CALENDAR 2018-2019

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 https://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

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September 2018

University of Toronto

School of Graduate Studies 2018-2019 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

https://sgs.calendar.utoronto.ca

Student Services at SGS

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

63/65 St. George Street, Toronto, Canada M5S 2Z9

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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 84,000 students, including over 18,000 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 280 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 is 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

Choosing to pursue an advanced degree is a momentous decision, one that requires thought, research, and often considerable soul-searching. You may ask yourself many difficult questions: What area of study are you most passionate about? Does that choice align with your career goals? What kinds of networks will you be able to build in a given program, both academically and professionally?

At the University of Toronto's School of Graduate Studies, we are committed to providing the tools that prospective and current students need to make informed decisions about their futures. The *SGS Calendar* is one such tool. Introducing the vast array of graduate programs offered across our three campuses, it will also direct you to key resources—institutional websites, policies, and codes—that will explain both the intellectual and ethical frameworks supporting graduate research and education here at U of T.

With more than 18,000 graduate students from all over the world, the University of Toronto hosts Canada's largest graduate community. I can assure you that our faculty, staff, and students work hard to make this graduate community welcoming, vibrant, and strong. As a U of T graduate student, you will make lifelong connections with mentors and colleagues while you gain specialized knowledge as well as a robust set of transferable skills.

On behalf of the School of Graduate Studies, welcome. We are here to support you on your academic journey, wherever that may take you.

With my best wishes,

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

Acting Dean, Students (April 16, 2018 to December 31, 2018), School of Graduate Studies and Acting Vice-Provost, Graduate Research and Education
L. De Nil, PhD

Vice-Dean, Programs and Innovation
G. Kerr, BPHE, MA, PhD

Acting Vice-Dean, Students (May 7, 2018 to December 31, 2018)
C. C. Williams, BA, MSW, PhD

About This Calendar

Effective Academic Period

The *2018-2019 School of Graduate Studies Calendar* is effective for the academic period September 1, 2018 to August 31, 2019. 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 August. 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:

1. degree and diploma programs by graduate unit
2. combined degree programs
3. 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, 2018, to August 31, 2019. 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*.

2018-2019 Sessional Dates

View the 2017-18 Sessional Dates (PDF).

2018 Fall Session

M July 16	Registration for Fall session begins
M August 6	Civic Holiday (University closed)
F August 24	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 14, and to avoid cancellation of registration and course enrolment. International students must make a payment by this date to ensure they are covered by UHIP at the beginning of September.[4][5]
M September 3	Labour Day (University closed)
F September 7	Coursework must be completed and grades submitted for Summer session courses and extended courses[1]
M September 10	Most formal graduate courses and seminars begin[2]
W September 12	Summer session grades available for viewing by students on ACORN
F September 14	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). See methods of registration[4].
M September 17	Final date to submit final doctoral theses to SGS to avoid fee charges for 2018-19[3]
M September 24	Final date to add full-year and Fall session courses
F September 28	Final date to submit final doctoral theses for Fall Convocation
F September 28	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[6]
S September 30	Payment deadline to avoid service charges on unpaid Fall session (September to December) tuition and non-tuition fee amounts for all **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 incur starting October 15[5].
M October 8	Thanksgiving Day (University closed)
M October 29	Final date to drop Fall session full or half courses without academic penalty[7]
November	Fall Convocation information and dates are posted at www.convocation.utoronto.ca
F November 30	Payment deadline to avoid service charges on unpaid Winter session (January to April) tuition and non-tuition fee amounts for all **students registered in the Fall and Winter sessions**, 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 incur starting December 15[5].
F December 21	Recommended tuition fee payment deadline for students registering or starting their program in the Winter session to ensure payment is received by the registration deadline of January 14, and to avoid cancellation of registration and course enrolment. International students must make a payment by this date to ensure they are covered by UHIP at the beginning of January[4][5].
M December 24	University closed for the winter break from Monday, December 24 to Friday, January 4 inclusive. For the last day of classes before the winter break, consult the graduate units concerned.

2019 Winter Session

M January 7	University re-opens
M January 7	Most formal graduate courses and seminars begin[2]
F January 11	Coursework must be completed and grades submitted for Fall session courses[1]
M January 14	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). See methods of registration[4].
T January 15	Final date to submit doctoral theses without payment of incidental Winter session fees. See footnote for academic fees[8].
W January 16	Fall session grades available for viewing by students on ACORN
F January 18	Final date for receipt of degree recommendations and submission of any required theses for March or June graduation for master's students without fees being charged for the Winter session[6]
F January 18	Final date for all students to request that their degrees be conferred *in absentia* in March
F January 18	Final date to submit final doctoral theses for March Convocation *in absentia*
F January 18	Students dually registered in the Fall session must be recommended for the master's degree by this date to maintain their PhD registration[6]
M January 21	Final date to add Winter session courses
Th January 31	Payment deadline to avoid service charges on unpaid Winter session (January to April) tuition and non-tuition fee amounts for all **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 incur starting February 15[5].
M February 18	Family Day (University closed)
M February 25	Final date to drop full-year and Winter session courses without academic penalty[7]
March	March graduation *in absentia* information is posted at www.convocation.utoronto.ca
April	For the last day of Winter classes, consult the unit concerned
Th April 18	For students obtaining degrees at June Convocation, coursework must be completed and grades submitted for full-year and Winter session courses
Th April 18	Final date for receipt of degree recommendations and submission of any required theses for master's degrees for June Convocation[6]
Th April 18	Final date for submission of final doctoral thesis for students whose degrees are to be conferred at the June Convocation[3]
Th April 18	Students dually registered in the Winter session must be recommended for the master's degree by this date to maintain their PhD registration[6]
Th April 18	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 3, and to avoid cancellation of registration and course enrolment[4][5]
F April 19	Good Friday (University closed)
T April 30	Payment deadline to avoid service charges on unpaid Fall/Winter session (September to April) tuition and non-tuition fee amounts for all **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 incur starting May 15[4][5].

2019 Summer Session

May	For the first day of Summer classes, consult the graduate unit concerned
F May 3	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). See methods of registration(4).
M May 6	Final date to enrol in May-to-June or May-to-August session courses
F May 10	Coursework must be completed and grades submitted for full-year and Winter session courses (except for extended courses)(1)
W May 15	Winter session grades available for viewing by students on ACORN
M May 20	Victoria Day (University closed)
F May 24	Final date to drop May-to-June F section courses without academic penalty(7)
F May 31	Payment deadline to avoid service charges on unpaid Summer session (May to August) tuition and non-tuition fee amounts for all **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 incur starting June 15(5).
June	June Convocation information and dates are posted at www.convocation.utoronto.ca
M June 17	Final date to drop May-to-August session Y section courses without academic penalty(7)
M July 1	Canada Day (University closed)
T July 2	Final date to enrol in July-to-August courses(9)
F July 12	Coursework must be completed and grades submitted for May-to-June F section courses(1)
M July 15	Final date to drop July-to-August S section courses without academic penalty(7)
W July 17	Grades for May-to-June F section courses available for viewing by students on ACORN
M Aug 5	Civic Holiday (University closed)

(1) 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.

(2) The precise dates of commencement of courses are determined by the graduate units; students are urged 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 Accommodations for 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.

Reading weeks for Faculty of Arts and Science undergraduate students take place November 5 to 9 for the Fall session, and February 18 to 22 for the Winter session. These are the dates which have been established for undergraduate students in the Faculty of Arts and Science. Not all Faculties offer reading weeks. To find out if your Faculty has a reading week, please contact them directly. SGS does not have a reading week.

(3) A final thesis is the corrected, approved version of thesis which is submitted to SGS following the Final Oral Examination.

(4) Students are considered registered when tuition and non-tuition fees have been paid or when their request to register without payment (fee deferral) is approved. 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 your ACORN invoice accordingly.

(5) 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.

(6) For final dates for completing degree requirements, students should consult their own graduate unit.

(7) Graduate units may establish earlier deadlines to add/drop courses but these dates must clearly be communicated to students. Please note that 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.

(8) 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 plus sessional incidentals. 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 plus sessional incidentals. For details, visit Final-Year Fees.

(9) Students who start their program in the Summer and 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)
Ancient Greek and Roman History (CS)
Art
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 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 and Pluralism Studies (CS)
European, Russian, and Eurasian Studies
Financial Economics
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
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
Earth Sciences and Physics (CS)
Electrical and Computer Engineering
Engineering Education (CS)
Environment and Health (CS)
Environmental Studies (CS)
Knowledge Media Design (CS)
Materials Science and Engineering
Mathematical Finance
Mathematics
Mechanical and Industrial Engineering
Optics (CS)
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)
Biomedical Toxicology (CS)
Biotechnology (program housed in Management & Innovation)
Cardiovascular Sciences (CS)
Cell and Systems Biology
Dentistry
Developmental Biology (CS)
Ecology and Evolutionary Biology
Exercise Sciences
Forestry
Genome Biology and Bioinformatics (CS)
Global Health (CS)
Health Policy, Management and Evaluation
Health Services and Policy Research (CS)
Human Development (CS)
Immunology
Indigenous Health (CS)
Laboratory Medicine and Pathobiology
Management of Innovation (program housed in Management & Innovation)
Medical Biophysics
Medical Science
Molecular Genetics
Musculoskeletal Sciences (CS)
Neuroscience (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)
Women's Health (CS)

Graduate Programs at a Glance

Degree Programs

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

Legend

*	Admissions suspended
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
	Counselling and Clinical Psychology	MA, PhD
	Counselling Psychology	MEd^{p}, EdD
	Developmental Psychology and Education	MA, MEd^{p}, PhD^{flex}
	School and Clinical Child Psychology	MA, PhD
Architecture, Landscape, and Design	Architecture	MArch
	Landscape Architecture	MLA
	Urban Design	MUD
	Visual Studies	MVS
Art	History of Art	MA^{p}, PhD
Astronomy and Astrophysics	Astronomy and Astrophysics	MSc, PhD
Biochemistry	Biochemistry	MSc, PhD
Biomedical Engineering	Biomedical Engineering	MASc, MEng^{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 Studies and Teacher Development	MA^{p}, MEd^{p}, PhD^{flex}
	Language and Literacies Education	MA^{p}, MEd^{p}, PhD^{flex}
	Teaching	MT
Dentistry	Dentistry	MSc^{p}, PhD^{flex}
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
	Financial Economics	MFE
Electrical and Computer Engineering	Electrical and Computer Engineering	MASc, MEng[EFT, p], PhD
English	English	MA[p], PhD
European, Russian, and Eurasian Studies	European and Russian Affairs	MA
Exercise Sciences	Exercise Sciences	MSc[p], PhD[flex]
	Professional Kinesiology	MPK
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
	Urban Design Studies*	MUDS
Germanic Languages and Literatures	Germanic Languages and Literatures	MA[p]
	German 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
Laboratory Medicine and Pathobiology	Laboratory Medicine and Pathobiology	MSc, PhD
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
Management, Rotman School of	Finance	MF[p]
	Financial Risk Management	MFRM
	Management	MBA[EFT]
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
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 Radiation Sciences **(admissions have been suspended)**	MHSc[EFT]
	Medical Science	MSc, PhD

	Translational Research in the Health Sciences	MHSc
Medieval Studies	Medieval Studies	MA[p], PhD
Molecular Genetics	Genetic Counselling	MSc
	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, PhD
Nutritional Sciences	Nutritional Sciences	MSc[p], PhD
Occupational Science and Occupational Therapy	Occupational Therapy	MScOT
Pharmaceutical Sciences	Pharmaceutical Sciences	MSc[p], PhD[flex]
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	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], 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 / Master of Business Administration
BKin / MT	STG, Bachelor of Kinesiology / Master of Teaching
BPHE / MT	STG, Bachelor of Physical and Health Education / Master of Teaching
HBA / MI	UTM, Honours Bachelor of Arts, Major in Communication, Culture, Information and Technology / Master of Information
HBA / MI	UTM, Honours Bachelor of Arts, Specialist in Digital Enterprise Management / Master of Information
HBA / MI	UTM, Honours Bachelor of Arts, Specialist in Interactive Digital Media / Master of Information
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 / 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, Specialist in French / Master of Teaching
HBA / MT	UTSC, Honours Bachelor of Arts, Specialist Co-op in French / Master of Teaching
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 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 / 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

HBSc / MEng	UTSC, Honours Bachelor of Science, Specialist Co-op in Environmental Chemistry / Chemical Engineering and Applied Chemistry
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
HBSc / MEng	UTSC, Honours Bachelor of Science, Specialist Co-op in Environmental Geoscience / Chemical Engineering and Applied Chemistry
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 / 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 for Health Sciences / 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 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 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 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, 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 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 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 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 / MBA	STG, Law, Juris Doctor / 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
PharmD / MBA	STG, Pharmacy, Doctor of / 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	STG, Health Administration, Master of Health Science / Master of Social Work
MI / MMSt	STG, Master of Information / Master of Museum Studies

Collaborative Specializations

Collaborative Specialization	Participating Degree Programs	Degrees
Addiction Studies	Community Health	MScCH
	Counselling and Clinical Psychology	MA, PhD
	Criminology	MA, PhD
	Information	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
Aging, Palliative and Supportive Care Across the Life Course	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
	Exercise Sciences	MSc, PhD
	Health Administration	MHSc
	Health, Policy, Management and Evaluation	MSc, PhD
	Information	MI, 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
Ancient and Medieval Philosophy	Classics	PhD
	Medieval Studies	PhD
	Philosophy	PhD
Ancient Greek and Roman History	Classics (University of Toronto)	PhD
	History (York University)	PhD
Bioethics	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
Biomedical Engineering	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 Rehabilitation Science	MSc, PhD MSc, PhD
Biomedical Toxicology	Laboratory Medicine and Pathobiology Medical Science Nutritional Sciences Pharmaceutical Sciences Pharmacology	MSc, PhD MSc, PhD MSc, PhD MSc, PhD MSc, PhD
Book History and Print Culture	Classics Comparative Literature East Asian Studies English French Language and Literature Germanic Languages and Literatures German Literature, Culture and Theory History History and Philosophy of Science and Technology History of Art Information Italian Studies Language and Literacies Education Medieval Studies Museum Studies Music Religion Spanish	MA, PhD MA, PhD MA, PhD MA, PhD MA, PhD MA PhD MA, PhD MA, PhD MA, PhD MI, PhD MA, PhD MA, MEd, PhD MA, PhD MMSt MA, PhD MA, PhD MA, PhD
Cardiovascular Sciences	Biomedical Engineering Chemical Engineering and Applied Chemistry Clinical Engineering Dentistry Exercise Sciences 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)* Counselling Psychology Geography Planning Public Health Sciences Social Work	MA, MEd MA MEd MA MScPl MPH MSW
Comparative, International and Development Education	Adult Education and Community Development Curriculum Studies and Teacher Development 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	MSc, PhD MASc, PhD MSc, PhD MHSc

	Immunology Laboratory Medicine and Pathobiology Medical Science Molecular Genetics Physiology	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	MA, MSc MEnvSc MA MA MPH MA, MEd MA
Diaspora and Transnational Studies	Anthropology Cinema Studies Comparative Literature Criminology Drama, Theatre and Performance Studies English Geography Germanic Languages and Literature German Literature, Culture and Theory History History of Art 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 MA, PhD MA, PhD MA, PhD MA PhD MA, MSc, PhD MA PhD MA, PhD MA, PhD MA, PhD MA, PhD MA, PhD MA, PhD MA, MEd, EdD, PhD MA, PhD MA, PhD MA, PhD
Earth Sciences and Physics	Earth Sciences Physics	MSc, PhD MSc, PhD
Editing Medieval Texts	Classics English History Italian Studies Medieval Studies Music Philosophy Religion Spanish	PhD PhD PhD PhD PhD PhD PhD PhD PhD
Education, Francophonies and Diversity	Curriculum Studies and Teacher Development 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 Studies and Teacher Development 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 Studies and Teacher Development Mechanical and Industrial Engineering	MASc, PhD MASc, PhD MA, PhD MASc, PhD
Environment and Health	Community Health Environmental Science Geography Medical Science Planning Public Health Sciences Women and Gender Studies	MScCH MEnvSc, PhD MA, MSc, PhD MSc, PhD MScPl, PhD MPH, PhD MA, PhD
Environmental Studies	Adult Education and Community Development Anthropology Chemical Engineering and Applied Chemistry Chemistry	MA, MEd, PhD MA, MSc, PhD MASc, MEng, PhD MSc, PhD

	Civil Engineering	MASc, MEng, MEngCEM, PhD
	Earth Sciences	MSc, PhD
	Ecology and Evolutionary Biology	PhD
	Forest Conservation	MFC
	Forestry	MScF, PhD
	Geography	MA, MSc, PhD
	Global Affairs	MGA
	Information	MI, PhD
	Management	MBA, 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
Ethnic and Pluralism Studies	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
Food Studies	Anthropology	MA, PhD
	East Asian Studies	MA, PhD
	Environmental Science	MA,PhD
	Geography and Planning	MA, MSc, PhD
	History	MA, PhD
	Information	MI
	Museum Studies	MMSt
	Nutritional Sciences	MSc, PhD
	Public Health Sciences	PhD
	Sociology	MA, PhD
Genome Biology and Bioinformatics	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
Global Health	Anthropology	MA, MSc, PhD
	Chemical Engineering and Applied Chemistry	MASc, MEng, PhD
	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), MScCH, PhD
	Rehabilitation Science	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	Exercise Sciences Health Policy, Management and Evaluation Pharmaceutical Sciences Public Health Sciences Rehabilitation Science Social Work	MSc, PhD MSc, PhD MSc, PhD PhD MSc PhD
Human Development (admissions have been suspended)	Biomedical Engineering Developmental Psychology and Education Ecology and Evolutionary Biology Immunology Medical Science Medical Biophysics Music Nutritional Sciences Pharmacology Physiology Psychology Public Health Sciences Social Work	PhD PhD PhD PhD PhD PhD PhD PhD PhD PhD PhD PhD PhD
Indigenous Health	Adult Education and Community Development Anthropology Counselling and Clinical Psychology Counselling Psychology Geography Medical Science Nutritional Sciences Public Health Sciences Social Justice Education	MA, MEd, PhD MA, MSc, PhD MA, PhD MEd, EdD MA, PhD MSc, PhD MSc, PhD MPH, PhD MA, MEd, EdD, PhD
Jewish Studies	Anthropology Classics Comparative Literature Drama, Theatre and Performance Studies English European and Russian Affairs Geography Germanic Languages and Literatures German Literature, Culture and Theory History History of Art Information Law Linguistics Medieval Studies Museum Studies Music Music Performance Near and Middle Eastern Civilizations Philosophy Political Science Religion Slavic Languages and Literatures Sociology Women and Gender Studies	MA, PhD MA, PhD MA, PhD MA, PhD MA, PhD MA PhD MA PhD MA, PhD MA, PhD PhD LLM, MSL, SJD PhD MA, PhD MMSt MA, PhD DMA MA, PhD MA, PhD MA, PhD MA, PhD MA, PhD MA, PhD MA
Knowledge Media Design	Architecture Computer Science Curriculum Studies and Teacher Development Drama, Theatre and Performance Studies Information Landscape Architecture	MArch MSc, PhD MA, MEd, PhD MA, PhD MI, PhD 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	PhD
	Classics	PhD
	Near and Middle Eastern Civilizations	PhD
	Religion	PhD
Musculoskeletal Sciences	Biomedical Engineering	MASc, PhD
	Dentistry	MSc, PhD
	Exercise Sciences	MSc, PhD
	Health Policy, Management and Evaluation	MSc, PhD
	Laboratory Medicine and Pathobiology	MSc, PhD
	Medical Science	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
Optics	Chemistry	MSc
	Electrical and Computer Engineering	MASc
	Materials Science and Engineering	MASc
	Physics	MSc
Psychology and Engineering	Mechanical and Industrial Engineering	MASc, PhD
	Psychology	MA, PhD
Public Health Policy	Exercise Sciences	MSc, PhD
	Health Administration	MHSc
	Health Policy, Management and Evaluation	MSc, PhD
	Nutritional Sciences	MSc, PhD
	Public Health Sciences	MPH, MSc, PhD
	Public Policy	MPP
	Social Work	MSW, PhD
Resuscitation Sciences	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
	Cinema Studies	MA

	Classics	MA, PhD
	Comparative Literature	MA, PhD
	Counselling Psychology	MEd, EdD
	Counselling and Clinical Psychology	MA, PhD
	Criminology	MA, PhD
	Curriculum Studies and Teacher Development	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
	Exercise Sciences	MSc, 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
	History of Art	MA, PhD
	Information	MI, PhD
	Italian Studies	MA, 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
	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
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	MA, PhD
	Curriculum Studies and Teacher Development	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
	Exercise Sciences	MSc, PhD
	French Language and Literature	MA, PhD
	Geography	MA, MSc, PhD
	Germanic Languages and Literatures	MA
	German 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
	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	MA, MSc, PhD
	Dentistry	MSc, PhD
	English	MA, PhD
	Exercise Sciences	MSc, PhD
	Health Policy, Management and Evaluation	MSc, PhD
	Immunology	MSc, PhD
	Information	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
Workplace Learning and Social Change	Adult Education and Community Development	MA, MEd, PhD
	Industrial Relations and Human Resources	MIRHR, PhD
	Rehabilitation Science	MSc, PhD
	Social Justice Education	MA, MEd, EdD, PhD
	Women and Gender Studies	MA

Diploma Programs

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

Legend

*	Admissions suspended
**	Admissions closed
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*	DIFA$^{p\sim}$
Nursing Science	Post-Master's Nurse Practitioner	DipNP^{p} (PMNP)
Social Work	Advanced Diploma in Social Service Administration**	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 on Probation

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 on probation for a period of at least 4 months and not more than 12 months. Applicants should hold a recognized degree with appropriate standing.

After 4 months, but before the end of 12 months, the graduate unit may recommend to the School of Graduate Studies that the student's probationary status be removed. Work completed during the probation period will be credited towards the degree program. Students whose probationary status is not removed may remain registered on probation for the remainder of the academic year but will not be permitted to continue after that.

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 Exchange Opportunities: International and Domestic web page.

3 Application for Admission to a Degree Program

3.1 Procedures

1. Application for admission should be submitted using the SGS Online Admissions Application. The exceptions for using the SGS Online 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).
2. Applicants must pay a non-refundable application fee of $120. 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.
3. 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.
4. 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

4.3.3 Academic English Level 60

School of Continuing Studies University of Toronto
Web: https://english.learn.utoronto.ca
Required score: B

4.3.4 Michigan English Language Assessment Battery (MELAB)

Web: https://michiganassessment.org/test-takers/tests/melab/
Required score: 85

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. Some master’s degree programs are approved to offer part-time studies.

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 annually 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.

Reinstatement 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 collaborating 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 partner 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 joint collaborator 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 case by case 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. Students enrolled at the University of Toronto as the lead institution who successfully complete the requirements of the program receive a U of T degree and may participate in a U of T convocation ceremony.

For the agreement form 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 January 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 (Aboriginal Student Services, Academic Success Centre, Career Services, Centre for International Experience, Centre for Community Partnerships, Health and Wellness, Housing 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:

Sep. 24, 2018	Deadline to add full courses (Y) and Fall session half courses (H).
Oct. 29, 2018	Deadline to drop a Fall session full course or half course without academic penalty.
Jan. 21, 2019	Deadline to add Winter session full courses (Y) and half courses (H).
Feb. 25, 2019	Deadline to drop a full course (Y) or Winter session half course (H), or withdraw from a program without academic penalty.
May 6, 2019	Deadline to add Summer session May to June half courses (H) or May to August full courses (Y).
May 24, 2019	Deadline to drop a May to June half course without academic penalty.
Jun. 17, 2019	Deadline to drop a May to August full course without academic penalty.
Jul. 2, 2019	Deadline to enrol in July to August half courses (H).
Jul. 15, 2019	Deadline to drop a July to August half course 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. 11, 2019	Fall session (Y, H) courses
May 10, 2019	Fall/Winter session (Y) and Winter session (Y, H) courses *For students receiving degrees at June convocation, grades must be submitted by April 18.
Jul. 12, 2019	May/June Summer session courses
Sept. 6, 2019	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 10, 2019	Fall session (Y, H) courses
Sept. 6, 2019	Fall/Winter session (Y) and Winter session (Y, H) courses
Jan. 10, 2020	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:

1. *Code of Student Conduct* (PDF)
2. *Code of Behaviour on Academic Matters* (PDF)

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.

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 at the best of times, 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 Certificate of Completion together with the nomination form confirming completion of all other academic requirements, such as language and field requirements; 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, Programs. 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.

13. 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.
14. 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.
15. 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 the national thesis program at Library and Archives Canada, and theses will be made publicly available on the Theses Canada Portal. This program makes theses available to ProQuest, which in turn makes theses available for purchase on its ProQuest Dissertations and Theses Database and includes the catalogue records in its bibliographic services.

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 one copy of the thesis is brought to 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. 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 www.convocation.utoronto.ca.

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 GAAB[2]	**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*.

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 four doctoral degrees:

1. Doctor of Philosophy (PhD)
2. Doctor of Education (EdD)
3. Doctor of Juridical Science (SJD)
4. Doctor of Musical Arts (DMA).

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. Nonetheless, it may contain a collection of several papers. The collection of papers may be expanded or supplemented by unpublished material, scholarly notes, and necessary appendices. In all theses, pagination should be continuous; there should be a common table of contents and an integrated bibliography for

the whole thesis. 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.

4. Students in some graduate programs may be required to take a comprehensive examination. Consult the specific graduate unit entry for details.
5. 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.
6. 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 (dissertation in practice), which is the culminating component of the Doctor of Education degree. The thesis (dissertation 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 thesis (dissertation 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 thesis (dissertation 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 thesis (dissertation 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 dissertation 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.

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. At least one year of relevant, successful, professional experience.
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 undertakes one of four options to complete the program. Not all options are available in all graduate units.

   Option I—Coursework Plus Comprehensive

   - 5.0 full-course equivalents (FCEs) plus a comprehensive examination/requirement

   Option II—Research Project

   - 4.0 full-course equivalents (FCEs) plus a research project or a Major Research Paper

   Option III—Thesis

   - 3.0 full-course equivalents (FCEs) plus a thesis

   Option IV—Coursework-Only

   - 5.0 full-course equivalents (FCEs)

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
- 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 webpage 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 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	Exercise Sciences
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 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 Design Studies (admissions have been suspended; the program will close in 2020)	MUDS	Geography and Planning
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, www.fees.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 at a branch of a financial institution in Canada. Students wishing to make a fee payment from outside of Canada may choose one of the fee payment options 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.

Students are considered to be registered as soon as they have paid academic and incidental fees or have an approved request to register without payment in place. 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 fee associated with the program length for each graduate master's program and represents the minimum amount of tuition 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 tuition 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 tuition fee;
- if the legal status change occurred after the program length, the minimum degree fee will be based on the international tuition fee.

14.4.3 Doctoral Programs

The minimum degree fee for PhD and professional doctoral programs is the fee associated with one year (three sessions) of full-time studies and represents the minimum amount of tuition 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 PhD 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, 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 Services Office prior to the above deadlines. However, if a status change effective before these dates is reported with a minor delay, fees 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 but complete their degree requirements by January 18, 2019, 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 $12 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, 100 St. George Street, Toronto, Ontario M5S 3G3.

Financial Support

15.1 Graduate Funding

The University of Toronto gives high priority to graduate financial support. For doctoral 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. Students may be eligible for a limited number of graduate awards available through their graduate units and various external agencies. For more information about funding available from specific programs, visit the Financing Your Graduate Education 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 Internal Awards

SGS offers a number of internal awards to meritorious 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 internal awards, visit the Internal Awards section of the SGS website.

15.3 External and Government-Funded Awards

SGS administers many awards from sources external to the University of Toronto (e.g., federal, provincial, 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 described on both the External Awards and Government-Funded Awards sections of the SGS website.

15.4 Awards for International Students

In addition to any internal departmental funding that may be available to international students, there are a number of external funding sources listed on the SGS website. International students are 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 Student 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 amount depends on your calculated financial need. Ontario residents may apply online. Visit the Enrolment Services website for information regarding provincial loans. Student who are eligible for 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 provide teaching and/or research assistantship opportunities.

Teaching assistants may spend up to 10 hours per week on such teaching tasks 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. The financial advisor 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 available in person, by email, or phone. Visit the Financial Aid and Advising section of the SGS website.

Emergency Grant Program

The Emergency Grant Program assists currently registered, full-time graduate students beyond their first year of study who generally are not part of the funded cohort and who encounter an unanticipated serious financial emergency. This is not considered to be a source of routine or long-term funding.

Emergency Loan Program

The Emergency Loan Program alleviates temporary cash flow problems for registered graduate students who are expecting to receive a 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.

Accessibility Grant Program

The Accessibility Grant Program assists currently registered, full-time graduate students with 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

Telephone: 416-946-0808
Email: graduateawards@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:

1. Degree and diploma programs by graduate unit
2. Combined degree programs
3. Collaborative specializations

SGS comprises approximately 80 graduate units, 100 combined 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 and Mechatronics Sustainable Aviation Sustainable Energy
MEng	*Emphases:* Advanced Manufacturing Aerial Robotics Engineering and Globalization Entrepreneurship, Leadership, Innovation and Technology in Engineering (ELITE) Robotics and Mechatronics Sustainable Aviation Sustainable Energy
PhD	*Emphases:* Aerial Robotics Robotics and Mechatronics Sustainable Aviation Sustainable Energy

Overview

Aerospace science and engineering is a cross-disciplinary and multi-disciplinary 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
D'Eleuterio, Gabriele - BASc, MASc, PhD
Damaren, Christopher - BASc, MASc, PhD (***Director***)
Davis, James - BASc, MASc, PhD
Ekmekci, Alis - BS, MS, PhD
Emami, M. Reza - BSc, MSc, PhD
Gottlieb, James - BSc, MSc, PhD
Grant, Peter - BASc, MASc, PhD
Groth, Clinton - BASc, MASc, PhD
Gulder, Omer - BSc, MSc, PhD
Haasz, Anthony - BASc, MASc, 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
Steeves, Craig - BA, BASc, PhD (***Associate Director, Graduate Studies***)
Steinberg, Adam - BASc, MSc, PhD
Yano, Masayuki - BS, SM, 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 AER 1800H *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 JDE 1000H *Ethics in Research*.
- 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 and Mechatronics, 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 programs is not permitted after registration. The default registration is the extended full-time program.

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 and Mechatronics; 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 and Mechatronics; 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 and Mechatronics; 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.

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 JDE 1000H *Ethics in Research*.
- 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 and Mechatronics, 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 JDE 1000H *Ethics in Research*.
- 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 and Mechatronics, 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 JDE 1000H *Ethics in Research*.
- 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 and Mechatronics, 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: MEng, MASc, 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

AER 501H, AER 1403H, APS 1028H, CHE 1123H, MIE 519H, MIE 1740H.

Elective Courses—Manufacturing Engineering

AER 521H, AER 1415H,
CHE 575H, CHE 1134H,
MIE 506H, MIE 540H, MIE 1706H, MIE 1713H, MIE 1718H, MIE 1743H,
MSE 558H, MSE 561H, MSE 1013H, MSE 1015H, MSE 1028H, MSE 1029H, MSE 1031H,
ROB 501H.

Elective Courses—Manufacturing Management

APS 1005H, APS 1011H, APS 1012H, APS 1013H, APS 1014H, APS 1017H, APS 1020H, APS 1023H, APS 1026H, APS 1040H, APS 1088H, APS 1420H, APS 1501H,
CHE 561H, CHE 1434H,
MIE 523H, MIE 1505H, MIE 1514H, MIE 1715H, MIE 1721H, MIE 1723H, MIE 1727H.

Emphasis: Aerial Robotics (MASc, MEng, PhD)

MASc and PhD students must successfully complete:

- 1.0 full-course equivalent [FCE]): AER 1216H *Fundamentals of Unmanned Aerial Vehicles* and AER 1217H *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]): AER 1216H *Fundamentals of Unmanned Aerial Vehicles* and AER 1217H *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

AER 501H, AER 503H, AER 506H, AER 510H, AER 521H, AER 525H, AER 1202H, AER 1211H, AER 1214H, AER 1215H, AER 1303H, AER 1308H, AER 1316H, AER 1324H, AER 1403H, AER 1410H, AER 1415H, AER 1503H, AER 1513H, AER 1514H,
CSC 411H, CSC 2503H, CSC 2545H,
ECE 537H, ECE 1512H, ECE 1505H, ECE 1747H, ECE 1762H,
MIE 506H, MIE 1068H, MIE 1740H, MIE 1742H, MIE 1809H.

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

APS 510H, APS 530H, APS 1420H, GLA 1000H, JCR 1000Y (full-year course)

Group B

APS 1015H, APS 1020H, APS 1024H, CHL 5700H, JMG 2020H

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.

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

APS 1010H, APS 1011H, APS 1026H, APS 1027H, APS 1029H, APS 1030H, APS 1501H

Entrepreneurship and Innovation

APS 1012H, APS 1013H, APS 1015H, APS 1023H, APS 1033H, APS 1035H, APS 1036H, APS 1088H

Finance and Management

APS 502H, APS 1001H, APS 1004H, APS 1005H, APS 1009H, APS 1016H, APS 1017H, APS 1020H, APS 1022H, APS 1028H, APS 1032H, APS 1038H, APS 1039H, APS 1040H

Engineering and Society

APS 510H, APS 1018H, APS 1024H, APS 1025H, APS 1031H, APS 1034H, APS 1420H, JMG 2020H

Emphasis: Robotics and Mechatronics (MASc, MEng, PhD)

Students must successfully complete four courses (2.0 full-course equivalents [FCEs]) chosen from at least three of the following groups:

Group 1: Control

ECE 1619H, ECE 1636H, ECE 1647H, ECE 1653H, ECE 1657H, ECE 557H (exclusion: ECE410H),
MIE 1064H, MIE 1068H

Group 2: Signal and Image Processing

AER 1513H,
CSC 2503H, CSC 2506H, CSC 2515H,
ECE 1511H, ECE 1512H, ECE 516H,
JEB 1433H

Group 3: Dynamics

AER 1503H, AER 1512H, AER 506H,
JEB 1444H,
MIE 1001H

Group 4: Systems Integration

AER 1514H, AER 525H (exclusion: ECE 470H),
ECE 1373H, ECE 1460H, ECE 532H,
MIE 1070H, MIE 1071H, MIE 1809H, MIE 505H, MIE 506H

Emphasis: Sustainable Aviation (all programs)

MASc and PhD students must successfully complete:

- At least two half courses (1.0 full-course equivalent [FCE]) from: AER 1303H, AER 1304H, AER 1306H, AER 1308H, AER 1310H, AER 1316H, AER 1318H, AER 1319H, AER 1322H, AER 1403H, AER 501H, AER 510H, CIV 1307H, PHY 1498H, PHY 2504H, PHY 2505H, CHE 1123H, JCC 1313H.
- AER 1315H (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 five half courses (2.5 FCEs) from: AER 1303H, AER 1304H, AER 1306H, AER 1308H, AER 1310H, AER 1316H, AER 1318H, AER 1319H, AER 1322H, AER 1403H, AER 501H, AER 510H, CIV 1307H, PHY 1498H, PHY 2504H, PHY 2505H, CHE 1123H, JCC 1313H.
- AER 1315H (0.5 FCE).

Emphasis: Sustainable Energy (all programs)

MASc and PhD students must successfully complete:

- At least three half courses (1.5 full-course equivalents [FCEs]) from the course lists below.
- A thesis in an area of relevance to sustainable energy with approval of the Institute of Sustainable Energy steering committee.

MEng students must successfully complete:

- Four courses (2.0 FCEs) from the following lists below, of which at least one (0.5 FCE) must be a core course.

Core Courses

APS 1032H,
MIE 515H, MIE 1120H.

Elective Courses

AER 507H, AER 1304H, AER 1315H, AER 1415H,
CHE 568H, CHE 1053H, CHE 1118H, CHE 1123H, CHE 1142H, CHE 1143H,
CIV 575H, CIV 576H, CIV 577H, CIV 1303H, CIV 1307H,
ECE 533H, ECE 1030H, ECE 1055H, ECE 1057H, ECE 1085H, ECE 1086H, ECE 1092H, ECE 1094H,
MIE 516H, MIE 517H, MIE 1128H, MIE 1129H, MIE 1130H, MIE 1240H, MIE 1715H,
MSE 1022H, MSE 1023H, MSE 1028H, MSE 1058H.

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

AER 0503H	Aeroelasticity
AER 1202H	Advanced Flight Dynamics
AER 1211H	Human Control of Flight Systems
AER 1216H	Fundamentals of Unmanned Aerial Vehicles
AER 1217H	Development of Autonomous Unmanned Aerial Systems (prerequisite: AER 1216H)

Aerodynamics, Fluid Dynamics, and Propulsion

AER 0510H	Aerospace Propulsion
AER 1301H	Kinetic Theory of Gases
AER 1303H	Advanced Fluid Mechanics (PR)
AER 1304H	Fundamentals of Combustion
AER 1306H	Special Topics in Reacting Flows
AER 1308H	Introduction to Modern Flow Control
AER 1310H	Turbulence Modelling
AER 1311H	Unsteady Gasdynamics
AER 1316H	Fundamentals of Computational Fluid Dynamics
AER 1318H	Topics in Computational Fluid Dynamics
AER 1319H	Finite Volume Methods for Computational Fluid Dynamics
AER 1320H	Air-Breathing Propulsion
AER 1322H	Modern Aircraft Propulsion (prerequisite: AER 0510 or equivalent; undergraduate-level training in compressible flow)
AER 1324H	Introduction to Turbulence (exclusion: MIE 1207H)
AER 1326H	Aeroacoustics

Structures and Multidisciplinary Optimization

AER 0501H	Advanced Mechanics of Structures
AER 1403H	Advanced Aerospace Structures (PR)
AER 1410H	Topology Optimization
AER 1415H	Computational Optimization
AER 1416H	Numerical Methods for Uncertainty Quantification
AER 1418H	Variational Methods for Partial Differential Equations

Sustainable Aviation

AER 1315H	Sustainable Aviation

Robotics and Space Systems Engineering

AER 0506H	Spacecraft Dynamics and Control I
AER 0521H	Mobile Robotics and Perception
AER 0525H	Robotics
AER 1503H	Spacecraft Dynamics and Control II
AER 1512H	Multibody Dynamics
AER 1513H	State Estimation for Aerospace Vehicles
AER 1514H	Mobile Robotics
AER 1515H	Intelligent Robotics
AER 1520H	Microsatellite Design I
AER 1521H	Microsatellite Design II

Management and Policy

AER 1601H	Aerospace Engineering and Operations Management

Engineering Physics

AER 0507H	Introduction to Fusion Energy
AER 1717H	Applied Plasma Physics I (reading course)
AER 1720H	Applied Plasma Physics II (reading course)

Research Seminars and Professional Courses

AER 1800H	Research Seminar in Aerospace Science and Engineering (for first-year MASc students only)
AER 1810H	MEng Project (for MEng students only)
JDE 1000H	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

AER 1820H	Directed Reading in Aerospace Studies

APS Engineering Course

APS 1012H	Managing Business Innovation and Transformational Change

Anthropology

Anthropology: Introduction

Faculty Affiliation

Arts and Science

Degree Programs

Anthropology

MA, MSc, and PhD	*Fields:* Archaeology Evolutionary Anthropology Linguistic and Semiotic Anthropology Medical Anthropology Sociocultural Anthropology

Collaborative Specializations

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

1. **Aging, Palliative and Supportive Care Across the Life Course**
   - Anthropology, MA, MSc, PhD
2. **Contemporary East and Southeast Asian Studies**
   - Anthropology, MA
3. **Development Policy and Power**
   - Anthropology, MA, MSc
4. **Diaspora and Transnational Studies**
   - Anthropology, MA, MSc, PhD
5. **Environmental Studies**
   - Anthropology, MA, MSc, PhD
6. **Ethnic and Pluralism Studies**
   - Anthropology, MA, PhD
7. **Food Studies**
   - Anthropology, MA, PhD
8. **Global Health**
   - Anthropology, PhD
9. **Indigenous Health**
   - Anthropology, MA, MSc, PhD
10. **Jewish Studies**
    - Anthropology, MA, PhD
11. **Mediterranean Archaeology**
    - Anthropology, PhD
12. **Sexual Diversity Studies**
    - Anthropology, MA, MSc, PhD
13. **South Asian Studies**
    - Anthropology, MA, MSc, PhD
14. **Women and Gender Studies**
    - Anthropology, MA, MSc, PhD
15. **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. We offer graduate training 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

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

Anthropology: Graduate Faculty

Full Members

Bamford, Sandra - BA, MA, MPA, PhD
Banning, Edward - BA, MA, PhD
Barker, Joshua - BA, MA, PhD
Begun, David - BA, MA, PhD
Boddy, Janice - BA, MA, PhD (***Chair and Graduate Chair***)
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
Danesi, Marcel - BA, MA, PhD
Daswani, Girish - BSc, BSc, MS, PhD
Dave, Prakruti - BA, MA, PhD
Dewar, Genevieve - BS, MA, PhD
Friesen, T Max - BA, MA, PhD
Gillison, Gillian - BA, PhD
Heller, Monica - BA, MA, PhD
Hillewaert, Sarah Marleen - BA, MA, MA, PhD

Kalmar, Ivan - BA, MA, PhD
Kilroy-Marac, Kathleen Patricia - MA, MPH, 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
Maxwell, Krista - BSc, MA, PhD
McElhinny, Bonnie - BA, MA, MA, PhD, PhD
Miller, Heather - BA, MSc, MA, PhD
Mortensen, Lena - BA, MA, PhD
Muehlebach, Andrea - MA, PhD
Napolitano, Valentina - BSc, MPH, PhD
Parra, Esteban - BA, 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
Viola, T. Bence - MSc, PhD
Wardlow, Holly - BA, MA, MPH, PhD

Members Emeriti

Alderson-Smith, Gavin - BA, MA, DPhil
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
Nagata, Shuichi - BS, MA, PhD
Philpott, Stuart - BA, MA, PhD
Ray, Ajit - BSc, MSc, PhD
Samarin, William - BA, PhD
Vanderburgh, Rosamond - BA, MA

Associate Members

Bright, Kristin - PhD
Gamble, Julia - BA, MA, PhD
Harrison, Timothy - BA, MA, PhD
Knappett, Carl - MA, PhD
Magne, Martin - BSc, MA, PhD
Munson, Marit - BA, MA, PhD
O'Reilly, Andrea - BA, MA, PhD
Patton, Anna - BA, MA, 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 program 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: ANT 3047H or ANT 4020H or ANT 6100H
  - 1.0 FCE: ANT 2000Y
  - 2.0 FCEs: at least 1.0 FCE of which 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: ANT 3047H or ANT 4020H or ANT 6100H
  - 1.0 FCE: ANT 2500Y
  - 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)**, at least 1.5 of which 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), at least 1.5 of which 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 be 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), at least 1.5 of which 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

ANT 1000H	Introductory Masters Workshop (Credit/No Credit)
ANT 1096H	Quantitative Methods I
ANT 1099H	Quantitative Methods II
ANT 1155H,Y+	Research (or reading seminar)
ANT 1156H,Y+	Research (or reading seminar)
ANT 1157H,Y+	Research (or reading seminar)
ANT 1158H,Y+	Research (or reading seminar)
ANT 2000Y0	MA Research Paper
ANT 2500Y0	MSc Research Paper
JTH 3000H	Coordinating Seminar in Ethnic and Pluralism Studies (for students in the Ethnic 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

JPA 1040Y	Advanced Physics and Archaeology
ANT 4010H	Archaeology in Contemporary Society
ANT 4020H	Archaeology Theory
ANT 4025H	Archaeology of Eastern North America
ANT 4026H	Arctic Archaeology
ANT 4028H	Violence and Civilization
ANT 4030H	Artifacts
ANT 4031H	Value
ANT 4038H	Archaeology of Urban Development
ANT 4039H	Origin and Nature of Food Producing Societies
ANT 4040H	Archaeology of Hunter-Gatherers
ANT 4041H	Landscape Archaeology
ANT 4042H	Archaeology of Complex Hunter-Gatherers
ANT 4043H	Archaeology of Ritual, Religion, and Ideology
ANT 4044H	Interregional Interaction in the Ancient World
ANT 4045H	Mortuary Archaeology
ANT 4046H	Archaeology of Style
ANT 4050H	Zooarchaeology
ANT 4059H	Anthropological Understanding of Cultural Transmission
ANT 4060H	Specific Problems I
ANT 4065H	Specific Problems II
ANT 4066H	Household Archaeology
ANT 4068H	Archaeology of Technology

Evolutionary Anthropology

ANT 3005H	Advanced Topics in Paleoanthropology
ANT 3010H	Human Osteology: Theory and Practice
ANT 3011H	Palaeopathology
ANT 3031H,Y	Advanced Research Seminar I
ANT 3034H,Y+	Advanced Research Seminar IV
ANT 3035H	Primate Sexual Selection
ANT 3041H	Evolutionary Perspectives on Growth and Development
ANT 3042H	Advanced Topics in Primate Ecology
ANT 3043H	Comparative Methods in Biological Anthropology
ANT 3044H	Current Topics in Primate Social Behaviour
ANT 3045H	Advanced Topics in Non-Human Primate Evolution
ANT 3046H	Paleoecology in Primate and Human Evolution
ANT 3047H	Evolutionary Anthropology Theory
ANT 3048H	Primatological Theory and Methods
ANT 3438H	Skeletal Trauma and Violence: Theory and Practice
ANT 3439H	Advanced Seminar in Forensic Anthropology
ANT 3440H	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

JAL 1140H	Special Topics in Anthropology and Linguistics
JAL 1153H	Conversational Structures
JAL 1155H	Language and Gender
ANT 5144H	Foundations in Linguistic Anthropology
ANT 5148H	Language, Ideology and Political Economy
ANT 5150H	Nation, State, and Language in Francophone Canada
ANT 5151H	Metaphor, Language, and Science
JSA 5147H	Language, Nationalism, and Post-Nationalism

Medical Anthropology

ANT 7001H	Medical Anthropology I
ANT 7002H	Medical Anthropology II
ANT 7003H	Global Health: Anthropological Perspectives

Sociocultural Anthropology

ANT 6003H	Critical Issues in Ethnography I
ANT 6004H	Critical Issues in Ethnography II
ANT 6005H	The Politics of Distribution: Work, Welfare and Abandonment in Precarious Times
ANT 6006H	Genealogies of Anthropological Thought
ANT 6007H	Magic, Science, and Religion
ANT 6008H	Posthuman Anthropology
ANT 6010H	Anthropology of Korea: History and Dialogues with Other Disciplines within Korean Studies
ANT 6014H	Media and Mediation
ANT 6017H	Post-colonial Science Studies and the Cultural Politics of Knowledge Translation
ANT 6018H	Approaches to Nature and Culture
ANT 6019H	Anthropology of Neoliberalism
ANT 6021H	Political Anthropology: State, Power, and Sovereignty
ANT 6022H	Symbolic Anthropology: Structuralism, Hermeneutics, and Poststructuralism
ANT 6025H	Anthropology and Epistemology
ANT 6027H	Anthropology of Violence
ANT 6029H	Anthropology of Capitalism
ANT 6030H	Anthropology and the Ethical Imagination
ANT 6031H,Y	Advanced Research Seminar I
ANT 6032H	Advanced Research Seminar II
ANT 6032Y	Advanced Research Seminar
ANT 6033H,Y	Advanced Research Seminar III
ANT 6034H,Y	Advanced Research Seminar IV
ANT 6035H	Advanced Research Seminar
ANT 6036H	Advanced Research Seminar
ANT 6037H,Y	Advanced Research Seminar VII
ANT 6038H,Y+	Advanced Research Seminar VIII
ANT 6040H	Research Design and Fieldwork Methods
ANT 6050H	Reading Course
ANT 6055H	Anthropology of Subjectivity and Personhood
ANT 6056H	Decolonizing Diversity Discourse: Critical and Comparative Accounts of Multiculturalism and Settler Colonialism
ANT 6057H	Anthropology and Literature
ANT 6058H	Anthropology of Normativity
ANT 6059H	Anthropology and History
ANT 6060H	Anthropology and Indigenous Studies in North America
ANT 6100H	History of Anthropological Thought
JAR 6510H	From Theory to Ethnography: Anthropological Approaches to Religion

+ *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

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 Guidance and Counselling
EdD	*Field:* Counselling and Psychotherapy

Developmental Psychology and Education

MA
MEd
PhD *Emphasis:* Early Learning (flexible-time)

School and Clinical Child Psychology

MA
PhD

Combined Degree Programs

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:

1. **Addiction Studies**
   - Counselling and Clinical Psychology, MA, PhD
2. **Aging, Palliative and Supportive Care Across the Life Course**
   - Counselling and Clinical Psychology, MA, PhD
   - Counselling Psychology, MEd, EdD
3. **Community Development**
   - Counselling and Clinical Psychology (Clinical and Counselling Psychology field), MA
   - Counselling Psychology, MEd
4. **Educational Policy**
   - Developmental Psychology and Education, MA, MEd, PhD
5. **Human Development (admissions have been suspended)**
   - Developmental Psychology and Education, PhD
6. **Indigenous Health**
   - Counselling and Clinical Psychology, MA, PhD
   - Counselling Psychology, MEd, EdD
7. **Neuroscience**
   - Developmental Psychology and Education, MA, PhD
8. **Sexual Diversity Studies**
   - Counselling and Clinical Psychology, MA, PhD
   - Counselling Psychology, MEd, EdD
9. **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.

Consult the department for further details about financial support for students.

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

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

APHD: Graduate Faculty

Full Members

Barros, Aluisio - DrMed
Chen, Charles - BA, MEd, MA, PhD
Chen, Xi (Becky) - BA, MEd, MA, PhD
Day, David Martin - BA, MA, PhD
Ducharme, Joseph - BA, MPsy, PhD
Ferrari, Michel - BA, MA, PhD
Ganea, Patricia - BA, PhD
Geva, Esther - BA, MA, PhD
Gillis, Joseph - BSc, MA, PhD
Goldstein, Abby - BA, MA, PhD
Henderson, Joanna - BA, MA, PhD
Jang, Eunice Eunhee - BA, MA, PhD
Jenkins, Jennifer - BA, MA, PhD
Lee, Kang - BSc, MEd, PhD
Lye, Stephen - BSc, PhD
Martinussen, Rhonda - BE, MEd, PhD
Moodley, Roy - BA, MA, PhD
Moran, Greg - BA, MA, PhD
Moss, Joan - BA, MA, PhD
O'Sullivan, Julia - BA, MA, PhD
Pascal, Charles - BA, AM, PhD
Pelletier, Janette - AB, BE, MEd, PhD
Perlman, Michal - BA, MA, PhD
Peterson-Badali, Michele - BA, MA, PhD
Portelli, John - 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
Stermac, Lana - BSc, MA, PhD
Stewart, Suzanne - BA, MA, PhD
Volpe, Richard - BA, MA, PhD
Watson, Jeanne - PhD
Whiteley, Walter - PhD
Wiener, Judith - BA, MEd, PhD
Willows, Dale - PhD
Woodruff, Earl - MA, PhD (***Chair and Graduate Chair***)

Members Emeriti

Corter, Carl - BA, PhD
Wolfe, Richard - BA

Associate Members

Andrade, Brendan - PhD
Ansloos, Jeffrey - PhD
Bertrand, Jane - BA, MEd
Brown, Shelley Lynn - PhD
Cohen, Nancy - BSc, MSc, PhD
Cunningham, Todd - BS, MA, PhD
Farnia, Fataneh - PhD
Flora, David - PhD
Gottardo, Alexandra - PhD
Greenbaum, Rachel - PhD
Hamza, Chloe - BA, MA, PhD
Heck, Ronald - PhD
Hetherington, C Ross - BSc, MA, PhD
Langford, Rachel - MEd, PhD
Nicholas, David - BSW, MSW, DPhil
Plamondon, Andre - BA, PhD
Rodger, Susan - PhD
Sawka, Anna - MSc, MD, BScMed, PhD
Saylor, Megan - PhD
Schmidt, Fred - BA, MA, PhD
Silver, Judith - BSc, PhD
Turrell, Sheri - BNSc, BA, MA, PhD
Vervaeke, John - BSc, BA, MA, PhD
Watson, William - BSc, PhD
Zucker, Kenneth - MA, 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.

This program offers two fields:

1. Practice-Based Inquiry (PBI) in Psychology and Educational Practice
2. Research-Intensive Training (RIT) in Psychology and Education

Field: Practice-Based Inquiry (PBI) in Psychology and Education Practice

The field is based on the use of collaborative inquiry and data-based decision-making to enhance teachers' practice and student learning and success. 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.

Program Requirements

- **Coursework.** Students must complete **10.0 full-course equivalents (FCEs)** including practicum placements and an internship as follows:
  - **Year 1**—6.0 FCEs as follows:
    - APD 2200Y *Child Study: Observation, Evaluation, Reporting, and Research* (1.0 FCE).
    - APD 2201Y *Childhood Education Seminar I* (1.0 FCE).
    - APD 2210Y *Introduction to Curriculum I: Core Areas* (1.0 FCE).
    - APD 2220Y *Teaching Practicum* (1.0 FCE): three eight-week, half-day placements in kindergarten/early childhood, grades 1 to 3, and grades 4 to 6.
    - APD 2280H *Introduction to Special Education and Adaptive Instruction* (0.5 FCE).
    - APD 1226H *Foundations in Inquiry and Data-Based Decision Making* (0.5 FCE).
    - 1.0 elective FCE (equivalent to two 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/ Summer intersession.
    - Students without an undergraduate course in child development must take APD 1201H *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:
    - APD 2211H *Theory and Curriculum I: Language and Literacy* (0.5 FCE).
    - APD 2212H *Theory and Curriculum II: Mathematics* (0.5 FCE).
    - APD 2214H *Curriculum and Pedagogies for Cross-Curricular Teaching* (0.5 FCE).
    - APD 2221Y *Advanced Teaching Practicum* (1.0 FCE), a 12-week full-time internship to be taken in one session.
    - APD 2222H *Professional Practice Project: Role A* (0.5 FCE).
    - APD 2223H *Professional Practice Project: Role B* (0.5 FCE).
    - APD 2202H *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

The field provides concurrent training in research methods and educational practice for elementary teacher certification, including 600 hours of 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 experience working with groups of children, preferably in responsible positions.
- Normally, an interview is required prior to admission.

Program Requirements

- **Coursework.** Students must complete **10.0 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**—6.0 FCEs as follows:
    - APD 2200Y *Child Study: Observation, Evaluation, Reporting, and Research* (1.0 FCE).
    - APD 2201Y *Childhood Education Seminar I* (1.0 FCE).
    - APD 2210Y *Introduction to Curriculum I: Core Areas* (1.0 FCE).
    - APD 2220Y *Teaching Practicum* (1.0 FCE): three eight-week, half-day placements in kindergarten/ early childhood, grades 1 to 3, and grades 4 to 6.
    - APD 2280H *Introduction to Special Education and Adaptive Instruction* (0.5 FCE).
    - APD 1209H *Research Methods and Thesis Preparation in AP&HD* (0.5 FCE).
    - 1.0 elective FCE (equivalent to two 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/ Summer intersession.
    - Students without an undergraduate course in child development must take APD 1201H *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:
    - APD 2211H *Theory and Curriculum I: Language and Literacy* (0.5 FCE).
    - APD 2212H *Theory and Curriculum II: Mathematics* (0.5 FCE).
    - APD 2214H *Curriculum and Pedagogies for Cross-Curricular Teaching* (0.5 FCE).
    - APD 2221Y *Advanced Teaching Practicum* (1.0 FCE), a 3.5-month full-time internship to be taken in one session.
    - APD 2001Y^{0} *Major Research Paper* (1.0 FCE).
    - APD 2202H *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 MA Courses

Year 1 Required Courses

APD 2200Y	Child Study: Observation, Evaluation, Reporting, and Research
APD 2201Y	Childhood Education Seminar I
APD 2210Y	Introduction to Curriculum I: Core Areas
APD 2220Y	Teaching Practicum
APD 2280H	Introduction to Special Education and Adaptive Instruction
Plus	PBI field only: APD 1226H Foundations in Inquiry and Data-Based Decision Making **or** RIT field only: APD 1209H Research Methods and Thesis Preparation in AP&HD
Plus	Two elective half courses to be completed during the Spring/Summer intersession

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 APD 1201H *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

APD 2211H	Theory and Curriculum I: Language and Literacy
APD 2212H	Theory and Curriculum II: Mathematics
APD 2214H	Curriculum and Pedagogies for Cross-Curricular Teaching
Plus	PBI field only: APD 2222H Professional Practice Project: Role A and APD 2223H Professional Practice Project: Role B **or** RIT field only: APD 2001Y^0 Major Research Paper

Internship Session

APD 2202H	Childhood Education Seminar II: Advanced Teaching
APD 2221Y	Advanced Teaching Practicum

In addition, students must demonstrate knowledge of the Acts and Regulations respecting education in Ontario (addressed in APD 2202H).

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 at least one recommended special education elective.

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 recommended Early Childhood elective course plus an internship in a kindergarten class.

Course List

APD 1201H	Child and Adolescent Development
APD 1209H	Research Methods and Thesis Preparation in AP&HD
APD 1211H	Psychological Foundations of Early Development and Education
APD 1217H	Foundations of Proactive Behavioural and Cognitive-Behavioural Intervention with Children
APD 1226H	Foundations in Inquiry and Data-Based Decision Making
APD 1256H	Child Abuse: Intervention and Prevention
APD 1259H	Family Relationships with Early Childhood Services and Schools
APD 1271H	Perspectives on Executive Functions in Education: From Theory to Practice
APD 1272H	Play and Education
APD 1280H	Symbolic Development and Learning
APD 1284H	Psychology and Education of Children and Adolescents with Behaviour Disorders
APD 1286H	Foundations of Literacy Development for School Age Children
APD 1289H	Multivariate Analysis with Applications
APD 1293H	Applied Research Design and Data Analysis
APD 1294H	Technology, Psychology, and Play
APD 1296H	Assessing School-Aged Language Learners
APD 1298H	Imagination, Reasoning, and Learning
APD 1299H	Language Acquisition and Development in Early Childhood
APD 2001Y^0	Major Research Paper
APD 2200Y	Child Study: Observation, Evaluation, Reporting, and Research
APD 2201Y	Childhood Education Seminar I
APD 2202H	Childhood Education Seminar II: Advanced Teaching
APD 2210Y	Introduction to Curriculum I: Core Areas
APD 2211H	Theory and Curriculum I: Language and Literacy
APD 2212H	Theory and Curriculum II: Mathematics
APD 2214H	Curriculum and Pedagogies for Cross-Curricular Teaching
APD 2220Y	Teaching Practicum
APD 2221Y	Advanced Teaching Practicum
APD 2222H	Professional Practice Project: Role A
APD 2223H	Professional Practice Project: Role B
APD 2275H	Technology for Adaptive Instruction and Special Education
APD 2280H	Introduction to Special Education and Adaptive Instruction
APD 2292H	Assessment for Instruction
APD 2293H	Interpretation of Educational Research
APD 2296H	Reading and Writing Difficulties
APD 3203H	Children's Theory of Mind
APD 3297H	Biological and Psychological Foundations of Low Incidence Disorders
APD 5000H	Special Topics in Applied Psychology and Human Development: Master's Level
APD 6000H	Special Topics in Applied Psychology and Human Development: Doctoral Level

JDS 1249H	Social-Emotional Development and Applications

Individual Reading and Research Courses

APD 3252H	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.

APHD: Counselling and Clinical Psychology MA, Clinical and Counselling Psychology Field

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:

1. Clinical and Counselling Psychology, offered primarily by OISE;
2. 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 program will be required to complete one year of full-time study to fulfil their degree requirements.

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).
- Scores on General and Subject tests of the Graduate Record Examination (GRE).
- A standing equivalent to a University of Toronto A– or better in the final year.

Program Requirements

- **Coursework.** Students must complete **4.5 FCEs** as follows:
  - APD 1203Y[+] Practicum I: Interventions in Counselling Psychology and Psychotherapy (1.0 FCE) (500 hours of practicum).
  - APD 1204H *Personality Theories* **or** APD 1265H *Advanced Topics in Social and Personality Development* (0.5 FCE).
  - APD 1208Y[+] *Individual Cognitive and Personality Assessment and Practicum* (1.0 FCE).
  - APD 1219H *Ethical Issues in Professional Practice in Psychology and Psychotherapy* (0.5 FCE).
  - APD 1228H *Individual and Group Psychotherapy: Families and Couples Counselling* (0.5 FCE) **or** APD 1261H *Group Work in Counselling and Psychotherapy* (0.5 FCE) (or an equivalent course).
  - APD 1263H *Research Methods for Clinical and Counselling Psychology* (RM) (0.5 FCE).
  - JOI 1288H *Intermediate Statistics and Research Design* (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 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.

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

Program Length

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

Time Limit

3 years full-time;
6 years part-time

APHD: Counselling and Clinical Psychology PhD, Clinical and Counselling Psychology Field

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:

1. Clinical and Counselling Psychology, offered primarily by OISE;
2. 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 pre-existing program in Counselling Psychology at OISE was re-accredited by the Canadian Psychological Association (CPA) in 2010-2011 for a five-year term. Currently, the program is being reviewed for re-accreditation in Clinical and Counselling Psychology. Applicants to the flexible-time PhD option are accepted under the same admission requirements as applicants to the full-time PhD option. Applicants to the flexible-time PhD should also demonstrate that they are active professionals engaged in activities relevant to their proposed program of study.

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 **5.0 FCEs** as follows:
  - 2.5 FCEs in Counselling and Psychotherapy:
    - APD 3215H *Advanced Psychotherapy Seminar*;
    - APD 3217Y[+] *Advanced Practicum in Clinical and Counselling Psychology* (600-hour practicum); and
    - APD 3268Y *Internship in Clinical and Counselling Psychology* (1,600-hour internship—arrangements must be made in consultation with the Coordinator of Internship and Counselling Services).
  - 1.0 FCE in Psychology Measurement/Assessment and Diagnosis:
    - APD 3225H *Assessment and Diagnosis of Personality and Psychopathology*; and
    - APD 3260H *Psychodiagnostic Systems.*
  - 1.0 FCE in Advanced Research Methods:
    - APD 3202H *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:
        - APD 3204H *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)

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 should also demonstrate that they are active professionals engaged in activities relevant to their proposed program of study.

Program Requirements

- **Coursework.** Students must complete a minimum of **5.0 FCEs** as follows:
    - 2.5 FCEs in Counselling and Psychotherapy:
        - APD 3215H *Advanced Psychotherapy Seminar*;
        - APD 3217Y[+] *Advanced Practicum in Clinical and Counselling Psychology* (600-hour practicum); and
        - APD 3268Y *Internship in Clinical and Counselling Psychology* (1,600-hour internship—arrangements must be made in consultation with the Coordinator of Internship and Counselling Services).
    - 1.0 FCE in Psychology Measurement/Assessment and Diagnosis:
        - APD 3225H *Assessment and Diagnosis of Personality and Psychopathology*; and
        - APD 3260H *Psychodiagnostic Systems.*
    - 1.0 FCE in Advanced Research Methods:
        - APD 3202H *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:
        - APD 3204H *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 Courses, Clinical and Counselling Psychology Field

APD 1202Y	Theories and Techniques of Counselling and Psychotherapy
APD 1203Y[+]	Practicum I: Interventions in Counselling Psychology and Psychotherapy
APD 1204H	Personality Theories
APD 1208Y[+]	Individual Cognitive and Personality Assessment and Practicum
APD 1219H	Ethical Issues in Professional Practice in Psychology and Psychotherapy
APD 1228H	Individual and Group Psychotherapy: Families and Couples Counselling
APD 1260H	Family Therapy (exclusion: APD 1261H)
APD 1261H	Group Work in Counselling and Psychotherapy
APD 1263H	Research Methods for Clinical and Counselling Psychology (RM)
APD 1265H	Advanced Topics in Social and Personality Development
APD 3202H	A Foundation of Program Evaluation in Social Sciences (RM)
APD 3204H	Contemporary History and Systems in Human Development and Applied Psychology
APD 3215H	Advanced Psychotherapy Seminar
APD 3217Y[+]	Advanced Practicum in Clinical and Counselling Psychology
APD 3218H	Research Seminar in Counselling
APD 3225H	Assessment and Diagnosis of Personality and Psychopathology
APD 3260H	Psychodiagnostic Systems
APD 3268Y	Internship in Clinical and Counselling Psychology
APD 5000H	Special Topics in Applied Psychology and Human Development: Master's Level
JOI 1287H	Introduction to Applied Statistics (RM)
JOI 1288H	Intermediate Statistics and Research Design (RM)
JOI 3048H	Intermediate Statistics in Educational Research: Multiple Regression Analysis (RM)

[+] *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, Clinical Psychology Field

Master of Arts

Overview

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. Housed within the Graduate Department of Psychological Clinical Science, 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 neuropsychology and neurosciences; personality and psychological assessment; and mindfulness- and acceptance-based psychotherapies.

A unifying theme of faculty research in Clinical Psychology at UTSC is to advance the assessment and treatment of mental disorders, especially depressive and bipolar disorders, anxiety disorders, schizophrenia-spectrum disorders, borderline personality disorder, and neurocognitive disorders, such as dementia due to Alzheimer's or Parkinson's disease.

Contact and Address

Web: www.utsc.utoronto.ca/psych/clinical-psychology
Email: clinical-psych@utsc.utoronto.ca
Telephone: (416) 208-4867

Graduate Department of Psychological Clinical Science
University of Toronto Scarborough (UTSC)
Science Wing, Room SW427D
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 educational 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.
- An appropriate 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).
- Two academic letters of reference.
- A personal statement.
- A curriculum vitae.
- Completion of the Psychological Clinical Science MA, PhD 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:** CPS 1601H *Psychopathology* (0.5 FCE); CPS 1701H *Psychological Assessment I* (0.5 FCE); CPS 1702H *Psychological Assessment II* (0.5 FCE); CPS 1801H *Psychotherapy* (0.5 FCE); and CPS 1901H *Ethics* (0.5 FCE).
    - **Year 2:** CPS 1101H *Clinical Research Design* (0.5 FCE); CPS 1102H *Statistical Techniques I* (0.5 FCE); CPS 1802H *Applied Interventions in Clinical Psychology* (0.5 FCE); CPS 1803H *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 (CPS 2999H *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, Clinical Psychology Field

Doctor of Philosophy

Overview

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. Housed within the Graduate Department of Psychological Clinical Science, 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.

A unifying theme of faculty research in Clinical Psychology at UTSC is to advance the assessment and treatment of mental disorders, especially depressive and bipolar disorders, anxiety disorders, schizophrenia-spectrum disorders, borderline personality disorder, and neurocognitive disorders, such as dementia due to Alzheimer's or Parkinson's disease.

Contact and Address

Web: www.utsc.utoronto.ca/psych/clinical-psychology
Email: clinical-psych@utsc.utoronto.ca
Telephone: (416) 208-4867

Graduate Department of Psychological Clinical Science
University of Toronto Scarborough (UTSC)
Science Wing, Room SW427D
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 careers as psychological clinical scientists in university and academic medical settings. The PhD program has research strengths in **clinical neuropsychology and neurosciences; personality and psychological assessment; and mindfulness- and acceptance-based psychotherapies**.

It 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).
- Two academic letters of reference.
- A personal statement.
- A curriculum vitae.
- 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 **6.0 full-course equivalents (FCEs)** including coursework, three clinical placements, plus a comprehensive examination, thesis proposal, thesis, and thesis defence:
  - 4.0 FCEs in coursework, normally completed by the end of Year 3 (CPS 1103H, CPS 1201H, CPS 1301H, CPS 1401H, CPS 1501H, CPS 1809H, CPS 3801H, CPS 3901H).
  - Completion of two one-day courses (CPS 2901H and CPS 2902H) assessed as Credit/No Credit (0.0 FCE).
  - 2.0 FCEs in clinical work:
    - 1.0 FCE in two separate part-time clinical placements during Years 1 and 2 (CPS 3999H, CPS 4999H).
    - 1.0 FCE in a one-year, full-time clinical internship at a Canadian Psychological Association- or American Psychological Association-accredited clinical setting, which normally takes place during Year 5 (CPS 5999Y). 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:
  1. An oral examination focused on clinical expertise (normally completed in the Summer session of Year 1); and
  2. A research-focused paper (normally completed in the Summer 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 research paper 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: CPS 6999H and CPS 7999H. 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 Courses, Clinical Psychology Field

CPS 1101H	Clinical Research Design (exclusion: APD 1263H Research Methods for Clinical and Counselling Psychology)
CPS 1102H	Statistical Techniques I (exclusion: JOI 1287H Introduction to Applied Statistics)
CPS 1103H	Statistical Techniques II (exclusion: JOI 1288H Intermediate Statistics and Research Design)
CPS 1201H	Neurobiological Bases of Behaviour
CPS 1301H	Cognitive-Affective Bases of Behaviour
CPS 1401H	Social and Interpersonal Bases of Behaviour
CPS 1501H	Personality
CPS 1601H	Psychopathology (exclusion: APD 3260H Psychodiagnostic Systems)
CPS 1701H	Psychological Assessment I (exclusion: APD 3224H Individual Cognitive and Personality Assessment)
CPS 1702H	Psychological Assessment II
CPS 1801H	Psychotherapy (exclusion: APD 1202Y Theories and Techniques of Counselling and Psychotherapy)
CPS 1802H	Applied Interventions in Clinical Psychology (exclusion: APD 1203Y+ Practicum I: Interventions in Counselling Psychology and Psychotherapy)
CPS 1803H	Practicum in Psychological Interventions (exclusion: APD 1203Y+ Practicum I: Interventions in Counselling Psychology and Psychotherapy)
CPS 1809H	Clinical Psychopharmacology
CPS 1810H	Advanced Psychotherapy
CPS 1901H	Ethics (exclusion: APD 1219H Ethical Issues in Professional Practice in Psychology and Psychotherapy)
CPS 2901H	Clinical Supervision (Credit/No Credit)
CPS 2902H	Consultation and Program Development and Evaluation (Credit/No Credit)
CPS 2999H	Summer Practicum
CPS 3801H	Multi-Person Therapies (exclusions: APD 1228H Individual and Group Psychotherapy: Family and Couples Counselling, APD 1260H Family Therapy, and APD 1261H Group Work in Counselling and Psychotherapy)
CPS 3901H	The Historical and Scientific Foundations of Psychology (exclusion: APD 3204H Contemporary History and Systems in Human Development in Applied Psychology)
CPS 3999H	Clinical Placement I
CPS 4999H	Clinical Placement II
CPS 5001H	Directed Readings
CPS 5002H	Directed Readings
CPS 5999Y	Internship (exclusion: APD 3268Y Internship in Clinical and Counselling Psychology)
CPS 6999H	Clinical Placement III
CPS 7999H	Clinical Placement IV

APHD: Counselling Psychology MEd, Counselling and Psychotherapy Field

Master of Education

Program Description

This 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; multicultural counselling; 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.

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 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 experience.

Program Requirements

- **Coursework.** Students must complete **5.0 full-course equivalents (FCEs)** as follows:
  - APD 1202Y *Theories and Techniques of Counselling and Psychotherapy* (1.0 FCE)
  - APD 1203Y+ *Practicum I: Interventions in Counselling Psychology and Psychotherapy* (1.0 FCE). The practicum placement is the supervised training component of this course.
  - APD 1214H *Critical Multicultural Practice: Diversity Issues in Counselling and Psychotherapy* (0.5 FCE; prerequisite: APD 1202Y and co-requisite: APD 1203Y+)
  - APD 1219H *Ethical Issues in Professional Practice in Psychology and Psychotherapy* (0.5 FCE)

    - APD 1260H *Family Therapy* (0.5 FCE) **or** APD 1261H *Group Work in Counselling and Psychotherapy* (0.5 FCE)
    - 1.5 FCEs in electives. Recommended electives: one of APD 1266H *Career Counselling and Development: Transition from School to Work* (0.5 FCE) **or** APD 1268H *Career Counselling and Development: Transitions in Adulthood* (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 (APD 1247H *Practicum in Adult Counselling and Psychotherapy*) for an additional 250 hours of field placement concurrent with the required course (APD 1203Y+ *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. Find out more about the practicum.

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, Counselling and Psychotherapy Field

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.

This program will be especially attractive to individuals who have demonstrated a career commitment to the provision of counselling 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.

This option will be especially attractive to individuals who have demonstrated a career commitment to the provision of counselling services in an educational and community setting. 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:
    - APD 3115H *Research Proseminar in Counselling and Psychotherapy* (0.5 FCE).
    - APD 3215H *Advanced Psychotherapy Seminar* (0.5 FCE).
    - APD 3261H *Supervision Practice* (0.5 FCE).
    - APD 3217Y+ *Advanced Practicum in Clinical and Counselling Psychology* (1.0 FCE): complete a 500-hour practicum before the Final Oral Examination.
    - APD 3270H *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 Coordinator of Internship and Counselling Services.
    - Three courses, one from each of the following three groupings:
        - APD 3178H *Advanced Cognitive Benaviour Therapy* (0.5 FCE) **or** APD 3160H *Advanced Family Therapy* (0.5 FCE)
        - APD 3260H *Psychodiagnostic Systems* (0.5 FCE) **or** one elective in a special focus of interest (0.5 FCE)
        - APD 3201H *Qualitative Research Methods in Applied Psychology and Human Development* (0.5 FCE) **or** APD 3202H *A Foundation of Program Evaluation in Social Sciences* (RM) (0.5 FCE) **or** APD 3228H *Mixed Methods Research Design in Social Sciences* (RM) (0.5 FCE).
    - In addition, students must take 1.0 FCE in their specific area of **focus**.
        - Option 1: Counselling and Psychotherapy for Adults
            - APD 3163H *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
            - APD 5284Y *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 (APD 3271H[0] *Additional PhD Practicum*) in conjunction with the required doctoral practicum course APD 3217Y[+] *Advanced Practicum in Clinical and Counselling Psychology*. Find out more about the practicum.
- **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. The main criteria for evaluation will be those applied to creative professional activity. Students will defend their thesis (dissertation in practice) at a Final Oral Examination.
- 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.
- Normally, students cannot transfer between the EdD and PhD programs.

Program Length

5 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, Global Mental Health and Counselling Psychology Field

Master of Education

Program Description

The Master of Education (MEd) degree program provides individuals with the opportunity to learn and develop skills appropriate for the field of mental health and counselling psychology. 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, nor will it provide registration with the College of Psychotherapists in Ontario. This degree is cohort based and must be pursued **full-time**.

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 experience.
- Normally, an interview is required prior to admission.

Program Requirements

- **Coursework.** Students must complete **5.0 full-course equivalents (FCEs)** as follows:
  - APD 1902H *Theories and Techniques of Counselling in a Global Context* (0.5 FCE).
  - APD 1219H *Ethical Issues in Professional Practice in Psychology and Psychotherapy* (0.5 FCE).
  - APD 1228H *Individual and Group Psychotherapy: Families and Couples Counselling* (0.5 FCE).
  - APD 1268H *Career Counselling and Development: Transitions in Adulthood* (0.5 FCE).
  - APD 1277H *Global Indigenous Healing in Counselling and Psychotherapy* (0.5 FCE).
  - APD 1278H *Cognitive Therapy* (0.5 FCE).
  - APD 1282H *Introduction to Global Mental Health and Counselling Psychology* (0.5 FCE).
  - APD 1283H *Peer and Video-Based Counselling With Practicum Field-Based Learning in Global Mental Health* (0.5 FCE).
  - APD 2293H *Interpretation of Educational Research* (0.5 FCE).
  - APD 5000H *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, Guidance and Counselling Field

Master of Education

Program Description

The Master of Education (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 degree program 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 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 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:
  - APD 1202Y *Theories and Techniques of Counselling and Psychotherapy* (1.0 FCE).
  - APD 1203Y+ *Practicum I: Interventions in Counselling Psychology and Psychotherapy* (1.0 FCE). The practicum placement is the supervised training component of this course.
  - APD 1214H *Critical Multicultural Practice: Diversity Issues in Counselling and Psychotherapy* (0.5 FCE; prerequisite: APD 1202Y and co-requisite: APD 1203Y+).
  - APD 1219H *Ethical Issues in Professional Practice in Psychology and Psychotherapy* (0.5 FCE).
  - APD 1260H *Family Therapy* (0.5 FCE) **or** APD 1261H *Group Work in Counselling and Psychotherapy* (0.5 FCE).
  - APD 1262H *Educational Psychological Testing for Counselling* (0.5 FCE).
  - APD 1266H *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 (APD 1247H *Practicum in Adult Counselling and Psychotherapy*) for an additional 250 hours of field placement concurrent with the required course APD 1203Y+ *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. Find out more about the practicum.

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 and EdD Courses, Counselling and Psychotherapy; Global Mental Health and Counselling Psychology; Guidance and Counselling Fields

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

APD 1202Y	Theories and Techniques of Counselling and Psychotherapy
APD 1203Y[+]	Practicum I: Interventions in Counselling Psychology and Psychotherapy
APD 1204H	Personality Theories
APD 1207H	Counselling Topics in Sexual Orientation and Gender Identity Diversity
APD 1214H	Critical Multicultural Practice: Diversity Issues in Counselling and Psychotherapy
APD 1219H	Ethical Issues in Professional Practice in Psychology and Psychotherapy
APD 1228H	Individual and Group Psychotherapy: Families and Couples Counselling
APD 1229H	Individual and Group Psychotherapy for Counselling
APD 1245H	Brief Strategies in Counselling and Psychotherapy
APD 1247H	Practicum in Adult Counselling and Psychotherapy
APD 1252H	Individual Reading and Research in Counselling Psychology: Master's Level
APD 1253H	Feminist Issues in Counselling Psychology and Psychotherapy
APD 1260H	Family Therapy (exclusion: APD 1261H)
APD 1261H	Group Work in Counselling and Psychotherapy
APD 1262H	Educational and Psychological Testing for Counselling
APD 1266H	Career Counselling and Development: Transition from School to Work
APD 1268H	Career Counselling and Development: Transitions in Adulthood
APD 1269H	Use of Guided Imagery in Counselling and Psychotherapy
APD 1271H	Perspectives on Executive Functions in Education: From Theory to Practice
APD 1275H	Special Topics in Counselling Psychology (Master's)
APD 1277H	Global Indigenous Healing in Counselling and Psychotherapy
APD 1278H	Cognitive Therapy
APD 1282H	Introduction to Global Mental Health and Counselling Psychology
APD 1283H	Peer and Video-Based Counselling With Practicum Field-Based Learning in Global Mental Health
APD 1290H	Indigenous Healing in Counselling and Psychoeducation
APD 1902H	Theories and Techniques of Counselling in a Global Context
APD 2286H	Global Indigenous Healing in Counselling and Psychotherapy
APD 2291H	Introduction to Global Mental Health and Counselling Psychology
APD 2293H	Interpretation of Educational Research
APD 2298H	Peer and Video-Based Counselling With Practicum Field-Based Learning in Global Mental Health
APD 3115H	Research Proseminar in Counselling and Psychotherapy
APD 3160H	Advanced Family Therapy
APD 3163H	Advanced Multicultural Counselling and Psychotherapy
APD 3178H	Advanced Cognitive Behaviour Therapy
APD 3201H	Qualitative Research Methods in Human Development and Applied Psychology
APD 3202H	A Foundation of Program Evaluation in Social Sciences (RM)
APD 3215H	Advanced Psychotherapy Seminar
APD 3216H	Seminar in Counselling Psychology: Part II
APD 3217Y[+]	Advanced Practicum in Clinical and Counselling Psychology
APD 3228H	Mixed Methods Research Design in Social Sciences (RM)
APD 3253H	Individual Reading and Research in Counselling Psychology: Doctoral Level
APD 3258H	Special Topics in Counselling Psychology
APD 3261H	Supervision Practice
APD 3268Y	Internship in Clinical and Counselling Psychology
APD 3269H	Research Seminar in Critical Multicultural Counselling and Psychotherapy
APD 3270H	EdD Internship
APD 3271H[0]	Additional PhD Practicum
APD 5000H	Special Topics in Applied Psychology and Human Development: Master's Level
JOI 6000H	Advanced Quantitative Research Methods Courses

[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.*

Interprogram Courses

The following courses are accepted for credit in the Counselling Psychology program and will satisfy that program's specialization requirements. For descriptions, see the relevant programs.

APD 1209H	Research Methods and Thesis Preparation in AP&HD
APD 1263H	Research Methods for Clinical and Counselling Psychology (RM)
APD 3204H	Contemporary History and Systems in Human Development and Applied Psychology
CTL 1602H	Introduction to Computers in Education
JOI 1287H	Introduction to Applied Statistics (RM)
JOI 1288H	Intermediate Statistics and Research Design (RM)
LHA 1105H	Introduction to Qualitative Research: Part I (RM)
LHA 1106H	Introduction to Qualitative Research: Part II (RM)
LHA 1109H	Creative Empowerment Work with the Disenfranchised
LHA 1111H	Working with Survivors of Trauma
LHA 1173H	Creativity and Wellness: Learning to Thrive

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. 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:
  - APD 1209H *Research Methods and Thesis Preparation in Human Development and Applied Psychology* (0.5 FCE)
  - JOI 1288H *Intermediate Statistics and Research Design* (0.5 FCE)
  - Two elective courses (1.0 FCE total) chosen in consultation with the student's advisor, which may include APD 2252H *Individual Reading and Research* (0.5 FCE).
  - Students who have not taken a previous course in human development are required to take APD 1201H *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 JOI 1287H *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.

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 Master of Education (MEd) program is designed for the reflective teacher or other practitioner in education or related fields.

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:
  - **Year 1:**
    - APD 1200H *Foundations of Human Development and Education* (0.5 FCE).
    - APD 2293H *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 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 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 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:
  - APD 3200H *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. However, in addition, applicants to the flexible-time PhD should demonstrate that they 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:
    - APD 3200H *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

Emphasis: Early Learning

This emphasis is an option for all PhD students. Note that full-time PhD students interested in the emphasis should consult 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:
  - APD 3200H *Researching Proseminar in Human Development and Applied Psychology* (0.5 FCE).
  - APD 3273H *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).
  - APD 1211H *Psychological Foundations of Early Development and Education* (0.5 FCE).
  - APD 3274H *Early Learning and Thesis Development* (0.5 FCE).
- Students who complete the emphasis requirements will receive a letter of completion from the department.

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.

APD 1200H	Foundations of Human Development and Education
APD 1201H	Child and Adolescent Development
APD 1209H	Research Methods and Thesis Preparation in Human Development and Applied Psychology
APD 1210H	Research Practicum (RM)
APD 1211H	Psychological Foundations of Early Development and Education
APD 1217H	Foundations of Proactive Behavioural and Cognitive-Behavioural Intervention with Children
APD 1233H	Cognitive Development and Applications
APD 1256H	Child Abuse: Intervention and Prevention
APD 1259H	Family Relationships with Early Childhood Services and Schools
APD 1271H	Perspectives on Executive Functions in Education: From Theory to Practice
APD 1272H	Play and Education
APD 1280H	Symbolic Development and Learning
APD 1284H	Psychology and Education of Children and Adolescents with Behaviour Disorders
APD 1286H	Foundations of Literacy Development for School Age Children
APD 1289H	Multivariate Analysis with Applications
APD 1290H	Indigenous Healing in Counselling and Psychoeducation
APD 1292H	Instrument Design and Analysis
APD 1293H	Applied Research Design and Data Analysis
APD 1294H	Technology, Psychology, and Play
APD 1295H	Adolescent Mental Health: An Examination of Risk and Resilience
APD 1296H	Assessing School-Aged Language Learners
APD 1297H	Mental Health in the Classroom: How Educators Can Help Our Most Vulnerable Students
APD 1298H	Imagination, Reasoning, and Learning
APD 1299H	Language Acquisition and Development in Early Childhood
APD 2275H	Technology for Adaptive Instruction and Special Education
APD 2280H	Introduction to Special Education and Adaptive Instruction
APD 2292H	Assessment for Instruction
APD 2293H	Interpretation of Educational Research
APD 2296H	Reading and Writing Difficulties
APD 3200H	Research Pro-seminar in Human Development and Applied Psychology
APD 3203H	Children's Theory of Mind
APD 3225H	Assessment and Diagnosis of Personality and Psychopathology
APD 3272H	Early Learning Practice, Research, and Policy
APD 3273H	Researching Early Learning: An Overview Course of Quantitative and Qualitative Methodology
APD 3274H	Early Learning and the Thesis
APD 3275H	International Policy Perspectives on Early Learning
APD 3297H	Biological and Psychological Foundations of Low Incidence Disorders
APD 5000H	Special Topics in Applied Psychology and Human Development: Master's Level
APD 6000H	Special Topics in Applied Psychology and Human Development: Doctoral Level
JDS 1249H	Social-Emotional Development and Applications
JDS 3000H	Advanced Methods in Developmental Science
JOI 1287H	Introduction to Applied Statistics (RM)
JOI 1288H	Intermediate Statistics and Research Design (RM)
JPX 1001H	Parenting: Multidisciplinary Perspectives

Individual Reading and Research Courses

APD 3252H	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.
    - APD 1205H *Ethical Issues in Applied Psychology* (0.5 FCE).
    - APD 1215H *Psychological Assessment of School-Aged Children* (0.5 FCE).
    - APD 1216H *Psychoeducational Assessment* (0.5 FCE).
    - APD 1218H *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.
    - APD 1222H *Approaches to Psychotherapy-Lifespan* (0.5 FCE).
    - APD 1236H *Developmental Psychopathology* (0.5 FCE).
    - APD 1285H *Psychology and Education of Children with Learning Disabilities* (0.5 FCE).
    - JOI 1288H *Intermediate Statistics and Research Design* (RM) (0.5 FCE).
    - APD 3240H *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 APD 3204H, *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 APD 1201H *Childhood and Adolescent Development*.
- Students who have not taken a previous statistics course or its equivalent must take JOI 1287H *Introduction to Applied Statistics* (RM).
- Students must achieve a minimum of A- in at least one of APD 1215H *Psychological Assessment of School-Aged Children* and APD 1216H *Psychoeducational Assessment*, and must complete APD 1218H *Seminar and Practicum in School-Based Assessment, Consultation, and Intervention* in order t o 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:
  - APD 3202H *A Foundation of Program Evaluation in Social Sciences* (RM) (0.5 FCE).
  - APD 3222H *Approaches to Psychotherapy Across the Lifespan* (0.5 FCE), normally taken in Year 1.
  - APD 3241H+ *Seminar and Practicum in Clinical Assessment and Intervention,* normally taken in Year 2. The practicum portion of APD 3241H+ consists of 500 hours (two days a week from September to June) and is normally taken in a clinical setting. Students must complete APD 3241H+ in order to remain in good standing and be permitted to continue in the program.
  - APD 3260H *Psychodiagnostic Systems* (0.5 FCE).
  - APD 5284Y+ *Assessment and Intervention with Culturally and Linguistically Diverse Children, Youth, and Families* (1.0 FCE).
  - 0.5 FCE from the Psychosocial Interventions course menu.
  - 1.0 elective FCE.
  - APD 3242Y *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 APD 1201H *Childhood*

and Adolescent Development. Students who have not taken a previous statistics course or its equivalent must take JOI 1287H *Introduction to Applied Statistics* (RM).

- Students must complete APD 3241H+ *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 APD 1215H, APD 1216H, and APD 1218H 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 APD 1215H *Psychological Assessment of School-Aged Children* and APD 1216H *Psychoeducational Assessment*, and must complete APD 1218H+ *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.

APD 1202Y	Theories and Techniques of Counselling and Psychotherapy
APD 1205H	Ethical Issues in Applied Psychology
APD 1207H	Counselling Topics in Sexual Orientation and Gender Identity Diversity
APD 1215H	Psychological Assessment of School-Aged Children
APD 1216H	Psychoeducational Assessment
APD 1217H	Foundations of Proactive Behavioural and Cognitive-Behavioural Intervention with Children
APD 1218H+	Seminar and Practicum in School-Based Assessment, Consultation, and Intervention
APD 1222H	Approaches to Psychotherapy-Lifespan
APD 1228H	Individual and Group Psychotherapy: Families and Couples Counselling
APD 1233H	Cognitive Development and Applications
APD 1234H	Foundations of Cognitive Science
APD 1236H	Developmental Psychopathology
APD 1237H	Cognitive Development and Learning
APD 1245H	Brief Strategies in Counselling and Psychotherapy
APD 1256H	Child Abuse: Intervention and Prevention
APD 1271H	Perspectives on Executive Functions in Education: From Theory to Practice
APD 1285H	Psychology and Education of Children with Learning Disabilities
APD 1290H	Indigenous Healing in Counselling and Psychoeducation
APD 1291H	Addictive Behaviours: Approaches to Assessment and Intervention
APD 1295H	Adolescent Mental Health: An Examination of Risk and Resilience
APD 1299H	Language Acquisition and Development
APD 3202H	A Foundation of Program Evaluation in Social Sciences (RM)
APD 3204H	Contemporary History and Systems in Human Development and Applied Psychology
APD 3205H	Social and Moral Development
APD 3221H	Cross-Cultural Perspectives on Children's Problems
APD 3222H	Approaches to Psychotherapy Across the Lifespan
APD 3224H	Advanced Proactive Behavioural and Cognitive-Behavioural Interventions
APD 3231H	Psychodynamic Bases of Therapy
APD 3240H	Advanced Social and Emotional Assessment Techniques
APD 3241H+	Seminar and Practicum in Clinical Assessment and Intervention
APD 3242Y	Internship in School and Clinical Child Psychology
APD 3243H	Additional PhD Practicum in Assessment and Intervention
APD 3255H	Systemic Family Therapy
APD 3260H	Psychodiagnostic Systems
APD 3286H	Developmental Neuropsychology
APD 3297H	Biological and Psychological Foundations of Low Incidence Disorders
APD 5000H	Special Topics in Applied Psychology and Human Development: Master's Level
APD 5284Y+	Assessment and Intervention with Culturally and Linguistically Diverse Children, Youth, and Families
JDS 1233H	Cognitive Development and Applications
JHC 1251H	Reading in a Second Language
JOI 1287H	Introduction to Applied Statistics (RM)
JOI 1288H	Intermediate Statistics and Research Design (RM)

+ *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

Landscape Architecture

MLA

Urban Design

MUD

Visual Studies

MVS	*Fields:* Studio Curatorial Studies

Collaborative Specializations

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

1. **Knowledge Media Design**
   - Architecture, MArch
   - Landscape Architecture, MLA
   - Urban Design, MUD
2. **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, 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, urban design, and visual studies under the same roof, the Faculty benefits from rich collaborations and crossover between like-minded disciplines.

The growth has led to the building of a new facility which will double the Faculty's size and create a new and unprecedented centre at the University of Toronto for education, research, and public outreach on architecture, urbanism, and the visual arts.

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University of Toronto
1 Spadina Crescent
Toronto, Ontario M5S 2J5
Canada

Architecture, Landscape, and Design: Graduate Faculty

Full Members

Anderson, Christy - BA, MA, PhD
Celik, Zeynep - BArch, MArch, PhD
Chaouni, Aziza - BScCE, MArch
Farhat, Georges - MArch, PhD
Harwood, John - PhD
Hess, Paul - BA, MA, PhD
Kesik, Ted - BASc, MASc, DPhil
Levit, Robert - BA, MArch (***Associate Dean, Academic***)
Liu, An Te - BA, MArch
Lloyd, Sue - BA, MFA
Lobsinger, Mary Louise - BArch, BES, BA, MES, PhD
Margolis, Liat - BFA, MLA (***Associate Dean, Research***)
McCarney, Patricia - BA, MCP, PhD
North, Alissa - BLA, MLA
Sampson, Barry - BArch
Shim, Brigitte - BES, BArch
Siemiatycki, Matthew - BA, MSc, PhD
Sommer, Richard - BFA, BArch, MArch (***Dean***)
Steele, Lisa - BA
Verderber, Stephen - BSc, AA, MArch, PhD
White, Mason - BArch, MArch
Williamson, Robert Shane - BSc, MArch

Wolff, Jane - AB, MLA
Wright, Robert - BSc, MLA

Members Emeriti

Baird, George - BArch

Associate Members

Akiyama, Mitchell - BFA, MFA, PhD
Babasikas, Petros - BArch, BA, MArch
Boigon, Brian - BArch
Byrne, Ultan - BA, MArch
Clarke, Joseph - PhD, PhD
Denegri, Maria - BA, BArch
Drake, Jennifer Anne Pauline - BEng, MASc, PhD, PEng
Fischer, Barbara - BFA, MA
Fong, Steven - BArch, MArch
Hilchie, Shannon - BEng
Hlady, Marla - BFA, MFA
Holzman, Justine - BA, MLA
Ibelings, Johannes - MA
Jacob, Luis - BA
Kim, Erica - BA, AM, PhD
Kim, Jeannie - AB, MArch, MA
Kwan, Will - BA, MFA
Laird, Mark - BA, MA, PHM
Lee, Vivian - BA, MArch
Lieberman, David - DipIngArch, BFA
Lukachko, Alex - BES, MArch
Macgillivray, James - AB, MArch
Martire, Francesco - MArch
Masoud, Fadi - BES, MLA
Miller, Laura J. - BA, MArch
Mostafa, Heba - AM, PhD
Moukheiber, Carol Leila - BArch, BA
North, Peter - BLA, MLA
Perez-Amado, Victor - MArch
Peters, Brady - BS, BES, MArch, PhD
Petricone, Pina - MArch
Phiffer, Adrian - BArch
Piper, Michael - BS, MArch
Quiros Pacheco, Mauricio - MArch UD
Saleff, Ivan - BTech, MArch
Sealy, Peter - BSc, BArch, MArch, PhD
Shelley, Elise - BSc, MArch, MLA
Shnier, John - BArch, BES
Stankievech, Charles - BA, MFA
Sterling, Mark - BES, BArch
Tod, Joanne - AA
Tomczak, Kim - AA

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.

MArch Program (3.5-Year Option)

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 (BA, BSc, BASc, BES, BFA, BCom) with a final-year grade point average of at least mid-B, and showing leadership potential in the field.
- Recommended: courses in secondary calculus, secondary physics, and university architectural history (0.5 full-course equivalent [FCE]).
- Recommended: preparation in the visual arts, such as drawing, sculpture, graphics, photography, film, or new media, as well as computing and advanced writing 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. 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 in order 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.
- Students who complete their Master of Architecture program and are eligible to convocate 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 **17.5 full-course equivalents (FCEs)** as follows:
  - 15.0 FCEs in core courses
    - 4.0 FCEs Design Studios
    - 2.0 FCEs Option Design Studios
    - 0.5 FCE Thesis Preparation and Research course
    - 1.5 FCEs Design Thesis
    - 1.0 FCE Visual Communications courses
    - 1.0 FCE History courses
    - 0.5 FCE Computer Modelling course
    - 3.5 FCEs Technics and Planning courses
    - 1.0 FCE Professional Practice course
  - 2.5 FCEs in electives, of which 1.0 FCE must be in the History category.

Program Length

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

Time Limit

4 years full-time

MArch Program (2.5-Year: Second-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 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 in order 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.
- Students who complete their Master of Architecture program and are eligible to convocate 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 **12.5 full-course equivalents (FCEs)** as follows:
  - 10.0 FCEs in core courses:
    - 2.0 FCEs Design Studios
    - 2.0 FCEs Option Design Studios
    - 0.5 FCE Thesis Preparation and Research course
    - 1.5 FCEs Design Thesis
    - 0.5 FCE Computer Modelling course
    - 2.5 FCEs Technics and Planning courses
    - 1.0 FCE Professional Practice course
  - 2.5 FCEs in elective courses, of which 1.0 FCE must be in the History category.

Program Length

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

Time Limit

4 years full-time

MArch Program (1-Year: Post-Professional Advanced-Standing Option)

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 in order 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.
- 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.
- **Coursework.** Students must complete a total of **6.0 full-course equivalents (FCEs)** as follows:
  - 4.0 FCEs in core courses:
    - 0.5 FCE Fieldcourse
    - 0.5 FCE Thesis Preparation
    - 1.0 FCE Thesis I
    - 1.5 FCE Thesis II
    - 0.5 FCE Colloquium
  - 2.0 FCEs in elective courses. Of these, 1.0 FCE must be in the student's area of interest.

Program Length

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

Time Limit

3 years full-time

Architecture, Landscape, and Design: Architecture MArch Courses

Consult the department regarding course availability.

Core Courses

Computer Modelling

ARC 2023H	Intermediate Computer Applications in Architecture

Design

ARC 1011Y	Design Studio 1
ARC 1012Y	Design Studio 2
ARC 2013Y	Design Studio 3
ARC 2014Y	Design Studio 4
LAN 3016Y **or** URD 2013Y **or** ARC 3015Y	Design Studio Options **or** Urban Design Studio Options **or** Architectural Design Studio 5: Option Studios
ARC 3016Y	Architectural Design Studio 6: Research Studios
ARC 3017H	Thesis Research and Preparation
ARC 4018Y	Architectural Design Studio 7: Thesis

History

ARC 1031H	Historical Perspectives on Topics in Architecture 1
ARC 1032H	Historical Perspectives on Topics in Architecture 2

Professional Practice

ARC 3052Y	Professional Practice

Proseminar

ALA 3031H	Proseminar

Technics and Planning

ARC 1041H	Architecture in its Technological-Ecological Context
ARC 1042H	Site Engineering and Ecology
ARC 2043H	Building Science, Materials, and Construction 1
ARC 2044H	Structures 1
ARC 2045H	Building Science, Materials, and Construction 2
ARC 2046H	Structures 2
ARC 2047H	Environmental Systems

Visual Communication

ARC 1021H	Visual Communication 1
ARC 1022H	Visual Communication 2

Elective Courses

Not all elective courses are offered every year. Please check the timetable for current listings made available online from the summer.

Architecture and Health

ARC 3600H	Selected Topics in the History and Theory of Architecture and Health

Computer Modelling

ARC 3200H	Selected Topics in Advanced Computer Applications

Design

ARC 1013H	Graphic Design
ARC 1014H	Furniture Design
ARC 1100H	Selected Topics in Design
ARC 2015H	Global Architecture: Urban Analysis and Documentation

History and Theory

ARC 1035H	Toronto Architecture and Urban Form
ARC 3031H	Analysis of Architectural Form
ARC 3038H	Global Architecture: History and Theory
ARC 3100H	Selected Topics in Urban Design
ARC 3300H	Selected Topics in Architectural History and Theory

Independent Study

ARC 3039H	Independent Study and Research in Architecture

Other

ARC 3700H	Selected Topics in Architecture
ARC 3705H	Selected Topics in Architecture
ARC 3706H	Selected Topics in Architecture

Professional Practice

ARC 4500H	Selected Topics in Professional Practice

Technics and Planning

ARC 3400H	Selected Topics in Architecture and Technology
ARC 3500H	Selected Topics in Sustainable Design

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)

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 (such as BA, BSc, BASc, BES, BFA, BCom) with a minimum average of

mid-B and demonstrated leadership potential in the field. Preference is given to applicants who have completed a balanced undergraduate education that includes study in the arts, sciences, and humanities.

- Recommended:
  - undergraduate courses in biology, ecology, English (advanced writing skills), geography, history, humanities, and social sciences
  - preparation in the visual arts, such as hand and digital drawing, film, graphics, photography, sculpture, or other media.
- 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 in order 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.
- **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 Studios
    - 1.0 FCE Design Studio Options
    - 1.5 FCEs Design Studio Thesis
    - 2.0 FCEs Visual Communication courses
    - 2.0 FCEs History, Theory, Criticism courses
    - 1.5 FCEs Technology courses
    - 1.5 FCEs Environment courses
    - 1.0 FCE Professional Practice and Research Methods courses
  - 1.0 FCE in elective courses.

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)

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 architecture, architectural studies, or environmental design, or a comparable degree focusing on the design of 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 visual communications or representation, two courses in architectural history and theory (one in 20th-century), and two courses in architectural technology and/or 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 in order 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.
- **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 Studios
    - 1.0 FCE Design Studio Options
    - 1.5 FCEs Design Studio Thesis
    - 1.0 FCE Visual Communication courses
    - 0.5 FCE History, Theory, Criticism courses
    - 1.0 FCE Technology courses
    - 1.5 FCEs Environment courses
    - 1.0 FCE Professional Practice and Research Methods courses.
  - 1.0 FCE in elective courses.

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)

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 in order 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.
- 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.
- **Coursework.** Students must complete a total of **6.0 full-course equivalents (FCEs)** as follows:
    - 4.0 FCEs in core courses:
        - 0.5 FCE Fieldcourse
        - 0.5 FCE Thesis Preparation
        - 1.0 FCE Thesis I
        - 1.5 FCE Thesis II
        - 0.5 FCE Colloquium.
    - 2.0 FCEs in elective courses. Of these, 1.0 FCE must be in the student's area of interest.

Program Length

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

Time Limit

3 years full-time

Architecture, Landscape, and Design: Landscape Architecture MLA Courses

Consult the department regarding course availability.

Core Courses

Design

LAN 1011Y	Design Studio 1
LAN 1012Y	Design Studio 2
LAN 2013Y	Design Studio 3
LAN 2014Y	Design Studio 4
LAN 3016Y **or** URD 2013Y **or** ARC 3015Y	Design Studio Options **or** Urban Design Studio Options **or** Architectural Design Studio 5: Option Studios
LAN 3017Y	Design Studio Thesis

Environment

LAN 1041H	Field Studies 1
LAN 1043H	Field Studies 2
LAN 2045H	Landscape Ecology I
LAN 2046H	Landscape Ecology II
LAN 2047H	Landscape Hydrology I
LAN 2048H	Landscape Hydrology II

History and Theory

LAN 1031H	History, Theory, Criticism 1
LAN 1032H	History, Theory, Criticism 2
LAN 1037H	Plants and Design I
LAN 1038H	Plants and Design II
LAN 2037H	Contemporary Landscape Theory
LAN 2900H	Landscape Architecture Topics: History, Theory, Criticism

Proseminar

ALA 3031H	Proseminar
LAN 3051H	Landscape Architecture Research Methods
LAN 3052H	Professional Practice

Technology

LAN 1047H	Site Engineering I
LAN 1048H	Site Engineering II
LAN 2042H	Landscape Materials, Assemblies, Techniques
LAN 3045H	Advanced Site Technologies

Visual Communication

LAN 1021H	Visual Communication 1
LAN 1022H	Visual Communication 2
LAN 2023H	Intermediate Visual Communication
LAN 3025H	Advanced Visual Communication

Elective Courses

Not all elective courses are offered every year. Please check the timetable for current listings made available online from the summer.

Design

LAN 2200H	Landscape Architecture Topics: Design

Environment

LAN 2300H	Landscape Architecture Topics: Environment
LAN 2500H	Landscape Architecture Topics: Plants

History and Theory

LAN 2039H	Independent Study in Landscape Architecture
LAN 2700H	Landscape Architecture Topics: Society
LAN 2900H	Landscape Architecture Topics: History, Theory, Criticism
LAN 3900H	Landscape Architecture Topics: History, Theory, Criticism

Proseminar

LAN 2600H	Landscape Architecture Topics: Practice

Technology

LAN 2400H	Landscape Architecture Topics: Techniques
LAN 2800H	Landscape Architecture Topics: Technology

Visual Communication

LAN 2100H	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 the post-metropolis, 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 their studies included a design specialization or if they have professional design experience.
- All applicants must submit a portfolio of design work for review. Applicants with a planning background may also satisfy the design requirement by taking a preliminary makeup year in design in the Faculty of Architecture, Landscape, and Design.
- 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 in order 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.
- **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 course
    - 1.5 FCEs Design Thesis
    - 1.0 FCE History, Theory, Criticism course
    - 1.5 FCEs other courses
  - 2.5 FCEs in elective courses, 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

Consult the department regarding course availability.

Core Courses

Design

URD 1011Y	Urban Design Studio
URD 1012Y	Urban Design Studio Options
URD 2012Y	Independent Studio in Urban Design (may be undertaken in lieu of an option studio)
URD 2013Y **or** LAN 3016Y **or** ARC 3015Y	Urban Design Studio Options **or** Design Studio Options **or** Architectural Design Studio 5: Option Studios
URD 2015Y	Urban Design Studio Thesis

History, Theory, Criticism

URD 1031H	The History of Toronto Urban Form
URD 1041H	Introduction to Urban Design Theory

Other

URD 1021H	Urban Design Visual Communications
URD 1044H	Urban Design and Development
URD 2014H	Thesis Research and Preparation
URD 2041H	Business and Land Use Planning in Real Estate Development

Elective Courses

Not all elective courses are offered every year. Please check the timetable on the website for current listings available from the summer.

History, Theory, Criticism

URD 1033H	Urban Design Culture and Media
URD 1200H	Selected Topics in History and Theory of Urban Design
URD 1500H	Selected Topics in Urban Design

Other

URD 1022H	Topics in Computer-Aided Urban Design
URD 1042H	Urban Design and Environmental Systems
URD 1043H	Independent Study in Urban Design
URD 1300H	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 dependant 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.
- 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 Studes 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 dependant 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.
- 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 Studes 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 Studio Courses

VIS 1000Y	MVS Proseminar
VIS 1001H	Interdisciplinary Studio Practicum/Critiques I
VIS 1003H	Interdisciplinary Studio Practicum/Critiques II
VIS 1004H	Internship
VIS 1010H	Contemporary Art Since 1960
VIS 1020H	Contemporary Art: Theory and Criticism
VIS 2000Y	MVS Proseminar
VIS 2001H	Studio Practicum/Critiques III
VIS 2002H	MVS Research and Writing
VIS 2003Y	MVS Project

MVS Curatorial Studies Courses

VIS 1000Y	MVS Proseminar
VIS 1101H	Paradigmatic Exhibitions: History, Theory, Criticism
VIS 1010H	Contemporary Art Since 1960
VIS 1020H	Contemporary Art: Theory and Criticism
VIS 1102H	MVS Curatorial Research
VIS 1004H	Internship
VIS 2000Y	MVS Proseminar
VIS 2002H	MVS Research and Writing
VIS 2101Y	MVS Curatorial Studies Exhibition Project
VIS 2102H	MVS Curatorial Studies Collaboration

MVS Elective Courses

VIS 3001H	Advanced Readings in Visual Studies
VIS 3002H	Advanced Readings in Curatorial Studies
VIS 3003H	Special Topics in Art and Culture

Art

Art: Introduction

Faculty Affiliation

Arts and Science

Degree Programs

History of Art

MA and PhD	*Fields:* Ancient Medieval Modern Renaissance and Baroque

Collaborative Specializations

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

1. **Book History and Print Culture**
   - History of Art, MA, PhD
2. **Diaspora and Transnational Studies**
   - History of Art, MA, PhD
3. **Jewish Studies**
   - History of Art, MA, PhD
4. **Mediterranean Archaeology**
   - History of Art, PhD
5. **Sexual Diversity Studies**
   - History of Art, MA, PhD

Overview

The Department of Art'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 and the Art Gallery of Ontario.

Contact and Address

Web: http://art.utoronto.ca/graduate
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Art: 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
Fee, Sarah - PhD
Harney, Elizabeth - AB, MA, PhD (***Director of Graduate Studies***)
Jain, Kajri - PhD
Kaplan, Louis - AB, AM, DPhil
Kavaler, Ethan Matt - PhD
Kim, SeungJung - BS, MA, MPH, PhD, PhD
Knappett, Carl - MA, PhD (***Chair and Graduate Chair***)
Legge, Elizabeth MM - BA, BA, MA, PhD
Levy, Evonne - MFA, PhD
Mostafa, Heba - AM, PhD
Periti, Giancarla - PhD
Purtle, Jennifer - BA, MPH, MA, PhD
Reid, Dennis - BA, MA
Ricco, John - BA, MA, PhD
Sohm, Philip - BA, MA, PhD
Syme, Alison - PhD

Members Emeriti

Eleen, Luba - BA, MA, PhD
Richardson, Douglas - BA, MA, PhD
Scavizzi, Giuseppe - PhD
Shaw, Joseph - BA, MAT, PhD
Shaw, Maria - PhD

Associate Members

Letesson, Quentin - PhD

Art: History of Art MA

Master of Arts

Program Description

The MA program is a course-based and research-intensive degree designed to prepare history of art students for curatorial work, art consultation, heritage programs, cultural journalism, secondary school teaching, and doctoral research.

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's additional admission requirements stated below.
- Strong overall grade average in history of art 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 complete **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) Renaissance and Baroque, 4) Modern. No more than 2.0 FCEs may be taken in any one of the four fields
  - Courses 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 and the other department concerned.
- Reading knowledge of (normally) French, German, Italian, or Chinese; tested in the first session.
- *Orientation to Art Historical Research Methods*, a workshop for new students, must be 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 of Art PhD

Doctor of Philosophy

Program Description

The PhD program is designed to prepare history of art 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 MA or 2) direct entry after completing a BA.

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's additional admission requirements stated below.
- Minimum A- average in the MA program.
- Students without an MA in Art from the University of Toronto may be required to complete at least 1.0 additional full-course equivalent (FCE).
- Reading knowledge of two foreign languages, normally French, German, Italian, or Chinese.
- 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.
- Acceptance is limited to students who propose theses corresponding to research expertise of faculty. See faculty research profiles.

Program Requirements

- **Coursework**. Students must complete at least **3.0 full-course equivalent (FCEs)** of graduate courses as follows:
  - FAH 5000Y *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.
  - Coursework must be chosen from at least three of the following fields: 1) Ancient, 2) Medieval, 3) Renaissance and Baroque, 4) Modern.
  - 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.
  - FAH 1001H *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 at the University of Toronto or elsewhere.
- *Orientation to Art Historical Research Methods*, a workshop for new students, must be taken in Year 1.
- 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** (normally German, French, Italian, or Chinese) by the end of Year 2, if they have not already done so in the MA. 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.
- Also 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 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.
- Immediately following successful completion of comprehensive examinations, students must formally establish their **PhD Advisory 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 Advisory 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 Advisory Committee and the PhD student. The drafted proposal must be approved, first by the Advisory 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 in an appropriate format and at a time to be determined by the supervisor in consultation with the Director of Graduate Studies.

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's additional admission requirements stated below.
- Applicants with a BA 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, normally French, German, Italian, or Chinese.
- 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.
- Acceptance is limited to students who propose theses corresponding to research expertise of faculty. See faculty research profiles.

Program Requirements

- **Coursework**. Students must complete **at least 5.5 full-course equivalents** (FCEs) in art history as follows:
    - FAH 1001H *Methods of Art History* (0.5 FCE), a departmental methodology course, must be taken within Years 1 and 2. With departmental approval, credit may be given for a research methodology course taken previously at the University of Toronto or elsewhere.
    - FAH 5000Y *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.
    - Students must maintain an average grade of at least an A-.
    - In Years 1 and 2, students take a maximum of five courses in their declared area of interest. The other four (or more) courses must be in three of the following fields: (1) Ancient, (2) Medieval, (3) Renaissance and Baroque, or (4) Modern.
    - Courses without a specific regional focus may count toward the geographical distribution requirement if the student's final paper is on an appropriate topic.
- *Orientation to Art Historical Research Methods*, a workshop for new students, must be taken in Year 1.
- 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.
- Students must pass **examinations in two foreign languages** (normally German, French, Italian, or Chinese) 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.

- 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.
- Immediately following successful completion of comprehensive examinations, students must formally establish their **PhD Advisory 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 Advisory 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 Advisory Committee and the PhD student. The drafted proposal must be approved, first by the Advisory 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 in an appropriate format and at a time to be determined by the supervisor in consultation with the Director of Graduate Studies.

Program Length

5 years (some students may take longer to complete the program)

Time Limit

7 years

Art: History of Art MA, PhD Courses

Not all courses are offered each year. Check the departmental website for course availability under the current timetable.

Methods

FAH 1001H	Methods of Art History

Ancient

FAH 2017H	Art and Archaeology of the Everyday
FAH 2018H	Art and the Aegean Bronze Age: Contemporary Perspectives
FAH 2021H	Myth and Fantasy in Roman Painting
FAH 2022H	The Rhetoric of Space: Space as a Categorical Concept in Critical Histories of Art
FAH 2023H	Mind and Materiality: Views from Art History and Archaeology
FAH 2025H	Visual Narrative and Time in Ancient Greek and Roman Art
FAH 2026H	Myth into Art: Myth and Visual Narrative in Antiquity
FAH 2027H	Women and Gender in Ancient Greece
FAH 2028H	Art and the Philosophy of Time
FAH 2029H	The Art of Perception
FAH 2034H	Topics in Roman Imperial Art
FAH 2037H	Empathy, Embodiment, and Emotion in Ancient Art

Medieval

FAH 1114H	Multicultural Arts of Medieval Sicily
FAH 1118H	The Medieval Treasury
FAH 1119H	Global Medieval Art in China
FAH 1121H	12th-Century Renaissance?
FAH 1123H	The Art of the Medieval Book
FAH 1125H	Medieval Pilgrimage Art and Architecture
FAH 1126H	Exceptional Cities of the Middle Ages
FAH 1127H	Early Medieval Art
FAH 1175H[0]	Early Islamic Architecture: 7th-10th c.
FAH 1176H	History of Islamic Cairo (7th-16th c.)

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

Renaissance and Baroque

FAH 1201H	Art, Space, and Ritual in Renaissance Convents
FAH 1202H	Correggio and the Problem of Italian Renaissance Art
FAH 1203H	Art and Monasticism in Renaissance Italy
FAH 1204H	The Cassinese Art of Reform in Renaissance Italy
FAH 1205H	Early Modern Intermediality

FAH 1221H	Inside the Painter's Studio
FAH 1224H	Renaissance in Miniature
FAH 1226H	Architecture and Alchemy Before Modernism
FAH 1229H	Architecture of the Global Renaissance
FAH 1231H	Northern Renaissance Sculpture
FAH 1245H	Pieter Bruegel and Netherlandish Sixteenth-Century Painting
FAH 1249H	Margaret of Austria and the Renaissance in the Netherlands
FAH 1288H	Gianlorenzo Bernini
FAH 1299H	Heinrich Wölfflin's Principles of Art History (1915) @ 100: A Worldwide Reception History

Modern

FAH 1410H	Artwriting, Past and Present
FAH 1411H	Art and Analogy
FAH 1456H	Theories of Photographic Manipulation: Prehistories to Pictorialism
FAH 1458H	Viewing History: The Visual Experience of the Past, 1750–1900
FAH 1459H	Photography, Illusion, and Knowledge in 19th-Century Europe
FAH 1462H	Photography and Scientific Representation in the 19th Century
FAH 1463H	Realisms
FAH 1464H	The Recalcitrant Icon
FAH 1471H	The Aesthetics of Democracy
FAH 1476H	Surrealism and Art
FAH 1478H	Art and Animation
FAH 1481H	Automotive Affects
FAH 1482H	The Time of Art History
FAH 1486H	Bloomsbury and Vorticism
FAH 1488H	The Nature of Landscape
FAH 1489H	Re: Vision (Comparative Histories of the Senses)
FAH 1500H	Augmented Reality Art
FAH 1520H	Photography and Modernism
FAH 1755H	Architecture and the Project of Industrial Modernity
FAH 1756H	Acoustic Space
FAH 1800H	James Wilson Morrice
FAH 1801H	Portraiture in Canada: 1750–1870
FAH 1870H	Recent Canadian Art in International Perspective
FAH 1920H	Primitivism to Globalism: Theories of Otherness in Modern and Contemporary Arts
FAH 1921H	GeoAesthetics
FAH 1934H	Cosmopolitan/Comparative Modernisms
FAH 1935H	Contemporary Art Practices and the Modernist Archive
FAH 1936H	The Retro-Modern and the Time of the Contemporary
FAH 1940H	Photography and Humour
FAH 1951H	Contemporary Chinese Art and its Discontents
FAH 1956H	Can Art History Speak Chinese?

Reading Courses

FAH 3000H,Y	Special Studies in History of Art (only 1.0 FCE with this prefix is permitted in any one degree program)
FAH 3011H	Readings in Ancient Art
FAH 3012H	Readings in Medieval Art
FAH 3013H	Readings in Renaissance and Baroque Art
FAH 3014H	Readings in Modern and Contemporary Art
FAH 5000Y	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

EAS 1229H	Topics in Chinese Aesthetics
EAS 1339H	Topics in Chinese Art Theories
MSL 2240H	The Photographic Record
NMC 2500H	Early Islamic Art and Architecture
NMC 2521H	The Taj Mahal and Its Origins
NMC 2526H	Text and Image: The Formation of Arabic and Persian Manuscript Illustration

Astronomy and Astrophysics

Astronomy and Astrophysics: Introduction

Faculty Affiliation

Arts and Science

Degree Programs Offered

Astronomy and Astrophysics

MSc
PhD

Overview

The 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), the Centre for Planetary Sciences (CPS), 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 Herschel Space Observatory and Planck were launched recently and will soon be followed by the James Webb Space Telescope and ALMA. 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, CPS, 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

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
Artymowicz, Pawel - MS, PhD
Bond, J Richard - BSc, MS, PhD, FRSC, FRS
Bovy, Jo - MMath, PhD, CRC
Carlberg, Raymond - BSc, MS, PhD (***Chair and Graduate Chair***)
Gaensler, Bryan - PhD, CRC (***Director, Dunlap***)
Hlozek, Renee - PhD
Jayawardhana, Ray - BS, PhD
Lester, John - BA, MS, PhD
Lowman, Julian - BSc, MS, DPhil
Martin, Peter - BSc, MSc, PhD, FRSC, OC
Matzner, Christopher - BA, MA, PhD (***Associate Chair, Graduate***)
Menou, Kristen - BSc, MS, ScD (***Director, CPS***)
Moon, Dae-Sik - BS, MS, PhD
Murray, Norman - BSc, PhD, CRC
Netterfield, C. Barth - BSc, PhD
Pen, Ue-Li - BSc, PhD (***Acting Director, CITA***)
Pfeiffer, Harald - MSc, PhD, CRC
Sivanandam, Suresh - PhD
Thompson, Christopher - BSc, PhD
Valencia, Diana - BS, MS, ScD
van Kerkwijk, Marten - MA, PhD
Wu, Yanqin - PhD (***Associate Chair, Undergraduate***)
Yee, Howard - BASc, PhD, FRSC

Members Emeriti

Clement, Christine - BSc, MA, PhD
Clement, Maurice - BSc, MSc, PhD
Dyer, Charles - BS, MSc, PhD
Fernie, John Donald - BSc, MSc, PhD, FRAS
Garrison, Robert - BA, PhD
Seaquist, Ernest - BASc, MSc, PhD

Associate Members

Dubinski, John - BSc, MSc, PhD
Reid, Michael - BSc, MSc, 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

- Completion of **2.0 required full-course equivalents (FCEs)**: AST 1501Y and AST 1500Y, 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. AST 1501Y is normally completed during the Fall/Winter of Year 1, and AST 1500Y is completed in the following Summer session.
- Minimum of **1.0 FCE (two half courses)** from the AST preparatory, elective, or specialized courses.
- More courses may be taken for credit or audited as appropriate.

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.
- Because many universities do not offer extensive undergraduate training in astronomy and astrophysics, preparation in physics and mathematics is an acceptable background.

Program Requirements

- There is no minimum course requirement in the four-year program except for **courses** deemed necessary by the student's PhD supervisory committee.
- Students register in the **AST 4000Y *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, AST 4002Y, 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**: general knowledge and thesis proposal. Both are oral examinations conducted by a panel of faculty members. The general knowledge section evaluates the student's mastery of general astronomy and astrophysics. 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. Both qualifying examinations are taken in the Summer session of Year 1.
- 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.
- **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

- Completion of **2.0 required full-course equivalents (FCEs)**: AST 1501Y and AST 1500Y, with different supervisors. Students are immediately engaged in original research throughout these two required research courses. AST 1501Y is normally completed during the Fall/Winter of Year 1, and AST 1500Y is completed in the following Summer session. An oral exam by committee is held for each.
- A minimum of **four half courses (2.0 FCEs)** from the AST preparatory, elective, or specialized courses.
- Students register in the **AST 4000Y *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, AST 4002Y, 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**: general knowledge and thesis proposal. Both are oral examinations conducted by a panel of faculty members. The general knowledge section evaluates the student's mastery of general astronomy and astrophysics. 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. Both qualifying examinations are taken in the Summer session 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.
- **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

AST 1410H	Stars
AST 1420H	Galactic Structure and Dynamics
AST 1430H	Cosmology
AST 1440H	Radiation Processes and Gas Dynamics

Research Courses

AST 1500Y+	Directed Research
AST 1501Y	Introduction to Research
AST 4000Y+	Research (students register in this 4000Y series each year, beginning in Year 2, in sequence of the last digit: 2, 3, etc.)
AST 4002Y+	Research
AST 4003Y+	Research
AST 4004Y+	Research
AST 4005Y+	Research
AST 4006Y+	Research
AST 4007Y+	Research

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

Elective Courses

AST 2010H	Physics of Stellar Atmospheres
AST 2020H	Physics of Stellar Interiors
AST 2030H	Interstellar Medium and Star Formation
AST 2040H	Extragalactic Astronomy
AST 2050H	Observational Techniques
AST 2060H	General Relativity I: Theory
AST 2070H	General Relativity II: Applications and Cosmology

Specialized Courses

AST 3010H	Advanced Topics in Stellar and Galactic Astronomy I
AST 3011H	Advanced Topics in Stellar and Galactic Astronomy II
AST 3020H	Advanced Topics in Interstellar Matter and Star Formation I
AST 3021H	Advanced Topics in Interstellar Matter and Star Formation II
AST 3030H	Advanced Topics in Extragalactic Astronomy and Cosmology I
AST 3031H	Advanced Topics in Extragalactic Astronomy and Cosmology I
AST 3050Y	Theoretical Cosmology
AST 3100H	Lecture Series in Specialized Topics (mini courses)

Biochemistry

Biochemistry: Introduction

Faculty Affiliation

Medicine

Degree Programs

Biochemistry

MSc
PhD

Combined Degree Programs

STG, MD / PhD

Collaborative Specializations

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

1. **Biomedical Engineering**
   - Biochemistry, MSc, PhD
2. **Developmental Biology**
   - Biochemistry, MSc, PhD
3. **Genome Biology and Bioinformatics**
   - Biochemistry, PhD
4. **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: http://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
Attisano, Liliana - BSc, PhD
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
Enenkel, Cordula - PhD
Ernst, Oliver - PhD
Forman-Kay, Julie - BSc, PhD
Glover, John - BSc, MSc, PhD
Grinstein, Sergio - BSc, PhD
Houry, Walid - BS, MS, PhD (***Acting Chair and Acting Graduate Chair, July 1 to Dec. 31, 2018***)
Howell, Lynne - BSc, PhD
Ingles, C James - BSc, PhD
Isenman, David - BSc, BSc, PhD
Jorgensen, Annelise - MSc, PhD
Kapus, Andras - MD, PhD
Kay, Lewis - PhD
Keeley, Frederick - BSc, PhD
Kelley, Shana - BA, PhD
Kim, Peter - PhD
Klip, Amira - ScD
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 (***Graduate Coordinator***)
Melnyk, Roman - PhD
Moraes, Trevor - BS, MSc, PhD
Moran, Laurence - BSc, PhD
Nodwell, Justin - PhD (***Chair and Graduate Chair***)
Pai, Emil - PhD
Palazzo, Alexander - PhD
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
Rubinstein, John L - BSc, PhD
Schuurmans, Carol - PhD
Screaton, Robert - PhD
Segall, Jacqueline - BSc, PhD
Sharpe, Simon J - 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
Wyatt, Haley - PhD
Yip, Christopher - BSc, PhD
Zamble, Deborah - 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
Kahr, Walter - MD
Lee, Hyung-Ran - PhD
Muise, Aleixo - MD
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/specialist BSc program in biochemistry/molecular biology. Applicants with strong academic credentials in honours/specialist programs in disciplines related to biochemistry/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 are generally required to have an MSc degree in biochemistry or in a closely related subject area and must arrange for general Graduate Record Examination (GRE) results to be sent to the department.
- Applicants from outside Canada whose primary language is not English and who graduated from a university where the language of instruction was not English must provide TOEFL (Test of English as a Foreign Language) and TWE (Test of Written English) 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 IELTS (International English Language Testing System) score of at least 7 is also acceptable.

Program Requirements

- Complete any courses that were a condition of acceptance.
- Complete a 0.5 full-course equivalent (FCE) from the following list:
    - BCH 2024H[0] *Focused Topics in Biochemistry*;
    - JTB 2020H *Applied Bioinformatics*;
    - JBB 2025H *Protein Crystallography*; or
    - JBB 2026H *Protein Structure, Folding, and Design*.
- Participate in BCH 2020Y[0] *Master's Seminar Course in Biochemistry*.
- Thesis and successful completion of an oral examination on his or her 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 to the four-year and transfer options 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 are generally required to have an MSc degree in biochemistry or in a closely related subject area with high academic standing and must arrange for General Record Examination (GRE) results to be sent to the department.
- Applicants from outside Canada whose primary language is not English and who graduated from a university where the language of instruction was not English must provide TOEFL (Test of English as a Foreign Language) and TWE (Essay Writing) 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 IELTS (International English Language Testing System) score of at least 7 is also acceptable.

Program Requirements

- Students who have completed an MSc degree must successfully complete of a **qualifying examination** within the first 18 months of the program.
- Complete any **courses** that were a condition of acceptance.
- Complete **1.5 full-course equivalents (FCEs)** from Biochemistry or cognate departments in graduate-level courses; at least 0.5 FCE must be from the following list:
    - BCH 2024H[0] *Focused Topics in Biochemistry;*
    - JTB 2020H *Applied Bioinformatics*;
    - JBB 2025H *Protein Crystallography*; or
    - JBB 2026H *Protein Structure, Folding, and Design*.

  Students may fulfil the 1.5-FCE course requirement entirely from this list.

- Participate in **BCH 2022Y**[0] *Doctoral Seminar Course in Biochemistry*.
- Submit a **thesis** 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; 5 years transfer-from-master's

Time Limit

6 years full-time; 7 years transfer-from-master's

[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 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 are generally required to have an MSc degree in biochemistry or in a closely related subject area with high academic standing and must arrange for General Record Examination (GRE) results to be sent to the department.
- Applicants from outside Canada whose primary language is not English and who graduated from a university where the language of instruction was not English must provide TOEFL (Test of English as a Foreign Language) and TWE (Essay Writing) 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 IELTS (International English Language Testing System) score of at least 7 is also acceptable.
- The latter two categories require the student to successfully complete a qualifying examination within the first 18 months.

Program Requirements

- Students must successfully complete a **qualifying examination** within the first 18 months of the program.
- Complete any **courses** that were a condition of acceptance.
- Complete **1.5 full-course equivalents (FCEs)** from Biochemistry or cognate departments in graduate-level courses; at least 0.5 FCE must be from the following list:
    - BCH 2024H[0] *Focused Topics in Biochemistry;*
    - JTB 2020H *Applied Bioinformatics*;

- JBB 2025H *Protein Crystallography*; or
- JBB 2026H *Protein Structure, Folding, and Design*.

Students may fulfil the 1.5-FCE course requirement entirely from this list.

- Participate in **BCH 2022Y**[0] *Doctoral Seminar Course in Biochemistry*.
- Submit a **thesis** 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. The course is graded when completed.

Biochemistry: Biochemistry MSc, PhD Courses

For course details and availability, consult the Biochemistry website.

BCH 1371H	Laboratory Course in Biochemistry (BCH 371)[§]
BCH 1422H	Membrane Proteins: Structure and Function—Lectures (BCH 422H)[§]
BCH 1426H	Regulation of Signalling Pathways—Lectures (BCH 426H)[§]
BCH 1440H	Protein Biosynthesis—Lectures (BCH 440H)[§]
BCH 1441H	Bioinformatics (BCH 441H)[§]
BCH 1471Y	Advanced Biochemistry—Laboratory (BCH 471Y)[§] (prerequisite is BCH 371[§] or equivalent)
BCH 2020Y[0]	Master's Seminar Course in Biochemistry (Credit/No Credit)
BCH 2022Y[0]	Doctoral Seminar Course in Biochemistry (Credit/No Credit)
BCH 2024H[0]	Focused Topics in Biochemistry
JBB 1425H	Structural Biology: Principles and Practice—Lectures (BCH 425H)[§]
JBB 2025H	Protein Crystallography—Lectures
JBB 2026H	Protein Structure, Folding, and Design
JBI 1428H	Molecular Immunology—Lectures (JBI 428H)[§]
JBL 1507H	Biochemistry of Inherited Disease
JNP 1017H[+]	Current Topics in Molecular and Biochemical Toxicology
JNP 1018H[+]	Molecular and Biochemical Basis of Toxicology
JNR 1444Y	Fundamentals of Neuroscience: Cellular and Molecular—Lectures (PSL 444Y)[§]
JTB 2020H	Applied Bioinformatics

[§] Arts and Science undergraduate course

[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.

Biomedical Engineering

Biomedical Engineering: Introduction

Faculty Affiliation

Applied Science and Engineering

Degree Programs

Biomedical Engineering

MASc	*Fields:* Neural/Sensory Systems and Rehabilitation Biomaterials, Tissue Engineering and Regenerative Medicine Nanotechnology, Molecular Imaging and Systems Biology Engineering in a Clinical Setting
MEng	*Emphases:* Entrepreneurship, Leadership, Innovation and Technology (ELITE) Forensic Engineering *Fields:* Biomaterials, Tissue Engineering and Regenerative Medicine Engineering in a Clinical Setting Nanotechnology, Molecular Imaging and Systems Biology Neural/Sensory Systems Rehabilitation
PhD	*Fields:* Neural/Sensory Systems and Rehabilitation Biomaterials, Tissue Engineering and Regenerative Medicine Nanotechnology, Molecular Imaging and Systems Biology Engineering in a Clinical Setting Clinical Engineering

Clinical Engineering

MHSc

Collaborative Specializations

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

1. **Cardiovascular Sciences**
   - Biomedical Engineering, MASc, PhD
   - Clinical Engineering, MHSc
2. **Developmental Biology**
   - Biomedical Engineering, MASc, PhD
   - Clinical Engineering, MHSc
3. **Genome Biology and Bioinformatics**
   - Biomedical Engineering, PhD
4. **Health Care, Technology, and Place (admissions have closed)**
   - Biomedical Engineering, PhD
5. **Human Development (admissions have been suspended)**
   - Biomedical Engineering, PhD
6. **Musculoskeletal Sciences**
   - Biomedical Engineering, MASc, PhD
7. **Neuroscience**
   - Biomedical Engineering, MASc, PhD
   - Clinical Engineering, MHSc
8. **Resuscitation Sciences**
   - Biomedical Engineering, PhD
   - Clinical Engineering, MHSc

Overview

The Institute of Biomaterials and Biomedical Engineering (IBBME) 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

Web: www.ibbme.utoronto.ca

Institute of Biomaterials and Biomedical Engineering (IBBME) Graduate Office:

Email: admissions.ibbme@utoronto.ca
Telephone: (416) 978-4841
Fax: (416) 978-4317

Institute of Biomaterials and Biomedical Engineering
University of Toronto
Room 407, Rosebrugh Building
164 College Street
Toronto, Ontario M5S 3G9
Canada

IBBME Clinical Engineering Office:

Email: clinicaleng.ibbme@utoronto.ca
Telephone: (416) 978-6102
Fax: (416) 978-4317

Institute of Biomaterials and Biomedical Engineering
University of Toronto
Room 407, Rosebrugh Building
164 College Street
Toronto, Ontario M5S 3G9
Canada

Biomedical Engineering: Graduate Faculty

Full Members

Allen, Christine - BSc, PhD, PhD, GlaxoSmithKline Chair in Pharmaceutics and Drug Delivery
Andrysek, Jan - BSc, MASc, PhD
Audet, Julie - MASc, PhD (***Graduate Coordinator, Graduate Programs***)
Bardakjian, Berj - BSc, BEd, MASc, PhD
Beal, Deryk - BA, MHSc, PhD
Biddiss, Elaine Alisa - MASc, PhD
Bogoch, Earl - BA, MSc, MD
Cafazzo, Joseph - DPhil
Carlen, Peter - MD
Chan, Warren - BSc, PhD (***Director***)
Chau, Tom - PhD
Cheng, Hai-Ling - BSc, MS, PhD
Cheung, Angela - BA, MD, PhD
Cvitkovitch, Dennis - BSc, MSc, PhD
Davies, John - BSc, BDSc, PhD, DSc
Drake, James - BSE, MSc, MBCHB
Eizenman, Moshe - BASc, MASc, PhD
Fernandez-Gonzalez, Rodrigo - BSc, PhD
Fernie, Geoffrey - BSc, PhD
Finer, Yoav - MSc, MSc, DMD, PhD
Frecker, Richard - BSc, MD, PhD
Ginsberg, Howard - BSc, LRCP, MD, PhD
Grynpas, Marc - MSc, PhD
Hynynen, Kullervo - BSc, MS, PhD
Kandel, Rita - MD
Keating, Armand - BSc, MD
Kelley, Shana - BA, PhD
Kumacheva, Eugenia - MSc, PhD
Laflamme, Michael - BS, MD, PhD
Levi, Ofer - BSc, MSc, PhD
Li, Ren-Ke - MHSc, MSc, MD, PhD
Mandelis, Andreas - BSc, MA, MSc, PhD
Matsuura, Naomi - ME, PhD
McGuigan, Alison - MEng, PhD
Mihailidis, Alex - BASc, MASc, PhD
Nachman, Adrian - BSc, MA, PhD
Naguib, Hani - BSc, ME, PhD, PEng
Norwich, Kenneth - MSc, PhD
Popovic, Milos - DipIng, PhD
Prescott, Steven - BSc, MSc, MD, PhD
Radisic, Milica - BEng, PhD
Rocheleau, Jonathan - BSc, PhD
Santerre, Paul - BSc, MSc, PhD
Schweizer, Tom - BA, MSc, DPhil
Sefton, Michael - BASc, ScD
Shoichet, Molly - PhD
Simmons, Craig - BSc, MSc, PhD
Skinner, Frances - PhD
Sone, Eli - BSc, MS, PhD
Sun, Yu - BS, MS, MS, PhD
Thompson, Michael - BSc, PhD, DSc, FCIC
Thorpe, Steven - BASc, MASc, PhD
Trbovich, Patricia L - BA, MA, PhD, PhD
Truong, Kien (Kevin) - BASc, PhD
Waddell, Thomas - MSc, LMCC, MD, PhD
Wheeler, Aaron - BS, PhD
Whyne, Cari - BSc, PhD
Wong, Willy - BSc, MSc, PhD
Yee, Albert - MSc, LMCC, MD
Yip, Christopher - BSc, PhD (***Director and Graduate Chair***)
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
Joy, Michael - BSc, MASc, PhD
Kunov, Hans - MSc, PhD
Pilliar, Robert - BASc, PhD
Pritzker, Kenneth - BSc, MD

Associate Members

Aviv, Richard - MBCHB
Bouwmeester, James Christopher - PhD
Easty, Anthony - PhD
Farhat, Walid - BSc, DrMed
Fialkov, Jeffrey - MSc, MD
Islam, Mohammad - PhD
John, Michael Sasha - MSD
Karoubi, Golnaz - PhD
Kilkenny Rocheleau, Dawn - PhD
Kumbhare, Dinesh - BSc, MHSc, MD
Kushki, Azadeh - DrEng
Lapinsky, Stephen - MSc, MBCHB
McMillen, David - BSc, MS, PhD
Steinman, David - BASc, MASc, PhD
Taati, Babak - PhD
Viswanathan, Sowmya - DPhil
Weersink, Robert - BSc, PhD

Biomedical Engineering: Biomedical Engineering MASc

Master of Applied Science

Program Description

The research-intensive MASc program provides a strong academic foundation for students who want to become immersed in the discipline of biomedical engineering and is designed to offer students challenging and rewarding research opportunities to enhance the quality of our health-care system.

The MASc program is offered in the fields of 1) Neural/Sensory Systems and Rehabilitation; 2) Biomaterials, Tissue Engineering and Regenerative Medicine; 3) Nanotechnology, Molecular Imaging and Systems Biology; and 4) Engineering in a Clinical Setting.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy IBBME'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 A- in the final two years of study.

Program Requirements

- **Coursework.** The program normally comprises **at least 2.0 full-course equivalents (FCEs)** including:
  - BME 1450H *Bioengineering Science* (0.5 FCE); and
  - an appropriate life science or engineering course (0.5 FCE). Engineering and physical science students must take a life science course, such as JPB 1022H (or an equivalent); life science students must take an engineering or physical science course, such as JPB 1055H (or an equivalent).
- Students must participate in:
  - either BME 1010H or BME 1011H *Graduate Seminar* series (0.0 FCE).
  - JDE 1000H *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) Neural/Sensory Systems and Rehabilitation; 2) Biomaterials, Tissue Engineering and Regenerative Medicine; 3) Nanotechnology, Molecular Imaging and Systems Biology; or 4) Engineering in a Clinical Setting.

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 internship.

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 Rehabilitation. Students can take the program 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 IBBME's additional admission requirements stated below.
- A bachelor's degree in engineering or equivalent from a recognized university with at least an average of A- in the final two years of study.

Program Requirements

- **Coursework.** The program comprises at least **5.0 full-course equivalents (FCEs)** as follows:
  - at least 1.0 FCE in biomedical engineering technology courses;
  - at least 1.0 FCE in commercialization and entrepreneurship courses including BME 1800H and BME 1801H;
  - at least 1.0 FCE in biomedical sciences courses;
  - a 1.5 FCE internship in biomedical device development, usually over one session for the full-time option (BME 1899Y), and over three sessions for the part-time option (BME 1898Y). The internship must be in at least one of the following biomedical engineering research fields: 1) Neural/Sensory Systems and Rehabilitation; 2) Biomaterials, Tissue Engineering and Regenerative Medicine; 3) Nanotechnology, Molecular Imaging and Systems Biology; or 4) Engineering in a Clinical Setting. The internship can be taken in academic research laboratories, government institutions, health-care facilities, in the industry, or in health-care consulting firms.
  - the remaining 0.5 FCE can be a half course in either biomedical engineering technology, commercialization and entrepreneurship, or biomedical sciences.
- For the 5.0 FCEs, 2.5 FCEs must be BME courses (or a joint BME course with the designator JCB, JEB, JPB, JSB, or JMM); this includes the practicum project BME 1899Y or BME 1898Y. The remaining three courses (1.5 FCEs) can be taken from any other department associated with the program. All courses must be graduate level, which includes both 500- and 1000-level. Students can take a maximum of one 500-level course.
- A curriculum plan must be submitted to the program director prior to the start of the program.
- A written report submitted to the program director.
- Health and safety training workshops.
- Students have the option of completing an emphasis in 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 full-time (typical registration sequence: F/W/S);
9 sessions part-time (typical registration sequence: F/W/S/F/W/S/F/W/S)

Time Limit

2 years full-time;
6 years part-time

Course List

Biomedical Engineering Technology

BME 1405H	Clinical Engineering Instrumentation I
BME 1436H	Clinical Engineering Surgery
BME 1439H	Clinical Engineering Instrumentation II
BME 1452H	Signal Processing for Bioengineering
BME 1457H	Biomedical Nanotechnology
BME 1458H	Pattern Discovery Methods for Biomedical Engineering
BME 1462H	Biological Image Analysis
BME 1464H	Orthopaedic Biomechanics and Mechanics of Biomaterials
BME 1471H	Rehabilitation Engineering
BME 1472H	Fundamentals of Neuromodulation Technology and Clinical Applications
BME 1473H	Acquisition and Processing of Bioelectric Signals
BME 1480H	Experimental Design and Multivariate Analysis in Bioengineering
JEB 1365H	Ultrasound: Theory and Applications in Biology and Medicine
JEB 1433H	Medical Imaging
JEB 1444H	Neural Engineering
JEB 1447H	Sensory Communications
JMB 1050H	Biological and Bio-inspired Materials

Biomedical Science

BME 1453H	Cell and Tissue Engineering
BME 1454H	Regenerative Medicine: Fundamentals and Applications
BME 1459H	Protein Engineering
BME 1460H	Quantitative Fluorescence Microscopy: Theory and Application to Live Cell Imaging
BME/JBP 1022H	Human Physiology as Related to Bioengineering II
JCB 1349H	Molecular Assemblies: Structure/Function/ Properties

Commercialization and Entrepreneurship

BME 1800H	Biomedical Product Development I
BME 1801H	Biomedical Product Development II
BME 1899Y	Internship in Applied Research

Biomedical Engineering: Biomedical Engineering PhD

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:

Neural/Sensory Systems and Rehabilitation
Biomaterials, Tissue Engineering and Regenerative Medicine
Nanotechnology, Molecular Imaging and Systems Biology
Engineering in a Clinical Setting

PhD Program

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy IBBME's additional admission requirements stated below.
- Applicants must have master's degree in dentistry, engineering, medicine, or one of the physical or biological sciences. Applicants must have an undergraduate degree in engineering.

Program Requirements

- **Coursework.** Normally, students must complete **at least 1.0 full-course equivalent (FCE)** including:
  - Engineering and physical science students are required to take a life science course (0.5

FCE), such as JPB 1022H (or an equivalent). Life science students must take a physical science course (0.5 FCE), such as JPB 1055H (or an equivalent).
    - Students are also expected to take BME 1450H *Bioengineering Science* and pursue a **thesis topic** relevant to at least one of the following Biomedical Engineering research fields: 1) Neural/Sensory Systems and Rehabilitation; 2) Biomaterials, Tissue Engineering and Regenerative Medicine; 3) Nanotechnology, Molecular Imaging and Systems Biology; 4) Engineering in a Clinical Setting; or 5) Clinical Engineering*.
- 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 BME 1010H or BME 1011H *Graduate Seminar* series (0.0 FCE)
    - JDE 1000H *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.

Program Requirements

- **Coursework.** Students who transfer without completing a master's degree in biomedical engineering must complete the total course requirements for both degrees: 4.0 full-course equivalents (FCEs) for the master's level plus 1.0 FCE for the PhD level, for a total of **5.0 FCEs**:
    - Engineering and physical science students must take a life science course (0.5 FCE), such as JPB 1022H (or an equivalent). Life science students must take a physical science course (0.5 FCE), such as JPB 1055H (or an equivalent).
    - Students are expected to take BME 1450H *Bioengineering Science* (0.5 FCE) and pursue a thesis topic relevant to at least one of the following Biomedical Engineering research fields: 1) Neural/Sensory Systems and Rehabilitation; 2) Biomaterials, Tissue Engineering and Regenerative Medicine; 3) Nanotechnology, Molecular Imaging and Systems Biology; 4) Engineering in a Clinical Setting; or 5) Clinical Engineering*.
- 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 BME 1010H or BME 1011H *Graduate Seminar* series (0.0 FCE)
    - JDE 1000H *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 IBBME's additional admission requirements stated below.
- Direct entry with a bachelor's degree may be considered in exceptional cases.

Program Requirements

- **Coursework.** Normally, students must complete **3.0 full-course equivalents (FCEs)** including:
  - Engineering and physical science students must take a life science course (0.5 FCE), such as JPB 1022H (or an equivalent). Life science students must take a physical science course (0.5 FCE), such as JPB 1055H (or an equivalent).
  - Students are also expected to take BME 1450H Bioengineering Science (0.5 FCE) and pursue a thesis topic relevant to at least one of the following Biomedical Engineering research fields: 1) Neural/Sensory Systems and Rehabilitation; 2) Biomaterials, Tissue Engineering and Regenerative Medicine; 3) Nanotechnology, Molecular Imaging and Systems Biology; 4) Engineering in a Clinical Setting; or 5) Clinical Engineering*.
- 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 BME 1010H or BME 1011H *Graduate Seminar* series (0.0 FCE)
  - JDE 1000H *Ethics in Research* (0.0 FCE)
  - health and safety training workshops.

Program Length

5 years

Time Limit

7 years

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 IBBME's additional admission requirements stated below.
- Applicants must have an undergraduate degree in engineering.

Program Requirements

- **Coursework.** Normally, students must complete **at least 1.0 full-course equivalent (FCE)** including:
  - Engineering and physical science students must take a life science course (0.5 FCE), such as JPB 1022H (or an equivalent). Life science students must take a physical science course (0.5 FCE), such as JPB 1055H (or an equivalent).
  - If a student does not have a formal degree in clinical engineering, 0.5 FCE from one of the IBBME clinical engineering courses (BME 1405H, BME 1439H, BME 1436H, or BME 4444H) is required. A student who possesses protracted professional engineering experience (five or more years) will be exempt from this requirement.
  - Students are expected to take BME 1450H *Bioengineering Science* (0.5 FCE) and pursue a **thesis topic** relevant to at least one of the following Biomedical Engineering research fields: 1) Neural/Sensory Systems and Rehabilitation; 2) Biomaterials, Tissue Engineering and Regenerative Medicine; 3) Nanotechnology, Molecular Imaging and Systems Biology; 4) Engineering in a Clinical Setting; or 5) Clinical Engineering*.
- 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 IBBME-appointed; however, the co-supervisor could be from a clinical unit other than IBBME 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 BME 1010H or BME 1011H *Graduate Seminar* series (0.0 FCE)
  - JDE 1000H *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. Clinical Engineering MHSc students must complete 3.0 full-course equivalents (FCEs) within the MHSc curriculum.

Program Requirements

- **Coursework.** Students who transfer without completing a master's degree in biomedical engineering must complete the total course requirements for both degrees: 4.0 full-course equivalents (FCEs) for the master's level plus 1.0 FCE for the PhD level, for a total of **5.0 FCEs**:
    - Engineering and physical science students must take a life science course (0.5 FCE), such as JPB 1022H (or an equivalent). Life science students must take a physical science course (0.5 FCE), such as JPB 1055H (or an equivalent).
    - If a student does not have a formal degree in clinical engineering, 0.5 FCE from one of the IBBME clinical engineering courses (BME 1405H, BME 1439H, BME 1436H, or BME 4444H) is required. A student who possesses protracted professional engineering experience (five or more years) will be exempt from this requirement.
    - Students are expected to take BME 1450H *Bioengineering Science* (0.5 FCE) and pursue a thesis topic relevant to at least one of the following Biomedical Engineering research fields: 1) Neural/Sensory Systems and Rehabilitation; 2) Biomaterials, Tissue Engineering and Regenerative Medicine; 3) Nanotechnology, Molecular Imaging and Systems Biology; 4) Engineering in a Clinical Setting; or 5) Clinical Engineering*.
- 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 IBBME-appointed; however, the co-supervisor could be from a clinical unit other than IBBME 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 BME 1010H or BME 1011H *Graduate Seminar* series (0.0 FCE)
    - JDE 1000H *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 IBBME's additional admission requirements stated below.
- Direct entry with a bachelor's degree may be considered in exceptional cases.

Program Requirements

- **Coursework.** Normally, students must complete **3.0 full-course equivalents (FCEs)** including:
    - Engineering and physical science students must take a life science course (0.5 FCE), such as JPB 1022H (or an equivalent). Life science students must take a physical science course (0.5 FCE), such as JPB 1055H (or an equivalent).
    - If a student does not have a formal degree in clinical engineering, 0.5 FCE from one of the IBBME clinical engineering courses (BME 1405H, BME 1439H, BME 1436H, or BME 4444H) is required. A student who possesses protracted professional engineering experience (five or more years) will be exempt from this requirement.
    - Students are also expected to take BME 1450H Bioengineering Science (0.5 FCE) and pursue a thesis topic relevant to at least one of the following Biomedical Engineering research fields: 1) Neural/Sensory Systems and Rehabilitation; 2) Biomaterials, Tissue Engineering and Regenerative Medicine; 3) Nanotechnology, Molecular Imaging and Systems Biology; 4) Engineering in a Clinical Setting; or 5) Clinical Engineering*.
- 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 IBBME-appointed; however, the co-supervisor could be from a clinical unit other than IBBME 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 BME 1010H or BME 1011H *Graduate Seminar* series (0.0 FCE)
    - JDE 1000H *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 an internship 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 IBBME's additional admission requirements stated below.
- Selected students who hold a bachelor of applied science degree in engineering.

Program Requirements

- **Coursework.** Students must normally complete **4.0 full-course equivalents (FCEs)** as follows:
    - BME 1405H (0.5 FCE), BME 1436H (0.5 FCE), BME 1439H (0.5 FCE), and one elective (0.5 FCE), relevant to a student's area of research
    - BME 1450H (0.5 FCE) and a life sciences course (0.5 FCE), such as JPB 1022H (or an equivalent)
    - 1.0 FCE of internships (BME 4444Y) in health-care facilities, the medical device industry, or health-care consulting firms. The internship must total a minimum of 625 hours.
- Students must participate in:
    - either BME 1010H or BME 1011H *Graduate Seminar* series (0.0 FCE) and
    - JDE 1000H *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: 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

APS 1010H, APS 1011H, APS 1026H, APS 1027H, APS 1029H, APS 1030H, APS 1501H

Entrepreneurship and Innovation

APS 1012H, APS 1013H, APS 1015H, APS 1023H, APS 1033H, APS 1035H, APS 1036H, APS 1088H

Finance and Management

APS 502H, APS 1001H, APS 1004H, APS 1005H, APS 1009H, APS 1014H, APS 1016H, APS 1017H, APS 1020H, APS 1022H, APS 1028H, APS 1032H

Engineering and Society

APS 510H, APS 1018H, APS 1024H, APS 1025H, APS 1031H, APS 1034H, APS 1420H, JMG 2020H

Emphasis: Forensic Engineering (MEng only)

MEng students must successfully complete four courses (one core course and three elective courses).

Core Course

MSE 1031H

Elective Courses

APS 540H, APS 1034H, APS 1039H, APS 1040H,
BME 1800H, BME 1801H, BME 1480H,
CHE 561H, CHE 568H, CHE 1213H, CHE 1431H, CHE 1432H, CHE 1434H,
CIV 510H, CIV 518H, CIV 1163H, CIV 1171H, CIV 1174H, CIV 1190H, CIV 1201H, CIV 1279H, CIV 1282H, CIV 1422H, CIV 1429H,
JMB 1050H,
JNC 2503H,
MSE 1015H, MSE 1016H, MSE 1022H, MSE 1032H,
MIE 566H, MIE 1224H, MIE 1301H, MIE 1303H, MIE 1411H, MIE 1414H, MIE 1616H, MIE 1713H, MIE 1714H, MIE 1721H, MIE 1723H, MIE 1727H, MIE 1804H.

Biomedical Engineering: Biomedical Engineering MASc, PhD, Clinical Engineering MHSc Courses

Not all courses are offered every year. Students should contact the institute office for information about course availability. Outlines of these and other closely related courses may be obtained from the institute office.

BME 1010H	Graduate Seminar
BME 1011H	Graduate Seminar
BME 1405H	Clinical Engineering Instrumentation I
BME 1436H	Clinical Engineering Surgery
BME 1439H	Clinical Engineering Instrumentation II
BME 1450H	Bioengineering Science
BME 1452H	Signal Processing for Bioengineering
BME 1453H	Cellular Systems Engineering
BME 1454H	Regenerative Medicine: Fundamentals and Applications
BME 1456H	Changing Health Care Technologies, People, and Places
BME 1457H	Biomedical Nanotechnology
BME 1458H	Pattern Discovery Methods for Biomedical Engineering
BME 1459H	Protein Engineering
BME 1460H	Quantitative Fluorescence Microscopy: Theory and Application to Live Cell Imaging
BME 1462H	Biological Image Analysis
BME 1464H	Advanced Topics on Magnetic Resonance Imaging
BME 1471H	Rehabilitation Engineering
BME 1472H	Fundamentals of Neuromodulation Technology and Clinical Applications
BME 1473H	Acquisition and Processing of Bioelectric Signals
BME 1479H	Statistical Discovery Techniques for Biomedical Researchers
BME 1480H	Experimental Design and Multivariate Analysis in Bioengineering
BME 1802H	Applying Human Factors to the Design of Medical Devices
BME 1898Y	Internship in Applied Research
BME 4444Y	Practice in Clinical Engineering
HAD 5010H	Canada's Health System and Health Policy: Part I
JCB 1349H	Molecular Assemblies: Structure/Function/ Properties
JEB 1365H	Ultrasound: Theory and Applications in Biology and Medicine
JEB 1433H	Medical Imaging
JEB 1444H	Neural Engineering
JEB 1447H	Sensory Communications
JEB 1451H	Neural Bioelectricity
JMB 1050H	Biological and Bio-inspired Materials
JPB 1022H	Human Physiology as Related to Biomedical Engineering
JTC 1331H	Biomaterials Science
MBP 1007H	Fundamentals in Molecular and Cell Biology
MBP 1022H	Advanced Cell Biology for Physical Scientists

Cell and Systems Biology

Cell and Systems Biology: Introduction

Faculty Affiliation

Arts and Science

Degree Programs

Cell and Systems Biology

MSc
PhD

Collaborative Specializations

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

1. **Developmental Biology**
   - Cell and Systems Biology, MSc, PhD
2. **Genome Biology and Bioinformatics**
   - Cell and Systems Biology, PhD
3. **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: http://csb.utoronto.ca
Email: csb.grad@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
Anderson, James - BA, PhD
Arruda Carvalho, Maithe - BSc, MSc, PhD
Barrett, F Michael - BSc, MSc, PhD
Berleth, Thomas - BSc, MSc, PhD
Boonstra, Rudy - BSc, PhD
Braeutigam, Katharina - MA, MA, PhD
Brown, Ian - BSc, PhD
Bruce, Ashley - BA, PhD
Buck, Leslie - BSc, PhD
Calarco, John Anthony - PhD
Campbell, Malcolm - DPhil
Chang, Belinda - AB, PhD, CRC
Cheng, Mary - MSc, PhD
Christendat, Dinesh - PhD
Coleman, John - BSc, PhD
Desveaux, Darrell - BSc, MSc, PhD, CRC
Edwards, Elizabeth - BEng, PhD
Ensminger, Ingo - PhD
Erb, Suzanne - BSc, MA, PhD
Espie, George - PhD
Fernandez-Gonzalez, Rodrigo - BSc, PhD
Fitzpatrick, Mark - BS, MS, PhD
Fulthorpe, Roberta - BSc, MSc, PhD
Gazzarrini, Sonia - BA, PhD
Gerlai, Robert - MSc, PhD
Godt, Dorothea - MS, DrRerNat
Goring, Daphne - PhD, CRC
Guttman, David - BS, PhD, CRC
Guzzo, Christina - BSc, PhD
Harris, Tony - BSc, PhD, CRC
Harrison, Rene - BS, MS, PhD
Hasenkampf, Clare - BSc, MS, PhD
Holmes, Melissa - BA, MA, PhD
Horgen, Paul - BA, MS, PhD
Ito Lee, Rutsuko - BA, PhD
Kanelis, Voula - PhD
Kohn, Linda - BS, PhD
Kronzucker, Herbert - PhD
Lange, Angela - BSc, PhD
Larsen, Ellen - BSc, MSc, PhD
Levine, Joel - BA, PhD
Liu, Baohua - BSc, MSc, PhD
Lovejoy, David - PhD
Lovejoy, Nathan Richard - BSc, MS, PhD
Martin, Loren - BSc, MSc, PhD
Mason, Andrew - MS, PhD
Master, Emma - BSc, PhD
McCourt, Peter - PhD
McGowan, Patrick - BSc, MA, PhD
McMillen, David - BSc, MS, PhD
Milstein, Josh - BS, PhD
Mitchell, Jennifer - DSc
Monks, Ashley - BSc, MA, PhD
Moses, Alan - BA, PhD
Nambara, Eiji - MS, PhD
Nash, Joanne - BS, MSc, PhD
Ness, Robert - BSc, PhD
O'Day, Danton - BSc, MSc, PhD
Orchard, Ian - BSc, PhD, DSc
Peever, John - MSc, PhD

Phillips, Michael - BSc, PhD
Plotnikov, Sergey - DSc
Provart, Nicholas - PhD
Reid, Stephen - BS, PhD
Rhee, Ho Sung - BS, MS, PhD
Richards, Blake - BS, MS, PhD
Riggs, Charles - BS, PhD
Ringuette, Maurice - BSc, PhD
Romans, Patricia - BSc, MSc, PhD
Ryu, William - AB, PhD
Senatore, Adriano - BSc, MSc, PhD
Shin, Jumi - AB, DPhil
Smith, J.J. Berry - BA, MA, PhD
Sokolowski, Marla - BSc, PhD, CRC
Stephenson, Richard - BSc, PhD
Stewart, Bryan - BSc, MS, DPhil
Takehara, Kaori - BSc, MSc, PhD
Tepass, Ulrich - MSc, PhD
Terebiznik, Mauricio - BSc, PhD
Thiele, Tod - BS, PhD
Tobe, Stephen - BSc, MSc, PhD, FRSC
Treanor, Bebhinn Lucy - BSc, PhD
Tropepe, Vince - BSc, PhD (***Chair and Graduate Chair***)
Vanlerberghe, Greg - BSc, MSc, PhD
Varmuza, Susannah - BSc, MSc, PhD
Welch Jr., Kenneth Collins - BS, MA, PhD
Westwood, J. Timothy - PhD
Winklbauer, Rudolf - MSc, PhD
Woodin, Melanie - MSc, PhD
Yoshioka, Keiko - PhD
Zhao, Rongmin - BSc, PhD
Zovkic, Iva - BA, MA, PhD

Associate Members

Currie, Joshua - PhD
Fittipaldi, Nahuel Vicente - BS, MS, PhD
Lumba, Shelley - PhD
Revers, Leigh - PhD
Saltzman, Arneet - BSc, PhD
Subramaniam, Rajagopal - 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 CSB 1010Y *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

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

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.
    - CSB 1011Y ***PhD Seminar Series*** (1.0 FCE, minimum 24 seminars per year).
    - A **PhD proposal**, which involves three components:
        1. preparation of a written research proposal
        2. presentation to the department and questioning by the public
        3. *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 CSB 1011Y ***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:
    1. preparation of a written research proposal
    2. presentation to the department and questioning by the public
    3. *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 CSB 1011Y ***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:
    1. preparation of a written research proposal
    2. presentation to the department and questioning by the public
    3. *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.

CSB 1010Y[0]	MSc Seminar Series
CSB 1011Y[0]	PhD Seminar Series
CSB 1018H	Advanced Microscopy and Imaging
CSB 1020H	Topics in Cell and Systems Biology
CSB 1025H	Methods in Genomics and Proteomics
CSB 1472H	Computational Genomics and Bioinformatics
CSB 1482H	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 Water Technologies Analytics 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:

1. **Biomedical Engineering**
   - Chemical Engineering and Applied Chemistry, MASc, PhD
2. **Cardiovascular Sciences**
   - Chemical Engineering and Applied Chemistry, MASc, PhD
3. **Engineering Education**
   - Chemical Engineering and Applied Chemistry, MASc, PhD
4. **Environmental Studies**
   - Chemical Engineering and Applied Chemistry, MASc, MEng, PhD
5. **Environment and Health**
   - Chemical Engineering and Applied Chemistry, MASc, MEng, PhD
6. **Genome Biology and Bioinformatics**
   - Chemical Engineering and Applied Chemistry, PhD
7. **Global Health**
   - 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:

1. Biomolecular and Biomedical Engineering
2. Bioprocess Engineering
3. Chemical and Materials Process Engineering
4. Engineering Informatics
5. Environmental Science and Engineering
6. Pulp and Paper
7. Surface and Interface Engineering
8. Sustainable Energy

Contact and Address

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Department of Chemical Engineering and Applied Chemistry
University of Toronto
Room 212, Wallberg Building
200 College Street
Toronto, Ontario M5S 3E5
Canada

Chemical Engineering and Applied Chemistry: Graduate Faculty

Full Members

Acosta, Edgar Joel - BS, MS, PhD
Allen, D Grant - BASc, MASc, PhD (***Chair and Graduate Chair***)
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
Cluett, William - BSc, PhD
Cormack, Donald - BASc, MASc, PhD
Coyle, Thomas - BS, BA, ScD
DeMartini, Nikolai - BSc, MSc, PhD
Diosady, Levente - BASc, MASc, PhD
Edwards, Elizabeth - BEng, PhD
Evans, Gregory - PhD
Farnood, Ramin - BASc, MASc, PhD
Iakounine, Alexandre - MSc, ScD
Jia, Charles - BEng, MEng, PhD
Kawaji, Masahiro - BASc, MSc, PhD
Kirk, Donald - BASc, MASc, PhD
Kortschot, Mark - BASc, MASc, PhD
Lawryshyn, Yuri - DipIng, BASc, MASc, MBA, 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
Newman, Roger Charles - BA, PhD, DSc
Papangelakis, Vladimiros - MEng, PhD
Radisic, Milica - BEng, PhD
Ramchandran, Arun - PhD
Reeve, Douglas - BSc, MASc, PhD
Santerre, Paul - BSc, MSc, PhD
Saville, Bradley - BSc, PhD
Sefton, Michael - BASc, ScD
Sherwood Lollar, Barbara - PhD
Shoichet, Molly - PhD
Thomson, Murray - BSc, PhD
Tran, Hoc Nghia (Honghi) - PhD
Wania, Frank - 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
Jervis, Robert - BA, MA, PhD, RN, FCIC
Luus, Rein - BASc, MASc, AM, PhD
Mackay, Donald - BSc, PhD
Paradi, Joseph - BSc, PhD
Phillips, Mary - BASc, BASc, MA, PhD
Smith, James - BASc, MASc, PhD
Trass, Olev - BSE, ScD

Associate Members

Chan, Ariel - BSc, MSc, PhD
Crooks, Gregory - BASc, MEng
Gong, Sunling - BASc, MASc, PhD
Jones, Andrew Kevin - BSE, MASc, PhD
Krause, Eberhard - MASc, PhD
Liss, Steven - BSc, MSc, PhD
Norval, Graeme - BASc, MASc, PhD
Rizvi, Syed - BS, MEng, MS, PhD
Savchenko, Alexei - MS, PhD
Sinukoff, Randall - BASc, MASc
Tabe, Shahram - BASc, MASc, 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 complete at least three graduate half courses (**1.5 full-course equivalents [FCEs]**) as follows:
    - One course must normally be selected from Category A: fundamental courses (see courses below).
    - 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.
- Students must attend four sessions of the CHE 300xH seminar series (credit/no credit).
- Students must complete CHE 1102H *Research Methods and Project Execution* once during their program, typically in Year 1.
- Students must also complete CHE 2222H *Safety Workshop* and JDE 1000H *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

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 Water Technologies; Analytics; 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 Water Technologies; Analytics; 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 Water Technologies; Analytics; 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 complete at least **2.0 full-course equivalents (FCEs)**.

    - 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.
- Students must complete eight sessions of the **CHE 300xH seminar series** (credit/no credit).
- Students must also take **CHE 1102H *Research Methods and Project Execution*** once during their program, typically in Year 1.
- If not already completed, students must take CHE 2222H *Safety Workshop* and JDE 1000H *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 complete **3.0 full-course equivalents (FCEs)** and do not have to take a separate PhD qualifying examination.
    - 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.
- Students must complete eight sessions of the **CHE 300xH seminar series** (credit/no credit).
- If not already completed, students must take CHE 2222H *Safety Workshop* and JDE 1000H *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.
- 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).
- In exceptional cases, applicants may enter the PhD program via direct entry after completing a bachelor's degree.

Program Requirements

- **Coursework.** Students must complete at least **3.0 full-course equivalents (FCEs)**.
  - 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.
- Students must complete eight sessions of the **CHE 300xH seminar series** (credit/no credit).
- Students must also take **CHE 1102H *Research Methods and Project Execution*** once during their program, typically in Year 1.
- If not already completed, students must take CHE 2222H *Safety Workshop* and JDE 1000H *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 PhD program will be subject to the same requirements as students in the full-time program.
- Students must complete at least **2.0 full-course equivalents (FCEs)**.
  - 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.
- Students must complete eight sessions of the **CHE 300xH seminar series** (credit/no credit).
- Students must also take **CHE 1102H *Research Methods and Project Execution*** once during their program, typically in Year 1.
- If not already completed, students must take CHE 2222H *Safety Workshop* and JDE 1000H *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

AER 501H, AER 1403H, APS 1028H, CHE 1123H, MIE 519H, MIE 1740H.

Elective Courses—Manufacturing Engineering

AER 521H, AER 1415H,
CHE 575H, CHE 1134H,
MIE 506H, MIE 540H, MIE 1706H, MIE 1713H, MIE 1718H, MIE 1743H,
MSE 558H, MSE 561H, MSE 1013H, MSE 1015H, MSE 1028H, MSE 1029H, MSE 1031H,
ROB 501H.

Elective Courses—Manufacturing Management

APS 1005H, APS 1011H, APS 1012H, APS 1013H, APS 1014H, APS 1017H, APS 1020H, APS 1023H, APS 1026H, APS 1040H, APS 1088H, APS 1420H, APS 1501H,
CHE 561H, CHE 1434H,
MIE 523H, MIE 1505H, MIE 1514H, MIE 1715H, MIE 1721H, MIE 1723H, MIE 1727H.

Emphasis: Advanced Water Technologies (MEng only)

MEng students must successfully complete two core courses (1.0 full-course equivalent [FCE]) and two specialized courses (1.0 FCE).

- Two core courses (1.0 FCEs):
    1. CHE 1150H *Industrial Water Technology*
    2. at least one of the following (any of the other three can count as a specialized course):
        - CIV 541H *Environmental Biotechnology*
        - CIV 1308H *Physical and Chemical Treatment Processes*
        - CIV 1311H *Advanced and Sustainable Drinking Water Treatment* and
        - CIV 1319H *Chemistry and Analysis of Water and Wastes.*
- Two specialized courses selected from the following (1.0 FCE):
    - CHE 565H *Aqueous Process Engineering*
    - CHE 1213H *Corrosion*
    - CHE 1430H *Hydrometallurgy Theory and Practice*
    - CIV 549H *Groundwater Flow and Contamination*
    - CIV 550H *Water Resources Engineering*
    - CIV 1303H *Water Resources Systems Modeling*
    - JNC 2503H *Environmental Pathways*
    - MIE 1807H *Principles of Measurements*
    - STA 1004H *Introduction to Experimental Design*
    - or one of the remaining courses from item 2.

Upon successful completion of the emphasis requirements and the successful completion of the MEng degree requirements, the student will receive a Letter of Completion.

Emphasis: Analytics (MEng only)

MEng students must successfully complete four half courses (2.0 full-course equivalents [FCEs]) from the following lists. These must include at least one core course; the remaining courses must be selected from the list of elective courses.

Core Courses

ECE 1504H Statistical Learning
MIE 1624H Introduction to Data Science and Analytics

Elective Courses

APS 502H, APS 1005H, APS 1017H, APS 1022H
CHE 507H, CHE 1148H, CHE 1434H
CIV 1504H, CIV 1506H, CIV 1507H, CIV 1532H, CIV 1538H
ECE 537H, ECE 1505H, ECE 1510H, ECE 1657H, ECE 1778H, ECE 1779H
MIE 562H, MIE 1413H, MIE 1501H, MIE 1512H, MIE 1513H, MIE 1620H, MIE 1621H, MIE 1622H, MIE 1623H, MIE 1653H, MIE 1721H, MIE 1723H, MIE 1727H.

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

APS 510H, APS 530H, APS 1420H, GLA 1000H, JCR 1000Y (full-year course)

Group B

APS 1015H, APS 1020H, APS 1024H, CHL 5700H, JMG 2020H

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.

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

APS 1010H, APS 1011H, APS 1026H, APS 1027H, APS 1029H, APS 1030H, APS 1501H

Entrepreneurship and Innovation

APS 1012H, APS 1013H, APS 1015H, APS 1023H, APS 1033H, APS 1035H, APS 1036H, APS 1088H

Finance and Management

APS 502H, APS 1001H, APS 1004H, APS 1005H, APS 1009H, APS 1016H, APS 1017H, APS 1020H, APS 1022H, APS 1028H, APS 1032H, APS 1038H, APS 1039H, APS 1040H

Engineering and Society

APS 510H, APS 1018H, APS 1024H, APS 1025H, APS 1031H, APS 1034H, APS 1420H, JMG 2020H

Emphasis: Forensic Engineering (MEng only)

MEng students must successfully complete four courses (one core course and three elective courses).

Core Course

MSE 1031H

Elective Courses

APS 540H, APS 1034H, APS 1039H, APS 1040H,
BME 1800H, BME 1801H, BME 1480H,
CHE 561H, CHE 568H, CHE 1213H, CHE 1431H, CHE 1432H, CHE 1434H,
CIV 510H, CIV 518H, CIV 1163H, CIV 1171H, CIV 1174H, CIV 1190H, CIV 1201H, CIV 1279H, CIV 1282H, CIV 1422H, CIV 1429H,
JMB 1050H,
JNC 2503H,
MSE 1015H, MSE 1016H, MSE 1022H, MSE 1032H,
MIE 566H, MIE 1224H, MIE 1301H, MIE 1303H, MIE 1411H, MIE 1414H, MIE 1616H, MIE 1713H, MIE 1714H, MIE 1721H, MIE 1723H, MIE 1727H, MIE 1804H.

Emphasis: Sustainable Energy (MASc, MEng, and PhD)

MASc and PhD students must successfully complete:

- At least three half courses (1.5 full-course equivalents [FCEs]) from the course lists below.
- A thesis in an area of relevance to sustainable energy with approval of the Institute of Sustainable Energy steering committee.

MEng students must successfully complete:

- Four courses (2.0 FCEs) from the following lists below, of which at least one (0.5 FCE) must be a core course.

Core Courses

APS 1032H,
MIE 515H, MIE 1120H.

Elective Courses

AER 507H, AER 1304H, AER 1315H, AER 1415H,
CHE 568H, CHE 1053H, CHE 1118H, CHE 1123H, CHE 1142H, CHE 1143H,
CIV 575H, CIV 576H, CIV 577H, CIV 1303H, CIV 1307H,
ECE 533H, ECE 1030H, ECE 1055H, ECE 1057H, ECE 1085H, ECE 1086H, ECE 1092H, ECE 1094H,
MIE 516H, MIE 517H, MIE 1128H, MIE 1129H, MIE 1130H, MIE 1240H, MIE 1715H,
MSE 1022H, MSE 1023H, MSE 1028H, MSE 1058H.

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, CHE 2222H *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 WHMIS refresher workshop. Students registered in a graduate degree program involving research are required to participate in the non-credit seminar course JDE 1000H *Ethics in Research* during their first or second session of registration.

Category A: Fundamental Courses

CHE 1100H	Fundamentals of Chemical Engineering
CHE 1107H	Applied Mathematics
CHE 1141H	Advanced Chemical Reaction Engineering
CHE 1142H	Applied Chemical Thermodynamics
CHE 1143H	Transport Phenomena
CHE 1310H	Chemical Properties of Polymers
JTC 1134H	Applied Surface and Interface Science
JTC 1135H	Applied Surface Chemistry

Category B: Specialized Courses

APS 502H	Financial Engineering
APS 510H	Innovative Technologies and Organizations in Global Energy Systems
APS 530H	Appropriate Technology and Design for Global Development
APS 1001H	Project Management
APS 1004H	Human Resource Management: An Engineering Perspective
APS 1005H	Operations Research for Engineering Management
APS 1009H	Natural Resources Management
APS 1010H	Cognitive and Psychological Foundations of Effective Leadership
APS 1011H	Concepts and Application of Authentic Leadership
APS 1012H	Managing Business Innovation and Transformational Change
APS 1013H	Applying Innovation in Engineering and Business Operations
APS 1014H	Advanced Project Management
APS 1015H	Social Entrepreneurship
APS 1016H	Financial Management for Engineers
APS 1017H	Supply Chain Management and Logistics
APS 1018H	History and Philosophy of Engineering
APS 1020H	International Business for Engineers
APS 1022H	Financial Engineering II
APS 1023H	New Production Innovation
APS 1024H	Infrastructure Resilience Planning
APS 1025H	Infrastructure Protection
APS 1026H	Positive Psychology for Engineers
APS 1027H	Engineering Presentations
APS 1028H	Operations and Production Management for Manufacturing and Services
APS 1029H	The Science of Emotional Intelligence and its Application to Leadership
APS 1030H	Engineering Careers—Theories and Strategies to Manage Your Career for the Future
APS 1031H	Infrastructure Planning
APS 1032H	Introduction to Energy Project Management
APS 1033H	Business Innovation Leading to the Future, Based on Imagineering
APS 1034H	Understanding Technological Catastrophes
APS 1035H	Technology Sales for Entrepreneurs
APS 1036H	Formative Experiential Entrepreneurial Learning (FEEL)
APS 1088H	Entrepreneurship and Business for Engineers
APS 1201H	Topics in Engineering and Public Policy 500-level (undergraduate/graduate) Courses
APS 1420H	Technology, Engineering, and Global Development
APS 1501H	Leadership and Leading in Groups and Organizations
APS 1502H	Leading Engineering Design Projects
CHE 507H	Process Modelling and Simulation
CHE 553H	Electrochemistry
CHE 561H	Risk Based Safety Management
CHE 564H	Pulp and Paper Processes
CHE 565H	Aqueous Process Engineering
CHE 568H	Nuclear Engineering
CHE 575H	Mechanical Properties of Bio-Composites and Biomaterials
CHE 1053H	Electrochemistry
CHE 1123H	Liquid Biofuels
CHE 1125H	Modelling and Optimization of Chemical and Biomedical Networks
CHE 1134H	Advances in Bioengineering
CHE 1146H	Applied Transport Phenomena in Energy Systems
CHE 1147H	Data Mining in Engineering
CHE 1148H	Process Data Analytics
CHE 1150H	Industrial Water Technology
CHE 1213H	Corrosion
CHE 1430H	Hydrometallurgy, Theory, and Practice (MEng only)
CHE 1431H	Environmental Auditing (MEng only)
CHE 1432H	Technical Aspects of Environmental Regulations (MEng only)
CHE 1433H	Air Dispersion Modelling
CHE 1434H	Six Sigma for Chemical Processes
CHE 1435H	Fundamentals of Aerosol Physics and Chemistry
JCB 1349H	Molecular Assemblies: Structure/Function/Properties
JCC 1313H	Environmental Microbiology

JCR 1000Y	An Interdisciplinary Approach to Addressing Global Challenges
JNC 2503H	Environmental Pathways
JTC 1331H	Biomaterials Science

Seminar Courses

CHE 1102H	Research Methods and Project Execution
CHE 300xH	Seminars in Chemical Engineering and Applied Chemistry (Credit/No Credit)

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.

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:

1. **Biomedical Engineering**
   - Chemistry, MSc, PhD
2. **Environmental Studies**
   - Chemistry, MSc, PhD
3. **Optics**
   - Chemistry, MSc

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.

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Abbatt, Jonathan - BSc, PhD
Batey, Robert Alexander - BA, PhD (***Chair and Graduate Chair***)
Beharry, Andrew - BSc, PhD
Brumer, Paul - 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
Krull, Ulrich - BSc, MSc, 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
Peng, Hui - PhD
Polanyi, John - MSc, PhD, DSc, FRSC, FRS
Prosser, Scott - BSc, MSc, DPhil
Rousseaux, Sophie - PhD
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
Sullan, Ruby May - BSc, PhD
Taylor, Mark - BSc, DSc
Thompson, Michael - BSc, PhD, DSc, FCIC
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
Zamble, Deborah - BSc, PhD
Zhang, Xiaoan - MS, PhD

Members Emeriti

Harrison, Alexander - MSc, PhD
Jones, J Bryan - BSc, PhD, DPhil
McLean, Stewart - BSc, PhD
Reynolds, William - BSc, PhD
Still, Ian Wj - BSc, PhD

Associate Members

Muir, Derek - BSc, MSc, PhD
Rauscher, Sarah - BSc, PhD
Reiner, Eric - BSc, MSc, 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 every year. Attendance and presentation of a seminar are mandatory in order to receive the credit.
- Submission of a **thesis**.

Program Length

6 sessions full-time (typical registration sequence: F/W/S/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* (CHM 1190Y). Students must complete 30 Analytical Seminar Plus (ASP) points.
- 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:
    - CHM 1401H *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.
- Presentation of **two seminars** (normally in Years 2 and 4). Participation in the *Environmental Chemistry Seminar* and colloquia program (CHM 1590Y).
- 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): either CHM 1261H or CHM 1270H that are offered in alternating years **or** CHM 1266H.
- Participation in the *Inorganic Chemistry Seminar* (CHM 1290Y): 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 CHM 1040H to CHM 1068H (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).
- Participation in the *Organic Chemistry Seminar* (CHM 1090Y): present two seminars, normally in Year 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.
- Presentation of **two seminars**, normally in Years 2 and 4. Participation in the *Physical Chemistry Seminar* (CHM 1490Y).
- 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 (CHM 1206H, CHM 1301H, CHM 1302H).
  - A list of other courses considered appropriate to the Polymers and Materials Chemistry research area is available from the department.
- 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* (CHM 1390Y).
- Upon the completion of coursework, successful performance in an **oral comprehensive field examination** in Polymers and Materials Chemistry.

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.
- 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.

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.

Analytical Chemistry

CHM 1102H	Biosensors and Chemical Sensors
CHM 1103H	Advanced Topics in Analytical Chemistry
CHM 1104H	Separation Science
CHM 1105H	Separations, Chromatography, and Microfluidics
CHM 1106H	Lab Instrumentation
CHM 1107H	The -Omics Revolution and Mass Spectrometry
CHM 1150H	Advances in Electroanalytical Chemistry and Electrochemical Sensors
CHM 1152H	Chemical Sensors
CHM 1157H	Applications of Chemometrics
CHM 1190Y	Analytical Chemistry Seminar (Credit/No Credit)
CHM 1410H	Analytical Environmental Chemistry

CHM 2014H	Research in Analytical Chemistry
BME 1452H	Signal Processing for Bioengineering

Environmental Chemistry

CHM 1401H	Transport and Fate of Chemical Species in the Environment
CHM 1404H	Molecular Analysis of Natural Systems
CHM 1410H	Analytical Environmental Chemistry
CHM 1415H	Atmospheric Chemistry
CHM 1420H	Environmental Chemistry of Soil
CHM 1425H	Modelling the Fate of Organic Chemicals in The Environment
CHM 1430H	Advanced Topics in Atmospheric Chemistry
CHM 1590Y	Environmental Chemistry Seminar (Credit/No Credit)
CHM 2534H	Research in Environmental Chemistry
EES 1105H	Soil Contamination Chemistry

Inorganic Chemistry

CHM 1202H	Selected Current Directions in Inorganic Chemistry
CHM 1204H	Organometallic Chemistry and Catalysis
CHM 1205H	Inorganic Reaction Mechanisms
CHM 1206H	Solid State Chemistry: Structure-Property Relations
CHM 1255H	Supramolecular Chemistry
CHM 1258H	Reactions of Coordinated Ligands
CHM 1261H	Topics in Inorganic Chemistry I (core course)
CHM 1263H	Bio-inorganic Chemistry
CHM 1268H	X-Ray Crystallography
CHM 1269H	Nanochemistry: A Chemistry Approach to Nanomaterials
CHM 1270H	Frontiers in Inorganic Chemistry (core course)
CHM 1290Y	Inorganic Chemistry Seminar (Credit/No Credit)
CHM 2034H	Research in Inorganic Chemistry

Organic and Biological Chemistry

CHM 1003H	Physical Organic Chemistry II
CHM 1004H	Synthetic Organic Chemistry
CHM 1005H	Applications of Spectroscopy in Organic Structure Determination
CHM 1006H	Bioorganic Chemistry
CHM 1008H	Biological Chemistry
CHM 1040H	Modern Organic Synthesis
CHM 1045H	Modern Physical Organic Chemistry
CHM 1051H	Current Topics in Chemical Biology
CHM 1054H	Topics in Bio-organic Chemistry
CHM 1056H	Techniques for Studying the Chemical, Structural, and Dynamic Properties of Biomolecules
CHM 1057H	Topics in Synthetic Organic Chemistry
CHM 1060H	Advanced Topics in Synthetic Organic Chemistry
CHM 1068H	Topics in Biological and Medicinal Chemistry
CHM 1090Y	Organic Chemistry Seminar (Credit/No Credit)
CHM 2044H	Research in Organic Chemistry

Physical and Theoretical Chemistry

CHM 1441H	Mathematical Methods
CHM 1443H	Intermediate Quantum Mechanics
CHM 1444H	Statistical Mechanics of Condensed Phases
CHM 1445H	Coherent Control of Molecular Processes
CHM 1446H	Quantum Computation and Information Theory
CHM 1447H	Biophysical Chemistry
CHM 1448H	Modelling of Biochemical Systems
CHM 1450H	Nanoscale Characterization with Scan Probe Microscopy
CHM 1455H	NMR Spectroscopy I: Introduction to Theory and Application
CHM 1456H	NMR Spectroscopy II: Advanced Theory and Application
CHM 1464H	Topics in Statistical Mechanics
CHM 1478H	Quantum Mechanics for Physical Chemists (core course)
CHM 1479H	Thermodynamics (core course)

CHM 1480H	Basic Statistical Mechanics (core course)
CHM 1481H	Reaction Kinetics and Dynamics
CHM 1482H	Laser Spectroscopy and Photophysics
CHM 1490Y	Physical Chemistry Seminar (Credit/No Credit)
CHM 2024H	Research in Physical Chemistry
IOS 1500H	Selected Topics in Optics

Polymers and Materials Chemistry

CHM 1206H	Solid State Chemistry: Structure-Property Relations
CHM 1300H	Polymer Chemistry
CHM 1301H	Organic and Inorganic Polymer Synthesis
CHM 1302H	Physical Chemistry of Polymers
CHM 1303H	Solids as Advanced Polymer Materials
CHM 1304H	Organic Materials Chemistry
CHM 1310H	Polymer Chemistry
CHM 1390Y	Polymer and Materials Chemistry Seminar (Credit/No Credit)
CHM 2304H	Research in Polymer and Materials Chemistry

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.

Cinema Studies

Cinema Studies: Introduction

Faculty Affiliation

Arts and Science

Degree Programs

Cinema Studies

MA
PhD

Collaborative Specializations

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

1. **Diaspora and Transnational Studies**
   - Cinema Studies, MA
2. **Sexual Diversity Studies**
   - Cinema Studies, MA
3. **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
Ambros, Veronika - MA, PhD
Bai, Ruoyun - 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
Cazdyn, Eric - BA, MA, PhD
Columpar, Corinn - BA, PhD (***Director***)
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, Charles - BA, MA, 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
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
Keilty, Patrick - BA, MLIS, PhD
Richmond, Scott - BA, PhD

Saljoughi, Sara - BA, MA, PhD
Testa, Bart - BA, MA
Zambenedetti, Alberto - 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 40–50 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.
- **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: CIN 1101H and CIN 1102H.
    - 1.0 FCE devoted to either the writing of a major research paper (CIN 1006Y) or pursuing an internship (CIN 1007Y).
    - 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 complete **4.0 full-course equivalents (FCEs)** as follows:
    - 1.0 FCE required courses (CIN 2100H *History and Historiography of Cinematic Media* and CIN 2101H *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 (CIN 2999H *Research Seminar in Cinema Studies*), a credit/non-credit course.
- All coursework is normally completed by December of Year 2 of study, except for CIN 2999H which may extend beyond that date.
- Completion of **two comprehensive examinations**: the General Examination and the Special Field Examination. Students generally undertake the comprehensive examinations after the completion of coursework in Year 2 of study.
    - The General Examination has a written component. This exam is set by the program faculty. Students are permitted two attempts to pass the General Examination.
    - The Special Field Examination 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

CIN 1101H	Theories and Practices of Cinema
CIN 1102H	Key Developments in Film History

Plus one of:

CIN 1006Y	Major Research Paper in Cinema Studies
CIN 1007Y	Internship in Cinema Studies

PhD Core Courses

CIN 2100H	History and Historiography of Cinematic Media
CIN 2101H	Pressures on the Cinematic
CIN 2999H	Research Seminar in Cinema Studies (Credit/No Credit)

Elective Courses

(Subject to change)

CIN 1004H	Models of Film Analysis
CIN 1005H	Special Studies in Cinema
CIN 1008H	Independent Research and Reading in Cinema Studies
CIN 1010H	The Textuality of the Cinematic Body
CIN 1011H	Colour and the Moving Image
CIN 1100H	The Textual Object
CIN 1515H	The Emergence of Mass Culture: Movies, Vaudeville, and Public Amusements in Turn-of-the-Century America
CIN 1539H	Film Comedy and Popular Culture
CIN 1772H	The Politics of Non-Fiction Film
CIN 3002H	Cinema and Nation
CIN 3004H	Documentary and Non-fiction Media
CIN 3006H	Media and Philosophy
CIN 3008H	Topics in Film and Media History
CIN 3010H	Topics in Film and Media Theory
CIN 6153H	Race and Cinema
CIN 6803H	Intertextuality in Feminist Cinema: The Counter-Cinematic Impulse
JFF 1100H	Surrealism and French Cinema
JFF 1101H	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:

1. **Engineering Education**
   - Civil Engineering, MASc, PhD
2. **Environmental Studies**
   - Civil Engineering, MASc, MEng, MEngCEM, 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 sections: Structural Engineering; Transportation Engineering; Environmental Engineering; Building Engineering and Construction Management; and Mining and Geomechanics. Graduate students are typically "based" in one of these five sections, but are encouraged to break out to other areas in their selection of courses and in seeking advice on research.

Contact and Address

Admission Inquiries

Web: http://civmin.utoronto.ca
Email: graduateadmissions@civ.utoronto.ca
Telephone: (416) 946-8028
Fax: (416) 978-6813

Student Services Inquiries

Michael Godwin
Email: civ.gradprograms@utoronto.ca
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University of Toronto
Galbraith Building 35 St. George Street, Room 105
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
Bentz, Evan - BASc, PhD, PEng
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
Gauvreau, Douglas Paul - BSc, MSc, PhD, PEng
Grabinsky, Murray - BASc, MASc, PhD, Robert M Smith Chair in Geotechnical Mine Design and Analysis, PEng
Grasselli, Giovanni - PhD, PEng
Hadjigeorgiou, Ioannis (John) - DiplGeol, BASc, ME, Dphil, PEng
Harrison, John Paul - BSc, MSc, PhD, W M Keck Chair of Seismology and Rock Mechanics
Hofmann, Ronald - BEng, MASc, PhD, PEng
Hooton, R Douglas - BASc, MASc, PhD, PEng
Karney, Bryan - BSc, MEng, PhD, Erwin Edward Hart Professor, 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
Miller, Eric - BASc, MASc, PhD
Nurul Habib, Khandker - MS, PhD, PEng
Packer, Jeffrey - BE, MSc, DSc, PhD, Bahen/Tanenbaum Chair in Civil Engineering, PEng
Panesar, Daman - BE, ME, PhD, Erwin Edward Hart Professor, PEng
Passeport, Elodie - MSc, MSc, PhD, CRC
Peterson, Karl - BS, MS, PhD, PEng
Posen, I. Daniel - BA, MScPhD
Pressnail, Kim - BASc, PhD, PEng
Roorda, Matthew - BEng, MASc, PhD, CRC, 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
Vanderburg, Willem - BASc, MASc, PhD, PEng
Vecchio, Frank - BASc, MEng, PhD, Bahen/Tanenbaum Chair in Civil Engineering, PEng
Warren, Lesley Alice - BSc, PhD
Windisch, Marianne Frances - BASc, PhD
Xia, Kaiwen - BASc, MS, PhD, PEng
Young, R. Paul - BSc, MSc, PhD, CA

Members Emeriti

Birkemoe, Peter - BS, MSc, PhD
Ganczarczyk, Jerzy - MSc, DSc, DrHab
Hauer, Ezra - BSc, MSc, PhD
Hurdle, Vanolin - BS, MEng, PhD
Mohanty, Bibhuti - 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

Bolton, James - BA, MA, PhD
Carey, Grant R. - BASc, ME, PhD
Churchill, Cameron John - MEng
Gruber, Stephan - DrRerNat
Guo, Yiping - BSc, MASc, MSc, PhD
Krol, Magdalena - BSE, ME, PhD
Legge, Raymond - PhD
Magnan, Robert - BEng, MASc
Metcalfe, Murray - MS, PhD
Pantazopoulou, Stavroula - BEng, MSc, PhD, PhD
Papa, Fabian - BASc, MASc, MBA
Seica, Michael - DipIng, PhD
Tisato, Nicola - 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 JDE 1000H *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 JDE 1000H *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

- 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

Emphasis: Advanced Water Technologies (MEng only)

MEng students must successfully complete two core courses (1.0 full-course equivalent [FCE]) and two specialized courses (1.0 FCE).

- Two core courses (1.0 FCE):
    1. CHE 1150H *Industrial Water Technology*
    2. at least one of the following (any of the other three can count as a specialized course):
        - CIV 541H *Environmental Biotechnology*
        - CIV 1308H *Physical and Chemical Treatment Processes*
        - CIV 1311H *Advanced and Sustainable Drinking Water Treatment* and
        - CIV 1319H *Chemistry and Analysis of Water and Wastes*.
- Two specialized courses selected from the following (1.0 FCE):
    - CHE 565H *Aqueous Process Engineering*
    - CHE 1213H *Corrosion*
    - CHE 1430H *Hydrometallurgy Theory and Practice*
    - CIV 549H *Groundwater Flow and Contamination*
    - CIV 550H *Water Resources Engineering*

- CIV 1303H *Water Resources Systems Modeling*
- JNC 2503H *Environmental Pathways*
- MIE 1807H *Principles of Measurements*
- STA 1004H *Introduction to Experimental Design*
- or one of the remaining courses from item 2.

Upon successful completion of the emphasis requirements and the successful completion of the MEng degree requirements, the student will receive a Letter of Completion.

Emphasis: Analytics (MEng only)

MEng students must successfully complete four half courses (2.0 full-course equivalents [FCEs]) from the following lists. These must include at least one core course; the remaining courses must be selected from the list of elective courses.

Core Courses

ECE 1504H Statistical Learning
MIE 1624H Introduction to Data Science and Analytics

Elective Courses

APS 502H, APS 1005H, APS 1017H, APS 1022H,
CHE 507H, CHE 1148H, CHE 1434H,
CIV 1504H, CIV 1506H, CIV 1507H, CIV 1532H, CIV 1538H, ECE 537H, ECE 1505H, ECE 1510H, ECE 1657H, ECE 1778H, ECE 1779H,
MIE 562H, MIE 1413H, MIE 1501H, MIE 1512H, MIE 1513H, MIE 1620H, MIE 1621H, MIE 1622H, MIE 1623H, MIE 1653H, MIE 1721H, MIE 1723H, MIE 1727H.

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 (CIV 1001H) or two-session (CIV 1002Y) project (not listed below). Other courses may be considered but will require approval of the emphasis coordinator.

Core Courses (take at least four):

CIV 575H, CIV 576H, CIV 578H, CIV 1282H, CIV 1320H, MIE 507H.

Elective Courses (others can be approved by the Building Science coordinator):

CIV 514H, CIV 536H, CIV 577H, CIV 1279H, CIV 1299H, MIE 515H, MIE 1240H.

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 one-session (CIV 1001H) or two-session (CIV 1002Y) project (not listed below). Other courses may be considered but will require approval of the emphasis coordinator.

CIV 514H, CIV 517H, CIV 1201H, CIV 1250H, CIV 1252H, CIV 1260H, CIV 1262H, CIV 1275H, CIV 1504H.

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 one-session (CIV 1001H) or two-session (CIV 1002Y) project (not listed below). Other courses may be considered but will require approval of the emphasis coordinator.

APS 1001H, APS 1004H, APS 1005H, APS 1017H,
CIV 1279H, CIV 1281H, CIV 1283H, CIV 1299H, CIV 1307H, CIV 1504H,
MIE 562H, MIE 1413H.

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

APS 510H, APS 530H, APS 1420H, GLA 1000H, JCR 1000Y (full-year course).

Group B

APS 1015H, APS 1020H, APS 1024H, CHL 5700H, JMG 2020H.

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.

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

APS 1010H, APS 1011H, APS 1026H, APS 1027H, APS 1029H, APS 1030H, APS 1501H.

Entrepreneurship and Innovation

APS 1012H, APS 1013H, APS 1015H, APS 1023H, APS 1033H, APS 1035H, APS 1036H, APS 1088H.

Finance and Management

APS 502H, APS 1001H, APS 1004H, APS 1005H, APS 1009H, APS 1016H, APS 1017H, APS 1020H, APS 1022H, APS 1028H, APS 1032H, APS 1038H, APS 1039H, APS 1040H.

Engineering and Society

APS 510H, APS 1018H, APS 1024H, APS 1025H, APS 1031H, APS 1034H, APS 1420H, JMG 2020H.

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 one-session (CIV 1001H) or two-session (CIV 1002Y) project (not listed below). Other courses may be considered but will require approval of the emphasis coordinator.

CIV 541H, CIV 549H, CIV 550H, CIV 577H, CIV 1303H, CIV 1307H, CIV 1308H, CIV 1311H, CIV 1319H, CIV 1320H, CIV 1399H,
CHE 1134H, CHE 1150H, CHE 1180H, CHE 1431H, CHE 1432H, CHE 2504H,
CHL 5903H,
ENV 1001H, ENV 1701H,
JCC 1313H,
JGE 1212H,
JNC 2503H,
MIE 1240H.

Emphasis: Forensic Engineering (MEng only)

MEng students must successfully complete four courses (one core course and three elective courses).

Core Course

MSE 1031H

Elective Courses

APS 540H, APS 1034H, APS 1039H, APS 1040H,
BME 1800H, BME 1801H, BME 1480H,
CHE 561H, CHE 568H, CHE 1213H, CHE 1431H, CHE 1432H, CHE 1434H,
CIV 510H, CIV 518H, CIV 1163H, CIV 1171H, CIV 1174H, CIV 1190H, CIV 1201H, CIV 1279H, CIV 1282H, CIV 1422H, CIV 1429H,
JMB 1050H,
JNC 2503H,
MSE 1015H, MSE 1016H, MSE 1022H, MSE 1032H,
MIE 566H, MIE 1224H, MIE 1301H, MIE 1303H, MIE 1411H, MIE 1414H, MIE 1616H, MIE 1713H, MIE 1714H, MIE 1721H, MIE 1723H, MIE 1727H, MIE 1804H.

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 one-session (CIV 1001H) or two-session (CIV 1002Y) project (not listed below). Other courses may be considered but will require approval of the emphasis coordinator.

CIV 523H, CIV 1404H, CIV 1419H, CIV 1420H, CIV 1429H, CIV 1498H, CIV 1499H,
MIN 540H, MIN 565H.

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 one-session (CIV 1001H) or two-session (CIV 1002Y) project (not listed below). Other courses may be considered but will require approval of the emphasis coordinator.

CIV 510H, CIV 514H, CIV 515H, CIV 517H, CIV 518H, CIV 519H, CIV 1361H, CIV 1163H, CIV 1164H, CIV 1167H, CIV 1169H, CIV 1171H, CIV 1174H, CIV 1175H, CIV 1180H.

Emphasis: Sustainable Energy (MASc, MEng, PhD)

MASc, MEng, and PhD students must successfully complete:

- At least three half courses (1.5 full-course equivalents [FCEs]) from the course lists below.

- A thesis in an area of relevance to sustainable energy with approval of the Institute of Sustainable Energy steering committee.

MEng students must successfully complete:

- Four courses (2.0 FCEs) from the following lists below, of which at least one (0.5 FCE) must be a core course.

Core Courses

APS 1032H,
MIE 515H, MIE 1120H

Elective Courses

AER 507H, AER 1304H, AER 1315H, AER 1415H,
CHE 568H, CHE 1053H, CHE 1118H, CHE 1123H, CHE 1142H, CHE 1143H,
CIV 575H, CIV 576H, CIV 577H, CIV 1303H, CIV 1307H,
ECE 533H, ECE 1030H, ECE 1055H, ECE 1057H, ECE 1085H, ECE 1086H, ECE 1092H, ECE 1094H,
MIE 516H, MIE 517H, MIE 1128H, MIE 1129H, MIE 1130H, MIE 1240H, MIE 1715H,
MSE 1022H, MSE 1023H, MSE 1028H, MSE 1058H.

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 one-session (CIV 1001H) or two-session (CIV 1002Y) project (not listed below). Other courses may be considered but will require approval of the emphasis coordinator.

APS 1024H, APS 1025H, APS 510H,
CIV 514H, CIV 516H, CIV 531H, CIV 575H, CIV 576H, CIV 577H, CIV 1201H, CIV 1252H, CIV 1280H, CIV 1303H, CIV 1307H, CIV 1535H,
ECE 1092H,
ENV 1001H,
MIE 515H, MIE 1120H, MIE 1240H, MIE 1715.

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 one-session (CIV 1001H) or two-session (CIV 1002Y) project (not listed below). Other courses may be considered but will require approval of the emphasis coordinator.

CIV 516H, CIV 531H, CIV 536H, CIV 1307H, CIV 1506H, CIV 1508H, CIV 1520H, CIV 1532H, CIV 1535H, CIV 1536H, CIV 1538H.

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

APS 1012H	Managing Business Innovation and Transformational Change
CIV 1001H	MEng Project I
CIV 1002Y	MEng Project II
CIV 1099H	Special Studies in Civil Engineering
CIV 1504H	Applied Probability and Statistics for Civil Engineering
CIV 1539H	Evaluation of Civil Engineering Systems

Building Engineering

CIV 514H	Concrete Technology
CIV 575H	Building Science
CIV 1201H	Concrete Technology and Non-Destructive Testing Principles
CIV 1250H	Instrumentation Techniques in Concrete Technology
CIV 1252H	Repair and Maintenance of Concrete Structures
CIV 1260H	Chemistry of Cements and Concrete (prerequisite: CIV 514H)
CIV 1262H	Microscopy Applied to Concrete and Geomaterials
CIV 1275H	Construction Modeling Methods
CIV 1278H	Pre-Project Planning and Constructability Analysis
CIV 1279H	Construction Contract Documents
CIV 1280H	Building Envelope Design
CIV 1281H	Asset Management
CIV 1282H	Case Studies in Building Science
CIV 1283H	Civil Informatics
CIV 1299H	Special Studies in Civil Engineering

Environmental Engineering

CIV 540H	Treatment Processes
CIV 549H	Groundwater Flow and Contamination
CIV 550H	Water Resources Engineering
CIV 1303H	Water Resources Systems Modelling
CIV 1307H	Life Cycle Assessment of Engineering Activities
CIV 1308H	Physical and Chemical Treatment Processes
CIV 1309H	Biological Treatment Processes
CIV 1311H	Advanced and Sustainable Drinking Water Treatment
CIV 1319H	Chemistry and Analysis of Water and Wastes

CIV 1320H	Indoor Air Quality
CIV 1399H	Special Studies in Civil Engineering

Geomechanics

CIV 523H	Geotechnical Design
CIV 529H	Rock Engineering
CIV 1404H	Material Fracture Dynamics: Experimental Methods
CIV 1420H	Soil Properties and Behaviour
CIV 1421H	Continuum Mechanics of Fluids and Solids
CIV 1422H	Dynamic Response of Engineering Materials
CIV 1429H	Advanced Rock Engineering: Rock Engineering in Fractured Rock Masses
CIV 1499H	Special Studies in Civil Engineering

Structural Engineering

CIV 510H	Solid Mechanics II
CIV 513H	Collaborative Engineering and Architectural Design Studio
CIV 517H	Prestressed Concrete Structures
CIV 518H	Behaviour and Design of Steel Structures
CIV 519H	Structural Analysis II
CIV 1163H	Mechanics of Reinforced Concrete
CIV 1164H	Bridge Engineering
CIV 1167H	Advanced Structural Dynamics
CIV 1169H	Advanced Topics in Building Design
CIV 1171H	Earthquake Engineering and Seismic Design
CIV 1174H	Finite Element Methods in Structural Mechanics
CIV 1175H	Design of Tubular Steel Structures
CIV 1180H	Advanced Modeling Methods for Seismic Performance Assessment of Structures
CIV 1185H	Seismic Design with Supplemental Damping and Isolation Systems
CIV 1190H	Structures Under Blast and Impact
CIV 1199H	Special Studies in Civil Engineering
CIV 1361H	Reinforced and Prestressed Concrete Structures

Transportation Engineering and Planning

CIV 531H	Transport III—Planning
CIV 533H	Transport Operations
CIV 1505H	Transportation Research Seminar
CIV 1506H	Freight Transportation and ITS Applications
CIV 1507H	Public Transport
CIV 1508H	Airport Planning and Engineering
CIV 1520H	Travel Survey Methods
CIV 1532H	Fundamentals of ITS and Traffic Management
CIV 1535H	Transportation and Development
CIV 1536H	Modelling Transport Emissions
CIV 1538H	Transportation Demand Analysis
CIV 1540H	Urban Transportation Networks
CIV 1599H	Special Studies in Civil Engineering

Civil and Mineral Engineering: Cities Engineering and Management MEngCEM

Master of Engineering in Cities Engineering and Management

Program Description

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 four continuous sessions or through an extended full-time (EFT) option over three years.

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

- The program requires completion of **6.0 full-course equivalents (FCEs)** as follows:
  - 10 half courses (5.0 FCEs)
  - 1.0 FCE Practicum typically completed during the Summer of Year 1.
- The program consists of three required themes (see course list below):
  - Theme A Infrastructure Engineering: minimum of four half courses chosen from Theme A course list (2.0 FCEs); each student's course selection requires approval by the Program Director prior to enrolment
  - Theme B Cities as Complex Systems: four required half courses (2.0 FCEs)
  - Theme C Practicum: includes presentation and technical report (1.0 FCE)

- Two half-course electives (1.0 FCE) chosen from either Theme A or B list of courses, or from the list of Technology Management courses below.

Registration Path to Completion

EFT Registration Option	Fall	Winter	Summer
Year 1	Theme B	Theme A	Theme A
Year 2	Theme A	Theme B	Theme C (Practicum)
Year 3	Theme B	Theme A	Theme A

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 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

- The program requires completion of **6.0 full-course equivalents (FCEs)** as follows:
  - 10 half courses (5.0 FCEs)
  - 1.0 FCE Practicum typically completed during the Summer of Year 2.
- The program consists of three required themes (see course list below):
  - Theme A Infrastructure Engineering: minimum of four half courses chosen from Theme A course list (2.0 FCEs); each student's course selection requires approval by the Program Director prior to enrolment
  - Theme B Cities as Complex Systems: four required half courses (2.0 FCEs)
  - Theme C Practicum: includes presentation and technical report (1.0 FCE)
- Two half-course electives (1.0 FCE) chosen from either Theme A or B list of courses, or from the list of Technology Management courses below.

Registration Path to Completion

EFT Registration Option	Fall	Winter	Summer
Year 1	Theme B	Theme A	Theme A
Year 2	Theme A	Theme B	Theme C (Practicum)
Year 3	Theme B	Theme A	Theme A

Program Length

9 sessions (typical registration sequence: F/W/S/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.

Theme A

Eligible courses include graduate courses with course prefixes as follows: AER, BME, CHE, CIV, ECE, MIE, and MSE, including some courses at the 500 level.

Theme B

Required Courses

CEM 1001H	The Challenges of Urban Policy-Making (Core)
CEM 1002H	Empirical Study of Cities (Core)
CEM 1003H	Infrastructure and Urban Prosperity (Core)
CEM 1004H	Cities as Complex Systems (Core)
CEM 1005H	Integrative Decision Making for Cities (Core) Theme C
CEM 1000Y	Cities Engineering and Management Practicum (required)

Technology Management Course Electives (Course List is Subject to Change)

APS 1001H	Project Management
APS 1005H	Operations Research for Engineering Management
APS 1009H	Natural Resources Management
APS 1010H	Cognitive and Psychological Foundations of Effective Leadership
APS 1012H	Managing Business Innovation and Transformational Change
APS 1015H	Social Entrepreneurship
APS 1016H	Financial Management for Engineers
APS 1017H	Supply Chain Management and Logistics
APS 1024H	Infrastructure Resilience Planning
APS 1025H	Infrastructure Protection
APS 1031H	Infrastructure Planning
APS 1036H	Formative Experiential Entrepreneurial Learning (FEEL)
APS 1037H	Infrastructure Engineering in Remote First Nation Communities in Ontario
APS 1038H	Strategic Sustainability Management for Businesses and Products
APS 1039H	Enterprise Risk Management
APS 1040H	Quality Control for Engineering Management
APS 1088H	Business Planning and Execution for Canadian Entrepreneurs
APS 1202H	Engineering and Sustainable Development
CHE 1435H	Fundamentals of Aerosol Physics and Chemistry
CIV 1307H	Life Cycle Assessment and Sustainability of Engineering Activities

Classics

Classics: Introduction

Faculty Affiliation

Arts and Science

Degree Programs

Classics

MA and PhD	*Fields:* Greek and Roman History Greek and Roman Literature Greek and Roman Philosophy

Collaborative Specializations

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

1. **Ancient and Medieval Philosophy**
   - Classics, PhD
2. **Ancient Greek and Roman History**
   - Classics, PhD
3. **Book History and Print Culture**
   - Classics, MA, PhD
4. **Editing Medieval Texts**
   - Classics, PhD
5. **Jewish Studies**
   - Classics, MA, PhD
6. **Mediterranean Archaeology**
   - Classics, PhD
7. **Sexual Diversity Studies**
   - Classics, MA, PhD
8. **Women and Gender Studies**
   - Classics, MA, PhD

Overview

The Department of Classics provides advanced training in the fields of Greek and Roman History, Greek and Roman Literature, and Greek and Roman Philosophy. Collaborative specializations, listed above, are available to students enrolled in the specified participating degree programs. In addition, the Joint Collaborative Specialization in Ancient Greek and Roman History provides for interdisciplinary study with faculty from the graduate program in history at York University.

Information about admission, application procedures, and funding is available from the department.

Contact and Address

Web: http://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, Benjamin - BA, PhD
Barney, Rachel - BA, PhD
Bendlin, Andreas - PhD
Blouin, Katherine - BA, MA, PhD, PhD
Bruun, Christer - BA, MA, PhD (***Chair and Graduate Chair***)
Burgess, Jonathan - BA, MA, PhD
Dewar, Michael - BA, MA, DPhil
Gunderson, Erik - BA, MA, PhD
Hoeschele, Regina - MA, PhD (***Graduate Coordinator***)
Keith, Alison - BA, MA, PhD, FRSC
Lytle, Thomas - BA, PhD
Magee, John - BA, MA, PhD
Nakassis, Dimitri - BA, MA, PhD
Revermann, Martin - PhD
Welsh, Jarrett - BA, MA, PhD
Wohl, Victoria - BA, MA, PhD

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

Allen, James - BA, PhD
Balot, Ryan - BA, AM, PhD
Bing, Peter - PhD
Chrubasik, Boris - MA, PhD
Ewald, Bjoern - AM, PhD
Fulton, Carrie - BA, MA, PhD
Kim, SeungJung - BS, MA, MPH, PhD, PhD
Kloppenborg, John - BA, MA, PhD
Knappett, Carl - MA, PhD
Marshall, John - BA, MA, PhD
Murray, Sarah - PhD
Orwin, Clifford - AB, AM, PhD
Ross, Jill - BA, MA, PhD
Townsend, David Robert - BA, MA, PhD
Weinrib, Ernest - BA, LLB, PhD
Wilkinson, Kevin - MA, 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. 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 and the equivalent of at least three and preferably four full years of training in either Greek or Latin and two full years of training in the other.
- Students who are otherwise qualified but who lack the required amount of training in Greek and Latin 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)**.
    - Completion of one (0.5 FCE) of GRK 1000H or LAT 1000H (intensive advanced language skills), or equivalent, or a course from the GRK/LAT 1800H series, with a grade of at least B-.
    - Completion of three courses (1.5 FCE) from the CLA 5000H series.
    - Completion of CLA 2000Y (1.0 FCE) *Graduate Research Paper* with a grade of at least B. Each student is assigned to a faculty advisor for CLA 2000Y 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 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+.

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 and the equivalent of at least three and preferably four full years of training in either Greek or Latin and two full years of training in the other.
- Students who are otherwise qualified but who lack the required amount of training in Greek and Latin 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 GRK 1000H or LAT 1000H (intensive advanced language skills), or equivalent, or a course from the GRK/LAT 1800H series, with a grade of at least B-.

    - Completion of three courses (1.5 FCE) from the CLA 5000H series.
    - Completion of the sight translation examination in either Greek or Latin with a grade of at least B-.
    - Completion of CLA 2000Y (1.0 FCE) *Graduate Research Paper* with a grade of at least B. Each student is assigned to a faculty advisor for CLA 2000Y 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 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 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+.

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:
    - GRK 1000H (0.5 FCE) or equivalent
    - LAT 1000H (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.
    - CLA 2000Y (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 (SRD 4444Y or AMP 2000Y).
- **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** (CLA 4000Y^{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 may be admitted with advanced standing if they have completed the revised MA program at the University of Toronto (having graduated in the year 2000 or later) with grades of at least B+ in all components, and a grade of at least A- on the Graduate Research Paper.

Program Requirements

- **Coursework**. Satisfactory completion of:
  - GRK 1000H (0.5 FCE) or equivalent
  - LAT 1000H (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.
  - CLA 2000Y (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 (SRD 4444Y or AMP 2000Y).
- **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. Students admitted with advanced standing are exempt from the qualifying examinations.
- 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 (CLA 4000Y[0]). The major field defines a broad area of specialization, within which the dissertation topic will fall. It is normally established by Year 2 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 3.
- 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 with at least an A- average in the final year. 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:
  - GRK 1000H (0.5 FCE) or equivalent
  - LAT 1000H (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.
  - CLA 2000Y (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.
  - 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 (SRD 4444Y or AMP 2000Y).
- **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** (CLA 4000Y[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

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.

GRK 1000H	Advanced Studies in Greek Language (Credit/No Credit)
GRK 1800H	Special Topics in Greek Literature
GRK 1801H	Special Topics in Greek History
GRK 1802H	Readings in Greek Epic
GRK 1803H	Readings in Greek Verse
GRK 1804H	Readings in Greek Tragedy
GRK 1805H	Readings in Greek Comedy
GRK 1806H	Readings in the Greek Historians
GRK 1807H	Readings in the Greek Philosophers
GRK 1808H	Readings in the Greek Orators
GRK 1809H	Archaic Greek Literature and Culture
GRK 1810H	Classical Greek Literature and Culture
GRK 1811H	Hellenistic Literature and Culture
GRK 2500Y[0]	Greek Qualifying Exam
GRK 2505Y[0]	Greek Sight Exam
LAT 1000H	Advanced Studies in Latin Language (Credit/No Credit)
LAT 1800H	Special Topics in Latin Literature
LAT 1801H	Special Topics in Roman History
LAT 1802H	Readings in Latin Epic
LAT 1803H	Readings in Latin Verse
LAT 1804H	Readings in Roman Drama
LAT 1805H	Readings in Roman Satire and Novel
LAT 1806H	Readings in the Roman Historians
LAT 1807H	Readings in the Roman Philosophers
LAT 1808H	Readings in the Roman Orators
LAT 1809H	Readings in Roman Republican Literature and Culture
LAT 1810H	Readings in Roman Imperial Literature and Culture
LAT 1811H	Readings in Late Latin Literature and Culture
LAT 2500Y[0]	Latin Qualifying Exam
LAT 2505Y[0]	Latin Sight Exam
CLA 1800H	Special Topics in Classical Literature
CLA 1801H	Special Topics in Ancient History
CLA 2000Y	Graduate Research Paper
CLA 3000H	Research Techniques in Classics
CLA 3020H	Research Methods in Ancient History

CLA 3200Y	Work in Progress in Ancient History
CLA 3500H[0]	Minor Field
CLA 4000Y[0]	Major Field
AMP 2000Y[0]	Collaborative Program in Ancient and Medieval Philosophy Proseminar
JCO 5121H	Classics and Theory

[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.

CLA 5000H	Early Greek Epic
CLA 5002H	Studies in Greek Drama I
CLA 5003H	Studies in Greek Drama II
CLA 5004H	Studies in Greek Poetry
CLA 5007H	Criticism of Latin Poetry
CLA 5008H	Roman Comedy
CLA 5009H	Literature of the Roman Republic
CLA 5010H	Virgil
CLA 5012H	Studies in Ancient Philosophy I
CLA 5013H	Studies in Ancient Science
CLA 5014H	The Ancient Novel
CLA 5015H	Latin Poetry of the Empire
CLA 5016H	Topics in Greek and Hellenistic History
CLA 5018H	Topics in Roman History
CLA 5020H	Studies in Ancient Philosophy II
CLA 5021H	Topics in the Study of Greek and Hellenistic Literature and Culture
CLA 5022H	Topics in the Study of Greek and Hellenistic Society
CLA 5023H	Topics in the Study of Roman Literature and Culture
CLA 5024H	Topics in the Study of Roman Society
CLA 5025H	Topics in Greek and Hellenistic History II
CLA 5026H	Topics in Graeco-Roman Historiography I
CLA 5027H	Topics in Graeco-Roman Historiography II
CLA 5028H	Topics in Graeco-Roman History I
CLA 5029H	Topics in Graeco-Roman History II
JMT 1000H	Andronicus of Rhodes and the Early Peripatos
JMT 1002H	Augustine: Soliloquia

Directed Reading

CLA 1300Y	Studies in Classical Antiquity
CLA 1301H	Studies in Classical Antiquity
CLA 1303H	Studies in Classical Antiquity
CLA 1304H	Studies in Classical Greek
CLA 1305H	Studies in Classical Latin
CLA 1306H	Studies in Greek Literature I
CLA 1307H	Studies in Greek Literature II
CLA 1308H	Studies in Latin Literature I
CLA 1309H	Studies in Latin Literature II

Comparative Literature

Comparative Literature: Introduction

Faculty Affiliation

Arts and Science

Degree Programs

Comparative Literature

MA
PhD

Collaborative Specializations

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

1. **Book History and Print Culture**
   - Comparative Literature, MA, PhD
2. **Diaspora and Transnational Studies**
   - Comparative Literature, MA, PhD
3. **Jewish Studies**
   - Comparative Literature, MA, PhD
4. **Sexual Diversity Studies**
   - Comparative Literature, MA, PhD
5. **South Asian Studies**
   - Comparative Literature, MA, PhD
6. **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 graduate programs, course offerings, and academic profiles of graduate faculty.

Contact and Address

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Telephone: (416) 813-4041
Fax: (416) 813-4040

Centre for Comparative Literature
University of Toronto
Isabel Bader Theatre
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Canada

Comparative Literature: Graduate Faculty

Full Members

Ambros, Veronika - MA, PhD
Bai, Ruoyun - BA, MA, PhD
Cazdyn, Eric - BA, MA, PhD
Comay, Rebecca - BA, MA, 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 (***Acting Director***)
Kortenaar, Neil ten - BA, MA, PhD
Lahusen, Thomas - MA, PhD
Le Huenen, Roland - DesL, DLitt
LeBlanc, Julie - BA, PhD
Nyquist, Mary - BA, MA, PhD
Ricco, John - BA, MA, PhD
Ross, Jill - BA, MA, PhD (***Director***)
Rupp, Stephen - BA, MA, MPH, MA, PhD
Sakaki, Atsuko - BA, MA, PhD
Zilcosky, John - BA, MA, MA, PhD

Members Emeriti

Davis, Natalie - BA, MA, PhD
Dolezel, Lubomir - BA, PhD, FRSC
Hutcheon, Linda - BA, MA, PhD
Kushner, Eva - BA, MPH, PhD
Nesselroth, Peter - BA, MA, PhD
Perron, Paul - PhD
Sternberg, Ricardo - BA, MA, PhD
Stock, Brian - AB, PhD
Valdes, Mario - BA, MA, PhD

Associate Members

Akbari, Suzanne - BA, MA, MPH, PhD
Bender, Daniel Eric - BA, PhD
Budde, Antje - PhD
Capozzi, Rocco - BA, MA, PhD
Clark, Caryl - BMus, MA, PhD
Cozea, Angela - BA, MA, PhD

Esterhammer, Angela - BA, PhD
Goetschel, Willi - PhD
Gunderson, Erik - BA, MA, PhD
Hewitt, Marsha - BA, MA, PhD
Holland, Kate - MA, PhD
Kandiyoti, Dalia - PhD
Keith, Alison - BA, MA, PhD, FRSC
Legge, Elizabeth MM - BA, BA, MA, PhD
Leonard, Garry - BA, MA, PhD
Matus, Jill - BA, MA, PhD
Meng, Yue - BA, MA, MA, PhD
Motsch, Andreas - PhD
Nizri, Yigal - BFA
Noyes, John - BA, MA, PhD
Paterson, Janet - BA, MA, PhD
Pietropaolo, Domenico - BSc, MA, PhD
Preston, VK - DPhil
Pugliese, Olga - BA, MA, PhD
Quayson, Ato - BA, PhD
Revermann, Martin - PhD
Robins, William - BA, MPH, PhD
Sarabia, Rosa - BA, PhD
Somigli, Luca - PhD
Stern, Simon - BA, PhD, JD
Trojanowska, Tamara - MA, PhD
Weisman, Karen - BA, PhD
Wohl, Victoria - BA, MA, PhD
Xie, Ming - BA, 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 complete at least **4.0 full-course equivalents (FCEs)** including:
  - COL 1000H *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 Graduate Coordinator 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 Graduate Coordinator 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.

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.

Program Requirements

- A student with an **MA in Comparative Literature** or its equivalent must take at least **4.5 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/Coordinator of Graduate Studies.
- 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 Graduate Coordinator 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.
- **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 statement of purpose not exceeding 500 words; and must submit a sample of written work, preferably a short essay on a literary topic.

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/Coordinator of Graduate Studies.
- 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 Graduate Coordinator 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.
- **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 Handbook as well as the handbooks of other departments for courses that may be taken for credit. Information about course availability is also contained in the handbooks.

Core Program

COL 1000H	Faculty Seminar
COL 5018H	Gender and Agency
COL 5029H	Reading Cervantes
COL 5037H	Magic Prague—Questions of Literacy Cityscapes
COL 5044H	A Journey from Petersburg to Los Angeles
COL 5094H	Forms of Critical Writing
COL 5095H	Giorgio Agamben: Exception and Potentiality

COL 5101H	Diasporic Cities: Itinerant Narratives of Metropoles by Travellers and Expatriates
COL 5117H	Freud and Psychoanalysis
COL 5122H	Text and Digital Media
COL 5124H	Public Reading: Literature and the Formation of Critical Publics
COL 5127H	Queer Ethics and Aesthetics of Existence
COL 5128H	Tragedy: Instantiations of a Dramatic Form in Theatre, Philosophy, Opera, and Popular Cinema
JFC 1813H	Literature of Contact and Anthropological Thought 16th–18th Century
JFC 5129H	Performative Autobiographical Acts: Painted and Photographic Representations of Self in Personal and Political Testimonials
JGC 1855H	Critical Theory—The French-German Connection

Elective Courses

COL 5129H	New Addictions for the Anthropocene
COL 5130H	Comparison and "the Human"
COL 5131H	Non Disclosure Acts
COL 5133H	Comparative Modernisms
JGC 1740H	Humans and Things (Credit/No Credit)
JLV 5134H	Theories of the Novel
JLV 5135H	1968: The Year of Revolution and Protest

Computer Science

Computer Science: Introduction

Faculty Affiliation

Arts and Science

Degree Programs

Applied Computing

MScAC	*Concentration:* Data Science

Computer Science

MSc
PhD

Collaborative Specializations

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

1. **Genome Biology and Bioinformatics**
   - Computer Science, PhD
2. **Knowledge Media Design**
   - Computer Science, MSc, PhD
3. **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

Web: www.cs.toronto.edu
Email: gradadmissions@cs.toronto.edu
Telephone: (416) 978-8762
Fax: (416) 946-1932

Department of Computer Science Graduate Office
University of Toronto
Room 4242, Bahen Centre for Information Technology
40 St. George Street
Toronto, Ontario M5S 2E4
Canada

Computer Science: Graduate Faculty

Full Members

Abdelrahman, Tarek - BSc, MSc, PhD
Amza, Cristiana - BS, MS, PhD
Anderson, Ashton Chandler Justin - BEng, MSc, PhD
Andritsos, Periklis - BSc, MSc, PhD, PhD
Bacchus, Fahiem - BS, SM, PhD
Bader, Gary - BSc, PhD
Balakrishnan, Ravin - BS, SM, PhD (***Chair and Graduate Chair***)
Beck, J. Christopher - BSc, MSc, PhD
Bonner, Anthony - BSc, MSc, PhD
Borodin, Allan - BS, SM, PhD, AAAS
Brudno, Michael (Mikhail) - AB, SM, PhD
Chechik, Marsha - BS, SM, PhD
Christara, Christina - BS, SM, PhD
De Lara, Eyal - BS, MS, PhD
Demke Brown, Angela - BS, SM, PhD (***Coordinator, Graduate Studies***)
Dickinson, Sven Josef - BASc, MS, PhD
Duvenaud, David - PhD
Easterbrook, Stephen Michael - BSc, PhD
Ellen, Faith - BM, MMath, PhD
Fairgrieve, Thomas - BMath, MSc, PhD
Farzan, Azadeh - BS, PhD
Fidler, Sanja - PhD
Fleet, David James - BS, MS, PhD
Fox, Mark - BSc, PhD
Ganjali, Yashar - BSc, MSc, PhD
Goel, Ashvin - BTech, MS, PhD
Goldenberg, Anna - PhD
Grosse, Roger - PhD
Hadzilacos, Vassos - BSE, PhD
Hertzmann, Aaron - BA, MS, PhD
Hirst, Graeme - BA, BSc, MSc, PhD
Jackson, Kenneth - BSc, MSc, PhD
Jacobsen, Hans-Arno - MCS, PhD
Jacobson, Alec - PhD
Jepson, Allan - BSc, PhD
Johnson, F. Ryan - BSc, MSEE, PhD
Jurisica, Igor - PhD, CRC
Kim, Philip - BS, PhD
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
Marbach, Peter Josef - DipIng, MS, PhD

McIlraith, Sheila - BSc, MSc, PhD
Mihailidis, Alex - BASc, MASc, PhD
Miller, Renee - BS, BM, MS, PhD
Molloy, Michael - BMath, MMath, PhD
Morris, Quaid - BS, PhD
Moses, Alan - BA, PhD
Neal, Radford - BSc, MSc, PhD
Nikolov, Aleksandar - PhD
Pekhimenko, Gennady - BS, MS, PhD
Penn, Gerald - BS, MSc, PhD
Penny, David - PhD
Pitassi, Toniann - BS, SM, PhD
Roth, Frederick - PhD
Sachdeva, Sushant - BTech, MA, PhD
Schroeder, Bianca - MSc, PhD
Shah, Nisarg - PhD
Singh, Karan - BS, MS, PhD
Stevenson, Suzanne Ava - MS, PhD
Stumm, Michael - MS, PhD
Toueg, Sam - BS, MA, MSEE, PhD
Truong, Khai Nhut - BSc, PhD
Tsotsos, John - BASc, MSc, PhD, CRC
Urtasun, Raquel - PhD
Veneris, Andreas - BSc, MSc, PhD
Wigdor, Daniel - PhD
Xu, Yang - PhD
Yu, Eric - BSc, MMath, PhD
Zemel, Richard - BA, SM, PhD

Members Emeriti

Baecker, Ronald - BS, SM, PhD
Corneil, Derek - BSc, MA, PhD
Enright, Wayne - BSc, MSc, PhD
Hehner, Eric - BSc, MSc, PhD
Hinton, Geoffrey - BA, PhD
Levesque, Hector - BSc, MSc, PhD
Mylopoulos, John - BE, MSc, PhD
Rackoff, Charles - SB, SM, PhD
Wortman, David - BE, MS, PhD

Associate Members

Baumgartner, Gary - BSc, MS
Borgida, Alex - MSc, PhD
Campbell, Jennifer - BSc, MMath
Chevalier, Fanny - PhD
Craig, Michelle - BSc, MSc
Engels, Steven - BASc, MMath
Fazly, Afsaneh - PhD
Gries, Paul - BA, MSc
Heap, Daniel - BS, MSc
Horton, Diane - BS, MSc
Medland, Matthew - MSc
Pitt, Francois - BSc, MSc, PhD
Pu, Ken - PhD
Reid, Karen - BS, MB, MS
Rudzicz, Frank - PhD
Salakhutdinov, Ruslan - BS, MS, PhD
Stam, Jos - PhD
Taati, Babak - PhD
Topaloglou, Thodoros - BSc, MSc, PhD
Zaleski, Mathew - PhD

Computer Science: Applied Computing MScAC

Master of Science in Applied Computing

The MScAC program is offered as a general program (no concentration) or as a Data Science concentration. The Data Science concentration is offered jointly by the Department of Computer Science and the Department of Statistical Sciences.

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 in computer science.
- A minimum average grade of B+ over the final two years 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 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.
- Three letters of support from faculty and/or employers.
- A statement of purpose.

Program Requirements

- **Coursework.** Completion of **3.0 full-course equivalents (FCEs)** including:
    - 1.0 FCE in required courses: technical communications (CSC 2701H) and technical entrepreneurship (CSC 2702H).
- An eight-month industrial **internship**, CSC 2703H (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 (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 minimum average grade of B+ over the final two years 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 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.
- Three letters of support from faculty and/or employers.
- A statement of purpose.
- Applicants must indicate a preference for a 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: Technical Communications (CSC 2701H) and Technical Entrepreneurship (CSC 2702H).
  - Course selections should be made in consultation with the Program Director.
- An eight-month industrial **internship**, CSC 2703H (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 (CSC 4000Y [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.

CSC 2104H	Formal Methods of Program Design
CSC 2107H	Compilers and Interpreters
CSC 2125H	Algorithmic Program Verification
CSC 2130H	Empirical Research Methods in Software Engineering
CSC 2203H	Packet Switch and Network Architectures
CSC 2206H	Computer Systems Modelling
CSC 2208H	Advanced Operating Systems
CSC 2209H	Computer Networks
CSC 2221H	Introduction to Distributed Computing
CSC 2224H	Parallel Computer Architecture and Programming
CSC 2226H	Topics in Verification
CSC 2227H	Topics in the Design and Implementation of Operating Systems
CSC 2228H	Topics in Mobile, Pervasive, and Cloud Computing
CSC 2229H	Topics in Computer Networks
CSC 2231H	Topics in Computer Systems
CSC 2232H	Topics in Computer System Performance and Reliability
CSC 2233H	Topics in Storage Systems
CSC 2302H	Numerical Solution of Initial Value Problems for Ordinary Differential Equations
CSC 2305H	Numerical Methods for Optimization Problems
CSC 2306H	High Performance Scientific Computing
CSC 2310H	Computational Methods for Partial Differential Equations
CSC 2321H	Matrix Calculations
CSC 2322H	Boundary Problems for Ordinary Differential Equations
CSC 2326H	Topics in Numerical Analysis
CSC 2401H	Introduction to Computational Complexity
CSC 2404H	Computability and Logic
CSC 2405H	Automata Theory
CSC 2410H	Introduction to Graph Theory
CSC 2414H	Topics in Applied Discrete Mathematics
CSC 2415H	Advanced Topics in Distributed Computing
CSC 2416H	Machine Learning Theory
CSC 2417H	Algorithms for Genome Sequence Analysis
CSC 2419H	Topics in Cryptography
CSC 2420H	Algorithm Design, Analysis, and Theory
CSC 2421H	Topics in Algorithms
CSC 2426H	Fundamentals of Cryptography
CSC 2427H	Topics in Graph Theory
CSC 2429H	Topics in the Theory of Computation
CSC 2431H	Topics in Computational Molecular Biology
CSC 2451H	Quantum Computing, Foundations to Frontier (exclusion: MAT 1751H Quantum Computing, Foundations to Frontier)
CSC 2501H	Computational Linguistics
CSC 2502H	Knowledge Representation and Reasoning
CSC 2503H	Foundations of Computer Vision
CSC 2504H	Computer Graphics
CSC 2506H	Probabilistic Learning and Reasoning
CSC 2508H	Advanced Management Systems
CSC 2510H	Topics in Information Systems
CSC 2511H	Natural Language Computing
CSC 2512H	Constraint Satisfaction Problems
CSC 2514H	Human-Computer Interaction
CSC 2515H	Introduction to Machine Learning
CSC 2516H	Neural Networks and Deep Learning
CSC 2518H	Spoken Language Processing
CSC 2519H	Natural Language Semantics
CSC 2520H	Geometry Processing
CSC 2521H	Topics in Computer Graphics
CSC 2522H	Advanced Image Synthesis
CSC 2523H	Object Modelling and Recognition
CSC 2524H	Topics in Interactive Computing
CSC 2525H	Research Topics in Database Management
CSC 2526H	HCI: Topics in Ubiquitous Computing
CSC 2527H	The Business of Software
CSC 2528H	Advanced Computational Linguistics
CSC 2529H	Computer Animation
CSC 2530H	Computer Vision for Advanced Digital Photography
CSC 2531H	Advanced Topics in Data Management Systems
CSC 2532H	Dynamical Systems and Artificial Intelligence
CSC 2533H	Foundations of Knowledge Representation
CSC 2534H	Decision Making Under Uncertainty

CSC 2535H	Advanced Machine Learning
CSC 2537H	Information Visualization
CSC 2539H	Topics in Computer Vision
CSC 2541H	Topics in Machine Learning
CSC 2542H	Topics in Knowledge Representation and Reasoning
CSC 2546H	Computational Neuroscience
CSC 2547H	Current Algorithms and Techniques in Machine Learning
CSC 2548H	Machine Learning in Computer Vision
CSC 2552H	Topics in Computational Social Science
CSC 2556H	Algorithms for Collective Decision Making
CSC 2600H	Topics in Computer Science
CSC 2601H	Topics in Analysis and Computation in Discrete Models
CSC 2602H	Topics in Analysis and Computation in Continuous Models
CSC 2603H	Topics in Building Software and Hardware Artifacts
CSC 2604H	Topics in Human-Centred and Interdisciplinary Computing
CSC 2699H	Special Reading Course in Computer Science
CSC 2701H	Communication for Computer Scientists
CSC 2702H	Technical Entrepreneurship
CSC 2703H	MScAC Internship
CSC 2720H	Systems Thinking for Global Problems
CSC 4000Y	MSc Research Project in Computer Science

Criminology and Sociolegal Studies

Criminology and Sociolegal Studies: Introduction

Faculty Affiliation

Arts and Science

Degree Programs

Criminology and Sociolegal Studies

MA
PhD

Combined Degree Programs

STG, Law, Juris Doctor / Criminology and Sociolegal Studies, MA

Collaborative Specializations

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

1. **Addiction Studies**
   - Criminology and Sociolegal Studies, MA, PhD
2. **Diaspora and Transnational Studies**
   - Criminology and Sociolegal Studies, MA, PhD
3. **Sexual Diversity Studies**
   - Criminology and Sociolegal Studies, MA, PhD
4. **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.criminology.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
Dubber, Markus - AB, JD
Goodman, Philip - BA, MA, PhD
Hannah-Moffat, Kelly - BA, MA, PhD
Kruttschnitt, Candace - BA, MA, MPH, PhD
Light, Matthew - BA, MA, JD, PhD
Macklin, Audrey - BSc, LLB, LLM (***Director***)
Maurutto, Paula - DPhil
Phillips, James - LLB, MA, PhD
Roach, Kent - BA, LLB, LLM
Tanner, Julian - DipEd, BSc, MA, PhD
Valverde, Mariana - BA, MA, PhD, FRSC
Wortley, N. Scot - BA, MA, PhD

Members Emeriti

Doob, Anthony - AB, PhD, FRSC
Friedland, Martin - BCom, LLB, PhD
Gartner, Rosemary - BA, AA, MS, PhD

Associate Members

Contreras, Randol - BA, MA, PhD
Erickson, Patricia - BA, MA, PhD
Evans, Catherine - PhD

Fischer, Benedikt - DPhil
Jauregui, Beatrice - BA, MA, PhD
Matheson, Flora - BA, MA, 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** (CRI 3360Y) within 12 months.
- The degree program includes compulsory and elective courses.
    - The compulsory course (0.5 FCE) is CRI 2010H *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 (CRI 2010H *Methodological Issues in Criminology and Sociolegal Studies*) and the required theory course (CRI 1020H *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 CRI 1020H. Students will normally complete all course requirements for the PhD in Year 1.
- **Professional development sequence**. Year 1 doctoral students will participate in CRI 1010Y (CR/NCR, 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 CRI 3360Y[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 Course

CRI 1010Y[0]	Professional Development Workshops (Credit/No Credit)
CRI 2010H	Methodological Issues in Criminology and Sociolegal Studies

Elective Courses

CRI 1020H	Law and State Power: Theoretical Perspectives
CRI 1050H	Theories of Crime and Social Order
CRI 2040H	Drugs and Crime
CRI 2060H	Prisons and Punishment
CRI 2120H	Data Analysis
CRI 2140H	Guilt, Responsibility, and Forensics
CRI 3010H	Crime, Criminalization, and Victimization
CRI 3020H	Criminology and the Policy-Making Process
CRI 3110H	Qualitative Research Methods
CRI 3120H	Politics and Crime
CRI 3130H	Policing
CRI 3140H	Special Topics in Criminology and Sociolegal Studies
CRI 3160H	Historical Approaches to Crime and Justice in Canada
CRI 3220H	Organized Crime and Corruption
CRI 3240H	Penology
CRI 3256H	Law, Space, and Regulation
CRI 3270H	The Psychology of Criminal Behaviour: Theory and Practice
CRI 3310H	Special Topics in Criminology and Sociolegal Studies
CRI 3320H	The Criminal Process
CRI 3330H	Contemporary Issues in Safety and Security
CRI 3340H	Special Topics in Criminology and Sociolegal Studies
CRI 3350H	Directed Research in Criminology and Sociolegal Studies
CRI 3351H	Directed Research in Criminology and Sociolegal Studies
CRI 3355H	Sentencing
CRI 3356H	Youth Crime and Youth Justice
CRI 3360Y[0]	MA Research Paper

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

Curriculum, Teaching and Learning

CTL: Introduction

Faculty Affiliation

Ontario Institute for Studies in Education (OISE)

Degree Programs

Curriculum Studies and Teacher Development

MA	*Emphases:*
MEd	Arts in Education
PhD	Critical Studies in Curriculum and Pedagogy Digital Technologies in Education Indigenous Education and Decolonization Qualitative Methodologies Science, Mathematics and Technology (SMT)

Language and Literacies Education

MA
MEd
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
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, 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, 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, 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, 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, Physical and Mathematical Sciences (Specialist), Honours BSc / MT
UTSC, Physics and Astrophysics (Specialist), Honours BSc / MT

Collaborative Specializations

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

1. **Comparative, International and Development Education**
   - Curriculum Studies and Teacher Development, MA, MEd, PhD
   - Language and Literacies Education, MA, MEd, PhD
2. **Education, Francophonies and Diversity**
   - Curriculum Studies and Teacher Development, MA, MEd, PhD
   - Language and Literacies Education, MA, MEd, PhD
3. **Educational Policy**
   - Curriculum Studies and Teacher Development, MA, MEd, PhD
   - Language and Literacies Education, MA, MEd, PhD
4. **Engineering Education**
   - Curriculum Studies and Teacher Development, MA, PhD
5. **Ethnic and Pluralism Studies**
   - Language and Literacies Education, MA, MEd, PhD
6. **Knowledge Media Design**
   - Curriculum Studies and Teacher Development, MA, MEd, PhD

    - Language and Literacies Education, MA, MEd, PhD
7. **Sexual Diversity Studies**
    - Curriculum Studies and Teacher Development, MA, MEd, PhD
8. **Women and Gender Studies**
    - Curriculum Studies and Teacher Development, 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 Studies and Teacher Development; 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
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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

Bartel, Lee - BA, BMus, MEd, PhD
Beattie, Mary - BA, BA, MA, MEd, EdD
Bencze, Lawrence - BEd, BSc, MSc, PhD
Bennett, Barrie - BPHE, MEd, PhD
Bickmore, Kathy - MA, PhD
Brett, Clare - BA, MA, PhD (***Chair and Graduate Chair***)
Burke, Lydia Carol-Ann - DipEd, BA, MEd, PhD
Cameron, Linda - BA, MEd, EdD
Campbell, Elizabeth - BA, BEd, MEd, PhD
Conle, Carola - BA, MEd, PhD
Cooper, Karyn - PhD
Cumming, Alister - BA, MA, PhD
Danesi, Marcel - BA, MA, PhD
Davie, Lynn - BA, MA, PhD
Diamond, Colin - BA, PhD
Earl, Lorna - PhD
Esmonde, Indigo - BSc, MSc, MA, PhD
Evans, Mark - BE, BA, MA, PhD
Farrell, Joseph - BSc, PhD
Feuerverger, Grace - BA, MA, PhD
Gagne, Antoinette - BEd, MEd, PhD
Gallagher, Kathleen Marie - PhD
Gaztambide-Fernandez, Ruben - BM, MEd, EdD
Gerin-Lajoie, Diane - BSc, MA, PhD
Gitari, Wanja - BEd, MA, PhD
Goldstein, Tara - BA, PhD
Helms-Park, Rena - BA, MA, AM, DPhil
Hewitt, James - BEd, BMath, MEd, PhD (***Associate Chair, Graduate Studies***)
Hidi, Suzanne - BA, MA, PhD
Hodson, Derek - BSc, MEd, PhD
Jang, Eunice Eunhee - BA, MA, PhD
Kerekes, Julie - BA, MA, PhD
Kilbourn, Brent - BS, PhD
Kosnik, Clare - DPhil, DPhil
Labrie, Normand - BA, MA, PhD
Lam, Tony - BA, MA, PhD
Levine, David - BA, MA, PhD
McCready, Lance - BA, MA, PhD
McDougall, Douglas - BM, BEd, MEd, EdD
Miller, John - BA, MAT, PhD
Morgan, Cecilia Louise - BA, BA, MA, PhD
Niyozov, Sarfaroz - MEd, MA, PhD
Pedretti, Erminia - BE, MEd, PhD
Piccardo, Enrica - MA, PhD
Restoule, Jean-Paul - BA, MA, DPhil
Rolheiser, N Carol - BEd, MEd, PhD
Sandwell, Ruth - BA, MA, PhD
Scardamalia, Marlene - PhD
Simon, Robert - BA, MA, MTh, PhD
Slotta, James - BS, MPsy, PhD
Smyth, Elizabeth - BA, BEd, MA, EdD
Spada, Nina - BA, MA, PhD
Springgay, Stephanie - BEd, BFA, MA, PhD
Stagg Peterson, Shelley - BE, MEd, PhD
Styres, Sandra - BEd, MEd, PhD
Sykes, Heather - BSc, PhD
Thiessen, Dennis - AB, MEd, DPhil
Trifonas, Peter Pericles - BE, BA, PhD
Troper, Harold - BA, MA, PhD
Wahlstrom, Merlin - BEd, MEd, PhD
Wallace, John - BSc, BEd, MSc, PhD
Willows, Dale - PhD

Wolfe, Richard - BA

Members Emeriti

Aitken, Johan - BA, MA, PhD
Allen, Patrick - BA, MA, PhD
Beck, Clive - PhD
Bogdan, Deanne - BA, MA, PhD
Booth, David - BA, MEd
Churchill, Stacy (Jr.) - PhD
Clandfield, David - BA, MA, PhD
Connelly, Michael - BSc, BEd, MSc, PhD
Cummins, James - BA, PhD
Darroch-Lozowski, Vivian - BSc, MA, PhD
Frenette, Normand - BA, MA, MA, MEd, PhD
Hanna, Gila - BA, MA, MEd, PhD
Harley, Birgit - BA, MA, PhD
Jordan, Anne - BA, MA, PhD
Kelly, Brendan - BSc, MSc, PhD
Lapkin, Sharon - BA, MA, PhD
Logan, Robert - BSc, PhD
Nagy, Philip - BSc, MEd, PhD
Nishisato, Shizuhiko - BA, MA, PhD
Silvers, Ronald - BA, MA, PhD
Swain, Merrill - BA, PhD
Traub, Ross - PhD

Associate Members

Allen, Guy - BA, MA, PhD
Broad, Kathy - BEd, BA, MEd, PhD
Burnaby, Barbara - BA, BA, MA, PhD
Campano, H. Gerald - PhD
Collier, Diane - BEd, BA, MEd, PhD
Donald, Dwayne - BA, BEd, MEd, PhD
Dubek, Michelle - PhD
Hundey, Ian - BA, MA
Lancaster, Ron - BEd, BS, MMath
Le Pichon-Vorstman, Emmanuelle - PhD
Marks Krpan, Cathy - BEd, MEd, EdD
Montemurro, David - BEd, BA, MES
Nasmith, Louise - AB, AB, MDCM
Nayer, Marla - BSc, MEd
Penfield, Randall - PhD
Rehner, Katherine - BA, BE, MEd, PhD
Reid, Mary - BA, BEd, MEd, EdD
Rossi, Miriam Frances - BSc, MSc, MD, MD, MD
Seller, Wayne - BA, MEd
Shore, Lesley - DipEd, BA, MEd, EdD
Steele, Jeffrey - BA, MA, PhD
Stewart Rose, Leslie - BEd, BM, MA, EdD
Stiegelbauer, Suzanne - BS, MA, MA, PhD
Tarc, Aparna - BA, BE, MEd, PhD
Turnbull, Miles - BA, AM
Woodruff, Earl - MA, PhD

CTL: Curriculum Studies and Teacher Development Overview

Program Description

The Curriculum Studies and Teacher Development (CSTD) program is a forum for systematic reflection on curriculum, viewed in the broadest sense as educational 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 practices used for bringing about learning in educational settings. Given the diverse academic and research interests of faculty members, the program is organized into six constituent but optional program emphases.

The CSTD program offers the following six 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)

PhD, MA, and MEd students enrolled in CSTD emphases are required to take three courses from a list of courses affiliated with the emphasis. Students who successfully complete emphasis coursework as part of their CSTD degree requirements may request a letter of completion in the emphasis.

CTL: Curriculum Studies and Teacher Development MA

Master of Arts

The MA degree program is designed to provide academic study and research training related to curriculum studies. 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 or teacher development. The chief academic interests and experience, professional concerns, and career plans related to an aspect of curriculum studies should be discussed. In order to identify their research interests in their Statement of Intent, applicants should visit the Curriculum Studies and Teacher Development program web page.

- The Admissions Committee reviews this statement to determine the kind of curriculum problem 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 **4.0 full-course equivalents (FCEs)** as follows:
  - At least 2.0 FCEs, normally CTL 1000-level courses undertaken in the Curriculum Studies and Teacher Development program.
  - CTL 1000H *Foundations of Curriculum Studies* (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 Studies and Teacher Development 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. 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 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.

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 Studies and Teacher Development 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 Studies and Teacher Development program.
  - CTL 1000H *Foundations of Curriculum Studies* (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 Studies and Teacher Development PhD

Doctor of Philosophy

The PhD program demands a strong commitment to research. The Curriculum Studies and Teacher Development 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 Studies and Teacher Development web page.
    - A Statement of Intent describing their intellectual interests and concerns relevant to curriculum studies and teacher development, reasons for wishing to take the program, previous qualifications and professional experiences, particular research or 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.
    - CTL 1899H, the *CSTD Doctoral Proseminar* (0.5 FCE).
    - Students are expected to take CTL 1000H *Foundations of Curriculum Studies* (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 Studies and Teacher Development web page.
    - A Statement of Intent describing their intellectual interests and concerns relevant to curriculum studies and teacher development, reasons for wishing to take the program, previous qualifications and professional experiences, particular research or 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. However, in addition, applicants to the flexible-time PhD should demonstrate that they are active professionals engaged in activities relevant to their proposed program of study.

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.
    - CTL 1899H, the *CSTD Doctoral Proseminar* (0.5 FCE).

    - Students are expected to take CTL 1000H Foundations of Curriculum Studies (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 Studies and Teacher Development MA, MEd, PhD Emphases

Emphasis: Arts in Education

The emphasis in Arts in Education allows students to take specialized courses in the areas of music and sound, drama and theatre, visual art, performance, and, in particular, courses that reflect social justice concerns reflected through the arts and cultural production. This emphasis will attract students interested in the arts, elementary and secondary arts specialist teachers, and community, gallery, and museum educators interested in examining arts education beyond schooling.

- **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:
    - CTL 1026H, CTL 1065H, CTL 1099H, CTL 1104H, CTL 1322H, CTL 1811H, CTL 1818H, CTL 1822H, CTL 5013H, CTL 5018H, CTL 5019H, CTL 5020H.
- Upon successful completion of the emphasis requirements and the successful completion of the degree requirements, the student will receive a Letter of Completion.

Emphasis: Critical Studies in Curriculum and Pedagogy

The emphasis in Critical Studies in Curriculum and Pedagogy will encourage a critical exploration of educational phenomena, within and beyond the scope of schools, and will focus on social justice issues in education including issues related to environmental justice, globalization, colonialism, race, disability, gender, sexuality, and cultural and linguistic difference.

- **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:
    - CTL 1011H, CTL 1024H, CTL 1031H, CTL 1037H, CTL 1048H, CTL 1062H, CTL 1063H, CTL 1064H, CTL 1065H, CTL 1099H, CTL 1218H, CTL 1219H, CTL 1220H, CTL 1221H, CTL 1304H. CTL 1306H, CTL 1307H, CTL 1309H, CTL 1312H, CTL 1313H, CTL 1318H, CTL 1319H, CTL 1816H, CTL 1818H, CTL 1822H, CTL 1861H, CTL 3031H, CTL 3034H.
- Upon successful completion of the emphasis requirements and the successful completion of the degree requirements, the student will receive a Letter of Completion.

Emphasis: Digital Technologies in Education

The emphasis in Digital Technologies in Education is designed to engage educators in a critical 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 computational thinking, gamification of learning, online knowledge communities, social media, immersive simulations, technology and assessment, mobile devices, and knowledge building. These courses will address emerging trends in the contemporary digital technologies landscape. Given the thousands of educational apps and web-based technologies available to teachers, where are we seeing potential?

- **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:
    - CTL 1602H, CTL 1603H, CTL 1606H, CTL 1608H, CTL 1609H, CTL 1923H, CTL 1926H, CTL 5015H.
- 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.

Emphasis: Indigenous Education and Decolonization

The emphasis in Indigenous Education and Decolonization examines the complex and tangled histories of those on whose traditional lands OISE and U of T are situated: the Ouendat (Wyandot-Huron), Onondowahgah (Seneca-Hodenosaunee), and the Misi-zaagiing (Mississaugas-Anishinaabek) nations. This territory is subject to the *Dish With One Spoon Wampum Belt Covenant*, an agreement between the Iroquois Confederacy and the Ojibwe and allied nations to peaceably share and care for the resources around the Great Lakes. 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 this land has, and still does 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:
    - CTL 1024H, CTL 1063H, CTL 1320H, CTL 1321H, CTL 1322H, CTL 5010H, CTL 5029H.
- Upon successful completion of the emphasis requirements and the successful completion of the degree requirements, the student will receive a Letter of Completion.

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:
    - CTL 1018H, CTL 1041H, CTL 1049H, CTL 1062H, CTL 1063H, CTL 1099H, CTL 1105H, CTL 1211H, CTL 1306H, CTL 1322H, CTL 1801H, CTL 1809H, CTL 1810H, CTL 1822H, CTL 1861H, CTL 5019H, CTL 5029H, CTL 5030H.
- Upon successful completion of the Emphasis requirements and the successful completion of the degree requirements, the student will receive a Letter of Completion.

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. A vibrant community of scholars and graduate students thrive on collegiality, intellectual debate, critical analyses, and inquiry. Drawing on research and practice, students will explore and critique innovative SMT education while supporting research, curriculum development, and teaching. With strong connections to the SMT Centre and the collaborative specialization in Engineering Education, students will engage with topics such as science, technology engineering, and mathematics (STEM); mathematics pedagogy; 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:
    - CTL 1116H, CTL 1119H, CTL 1120H, CTL 1202H, CTL 1206H, CTL 1207H, CTL 1209H, CTL 1212H, CTL 1214H, CTL 1215H, CTL 1216H, CTL 1217H, CTL 1218H, CTL 1219H, CTL 1221H, CTL 1222H, CTL 1223H, CTL 1606H, CTL 1608H, CTL 1609H, CTL 1841H .
- Upon successful completion of the emphasis requirements and the successful completion of the degree requirements, the student will receive a Letter of Completion.

CTL: Curriculum Studies and Teacher Development 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

CTL 1000H	Fondements du l'étude des programmes scolaires
CTL 1000H	Foundations of Curriculum Studies
CTL 1001H	Values and Schooling
CTL 1005H	Language, Literacy, and the School Curriculum

CTL 1007H	Communities of Learning: Teachers Constructing Professional Knowledge
CTL 1011H	Anti-Oppression Education in School Settings
CTL 1011H	L'éducation pour l'anti-oppression en milieu scolaire
CTL 1012H	Curriculum for Girls and Young Women: Historical and Contemporary Issues
CTL 1014H	Evaluation of Curriculum and Instruction
CTL 1016H	Cooperative Learning Research and Practice
CTL 1018H	Introduction to Qualitative Inquiry in Curriculum, Teaching, and Learning
CTL 1019H	Authentic Assessment
CTL 1020H	Teaching High Ability Students
CTL 1023H	Technology and Education: Critical Perspectives on Theory and Practice
CTL 1024H	Poststructuralism and Education
CTL 1026H	Performed Ethnography
CTL 1027H	Facilitating Reflective Professional Development
CTL 1028H	Constructive Feedback in Teaching
CTL 1029H	From Student to Teacher: Professional Induction
CTL 1031H	Language, Culture, and Identity: Using the Literary Text in Teacher Development
CTL 1032H	Knowing and Teaching
CTL 1033H	Multicultural Perspectives in Teacher Development: Reflective Practicum
CTL 1036H	Thoughtful Teaching and Practitioner Inquiry
CTL 1037H	Teacher Development: Comparative and Cross-Cultural Perspectives
CTL 1038H	Change and Curriculum Implementation
CTL 1040H	Fundamentals of Program Planning and Evaluation
CTL 1041H	Research Methods In Education
CTL 1042H	Instrument Development in Education
CTL 1043H	Research Issues in Alternative Assessments
CTL 1045H	Survey Research
CTL 1046H	Training Evaluation
CTL 1047H	Course Self-Assessment
CTL 1048H	Qualitative Methodology: Challenges and Innovations
CTL 1049H	Critical Practitioner Research in Education
CTL 1060H	Education and Social Development
CTL 1062H	Performed Ethnography and Research Informed Theatre
CTL 1063H	Pedagogies of Solidarity
CTL 1064H	Applied Theatre and Performance in Sites of Learning
CTL 1065H	Approaches to Anti-Homophobia and Anti-Transphobia Education
CTL 1099H	Critical Approaches to Arts-Based Research
CTL 1104H	Play, Drama, and Arts Education
CTL 1105H	Research and Inquiry in Arts Education
CTL 1106H	Spirituality in Education
CTL 1110H	The Holistic Curriculum
CTL 1115H	Teacher Education and the Construction of Professional Knowledge: Holistic Perspectives
CTL 1116H	Holistic Education Approaches in Elementary School Mathematics
CTL 1117H	Liberatory Practices in Drama and Education
CTL 1119H	Gaining Confidence in Mathematics: A Holistic Approach to Rebuilding Math Knowledge and Overcoming Anxiety
CTL 1120H	Effective Teaching Strategies in Elementary Mathematics Education: Research and Practice
CTL 1200H	Science in the School Curriculum
CTL 1202H	Mathematics in the School Curriculum: Elementary
CTL 1206H	Teaching and Learning Science
CTL 1207H	Teaching and Learning about Science: Issues and Strategies in Science, Technology, Society, and Environment (STSE) Education
CTL 1208H	Curriculum Issues in Science and Technology: An Historical Perspective
CTL 1209H	Current Issues in Science and Technology Education
CTL 1211H	Action Research in Science, Mathematics, and Technology Education
CTL 1212H	Curriculum Making in Science: Some Considerations in the History, Philosophy, and Sociology of Science
CTL 1214H	Equity Issues in Science Education
CTL 1215H	Teaching and Learning About Science and Technology: Beyond Schools
CTL 1216H	Teacher Leadership in Curriculum, Teaching, and Technology Education
CTL 1217H	Integrating Science, Mathematics, and Technology Curricula
CTL 1218H	Culture and Cognition in Mathematics, Science, and Technology Education
CTL 1219H	Making Secondary Mathematics Meaningful
CTL 1220H	Sociocultural Theories of Learning
CTL 1221H	Education for Human Goals Local and Global: How's Science Education Helping?
CTL 1222H	Environmental Studies in Science, Mathematics, and Technology Education
CTL 1223H	Activist Science and Technology Education
CTL 1304H	Cultural Studies and Education
CTL 1306H	La recherche qualitative en éducation: bases théoriques et pratiques
CTL 1306H	Qualitative Research Methods in Education: Concepts and Methods
CTL 1307H	Identité collective et éducation minoritaire de langue française
CTL 1307H	Identity Construction and Education of Minorities
CTL 1309H	Les stéréotypes sexuels dans les programmes scolaires
CTL 1312H	Democratic Citizenship Education
CTL 1313H	Gender Equity in the Classroom
CTL 1316H	Global Education: Theory and Practice
CTL 1318H	Teaching Conflict and Conflict Resolution
CTL 1319H	Religious Education: Comparative and International Perspectives
CTL 1320H	Introduction to Aboriginal Land-Centered Education: Historical and Contemporary Perspectives
CTL 1321H	Aboriginal Civilization: Language, Culture, and Identity
CTL 1322H	Literacies of Land: Narrative, Storying, and Literature

CTL 1325H	Citizenship Education, Pedagogy, and School Communities
CTL 1330H	Education and Peacebuilding in Conflict Zones: International Comparative Perspectives
CTL 1400H	Classroom Adaptations and Instructional Strategies
CTL 1402H	Adaptive Instruction in Inclusive Classrooms
CTL 1403H	Special Education and Social Representation of Difference
CTL 1405H	The Origins of Modern Schooling I: Problems in Education Before the Industrial Revolution
CTL 1406H	The Origins of Modern Schooling: Issues in the Development of the North American Educational System
CTL 1407H	Rural Education and Social Reform in Canadian History, 1860–1960
CTL 1408H	History of Education and Society: Selected Topics
CTL 1423H	Families, Schooling and Canadian History, 1840–1970
CTL 1424H	Religion, Ideology, and Social Movement in the Development of North American Education
CTL 1426H	The History of Gender and Education in Canada
CTL 1427H	Commemorating Canada, 1800s–1900s
CTL 1428H	Immigration and the Development of Canadian Education
CTL 1429H	Ethnicity and the Development of Canadian Education
CTL 1430H	Gendered Colonialisms, Imperialisms, and Nationalisms in History
CTL 1448H	Popular Culture and the Social History of Education II
CTL 1454H	The Battle Over History Education in Canada
CTL 1460H	History and Educational Research
CTL 1602H	Introduction to Computers in Education
CTL 1603H	Introduction to Knowledge Building
CTL 1604H	Video/Multimedia Design
CTL 1606H	Computers in the Curriculum
CTL 1608H	Constructive Learning and Design of Online Environments
CTL 1609H	Educational Applications of Computer-Mediated Communication
CTL 1611H	Computer-Mediated Distance Education
CTL 1612H	The Virtual Library (Non-Credit)
CTL 1614H	Knowledge Media and Learning
CTL 1797H	Practicum in Curriculum: Master's Level
CTL 1798H	Individual Reading and Research in Curriculum: Master's Level
CTL 5010H	Special Topics in Curriculum: Master's Level

Doctoral Level

CTL 1801H	Action Research and Professional Practice
CTL 1808H	Curriculum Innovation in Teacher Education
CTL 1809H	Narrative and Story in Research and Professional Practice
CTL 1810H	Qualitative Research in Curriculum and Teaching
CTL 1811H	Writing Research/Research Writing: Moving from Idea to Reality
CTL 1812H	Professional Ethics of Teaching and Schooling
CTL 1816H	Minority Education and Inclusion: Policies in Practice
CTL 1817H	Current Issues in Teacher Education
CTL 1818H	Arts in Education: Concepts, Contexts, and Frameworks
CTL 1819H	Multicultural Literature in the Schools: Critical Perspectives and Practices
CTL 1822H	Urban School Research: Youth, Pedagogy, and the Arts
CTL 1825H	The Teacher as a Contemplative Practitioner
CTL 1841H	Research Seminar in Science, Mathematics, and Technology Education
CTL 1842H	Mixed Methods Research in Education: Combining Qualitative and Quantitative Inquiries
CTL 1844H	Seminar in Evaluation Problems (prerequisite: CTL 2803H, CTL 1843H, or equivalent)
CTL 1846H	Assessment for Teaching and Learning
CTL 1847H	Data Analysis and Integration in Mixed Methods Research
CTL 1861H	Critical Ethnography
CTL 1864H	Methodologies for Comparing Educational Systems
CTL 1899H	CSTD Doctoral Proseminar
CTL 1923H	Mobile and Ubiquitous Computing in Education
CTL 1926H	Knowledge Media and Learning
CTL 1997H	Practicum in Curriculum: Doctoral Level
CTL 1998H,Y	Individual Reading and Research in Curriculum: Doctoral Level
CTL 6000H	Special Topics in Curriculum: Doctoral Level

CTL: Language and Literacies Education Overview

Program Description

The Language and Literacies Education program investigates questions around the relationships of literacies in language and language in literacies across communities, societies, instructional environments, and informal learning settings.

The scope of the program encompasses the following within applied linguistics and literacies studies:

- the learning, teaching, and use of first and additional (non-native) languages in diverse settings;
- curriculum, instruction, and assessment related to the development of first and additional language and K-12 literacy
- skills;
- the development of bilingual, multilingual, and translinguistic abilities;
- language and literacy education policies and planning;
- pedagogy oriented towards 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.

Specific resources related to the program include the OISE library's Modern Language Collection, la Collection Franco-Ontarienne, the Children's and Young Adult literature collection, and the Centre for Educational Research on Languages and Literacies. The program offers three degrees: **MA**, **MEd**, and **PhD**.

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 CTL 3001H *Research Colloquium in Language and Literacies Education* (0.5 FCE). Part-time students are expected to be available to take CTL 3001H during daytime hours (usually Friday afternoons).
    - A research methods course relevant to the topic of the thesis (0.5 FCE). Any of the following courses can fulfil this requirement: CTL 1018H, CTL 1041H, CTL 1306H, CTL 1810H, CTL 1842H, CTL 3019H, CTL 3033H, CTL 3800H, CTL 3807H, CTL 3810H, APD 1296H, APD 3202H, APD 3228H, JOI 1287H, JOI 1288H, or SJE 1905H.
    - 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 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 CTL 3001H *Research Colloquium in Language and Literacies Education* (0.5 FCE) and CTL 3899H *Proseminar in Language and Literacies Education* (0.5 FCE), if not previously taken at the master's level. If CTL 3001H or CTL 3899H 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: CTL 1018H, CTL 1041H, CTL 1306H, CTL 1810H, CTL 1842H, CTL 3019H, CTL 3033H, CTL 3800H, CTL 3807H, CTL 3810H, APD 1296H, APD 3202H, APD 3228H, JOI 1287H, JOI 1288H, or SJE 1905H.
  - 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 should demonstrate that they 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 CTL 3001H *Research Colloquium in Language and Literacies Education* (0.5 FCE), if not previously taken at the master's level. If CTL 3001H 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).
  - CTL 1899H *Proseminar in Language and Literacies Education* (0.5 FCE), if not previously taken at the master's level. If CTL 3899H 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: CTL 1018H, CTL 1041H, CTL 1306H, CTL 1810H, CTL 1842H, CTL 3019H, CTL 3033H, CTL 3800H, CTL 3807H, CTL 3810H, APD 1296H, APD 3202H, APD 3228H, JOI 1287H, JOI 1288H, or SJE 1905H.
  - 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

APD 1296H	Assessing School-Aged Language Learners
CTL 3000H	Foundations of Bilingual and Multicultural Education
CTL 3001H	Research Colloquium in Language and Literacies Education
CTL 3002H	Second Language Teaching Methodologies
CTL 3002Y	Methodology and Organization of Second-Language Teaching
CTL 3003H	Planning and Organizing the Second Language Curriculum
CTL 3004H	Language Awareness and its Role in Teacher Development
CTL 3005H	Current Issues in English as a Second Language
CTL 3007H	Discourse Analysis
CTL 3007H	Séminaire sur le langage et la communication
CTL 3008H	Critical Pedagogy, Language, and Cultural Diversity
CTL 3010H	Second-Language Learning
CTL 3011H	Cognitive, Sociolinguistic, and Sociopolitical Orientations in Bilingual Education Research
CTL 3011H	Bilinguisme et éducation
CTL 3013H	Language Assessment
CTL 3015H	Language and Literacies Education in Multilingual Contexts
CTL 3018H	Language and Planning and Policy
CTL 3018H	Politique et aménagement linguistique
CTL 3019H	Research Themes in Canadian French as a Second Language Education
CTL 3020H	Writing in a Second Language
CTL 3021H	Pedagogical Grammar of French
CTL 3024H	Language Teacher Education
CTL 3025H	Educational Sociolinguistics
CTL 3026H	Pragmatics in Language Education
CTL 3027H	Planification de la programmation pour un enseignement efficace
CTL 3027H	Curriculum Development for Effective Teaching
CTL 3028H	Literacy in Elementary Education
CTL 3029H	Children's Literature as a Foundation of Literate Behaviour Across the Curriculum
CTL 3030H	Theory and Practice in Elementary Literacy Instruction
CTL 3031H	Children's Literature Within a Multicultural Context
CTL 3032H	Teaching Writing in the Classroom
CTL 3033H	Literary Research Methodologies

CTL 3034H	New Literacies: Making Multiple Meanings
CTL 3035H	Critical Literacy in Action
CTL 3036H	Expressive Writing: Practice and Pedagogy
CTL 3037H	Biography in Educational Contexts
CTL 3100H	Communication and Second Language Learning in the Workplace
CTL 3101H	Language Awareness for Language Educators
CTL 3410H	Schooling in the Movies: Education as Reflected in Hollywood Films
CTL 3411H	Cinema and Historical Literacy
CTL 3412H	Shakespeare and Cultural Literacy
CTL 3413H	Reading Cinema and Cultural Identity
CTL 3414H	Historical Literacy and Popular Literacy
CTL 3415H	Educational Thought and Historical Literature
CTL 3797H	Practicum in Language and Literacies Education: Master's Level
CTL 3798H	Individual Reading and Research in Language and Literacies Education: Master's Level
CTL 3899H	Proseminar in Language and Literacies Education Program: Master's Level
CTL 5300H	Special Topics in Language and Literacies Education Program: Master's Level
CRE 1001H	Séminaire d'études : Éducation, francophonies et diversité
JHC 1251H	Reading in a Second Language
JTE 1952H	Language Culture and Education/M. Heller

Doctoral Level

CTL 3800H	Second Language Classroom Research
CTL 3805H	Multilingualism and Plurilingualism
CTL 3806H	Sociocultural Theory and Second Language Learning
CTL 3807H	Processing Second Language Data
CTL 3808H	The Role of Instruction in Second Language Learning
CTL 3809H	Research Seminar in Sociocultural Theory and Second Language Learning
CTL 3810H	Second Language Classroom Research Methods
CTL 3899H	Proseminar in Language and Literacies Education
CTL 3997H	Practicum Second Language: Doctoral Level
CTL 3998H	Individual Reading and Research in Language and Literacies Education: Doctoral Level
CTL 6300H	Special Topics in Language and Literacies Education Program: Doctoral Level

CTL: Teaching MT

Master of Teaching

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, practice teaching, and the MT research projects.

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 **10.0 full-course equivalents (FCEs)** consisting of:
  - 16 (or equivalent) compulsory core courses (8.0 FCEs).
  - 2 elective courses (1.0 FCE).
  - 2 practice teaching courses (1.0 FCE): CTL 7004H and CTL 7005H. There are two placements per course, totalling four teaching placements.
  - Major Research Project.
- 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 CTL 7100H *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

CTL 7000H	Curriculum and Teaching in Literacy
CTL 7001H	Educational Professionalism, Ethics, and Law
CTL 7002H	Curriculum and Teaching in Mathematics
CTL 7004H	Practice Teaching (Year 1)
CTL 7005H	Practice Teaching (Year 2)
CTL 7006H	Educational Research 1
CTL 7008H	Introduction to Special Education and Mental Health
CTL 7009H	Anti-Discriminatory Education
CTL 7010H	Issues in Numeracy and Literacy
CTL 7011H	Child and Adolescent Development and Learning
CTL 7014H	Fundamentals of Teaching and Learning
CTL 7015H	Educational Research 2
CTL 7016H	Integrating Technology into the Classroom: Issues and Activities
CTL 7017H	Curriculum and Teaching in Music, Dance, and Drama
CTL 7018H	Curriculum and Teaching in Science and Environmental Education
CTL 7019H	Supporting English Language Learners
CTL 7071H	Curriculum and Teaching in Visual Arts and Physical Education
CTL 7072H	Curriculum and Teaching in Social Studies and Aboriginal Education
CTL 7100H	Mathematics Concepts for Elementary Teacher Candidates* (Non-credit)

*Students registered in the Primary/Junior division must successfully complete the non-credit seminar course CTL 7100H *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 (area)

Junior/Intermediate (J/I) Division (Grade 4 to Grade 10)

Core Courses

CTL 7000H	Curriculum and Teaching in Literacy
CTL 7001H	Educational Professionalism, Ethics, and Law
CTL 7002H	Curriculum and Teaching in Mathematics
CTL 7004H	Practice Teaching (Year 1)
CTL 7005H	Practice Teaching (Year 2)
CTL 7006H	Educational Research 1
CTL 7008H	Introduction to Special Education and Mental Health
CTL 7009H	Anti-Discriminatory Education
CTL 7010H	Issues in Numeracy and Literacy
CTL 7011H	Child and Adolescent Development and Learning
CTL 7013H	Arts in Education
CTL 7014H	Fundamentals of Teaching and Learning
CTL 7015H	Educational Research 2
CTL 7016H	Integrating Technology into the Classroom: Issues and Activities
CTL 7018H	Curriculum and Teaching in Science and Environmental Education
CTL 7019H	Supporting English Language Learners
CTL 7072H	Curriculum and Teaching in Social Studies and Aboriginal Education
CTL 7100H	Mathematics Concepts for Elementary Teacher Candidates* (Non-credit)

*Students registered in the Primary/Junior division must successfully complete the non-credit seminar course CTL 7100H *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 CTL 7050H to CTL 7058H
Plus 1.0 FCE	Two elective courses (area)

For J/I certification, students take **one subject specialization course** in Year 2 (the list of subject specializations are subject to change):

J/I Subject Specialization Courses

CTL 7050H	Intermediate Teaching Subject—English (First Language)
CTL 7051H	Intermediate Teaching Subject—French (Second Language)
CTL 7052H	Intermediate Teaching Subject—Geography
CTL 7053H	Intermediate Teaching Subject—Health and Physical Education
CTL 7054H	Intermediate Teaching Subject—History
CTL 7055H	Intermediate Teaching Subject—Mathematics
CTL 7056H	Intermediate Teaching Subject—Music-Instrumental
CTL 7057H	Intermediate Teaching Subject—Music-Vocal
CTL 7058H	Intermediate Teaching Subject—Science-General
CTL 7059H	Intermediate Teaching Subject—Visual Arts

Prerequisites

Before applying to the J/I 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

Core Courses

CTL 7004H	Practice Teaching (Year 1)
CTL 7005H	Practice Teaching (Year 2)
CTL 7006H	Educational Research 1
CTL 7007H	Authentic Assessment
CTL 7008H	Introduction to Special Education and Adaptive Instruction
CTL 7009H	Anti-Discriminatory Education
CTL 7011H	Child and Adolescent Development and Learning
CTL 7014H	Fundamentals of Teaching and Learning
CTL 7015H	Educational Research 2
CTL 7016H	Integrating Technology into the Classroom: Issues and Activities
CTL 7019H	Supporting English Language Learners
CTL 7070H	Issues in Secondary Education 2
CTL 7073H	Indigenous Experiences of Racism and Settler Colonialism in Canada: An Introduction
CTL 7074H	Issues in Educational Law, Policy, and Ethics

Elective Courses

Plus 1.0 FCE	First subject specialization course selected from CTL 7020Y to CTL 7041Y; see full course list below
Plus 1.0 FCE	Second subject specialization course selected from CTL 7020Y to CTL 7041Y; see full course list below
Plus 1.0 FCE	Two elective courses (area)

I/S Specialization Courses

The I/S 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).

CTL 7020Y	Curriculum and Teaching in English
CTL 7021Y	Curriculum and Teaching in History
CTL 7022Y	Curriculum and Teaching in Mathematics
CTL 7023Y	Curriculum and Teaching in Science: Biology
CTL 7024Y	Curriculum and Teaching in Science: Chemistry
CTL 7025Y	Curriculum and Teaching in Science: Physics
CTL 7026Y	Curriculum and Teaching in Science: General
CTL 7027Y	Curriculum and Teaching in Social Science: General
CTL 7028Y	Curriculum and Teaching in Geography—Intermediate/Senior
CTL 7029Y	Curriculum and Teaching in Music: Instrumental
CTL 7030Y	Curriculum and Teaching in Music: Vocal
CTL 7031Y	Curriculum and Teaching in Health and Physical Education
CTL 7032Y	Curriculum and Teaching in Visual Arts—Intermediate/Secondary
CTL 7033Y	Curriculum and Teaching in Dramatic Arts—Intermediate/Secondary
CTL 7034Y	Curriculum and Teaching in French as a Second Language—Intermediate/Secondary
CTL 7041Y	Curriculum and Teaching in Religious Education

Prerequisites

Before applying to the I/S 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:* Biomaterials Diagnostic and Therapeutic Technologies Growth, Development and Regeneration Health, Status, Clinical Outcome Measures and Health Care Delivery Molecular Approaches to the Study of Oral Health and Disease Pathogenesis Pain / Neurosciences

Collaborative Specializations

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

1. **Aging, Palliative and Supportive Care Across the Life Course**
   - Dentistry, MSc, PhD
2. **Biomedical Engineering**
   - Dentistry, MSc, PhD
3. **Cardiovascular Sciences**
   - Dentistry, MSc, PhD
4. **Global Health**
   - Dentistry, PhD
5. **Musculoskeletal Sciences**
   - Dentistry, MSc, PhD
6. **Neuroscience**
   - Dentistry, MSc, PhD
7. **Women's Health**
   - Dentistry, MSc, PhD

Overview

The Faculty of Dentistry offers a graduate program leading to either a **Master of Science** or **Doctor of Philosophy** degree. This graduate program appeals to:

1. applicants who have a degree in dentistry and who are pursuing research training and advanced clinical education in one of the dental specialties; and
2. applicants, both dentists and non-dentists, who are pursuing graduate research training without advanced clinical education.

Consequently, both the MSc and the PhD degrees have a common core of coursework and consist of three options, with each having varying additional research and training requirements.

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
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Dentistry: Graduate Faculty

Full Members

Agur, Anne - BSc, MSc, PhD
Aubin, Jane - BSc, PhD
Azarpazhooh, Amir - MSc, DDS, PhD
Bressmann, Tim - MPH, PhD
Casas, Michael - MSc, DDS
Casper, Robert - MD
Cvitkovitch, Dennis - BSc, MSc, PhD
Davies, John - BSc, BDSc, PhD, DSc
Dempster, Laura - BScD, MSc, PhD
Deporter, Douglas - DipPerio, DDS, PhD
Dostrovsky, Jonathan - BSc, MSc, PhD
El-Mowafy, Omar - BDS, 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, J. Boris - PhD
Kenny, David - BSc, DDS
Kishen, Anil - BDS, MDS, PhD (***Coordinator, Graduate Studies***)
Lam, Ernest - BSc, MSc, DMD, PhD (***Associate Dean, Graduate Education***)
Lawrence, Herenia - MSc, DDS, PhD
Levesque, Celine - BSc, MSc, PhD
Manolson, Morris - BS, PhD
McCulloch, Christopher - BSc, DDS, PhD
Mock, David - DDS, PhD, FRCDC
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

Fenton, Aaron - DipPerio, MS, DDS
Liebgott, Bernard - DDS, MScD, PhD
Mayhall, John - BA, MA, AM, DDS, PhD
McComb, Dorothy - BDS, MScD
Pilliar, Robert - BASc, PhD
Ross, Robert Bruce - MSc, DDS, FRSC
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
Carneiro, Karina - BSc, PhD
Dao, Thuan - MSc, DMD, PhD
Diwan, Randa - BDS, PhD
El-Badrawy, Wafa - MSc, BDS
Goldberg, Michael - DipPerio, BSc, MSc, DDS
Holmes, Howard - MSc, DDS, DDS
Iakounine, Alexandre - MSc, ScD
Judd, Peter - BSc, MS, DDS
Kulkarni, Gajanan - LLB, MSc, BDS, PhD
Lai, Jim Yuan - BSc, MSc, DMD, FRCDC
Laing Gibbard, Leslie - BSc, BEd, MSc, MS, MSc, DDS, PhD
Laporte, Audrey - BA, MA, PhD
Leong, Iona - BSc, MSc, BDS
Magalhaes, Marco - MSc, BDS, PhD
Metaxas, Angelos - DipOrH, MSc, DDS, DDSc
Moayedi, Massieh - BSc, PhD
Nainar, Hashim - BDS, MScD
Pharoah, Michael - BSc, MSc, DDS
Shrestha, Annie - MSc, BDS, PhD
Sigal, Michael - 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

Dentistry: Dentistry MSc

Master of Science

1. Thesis 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 bachelor of science, doctor of dental surgery, 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 in a discipline appropriate to the field of dentistry.

Program Requirements

- 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.
- **Year 1:** development of a research project and proposal, and coursework. Coursework will normally include, as a minimum, fulfilment of the requirements for the courses DEN 1001Y[0] *Seminars in Oral Health Sciences* and DEN 1010H *Research Ethics* and successful completion of an additional 1.5 full-course equivalents (FCEs) that includes the course DEN 1015H *Introduction to Biostatistics*. Exemptions may be granted for previously completed coursework at the bachelor's level.
- **Year 2:** research, thesis completion, and the oral defence of the written thesis.

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 when completed.

2. Specialist Dental Training: Thesis Option

The Faculty of Dentistry offers an MSc degree for dental graduates seeking advanced training in a clinical specialty as well as training in research.

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 GPA) in the final year from a recognized university.

Program Requirements

- Two to four years of full-time registration, depending upon the clinical specialty.
- Completion of an original research project culminating in the oral defence of a written thesis.
- Completion of clinical and didactic coursework program requirements as necessary to meet the

Commission on Dental Accreditation of Canada requirements for the chosen clinical specialty that includes successful completion of the courses DEN 1014H *Clinical Epidemiology and Evidence-Based Care* and DEN 1015H *Introduction to Biostatistics*.
- Course DEN 1001Y[0] *Seminars in Oral Health Sciences* for a minimum of one year.
- Completion of DEN 1010H *Research Ethics*.
- Upon completion of all program requirements, students are eligible for the MSc degree and certification in the chosen dental specialty. For further information, consult the Faculty of Dentistry calendar or website.

Program Length

2 to 4 years full-time; varies by graduate specialty program undertaken and must conform to the accreditation requirements of the Commission on Dental Accreditation of Canada.

Time Limit

3 to 5 years full-time depending on specialty

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

3. Specialist Dental Training: Coursework-Only Option

The Faculty of Dentistry offers a master of science degree for dental graduates seeking advanced training in a clinical specialty in which additional coursework is undertaken as an alternative to a thesis. The MSc with training in Dental Public Health is also offered to dental hygienists. The availability of this option will vary by 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.
- DDS or an equivalent degree, with at least a B+ standing (3.3 out of 4.0 GPA) in the final year from a recognized university. For the MSc with training in Dental Public Health, dental hygienist applicants should have an appropriate undergraduate dental hygiene degree from a recognized university, or an appropriate undergraduate degree from a recognized university and dental hygiene training.

Program Requirements

- Two to four years of full-time registration, depending upon the clinical specialty.
- Completion of all clinical and didactic coursework program requirements as necessary to meet the Commission on Dental Accreditation of Canada requirements in the chosen dental specialty that includes successful completion of the courses DEN 1014H *Clinical Epidemiology and Evidence-Based Care* and DEN 1015H *Introduction to Biostatistics*.
- Course DEN 1001Y[0] *Seminars in Oral Health Sciences* for a minimum of one year.
- Completion of DEN 1010H *Research Ethics*.
- 1.5 full-course equivalents (FCEs) in clinical, epidemiological, or basic science research methodology appropriate for clinical or public health practice.
- A research practicum (0.5 FCE) and successful completion of an oral examination of the research practicum.
- Upon successful completion of all program requirements, students are eligible for the graduate degree. Students, with the exception of dental hygienists, are eligible for certification in the chosen dental specialty. For further information, consult the Faculty of Dentistry calendar or website.

Program Length

2 to 4 years full-time; varies by graduate specialty program undertaken and must conform to the accreditation requirements of the Commission on Dental Accreditation of Canada.

Time Limit

3 to 5 years full-time depending on specialty

Dentistry: Dentistry PhD

Doctor of Philosophy

1. Full-Time Research Program

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 four-year PhD program with an appropriate master's degree, or equivalent, with at least an A- standing (3.7 out of 4.0 GPA) in the final year from a recognized university in a discipline appropriate to the intended field of doctoral study. However, under exceptional circumstances, the Faculty may admit a highly qualified student with an appropriate BSc degree in a discipline appropriate to the field of dentistry or a Doctor of Dental Surgery (DDS) degree with at least an A- standing from a recognized university.

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.
- Minimum course requirements: completion of the courses DEN 1100Y[0] *Seminars in Oral Health Sciences* and DEN 1010H *Research Ethics*, plus an additional 2.5 full-course equivalents (FCEs) that includes the course DEN 1015H *Introduction to Biostatistics*.
- Exemptions may be granted for MSc coursework from closely related disciplines. This includes students transferring from MSc to PhD programs. Programs of study for BSc students will normally include additional coursework requirements.
- Although the minimum residency requirement is one year, it is the Faculty's expectation that students will normally remain on campus for four years.
- After 12 months and within 24 months of starting a PhD program, students must pass a qualifying oral examination to demonstrate an adequate capacity for oral health sciences research through previous work and will be examined on their thesis proposal and their breadth of knowledge relative to the research project.
- Participate in all graduate research activities of the advisor's research group.
- Present at meetings and publish original research findings in timely fashion.
- Participate as members of departmental and student committees as applicable.
- Consult with the Associate Dean, Graduate Education, who will appoint a committee to plan and arrange their coursework and research programs. The committee and the Associate Dean must approve the entire course of study. The committee will closely monitor the student's ability to sustain satisfactory performance and will report annually to the Associate Dean for approval and continuance of candidacy.

Program Length

4 years full-time; 5 years direct-entry; 5 years transfer-from-MSc

Time Limit

6 years full-time; 7 years direct-entry; 7 years transfer-from-MSc

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

2. Full-Time Program Combined with Dental Specialty Training Option

The Faculty of Dentistry offers a doctor of philosophy degree for exceptional dental graduates seeking to combine a PhD degree with advanced training in a clinical specialty. Applicants intending to train as clinicians/scientists, aspiring to teaching and research careers in the dental field, are considered on an individual 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 Dentistry's additional admission requirements stated below.
- DDS degree with at least an A- standing (3.7 out of 4.0 GPA) in the final year from a recognized university. Evidence of research experience or research potential is normally required.

Program Requirements

- Completion of an original research project culminating in the oral defence of a thesis.
- Completion of the courses DEN 1100Y[0] *Seminars in Oral Health Sciences* and DEN 1010H *Research Ethics*, plus an additional 1.0 full-course equivalent (FCE) pertaining to the research component of the program, together with completion of clinical and didactic coursework requirements as necessary to meet Canadian Dental Association accreditation requirements for the chosen clinical specialty that includes successful completion of the courses DEN 1014H *Clinical Epidemiology and Evidence-Based Care* and DEN 1015H *Introduction to Biostatistics*.
- Consult with the Associate Dean, Graduate Education, who will appoint a committee to plan and arrange their course and research programs. The committee and the Graduate Chair must approve the entire course of study. The committee will closely monitor the student's ability to sustain satisfactory performance and will report semi-annually to the Associate Dean, Graduate Education for approval and continuance of candidacy.
- After 12 months and within 24 months of starting the PhD program, students must pass a qualifying oral examination to demonstrate an adequate capacity for oral health sciences research through previous work and will be examined on their thesis proposal and their breadth of knowledge relative to the research project.
- Participate in all graduate research activities of the advisor's research group.
- Present at meetings and publish original research findings in timely fashion.
- Participate as members of departmental and student committees as applicable.
- The addition of the clinical and didactic courses for a clinical specialty will normally increase the amount of time for the PhD degree by a minimum of two years, depending upon the particular clinical specialty undertaken. Program completion will be contingent

upon completion of all requirements for the research and specialty training components of the program.
- Upon completion, students are eligible for the graduate degree and to challenge dental specialty certification examinations in Canada and the United States. For further information, please consult the Faculty of Dentistry calendar or website.

Program Length

Varies by specialty; up to 6 years full-time

Time Limit

Varies by specialty; up to 8 years full-time

3. Flexible-Time Option

The Faculty of Dentistry offers a flexible-time PhD program for selected students whose career goal is a full-time academic position in a clinical discipline. Students concurrently establish their teaching and academic credentials. The major goal upon program completion is to enable students to compete for university tenure-stream professorial positions in their clinical science discipline.

The program is dedicated to research experience and therefore does not involve clinical training other than clinical research methodology. It entails completion of the research and coursework requirements for the PhD degree half time, while teaching in a clinical discipline half 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 Dentistry's additional admission requirements stated below.
- A professional degree from a recognized university equivalent to the University of Toronto DDS and a graduate degree equivalent to the University of Toronto MSc. Preference is given to:
  - applicants who have completed specialty education equivalent to the standard required for licensure as a specialist by the Royal College of Dental Surgeons of Ontario; and
  - applicants who hold a university appointment in Canada at an academic standard equivalent to the University of Toronto Lecturer.

Program Requirements

- Appropriate research supervision and advisory committee membership, customized plan of study, and timetable for the completion of the degree requirements, as approved by the Associate Dean, Graduate Education, will be in place at program commencement. The Associate Dean monitors progress by review of completed advisory committee reports based on annual meetings of the student with the supervisory committee.
- Although the minimum residency requirement for the PhD is one year, the anticipated completion date for the flexible-time PhD program will be within five to six years from the registration date.
- Students are required to conduct research leading to completion and defence of a thesis and complete minimum coursework requirements, which include DEN 1100Y[0] *Seminars in Oral Health Sciences*, plus an additional 2.5 full-course equivalents (FCEs) that includes the course DEN 1015H *Introduction to Biostatistics*.
- Students must pass a qualifying oral examination 12 to 24 months after commencement to demonstrate an adequate capacity for oral health sciences research at the doctoral level.
- Participate in all graduate research activities of the advisor's research group.
- Present at meetings and publish original research findings in timely fashion.
- Participate as members of departmental and student committees as applicable.

Program Length

8 years flexible-time depending on specialty

Time Limit

10 years flexible-time

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

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.

Core Courses

DEN 1001Y[0]	Seminars in Oral Health Sciences (Credit/No Credit)
DEN 1010H	Research Ethics (Credit/No Credit)
DEN 1015H	Introduction to Biostatistics
DEN 1100Y[0]	Seminars in Oral Health Sciences (Credit/No Credit)

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

General Courses

DEN 1014H	Clinical Epidemiology and Evidence-Based Care
DEN 1022H	Investigating Pathogenic Biofilms
DEN 1060H	Oral Physiology: Sensory and Neuromuscular Function

DEN 1070H	Advances in Dental Materials Science
DEN 1080Y	Biology of Connective Tissues
DEN 1081H	Bone Interfacing Implants
DEN 1082H	Biomaterials for Implant Treatment in Dentistry
DEN 1098H	Reading Course in Oral Health Sciences

Courses for Students in MSc/PhD Specialist Dental Training Programs

DEN 1002H	Oral Pathology
DEN 1003H	Preventive Dentistry
DEN 1006Y	Seminars in Dental Public Health
DEN 1007H	Oral Radiology
DEN 1008H	Cone Beam CT Imaging (Credit/No Credit) (prerequisite: DEN 1007H)
DEN 1011Y^{0}	Advanced Seminars in Oral Pathology
DEN 1012Y^{0}	Oral Medicine
DEN 1013Y^{0}	Oral Surgical Pathology
DEN 1016H	Occlusion: Function and Dysfunction
DEN 1017H	Temporomandibular Disorders
DEN 1033Y	Periodontology: Seminars and Clinics I
DEN 1034Y	Periodontology: Seminars and Clinics II
DEN 1035Y	Periodontology: Seminars and Clinics III
DEN 1036Y	Literature Review in Periodontology
DEN 1037Y	Clinical Case Presentations
DEN 1038Y	Biomaterials and Implant/Reconstructive Dentistry
DEN 1039Y	Principles and Practice of Periodontology
DEN 1041Y	Prosthodontics I: Prosthodontic Treatment Planning
DEN 1042Y	Prosthodontics II: Restorative Dentistry
DEN 1043Y	Prosthodontics III: Patients With the Partially Edentulous Mouth and Advanced Prosthodontic Care
DEN 1044Y	Prosthodontics IV: Patients With the Fully Edentulous Mouth and Advanced Prosthodontic Care
DEN 1045Y	Prosthodontics V: Critical Appraisal of the Literature
DEN 1046Y	Clinical Prosthodontics
DEN 1051Y	Oral Epidemiology
DEN 1052Y	General Anaesthesia for Medical Procedures: Paediatric
DEN 1053Y	General Anaesthesia for Medical Procedures—Adult
DEN 1054Y	Sedation and General Anaesthesia for Dentistry—Adult
DEN 1055H	Basic Principles of Dental Anaesthesia
DEN 1056Y	Basic Concepts in Clinical Medicine
DEN 1059Y	Dental Anaesthesia Journal Review 3
DEN 1061H	Research Practicum
DEN 1062H	Pharmacology of Dental Therapeutics
DEN 1063Y	Practicum in Dental Public Health
DEN 1064H	Management Principles in Canadian Dental Health Organizations
DEN 1071H	Medical Anaesthesia Seminars I
DEN 1072H	Medical Anaesthesia Seminars II
DEN 1073Y	Dental Anaesthesia Graduate Seminars
DEN 1074Y	Foundations of Medicine as Applied to Dental Anaesthesia
DEN 1075Y	General Anaesthesia for Dentistry—Paediatric
DEN 1076H	General Anaesthesia for Medical Procedures—Adult I
DEN 1077H	General Anaesthesia for Medical Procedures—Adult II
DEN 1078H	General Anaesthesia for Dental Procedures—Adult I
DEN 1079H	General Anaesthesia for Dental Procedures—Adult II
DEN 1083Y	Experiences in Clinical Medicine
DEN 1084H^{+}	Experiences in Clinical Teaching I (Credit/No Credit)
DEN 1085H^{+}	Experiences in Clinical Teaching II (Credit/No Credit)
DEN 1086H^{+}	Experiences in Clinical Teaching III (Credit/No Credit)
DEN 1087Y	Fundamentals of Dental Anaesthesia I
DEN 1088Y	Fundamentals of Dental Anaesthesia II
DEN 1089Y	Fundamentals of Dental Anaesthesia III
DEN 1090H	Inhalation and Oral Minimal and Moderate Sedation for Dental Procedures (Credit/No Credit)
DEN 1091Y^{0}	Parenteral Moderate Sedation for Dental Procedures (Credit/No Credit)
DEN 1094H^{+}	Advanced Oral Radiology I (co-requisite: DEN 1007H)
DEN 1095H^{+}	Advanced Oral Radiology II (prerequisite: DEN 1094Y)
DEN 1096H^{+}	Advanced Oral Radiology III (prerequisite: DEN 1095Y)
DEN 2001Y	Orthodontics 1: Advanced Orthodontic Diagnosis and Treatment Planning
DEN 2002Y	Orthodontics 2: Biomechanics Orthodontic Technique and Practice Administration
DEN 2003Y	Orthodontics 3: Orthodontic Technique and Clinical Practice
DEN 2004Y	Orthodontics 4: Interceptive Orthodontics
DEN 2005Y	Surgical Orthodontics
DEN 2006Y	Facial Growth and Facial Analysis
DEN 2007Y	Craniofacial Anomalies
DEN 2008Y	Craniofacial Anatomy and Osteology
DEN 2009H	Classic Theories of Craniofacial Growth
DEN 2010H	Tissue Reaction to Orthodontic and Orthopedic Forces
DEN 2011Y	Craniofacial Morphology and Development
DEN 3001Y	Oral and Maxillofacial Surgery 1: The Physiologic Basis of Disease
DEN 3002Y	Oral and Maxillofacial Surgery 2: Principles and Practice of Oral and Maxillofacial Surgery
DEN 3003Y	Oral and Maxillofacial Surgery 3: Evidence-Based Literature Reviews in Oral and Maxillofacial Surgery
DEN 3004Y	Oral and Maxillofacial Surgery 4: Applied Surgical Anatomy of the Head and Neck
DEN 3005H	Head and Neck Anatomy
DEN 4001Y	Paediatric Dentistry 1: Theoretical Paediatric Dentistry
DEN 4002Y	Paediatric Dentistry 2: Journal Review

DEN 4003Y	Paediatric Dentistry 3: Facial and Dental Growth and Development in Paediatric Dentistry
DEN 4004H	Paediatric Dentistry 4: Child Behaviour Management
DEN 4005Y	Paediatric Dentistry 5: Clinical Paediatric Dentistry
DEN 4006Y	Paediatric Dentistry 6: Oral and Maxillofacial Surgery as Applied to Paediatric Dentistry
DEN 4007H	Paediatric Dentistry 7: Therapy and Trauma
DEN 4008Y	Paediatric Orthodontics
DEN 4009Y	Paediatrics
DEN 4010Y	Care of Patients with Special Needs and Applied Paediatric Dentistry
DEN 4011Y	Conscious Sedation and Anaesthesia in Paediatric Dentistry
DEN 5001Y	Graduate Endodontics Case Presentations
DEN 5002Y	Graduate Endodontics Topical Literature
DEN 5003Y	Graduate Endodontics Current Literature
DEN 5004Y[0]	Single Tooth Replacements with Implant-Supported Prosthesis
DEN 5005H[+]	Introduction to Graduate Endodontics

[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.

Drama, Theatre and Performance Studies

Drama, Theatre and Performance Studies: Introduction

Faculty Affiliation

Arts and Science

Degree Programs

Drama, Theatre and Performance Studies

MA
PhD

Collaborative Specializations

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

1. **Diaspora and Transnational Studies**
   - Drama, Theatre and Performance Studies, MA, PhD
2. **Jewish Studies**
   - Drama, Theatre and Performance Studies, MA, PhD
3. **Knowledge Media Design**
   - Drama, Theatre and Performance Studies, MA, PhD
4. **Sexual Diversity Studies**
   - Drama, Theatre and Performance Studies, MA, PhD
5. **South Asian Studies**
   - Drama, Theatre and Performance Studies, MA, PhD
6. **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: http://dramacentre.utoronto.ca
Email:
General: graduate.drama@utoronto.ca
Associate Director of Graduate Studies:
gc.graddrama@utoronto.ca
Telephone: (416) 978-7980
Fax: (416) 971-1378

Centre for Drama, Theatre and Performance Studies
University of Toronto
Koffler Student Services Centre
214 College Street
Toronto, Ontario M5T 2Z9
Canada

Drama, Theatre and Performance Studies: Graduate Faculty

Full Members

Ackerman, Alan - BA, MA, PhD
Ambros, Veronika - MA, PhD
Astington, John - BA, MA, PhD
Brown, Elspeth - MA, PhD
Budde, Antje - PhD
Clark, Caryl - BMus, MA, PhD
Clarke, George Elliott - BA, MA, PhD
Cobb, Michael - BA, MA, AM, PhD
Columpar, Corinn - BA, PhD
Copeland, Nancy - BA, MA, PhD
Eisenbichler, Konrad - BA, MA, PhD
Esonwanne, Uzoma - BA, MA, PhD
Freeman, Barry - BA, MA, PhD
Gallagher, Kathleen Marie - PhD
Johnson, Stephen - BA, MA, PhD
Keil, Charles - BA, MA, PhD
Kleber, Pia - BA, MA, MA, PhD
Kortenaar, Neil ten - BA, MA, PhD
Legge, Elizabeth MM - BA, BA, MA, PhD
Lopez, Jeremy - BA, MA, DPhil
Michelucci, Pascal - BA, MA, PhD
Most, Andrea - BA, MA, PhD
Pietropaolo, Domenico - BSc, MA, PhD
Quayson, Ato - BA, PhD
Revermann, Martin - PhD
Ross, Jill - BA, MA, PhD
Rubright, Marjorie - AB, MA, DLitt

Sammond, Nicholas - BA, MA, PhD
Schotzko, T. Nikki - PhD
Somigli, Luca - PhD
Sperdakos, Paula - BA, MA, PhD
Syme, Holger Schott - BA, AM, PhD
Trojanowska, Tamara - MA, PhD (***Director***)

Associate Members

Barton, Bruce - BA, MA, PhD
Goldstein, Tara - BA, PhD
Houston, Andrew - DPhil
Knowles, Richard - DPhil
Preston, VK - DPhil
Sears, Djanet - MFA

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.

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 received after January 15 may be too late for consideration. Contact the Associate Director for further information.

Program Requirements

- **Coursework.** Students must complete a minimum of **4.0 full-course equivalents (FCEs)**, as approved by the centre, including DRA 5000Y *MA Projects in Drama, Theatre, and Performance Studies* (1.0 FCE).
- The centre may prescribe certain courses in the individual programs of MA students.
- Normally, the program requires one year of full-time study or the part-time equivalent. In some cases, students with insufficient background in the discipline may be required to take additional prerequisite courses.

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, 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.

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 received after January 15 may be too late for consideration. 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 to send two supporting letters of recommendation to the Associate Director of the centre 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 five pages and 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:
    - DRA 1011H *Traditions of Performance Theory* (0.5 FCE)
    - DRA 1012H *Twentieth-Century Theatre and Performance* (0.5 FCE).
    - Satisfy the centre's academic skill requirements by completing:
        - DRA 5001H *The Disciplines of Drama, Theatre, and Performance Studies: Research Methods* (0.5 FCE)
        - DRA 5002H *Dissertation Proposal* (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 **comprehensive examinations** by the beginning of Year 2.
- Pass the **field exam** (prospectus) at the end of Year 2 or 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 to send two supporting letters of recommendation to the Associate Director of the centre. Admission will be conditional upon satisfactory recommendation.

- Applications must be accompanied by a statement of research intent 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:
    - DRA 1011H *Traditions of Performance Theory* (0.5 FCE)
    - DRA 1012H *Twentieth-Century Theatre and Performance* (0.5 FCE)
    - DRA 5000Y *MA Project in Drama, Theatre, and Performance Studies* (1.0 FCE)
    - Satisfy the centre's dramaturgical and performance practice requirement by completing:
        - DRA 5001H *The Disciplines of Drama, Theatre, and Performance Studies: Research Methods* (0.5 FCE) and
        - DRA 5002H *Dissertation Proposal* (0.5 FCE).
        - the centre's dramaturgical and performance practice requirements as determined on admission.
- Must maintain an A- average in their first 3.0 FCEs in order to continue in the program.
- 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 **comprehensive examinations** by the beginning of Year 3.
- Pass the **field exam** (prospectus) 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

DRA 1001H	Concepts and Issues in Theatre History and Historiography
DRA 1002H	History of the Theatre II
DRA 1003H	Concepts and Issues in Performance Studies
DRA 1011H	Traditions of Performance Theory
DRA 1012H	Twentieth-Century Theatre and Performance
DRA 1031H	Seminar in Playwriting
DRA 1105H	Performing History
DRA 3021H	Elizabethan Performance: History and Practice
DRA 3901H	Topics in Theatre, Drama, and Performance
DRA 3902H	Topics in Theatre, Drama, and Performance
DRA 3903H	Topics in Theatre, Drama, and Performance
DRA 3904H	Topics in Theatre, Drama, and Performance
DRA 3905H	Topics in Theatre, Drama, and Performance
DRA 3906H	Topics in Theatre, Drama, and Performance
DRA 3907H	Topics in Theatre, Drama, and Performance
DRA 3908H	Topics in Theatre, Drama, and Performance
DRA 4031H	Studies in Canadian Drama and Theatre
DRA 4063H	Performance and Popular Culture
DRA 4090Y	Directed Reading/Theatre Research
DRA 4091H	Directed Reading/Theatre Research
DRA 4092H	Directed Reading
DRA 4093H	Directed Reading
DRA 5000Y[0]	MA Project in Drama, Theatre, and Performance Studies
DRA 5001H	The Disciplines of Drama, Theatre, and Performance Studies: Research Methods
DRA 5002H	Dissertation Proposal

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

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 Associate Director.

Earth Sciences

Earth Sciences: Introduction

Faculty Affiliation

Arts and Science

Degree Programs

Earth Sciences

MASc
MSc
PhD

Collaborative Specializations

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

1. **Earth Sciences and Physics**
   - Earth Sciences, MSc, PhD
2. **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

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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

Bailey, Richard - BSc, PhD
Bergquist, Bridget - BS, PhD
Bollmann, Jorg - DrRerNat
Brenan, James - BSc, PhD
Caron, Jean-Bernard - MSc, PhD
Chazan, Michael - BA, MA, 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 B. - BES, MSc, PhD
Eyles, Nicholas - BSc, MSc, PhD, DSc
Ferris, Grant - BSc, PhD
Finkelstein, Sarah - AB, MPH, PhD
Ghent, Rebecca - BA, MSc, PhD (*Associate Chair, Graduate Studies*)
Gorton, Michael - BSc, BSc, PhD
Grasselli, Giovanni - PhD, PEng
Halfar, Jochen - PhD
Hamilton, Michael - BSc, PhD
Head, Martin - BSc
Henderson, Grant - PhD
Howard, Kenneth - BSc, MSc, PhD
Liu, Qinya - PhD
Miall, Andrew - BSc, PhD
Milkereit, Bernd - DrRerNat
Peltier, W Richard - BSc, MSc, PhD
Pysklywec, Russell - BSc, MSc, PhD (*Chair and Graduate Chair*)
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
Young, R. Paul - BSc, MSc, PhD, CA
Zajacz, Zoltan - MASc, PhD

Members Emeriti

Westgate, John - PhD

Associate Members

Bank, Carl-Georg - MSc, PhD
Dinel, Etienne - BSc, PhD
Jantunen, Liisa - PhD
Kamo, Sandra - BSc, PhD
Lowman, Julian - BSc, MS, DPhil

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:
  - ESS 1101H *Graduate Seminars in Geology* (0.5 FCE);
  - one of the six breadth courses (0.5 FCE): ESS 2222H, ESS 2302H, ESS 2303H, ESS 2304H, ESS 2704H, or ESS 2708H; 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:
  - ESS 1101H *Graduate Seminars in Geology* (0.5 FCE);
  - ESS 3608H *All-Course Research Project* (0.5 FCE);
  - one of the six breadth courses (0.5 FCE): ESS 2222H, ESS 2302H, ESS 2303H, ESS 2304H, ESS 2704H, or ESS 2708H;
  - 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:
  - ESS 1101H *Graduate Seminars in Geology* (0.5 FCE);
  - ESS 3603Y+ *Research Project* (1.0 FCE);
  - ESS 3601Y+ *Research Presentation* (1.0 FCE);
  - one of the six breadth courses (0.5 FCE): ESS 2222H, ESS 2302H, ESS 2303H, ESS 2304H, ESS 2704H, 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): ESS 2222H, ESS 2302H, ESS 2303H, ESS 2304H, ESS 2704H, or ESS 2708H; 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:
    - ESS 1101H *Graduate Seminars in Geology* (0.5 FCE);
    - one of the six breadth courses (0.5 FCE): ESS 2222H, ESS 2302H, ESS 2303H, ESS 2304H, ESS 2704H, or ESS 2708H; 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:
    - ESS 1101H *Graduate Seminars in Geology* (0.5 FCE);
    - one of the six breadth courses (0.5 FCE): ESS 2222H, ESS 2302H, ESS 2303H, ESS 2304H, ESS 2704H, or ESS 2708H; 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.

ESS 1101H	Seminars in Earth Sciences
ESS 1423H	Mineralogy
ESS 1430H	Basin Analysis
ESS 1436H	Paleoecological Assessment of Environmental Change
ESS 1440H	Petrology
ESS 1441H	Remote Sensing of Earth and the Terrestrial Planets
ESS 1442H	Introductory Mineral Deposits I
ESS 1443H	Introductory Mineral Deposits II
ESS 1445H	Global Tectonics
ESS 1450H	Contaminant Fate and Transport in Subsurface Environments

ESS 1461H	Paleoenvironmental Studies
ESS 1463H	Contaminants in the Environment
ESS 2222H	Tectonics and Planetary Dynamics
ESS 2302H	Mineral Resources
ESS 2303H	Earth Systems Evolution
ESS 2304H	Geochemistry
ESS 2608H	Advanced Glacial Sedimentology
ESS 2704H	Isotope Geochemistry
ESS 2708H	Characterization of Geological Materials
ESS 3601Y+	Research Presentation
ESS 3603Y+	Research Project
ESS 3604H	Selected Topics in Geology
ESS 3605H	Selected Topics in Geochemistry
ESS 3606H	Selected Topics Earth System Evolution
ESS 3607H	Selected Topics in Geodynamics
ESS 3608H	All-Course Research Project
JPE 1452H	Geophysical Imaging: Non-seismic Methods
JPE 1493H	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
PhD

Collaborative Programs

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

1. **Book History and Print Culture**
   - East Asian Studies, MA, PhD
2. **Contemporary East and Southeast Asian Studies**
   - East Asian Studies, MA
3. **Food Studies**
   - East Asian Studies, MA, PhD
4. **Sexual Diversity Studies**
   - East Asian Studies, MA, PhD
5. **South Asian Studies**
   - East Asian Studies, MA, PhD
6. **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

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Telephone: (416) 978-7260
Fax: (416) 978-5711

Department of East Asian Studies
University of Toronto
Robarts Library 14-087, 130 St. George Street
Toronto, Ontario M5S 3H1
Canada

East Asian Studies: Graduate Faculty

Full Members

Cazdyn, Eric - BA, MA, PhD
Chin, Carol - BA, MA, PhD
Crawford, Gary - BSc, MA, PhD
Feng, Linda Rui - BA, MA, PhD
Hsiung, Ping-Chun - PhD
Kawashima, Ken - BA, MA, PhD
Keirstead, Thomas - BA, MA, PhD
Lam, Tong - BSc, MA, PhD
Liu, Johanna Ch'ien-mei - BA, MA, PhD
Luong, Hy Van - BA, PhD
Meng, Yue - BA, MA, MA, PhD
Poole, Janet - BA, MA, PhD (*Acting Chair and Acting Graduate Chair*)
Purtle, Jennifer - BA, MPH, MA, PhD
Sakaki, Atsuko - BA, MA, PhD
Sanders, Graham - BA, PhD
Schmid, Andre - BA, MA, PhD (*Chair and Graduate Chair*)
Shen, Vincent Tsing-song - MA, PhD
Tran, Nhung - MA, PhD
Wu, Yiching - BA, MA, MA, PhD
Yoneyama, Lisa - BA, MA, PhD (**Graduate Coordinator**)

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

Chen, Li - BA, MA, AM, JD, PhD
Cheng, Wen-Chien - PhD
Fujitani, Takashi - BA, MA, PhD
Goodman, Amanda - BA, MA, PhD
Grewal, Anup - BA, MA, PhD
Peng, Ito - BSW, BSc, MA, PhD
Rupprecht, Hsiao-Wei - BA, MA, MLS, PhD
Satsuka, Shiho - BA, BA, MA, PhD

Shen, Chen - BA, PhD
Virag, Curie - AB, MA, PhD
Wong, Joseph - BA, MA, PhD, CRC

East Asian Studies: East Asian Studies MA

Master of Arts

Program Description

East Asian Studies offers two tracks through its MA program: MA through coursework and MA with thesis. It is possible to switch between the two tracks as long as all requirements are fulfilled.

Applicants should consult the department's website for complete 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.
- Non-native speakers of English are required to take the Test of English as a Foreign Language (TOEFL). Applicants taking the paper-based TOEFL must achieve a minimum score of 600 and 5 on the Test of Written English (TWE). Applicants taking the Internet-based 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 two routes:
  - **Non-language courses**: normally 4.0 full-course equivalents (FCEs) with at least 2.0 FCEs in EAS courses, including the required course EAS 2020H *Critical Approaches to East Asia* (0.5 FCE)
  - **Non-language courses plus thesis**: thesis must be written with the guidance of a supervisor. Normally 4.0 FCEs as follows:
    - 3.0 FCEs of coursework including at least 1.5 FCEs in EAS courses, including the required course EAS 2020H *Critical Approaches to East Asia* (0.5 FCE)
    - Thesis counts as 1.0 FCE.
- Courses are selected in consultation with the Coordinator of Graduate Studies.

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 complete 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.
- Non-native speakers of English are required to take the Test of English as a Foreign Language (TOEFL). Applicants taking the paper-based TOEFL must achieve a minimum score of 600 and 5 on the Test of Written English (TWE). Applicants taking the Internet-based 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 complete **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–.
    - EAS 2020H *Critical Approaches to East Asia* is a required course if not taken previously. If EAS 2020H 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.
- 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 a supervisory committee. This process begins with the production of a dissertation prospectus to be approved by the 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.
- Non-native speakers of English are required to take the Test of English as a Foreign Language (TOEFL). Applicants taking the paper-based TOEFL must achieve a minimum score of 600 and 5 on the Test of Written English (TWE). Applicants taking the Internet-based 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 complete **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–.
    - EAS 2020H *Critical Approaches to East Asia* (0.5 FCE) is a required course if not taken previously. If EAS 2020H 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.
- EAS 1150Y *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.
- 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 a supervisory committee. This process begins with the production of a dissertation prospectus to be approved by the 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

EAS 1101Y	Classical Chinese I
EAS 1103Y	Introduction to Classical Japanese
EAS 1118H	Translation and Modernity
EAS 1180H	Environmental Criticism
EAS 1181H	Questioning Humanities: 20th Century China
EAS 1335H	Violence, Justice, the Human
EAS 1337H	Diaspora and Transpacific Studies
EAS 1339H	Topics in Chinese Art Theories
EAS 1419H	Chinese Cultural Studies Seminar: May Fourth
EAS 1424H	Multitude, Labour Power, Population
EAS 1432H	Korean Cultural Studies Seminar
EAS 1433H	Surplus Populations in East Asia and in Theory
EAS 1435H	Crisis, Repetition, and History
EAS 1436H	Rethinking Realism in 20th Century Korea
EAS 1441H	Advanced Topics in Japanese Cinema
EAS 1447H	Sound Studies and Modern Japan
EAS 1449H	Future, Architecture, Japan
EAS 1474H	US and Canada's Wars in East Asia
EAS 1475H	Contemporary Cultural Theories
EAS 2020H	Critical Approaches to East Asia
EAS 2323H	Rethinking Chinese Cultural History

History

EAS 1130H	Rethinking China's Cultural Revolution: History, Politics, and Theory
EAS 1140Y	From Republic to People's Republic: The Chinese Revolution from 1895 to the Present
EAS 1175H	20th Century East Asia in Comparative World History
EAS 1176H	Comparative Historical Socialisms in East Asia and Beyond
EAS 1297H	Texts, Images, and Objects in East Asia
EAS 1409H	Cities in Premodern China
EAS 1411H	Art and Archaeology of Early China

EAS 1412H	Special Topics in Archaeology of Ancient China
EAS 1173H,Y	Modern Korean History Seminar
EAS 1174Y	Rethinking Empire in East Asia
EAS 1425H	Critique of Everyday Life and Capitalism
EAS 1429H	Topics in Marxism and Japan
EAS 1430H	Introduction to the Countryside
EAS 1431H	Mass Culture, Capitalist Crisis, Fascism in Modern Japan
EAS 1434H	Karatani's The Structure of World History and the Politics of Marx
EAS 1466H	History, Everyday Life, and North Korea
EAS 1471H	Issues in Political Economy of South Korea
EAS 1496H	History of the Chinese Book

Language

EAS 1115Y	Reading Japanese for Graduate Purposes (Credit/No Credit)
EAS 1263H	Classical Japanese I
EAS 1301Y	Modern Standard Japanese I (Credit/No Credit)
EAS 1302Y	Modern Standard Japanese II (Credit/No Credit)
EAS 1303Y	Modern Standard Japanese III (Credit/No Credit)
EAS 1304H	Modern Standard Japanese IVa (Credit/No Credit)
EAS 1305H	Modern Standard Japanese IVb (Credit/No Credit)
EAS 1321H	Japanese I for Students with Prior Background (Credit/No Credit)
EAS 1322H	Modern Standard Japanese II Prior Background (Credit/No Credit)
EAS 1621Y	Modern Standard Korean I (Credit/No Credit)
EAS 1622Y	Modern Standard Korean II (Credit/No Credit)
EAS 1623Y	Modern Standard Korean III (Credit/No Credit)
EAS 1624Y	Modern Standard Korean IV (Credit/No Credit)
EAS 1626Y	Academic and Professional Korean (Credit/No Credit)
EAS 1631Y	Accelerated Modern Standard Korean 1 and 2 (Credit/No Credit)
EAS 1632H	Accelerated Modern Standard Korean 2 (Credit/No Credit)
EAS 1801Y	Modern Standard Chinese I (Credit/No Credit)
EAS 1802Y	Modern Standard Chinese II (Credit/No Credit)
EAS 1803Y	Modern Standard Chinese III (Credit/No Credit)
EAS 1804Y	Modern Standard Chinese IV (Credit/No Credit)
EAS 1811Y	Modern Standard Chinese I for Students With Background in Chinese (Credit/No Credit)
EAS 1812H	Modern Standard Chinese II for Students With Background in Chinese (Credit/No Credit)
EAS 1814H	Modern Standard Chinese IVa (Credit/No Credit)
EAS 1815H	Modern Standard Chinese IVb (Credit/No Credit)

Literature

EAS 1137H,Y	Chinese Poetics
EAS 1151H	Chinese Poetry I
EAS 1152H	Chinese Poetry II
EAS 1182H	Writing as Technology in Modern China
EAS 1345H	Readings in Japanese Literary Criticism
EAS 1408H	Identity and Diaspora in Modern Taiwanese Literature
EAS 1417H	Korean Literary Translation
EAS 1444H	The City, Body, and Text in Modern Japanese Literature
EAS 1467H	Photographic Narratives of Japan
EAS 1538H	Writing Women in Premodern China
COL 5101H	Diasporic Cities: Itinerant Narratives of Metropoles by Travellers and Expatriates
JLA 1456H	Japan As Seen By ?: Reference, Apparatus, Operation
JLA 5082H	The Rhetoric of Photography

Philosophy and Religion

EAS 1225H	Self-Cultivation and Health in Chinese Philosophy
EAS 1226H	Topics in Modern Chinese Philosophy
EAS 1227H	Topics in Chinese Religions
EAS 1229H	Topics in Chinese Aesthetics
EAS 1407H	Textual Analysis of Classical Chinese Philosophy
EAS 1438H	New Approaches to Classical Daoism
EAS 1601Y	Seminar in East Asian Buddhism

Politics

POL 2416Y	Politics and Society in Contemporary China

Research Seminars

EAS 1100H,Y	Special Topics in Chinese Studies
EAS 1116H,Y	Special Topics in Chinese Culture
EAS 1143H	Topics in Medieval China
EAS 1150H,Y	Reading and Major Research Paper
EAS 1163H	Special Topics in Korean Studies
EAS 1300H	Special Topics in Japanese Studies
EAS 1313Y	Japanese Source Materials and Reference Works
EAS 1320Y	Special Topics in Japanese Culture
EAS 1323Y	Readings in Japanese Documentary Source Materials
EAS 1497H	Special Topics in East Asian Studies
EAS 1999Y	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
PhD

Collaborative Specializations

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

1. **Environmental Studies**
   - Ecology and Evolutionary Biology, PhD
2. **Genome Biology and Bioinformatics**
   - Ecology and Evolutionary Biology, PhD
3. **Human Development (admissions have been suspended)**
   - 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 anatomy, physiology, behaviour, behaviour genetics, bioinformatics, population/community, ecosystem/landscape/evolutionary ecology, conservation biology, developmental biology, genetics, genomics, molecular evolution, plant biology, animal biology, taxonomy/systematics, and theoretical biology.

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 a partnership with 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 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, etc.

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 W. - BS, MS, PhD
Campbell, Malcolm - DPhil
Caron, Jean-Bernard - MSc, PhD
Chang, Belinda - AB, PhD, CRC
Currie, Douglas - BSc, PhD
Cutter, Asher - PhD, CRC
Cyr, Helene - BSc, MSc, PhD
Darling, D Christopher - MSc, PhD
Eckenwalder, James - BA, PhD
Engstrom, Mark - BSc, MSc, PhD
Evans, David - BSc, PhD
Fitzpatrick, Mark - BS, MS, PhD
Fortin, Marie-Josee - MSc, PhD
Frederickson, Megan - AB, PhD
Fulthorpe, Roberta - BSc, MSc, PhD
Gilbert, Benjamin - BSc, MSc, PhD
Gross, Mart - BSc, PhD
Guttman, David - BS, PhD, CRC
Gwynne, Darryl - BSc, PhD
Holmes, Melissa - BA, MA, PhD
Jackson, Donald - BSc, MSc, PhD (*Chair and Graduate Chair*)
Johnson, Marc - BSc, PhD
Kohn, Linda - BS, PhD
Kotanen, Peter - BSc, MSc, PhD
Krkosek, Martin - BSc, PhD
Kronzucker, Herbert - PhD
Levine, Joel - BA, PhD
Lovejoy, Nathan Richard - BSc, MS, PhD

MacIvor, James Scott - BSc, MSc, PhD
Mahler, Donald Luke - BA, PhD
Mandrak, Nicholas - BSc, MSc, PhD
Mason, Andrew - MS, PhD
McCauley, Shannon - PhD
McLennan, Deborah - BSc, PhD
McMeans, Bailey - BSc, MSc, PhD
Mideo, Nicole - BSc, PhD
Moncalvo, Jean-Marc - PhD
Moses, Alan - BA, PhD
Murphy, Robert - BSc, MA, PhD
Ness, Robert - BSc, PhD
Ratcliffe, John - BSc, MSc, PhD
Reisz, Robert - BSc, MSc, PhD, FRSC
Rodd, F. 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
Thomson, James - MS, PhD
Wagner, Helene - MSc, MSc, PhD
Weir, Jason Tyler - AB, PhD
Weis, Arthur - BPhil, PhD
Wright, Stephen - BSc, MS, PhD, CRC

Members Emeriti

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

Associate Members

De Kerckhove, Derrick - BSc, MSc, PhD
Dunlop, Erin - BSc, PhD
Jones, Nicholas - PhD
Lester, Nigel Paul - BA, MSc, PhD
Ridgway, Mark - MSc, PhD
Rochman, Chelsea - BS, 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 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, theory, etc. 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 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 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 a departmental 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 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, etc. 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 complete **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 complete **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 complete **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.

Courses Offered at the Graduate Level Only

EEB 1210H	Advanced Statistics
EEB 1230H	Multivariate Statistics
EEB 1235H	Modular Topics in Quantitative Analysis
EEB 1250H	Spatial Statistics
EEB 1310H	Philosophy and Methods
EEB 1315H	Professional Skills Development in EEB
EEB 1320H	Ecology
EEB 1350H	Evolution
EEB 1357H	Field Ecology and Evolution of Ontario Ecosystems
EEB 1360H	Special Topics in Behaviour
EEB 1420H	Special Topics in Ecology
EEB 1423H	Special Topics: Ecology I
EEB 1424H	Special Topics: Ecology II
EEB 1440H	Special Topics in Evolution
EEB 1445H	Special Topics: Evolution I
EEB 1446H	Special Topics: Evolution II
EEB 1450H	Special Topics in Ecology and Evolution A
EEB 1451H	Special Topics in Ecology and Evolution B
EEB 1452H	Special Topics: Evolution/Ecology Module I
EEB 1453H	Special Topics: Evolution/Ecology Module II
EEB 1462H	Phylogenetic Systematics
EEB 1470H	Special Topics in Integrative Biology

Graduate Courses With Significant Undergraduate Content

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

EEB 1328H	Physiological Ecology
EEB 1330H	Systematic Botany
EEB 1340H	Comparative Plant Morphology
EEB 1443H	Phylogenetic Principles
EEB 1459H	Population Genetics
EEB 1460H	Molecular Evolution

Economics

Economics: Introduction

Faculty Affiliation

Arts and Science

Degree Programs

Economics

MA
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 75 graduate faculty members span a wide range of subjects and cover theory, applied data analysis and econometric methodology.

The department offers both an MA and a PhD program 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 new PhD students are enrolled each year with total graduate student 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 a PhD program in economics. PhD graduates obtain academic placement and employment in the public and private sectors.

The Department of Economics and the Rotman School of Management also offer a professional **Master of Financial Economics (MFE)** program.

Contact and Address

MA and PhD:
Web: www.economics.utoronto.ca
Email:
www.economics.utoronto.ca/index.php/index/index/contact
Telephone: (416) 978-4544

MA and PhD Graduate Office
Department of Economics, Max Gluskin House
University of Toronto
150 St. George Street
Toronto, Ontario M5S 3G7
Canada

Economics: Graduate Faculty

Full Members

Aguirregabiria, Victor - BA, MSc, PhD
Aivazian, Varouj - BS, MA, PhD
Alexopoulos, Michelle - BSc, MA, PhD
Anderson, Gordon - BA, MSc, PhD
Baker, Michael - BComm, MA, PhD
Bar-Isaac, Yeheskel (Heski) - BA, MSc, PhD
Baum-Snow, Nathaniel - AB, PhD
Benjamin, Dwayne - BSc, MA, PhD
Bobonis, Gustavo - BA, PhD
Brandt, Loren - BS, MS, PhD
Burda, Martin - BSc, MA, PhD
Ching, Andrew Tat Tin - BA, MA, MA, PhD
Cziraki, Peter - MPH, MA, MSc, PhD
Damiano, Ettore Vincenzo - AB, MA, MPH, PhD (*Chair and Graduate Chair*)
Dasgupta, Kunal - BS, MA, MS, PhD
Deb, Rahul - MA, MPH, PhD
Dhuey, Elizabeth Ann - BA, MEc, PhD
Duarte, Margarida - MEc, PhD
Eli, Shari - BA, PhD
Faig, Miquel - MEc, PhD
Gans, Joshua - BEc, PhD
Goldfarb, Avi - BA, MA, PhD
Gourieroux, Christian - PhD
Halberstam, Yosh - BA, MA, PhD
Halevy, Yoram - BA, MA, PhD
Hall, Jonathan - BA, PhD
Hamilton, Gillian - MEc, PhD
Hosios, Arthur - BEng, MEng, MA, PhD
Hossain, Tanjim - BA, BS, PhD
Kambourov, Gueorgui - BA, MA, DPhil
Kramer, Lisa - BBA, PhD
Kroft, Kory - BA, MA, PhD
Kuruscu, Burhanettin - BSc, MA, PhD
Lacetera, Nicola - PhD
Li, Nicholas - BA, MEc, PhD
Luo, Yao - BS, MA, PhD
Malinova, Ekaterina - BS, MA, PhD
McMillan, Robert - AB, DPhil
Melino, Angelo - BA, 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

Park, Andreas - MEc, MPH, PhD
Pesando, James - BA, MA, 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
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

Berry, R Albert - BA, PhD
Cohen, Jon - BA, MA, PhD
Dewees, Donald - LLB, BScEE, PhD
Eddie, Scott - BS, PhD
Floyd, John - BComm, MA, PhD
Fuss, Melvyn - BSc, MA, PhD
Gunderson, Morley - BA, MA, PhD
Helleiner, Gerald - BA, PhD
Hollander, Samuel - BSc, PhD
Hynes, J Allan - BA
Reid, Frank - BA, MSc, PhD
Watson, Andrew - BComm, BA, MA
Wilson, Thomas - BA, AM, PhD

Associate Members

Bau, Natalie - BA, PhD
Beauchamp, Jonathan - PhD
Blouin, Arthur - BA, MA, PhD
Celik, Murat - PhD
Dyrda, Sebastian - MA, MA, PhD
Goldman, Jim - BS, MSc, PhD
Gu, Jiaying - BA, MSc, PhD
Hussain, Sayed - BA, PhD
Lim, Kevin Shun Wei - MA, MA
Tian, Xu - BA, MA, MA, PhD
Turner, Matthew - BA, AM, PhD
Webb, Ryan - BA, MA, PhD

Economics: Economics MA

Master of Arts

Program Description

The MA is a course-work 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. Students intending to apply to the PhD program must have a master's degree; it is not possible to enter directly with 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 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 (ECO 1010H);
  - 4.0 FCEs including the core courses in micro (ECO 2060H), macro (ECO 2061H), and econometrics (ECO 2408H). Five 0.5 FCE elective courses are selected from our current courses or may be graduate courses with strong economic content offered by another unit. 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 courses requirements by taking the corresponding PhD level core courses (ECO 2020H PhD microeconomics, ECO 2021H PhD macroeconomics, or ECO 2400H PhD econometrics). To make this substitution, the student will be required to take the PhD level ECO 1011H (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

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 website for details.

Program Requirements

- The PhD is a full-time program. Applicants must be registered as full-time students for a minimum period of three years.
- Students must maintain a minimum average of B+ throughout their **coursework**.
    - **Year 1:** normally two half-courses in each area (3.0 full-course equivalents [FCEs]), as follows:
        - microeconomics (ECO 2020H and ECO 2030H)
        - macroeconomics (ECO 2021H and ECO 2031H)
        - econometrics (ECO 2400H and ECO 2401H)
    - **Year 2:** six half-courses (3.0 FCEs), including the required courses for a major field of specialization and a minor field of specialization.
        - Second-year and third-year students must also participate in the full-year ECO 4060Y^0 *Graduate Research Seminar* (1.0 FCE).
        - Suitable PhD-level courses taken by a student in the MA program in the Department of Economics may fulfil some of the course requirements of the PhD program.
    - **Year 3**:
        - an original paper must be written in Year 2 and presented in the relevant workshop in the **fall** of Year 3,
        - a proposal must be submitted to a formal dissertation committee by the **spring.**
- 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.
    - All students who did 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, are 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:
        - Microeconomic Theory
        - Macroeconomic Theory
        - Econometrics
        - Economic Development
        - Financial Economics
        - Industrial Organization
        - International Economics
        - Labour Economics
        - Public Economics

Program Length

4 years

Time Limit

6 years

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

ECO 1010H	Mathematics and Statistics for MA General Students (Credit/No Credit)
ECO 1011H	Mathematics and Statistics for MA Doctoral Stream and PhD Students (Credit/No Credit)

Core Courses in Economic Theory

ECO 2020H	Microeconomic Theory I
ECO 2021H	Macroeconomic Theory I
ECO 2030H	Microeconomic Theory II (prerequisite: ECO 2020H)
ECO 2031H	Macroeconomic Theory II (prerequisite: ECO 2021H)
ECO 2050H	Applied Microeconomics (co-requisites: ECO 2020H and ECO 2030H)
ECO 2051H	Applied Macroeconomics (co-requisites: ECO 2021H and ECO 2031H)
ECO 2060H	Economic Theory—Micro (for MA students only)
ECO 2061H	Economic Theory—Macro (for MA students only)

Advanced Microeconomic Theory

ECO 2100H	Advanced Microeconomic Theory I (prerequisites: ECO 2020H and ECO 2030H)
ECO 2101H	Advanced Microeconomic Theory II
ECO 2102H	Topics in Microeconomic Theory
ECO 2103H	Topics in Macroeconomic Theory
ECO 2106H	Market Design (exclusion: ECO 426H)

Economic History

ECO 2214Y	The International Economy Since 1870
ECO 2234H	Topics in North American Economic History

International Economics

ECO 2300H	International Trade Theory
ECO 2301H	International Monetary Theory
ECO 2303H	International Macroeconomics
ECO 2304H	International Trade II (prerequisite: ECO 2300H)
ECO 2305H	Topics in International Finance
ECO 2310H	Topics in International Trade

Econometrics

ECO 2400H	Econometrics I
ECO 2401H	Econometrics II (prerequisite: ECO 2400H or ECO 2408H)
ECO 2402H	Advanced Econometrics
ECO 2403H	Topics in Econometrics
ECO 2404H	Empirical Applications of Economic Theory (exclusion: ECO 418H)
ECO 2408H	Econometrics (for MA students only)
ECO 2410H	Applied Econometrics (co-requisites: ECO 2400H and ECO 2401H)
ECO 2411H	Financial Econometrics (exclusion: ECO 462H)

Macroeconomics; Monetary and Financial Economics

ECO 2104H	Quantitative Macroeconomics
ECO 2500H	Monetary Theory I
ECO 2501H	Monetary Theory II
ECO 2502H	Advanced Monetary Theory
ECO 2503H	Financial Economics I (exclusion: ECO 419H)
ECO 2504H	Financial Economics II
ECO 2505H	Macroeconometric Models for Policy Analysis and Forecasting (exclusion: ECO 416H)
ECO 2506H	Economics of Risk Management (exclusion: ACT 370H, ECO 461H, RSM 435H)
ECO 2507H	International Financial Markets
ECO 2508H	Applied Financial Risk Management
ECO 2510H	Financial Market Microstructure (exclusion: ECO 463H)
ECO 2511H	Empirical Financial Economics (exclusion: ECO 464H)
ECO 2512H	Topics in Business Cycles (exclusion: ECO 438H)

Public Economics

ECO 2600H	Public Economics I
ECO 2601H	Public Economics II
ECO 2610H	Health Economics
ECO 2611H	Empirical Welfare Analysis
ECO 2620H	Topics in Health Economics

Economic Development

ECO 2700H	Economic Development
ECO 2701H	Development Economics I
ECO 2704H	Topics in Growth and Development
ECO 2738H	Economic Development of China (exclusion: ECO 435H)

Labour Economics

ECO 2800H	Labour Economics I
ECO 2801H	Labour Economics II
ECO 2802H	Economics Inside Organizations
ECO 2803H	Methods for Empirical Microeconomics
ECO 2804H	Social Economics
ECO 2808H	Topics in Economics of the Family (exclusion: ECO 432H)

Industrial Organization

ECO 2900H	Industrial Organization I
ECO 2901H	Industrial Organization II
ECO 2908H	Industrial Organization and Competition Policy

Law and Economics

ECO 3501H	Economic Analysis of Law
ECO 3502H	Energy and Regulation (exclusion: ECO 414H)
ECO 3504H	International Trade Regulation (exclusions: ECO 459H and LAW 285H/LAW 2038H)

Other Courses

ECO 3100H	Behavioural Economics
ECO 3140H	Topics in Behavioural Economics
ECO 3202H	Urban and Regional Economics
ECO 3300H	Political Economy (exclusion: ECO 434H)
ECO 3500H	Economics of Organizations and Contracts
ECO 4050H	Reading Course in an approved special field[#]
ECO 4051H	Reading Course in an approved special field[#]
ECO 4060Y[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 System Control *Emphases:* Robotics and Mechatronics 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 and Mechatronics Sustainable Energy Systems Control
PhD	*Fields:* Biomedical Engineering Communications Computer Engineering Electromagnetics Electronics Energy Systems Photonics System Control *Emphases:* Robotics and Mechatronics Sustainable Energy

Collaborative Specializations

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

1. **Biomedical Engineering**
   - Electrical and Computer Engineering, MASc, PhD
2. **Optics**
   - Electrical and Computer Engineering, MASc

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.

Contact and Address

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University of Toronto
Sandford Fleming Building
Room 1107, 10 King's College Road
Toronto, Ontario M5S 3G4
Canada

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
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
Demke Brown, Angela - BS, SM, PhD
Draper, Stark - BA, PhD
Eizenman, Moshe - BASc, MASc, PhD
Eleftheriades, George - DipIng, MSEE, PhD
Enright Jerger, Natalie - BSc, MSc, PhD
Frey, Brendan - BSc, MSc, PhD
Genov, Roman - BS, MS, 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
Hum, Sean - BSc, MSc, PhD, PEng
Iravani, Mohammad - 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 (*Associate Chair, Graduate Studies*)
Kundur, Deepa - BASc, MASc, PhD
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
Maggiore, Manfredi - MS, PhD
Mandelis, Andreas - BSc, MA, MSc, PhD
Mann, Steve - BSc, BASc, MSc, PhD
Mojahedi, Mohammad - BSE, MS, PhD
Moshovos, Andreas - BSc, MS, PhD
Nachman, Adrian - BSc, MA, PhD
Najm, Farid - BE, MSEE, PhD (*Chair and Graduate Chair*)
Ng, Wai Tung - BSc, MASc, PhD
Pavel, Lacra - BEng, PhD
Pekhimenko, Gennady - BS, MS, 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
Ruda, Harry - BSc, PhD
Sargent, Edward - BEng, PhD
Sarris, Konstantinos - BE, MS, PhD
Scardovi, Luca - MSc, PhD
Sheikholeslami, Ali - BSc, MASc, PhD
Sousa, Elvino - BASc, MASc, PhD
Stumm, Michael - MS, PhD
Sun, Yu - BS, MS, MS, PhD
Tate, Joseph - BS, MS, PhD
Trescases, Olivier - BASc, MASc, PhD
Triverio, Piero - BScEE, MS, PhD
Truong, Kien (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
Zhu, Jianwen - BS, MS, PhD

Members Emeriti

Balmain, Keith - BSc, MS, PhD
Blake, Ian - BASc, MASc, PhD
Bonert, Richard - DipIng, DE
Cobbold, Richard - PhD
Davison, Edward - BASc, MA, PhD, ARCT
Dmitrevsky, Sergi - BASc, MASc, AM, PhD
Hinton, Geoffrey - BA, PhD
Iizuka, Keigo - BS, ME, MS, PhD
Joy, Michael - BSc, MASc, 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

Alsohaily, Ahmed - BEng, MEng, PhD
Caldwell, Trevor - PhD
Chisholm, William - BASc, MEng, PhD
Czajkowski, Tomasz - BASc, MEng, PhD
Dong, Min - BEng, PhD
Gibson, Courtney - BASc, MASc
Huzayyin, Ahmed - PhD
Lostanlen, Yves - MSc, PhD
Maljevic, Ivo - PhD
Pagiamtzis, Kostas - PhD
Savor, Tony - PhD
Shahbazpanahi, Shahram - PhD
Song, Liang - PhD
Stergiopoulos, Stergios - BSc, MSc, PhD
Valiante, Taufik - BSc, MD, PhD
Yang, Victor - BASc, MASc, MD, PhD
Yazdani, Amirnaser - BSc, MSc, PhD

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 JDE 1000H *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 and Mechatronics 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 must enrol in a field of study.
- 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 and Mechatronics; 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 must enrol in a field of study.
- 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 and Mechatronics; 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 must enrol in a field of study.
- 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 and Mechatronics; 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 JDE 1000H *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 and Mechatronics 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 JDE 1000H *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 and Mechatronics 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 JDE 1000H *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 and Mechatronics 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

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 and Mechatronics
Sustainable Energy
Systems Control

Emphasis: Analytics (MEng only)

MEng students must successfully complete **four half courses (2.0 full-course equivalents [FCEs])** from the following lists. These must include at least one core course; the remaining courses must be selected from the list of elective courses.

Core Courses

ECE 1504H Statistical Learning
MIE 1624H Introduction to Data Science and Analytics

Elective Courses

APS 502H, APS 1005H, APS 1017H, APS 1022H
CHE 507H, CHE 1148H, CHE 1434H
CIV 1504H, CIV 1506H, CIV 1507H, CIV 1532H, CIV 1538H
ECE 537H, ECE 1505H, ECE 1510H, ECE 1657H, ECE 1778H, ECE 1779H
MIE 562H, MIE 1413H, MIE 1501H, MIE 1512H, MIE 1513H, MIE 1620H, MIE 1621H, MIE 1622H, MIE 1623H, MIE 1653H, MIE 1721H, MIE 1723H, MIE 1727H.

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 JEB 14XXH course
- ECE 1774H Sensory Cybernetics
- ECE 2500Y MEng 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.

- ECE 537H Random Processes
- Any ECE 15XXH course
- ECE 2500Y MEng 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.

- ECE 516H Intelligent Image Processing
- ECE 532H Digital Systems Design
- ECE 540H Optimizing Compilers
- ECE 552H Computer Architecture
- ECE 568H Computer Security
- Any ECE 17XXH course
- ECE 2500Y MEng 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 ECE 12XXH course
- ECE 2500Y MEng 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.

- ECE 530H Analog Integrated Circuits
- Any ECE 13XXH course
- ECE 2500Y MEng 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.

- ECE 510H Introduction to Lighting Systems
- ECE 514H Power Electronics: Converter Topologies
- ECE 533H Power Electronics
- Any ECE 10XXH course
- ECE 2500Y MEng 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

APS 510H, APS 530H, APS 1420H, GLA 1000H, JCR 1000Y (full-year course)

Group B

APS 1015H, APS 1020H, APS 1024H, CHL 5700H, JMG 2020H

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.

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

APS 1010H, APS 1011H, APS 1026H, APS 1027H, APS 1029H, APS 1030H, APS 1501H

Entrepreneurship and Innovation

APS 1012H, APS 1013H, APS 1015H, APS 1023H, APS 1033H, APS 1035H, APS 1036H, APS 1088H

Finance and Management

APS 502H, APS 1001H, APS 1004H, APS 1005H, APS 1009H, APS 1016H, APS 1017H, APS 1020H, APS 1022H, APS 1028H, APS 1032H, APS 1038H, APS 1039H, APS 1040H

Engineering and Society

APS 510H, APS 1018H, APS 1024H, APS 1025H, APS 1031H, APS 1034H, APS 1420H, JMG 2020H.

Emphasis: Identity, Privacy and Security (IPS) (MEng only)

MEng students must successfully complete four half courses (2.0 full-course equivalents [FCEs]) as follows:

- JIE 1001/ECE 1518H *Seminar in Identity, Privacy, and Security* (0.5 FCE)
- two courses (1.0 FCE) from:
  - ECE 568H, ECE 1517H, ECE 1529H, ECE 1776H, ECE 1778H
- and one course (0.5 FCE) from:
  - INF 2124H, INF 2165, INF 2181H, INF 2241H.

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.

- ECE 527H Photonic Devices
- Any ECE 14XXH course
- ECE 2500Y MEng Project (topic in photonics; counts as one course towards the emphasis).

Emphasis: Robotics and Mechatronics (MASc, MEng, PhD)

MASc, MEng, and PhD students must successfully complete four courses (2.0 full-course equivalents [FCEs]) chosen from at least three of the following groups:

Group 1: Control

ECE 1619H, ECE 1636H, ECE 1647H, ECE 1653H, ECE 1657H, ECE 557H (exclusion: ECE 410H),
MIE 1064H, MIE 1068H

Group 2: Signal and Image Processing

AER 1513H,
CSC 2503H, CSC 2506H, CSC 2515H,
ECE 1511H, ECE 1512H, ECE 516H,
JEB 1433H

Group 3: Dynamics

AER 1503H, AER 1512H, AER 506H,
JEB 1444H,
MIE 1001H

Group 4: Systems Integration

AER 1514H, AER 525H (exclusion: ECE 470H),
ECE 1373H, ECE 1460H, ECE 532H,
MIE 1070H, MIE 1071H, MIE 1809H, MIE 505H, MIE 506H.

Emphasis: Sustainable Energy (MASc, PhD)

Doctoral-stream (MASc/PhD) students must successfully complete:

- At least three half courses (1.5 full-course equivalents [FCEs]) from the course lists below.
- A thesis in an area of relevance to sustainable energy with approval of the Institute of Sustainable Energy steering committee.

MEng students must successfully complete:

- Four courses (2.0 FCEs) from the following lists below, of which at least one (0.5 FCE) must be a core course.

Core Courses

APS 1032H,
MIE 515H, MIE 1120H

Elective Courses

AER 507H, AER 1304H, AER 1315H, AER 1415H,
CHE 568H, CHE 1053H, CHE 1118H, CHE 1123H, CHE 1142H, CHE 1143H,
CIV 575H, CIV 576H, CIV 577H, CIV 1303H, CIV 1307H,
ECE 533H, ECE 1030H, ECE 1055H, ECE 1057H, ECE 1085H, ECE 1086H, ECE 1092H, ECE 1094H,
MIE 516H, MIE 517H, MIE 1128H, MIE 1129H, MIE 1130H, MIE 1240H, MIE 1715H,
MSE 1022H, MSE 1023H, MSE 1028H, MSE 1058H.

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.

- ECE 557H Systems Control
- Any ECE 16XXH course
- ECE 2500Y MEng 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 JDE 1000H *Ethics in Research* during their first year of registration. The department should be consulted each session as to course offerings.

Energy Systems

ECE 533H	Power Electronics
ECE 1030H	Space Vector Theory and Control
ECE 1049H	Special Topics in Energy Systems
ECE 1055H	Dynamics of HVdc/ac Transmission Systems
ECE 1065H	Custom Power Controllers
ECE 1066H	Design of High-Frequency Switch-Mode Power Supplies (SMPS)
ECE 1068H	Introduction to EMC
ECE 1084H	Design of Advanced High-Efficiency Switched Mode Power Supplies
ECE 1085H	Power System Optimization
ECE 1086H	Power Management for Photovoltaic Systems
ECE 1094H	Mathematical Methods in Power Systems

Electromagnetics

ECE 1228H	Electromagnetic Theory
ECE 1229H	Advanced Antenna Theory
ECE 1236H	Microwave and Millimetre-wave Techniques
ECE 1243H	Topics in Electromagnetic Waves
ECE 1252H	Introduction to Computational Electrodynamics
ECE 1253H	Active Microwave Circuits
ECE 1254H	Modeling of Multiphysics Systems
ECE 1255H	Special Topics in Electromagnetics
ECE 1256H	Microwave Circuits

Electronics

ECE 534H	Integrated Circuit Engineering
ECE 1333H	Selected Topics in Semiconductor Physics
ECE 1334H	Selected Topics in Solid State Electronics/VLSI Technology
ECE 1336H	Semiconductor Physics
ECE 1352H	Analog Circuit Design I
ECE 1360H	Selected Topics in Instrumentation
ECE 1364H	Selected Topics in Solid State Circuit Design
ECE 1365H	High Frequency Integrated Circuits
ECE 1371H	Advanced Topics in Analog Circuits
ECE 1373H	Digital Design for Systems-on-Chip
ECE 1379H	Introduction to Compound Semiconductor Devices
ECE 1384H	Digital Circuit Design
ECE 1385H	Selected Topics in VLSI Systems
ECE 1387H	CAD for Digital Circuit Synthesis and Layout
ECE 1388H	VLSI Design Methodology
ECE 1390H	Selected Topics in Circuits and Systems
ECE 1391H	Advanced Microelectronic Devices
ECE 1392H	Integrated Circuits for Digital Communications
ECE 1393H	Semiconductor Devices
ECE 1395H	Power Semiconductor Devices and Applications
ECE 1396H	Analog Signal Processing Circuits
ECE 1397H	Analog Integrated Circuits
ECE 1398H	VLSI Technology

Biomedical Engineering

JEB 1365H	Ultrasound: Theory and Applications in Biology and Medicine
JEB 1433H	Medical Imaging
JEB 1444H	Neural Engineering
JEB 1447H	Sensory Communications
BME 1452H	Signal Processing for Bioengineering

Photonics

ECE 525H	Lasers and Detectors
ECE 527H	Passive Photonic Devices
ECE 1448H	Quantum Mechanics for Engineers
ECE 1450H	Ultrafast Photonics
ECE 1460H	Special Topics in Photonics
ECE 1461H	Advanced Laser Processing
ECE 1467H	Integrated Optical Circuit Design
ECE 1473H	Micro and Nano Fabrication Technologies for Compound Semiconductors
ECE 1475H	Bio Photonics
ECE 1476H	Solar Energy Capture and Storage in Natural and Engineered Systems
ECE 1477H	Optical Interconnects
ECE 1478H	Lasers and Detectors

Communications

ECE 537H	Random Processes
ECE 1501H	Error Control Codes
ECE 1502H	Information Theory
ECE 1503H	Power Semiconductor Devices and Applications
ECE 1504H	Statistical Learning
ECE 1505H	Convex Optimization
ECE 1508H	Special Topics in Communications
ECE 1510H	Advanced Inference Algorithms
ECE 1511H	Signal Processing
ECE 1512H	Digital Image Processing and Applications
ECE 1517H	Biometric Systems
ECE 1518H	Seminar in Identity, Privacy, and Security
ECE 1520H	Data Communications I
ECE 1521H	Detection and Estimation Theory
ECE 1522H	Data Communications II
ECE 1528H	Special Topics in Data Communications
ECE 1529H	Adaptive Systems for Signal Processing and Communications
ECE 1531H	Quantum Information Theory
ECE 1541H	Communication Networks I
ECE 1542H	Communication Networks II
ECE 1543H	Mobile Communications Systems
ECE 1545H	Bridges and Routers
ECE 1548H	Advanced Network Architectures
ECE 1549H	Stochastic Networks
ECE 1550H	Physics of Information

Systems Control

ECE 557H	Systems Control
ECE 1619H	Linear Geometric Control Theory
ECE 1635H	Special Topics in Control I
ECE 1636H	Control of Discrete-Event Systems I
ECE 1637H	Control of Discrete-Event Systems II
ECE 1639H	Analysis and Control of Stochastic Systems I
ECE 1643H	Special Topics in Control II
ECE 1647H	Introduction to Nonlinear Control Systems
ECE 1648H	Nonlinear Control Systems
ECE 1653H	Hybrid Systems and Control Applications
ECE 1656H	Nonlinear Modeling and Analysis of Biological Systems
ECE 1657H	Game Theory and Evolutionary Games

Computer Engineering

ECE 516H	Personal Cybernetics and Intelligent Imaging Systems
ECE 532H	Digital Hardware
ECE 540H	Optimizing Compilers
ECE 1718H	Special Topics in Computer Hardware Design
ECE 1724H	Special Topics in Software Engineering
ECE 1749H	Interconnection Networks for Parallel Computer Architectures
ECE 1754H	Compilation Techniques for Parallel Processors
ECE 1755H	Parallel Computer Architecture and Programming
ECE 1756H	Reconfigurable Computing and FPGA Architecture
ECE 1759H	Advances in Operating Systems
ECE 1762H	Algorithms and Data Structures
ECE 1767H	Design for Test and Testability
ECE 1769H	Behavioural Synthesis of Digital Integrated Circuits
ECE 1770H	Trends in Middleware Systems—Selected Topics and Concepts
ECE 1771H	Quality of Service
ECE 1773H	Advanced Computer Architecture
ECE 1774H	Sensory Cybernetics
ECE 1776H	Computer Security, Cryptography, and Privacy
ECE 1777H	Computer Methods for Circuit Simulation
ECE 1778H	Creative Applications for Mobile Devices
ECE 1780H	Advanced Mobile User Interfaces
ECE 1781H	Dependable Software Systems (prerequisite: ECE 344H Operating Systems or similar)
ECE 1782H	Programming Massively Parallel Multiprocessors and Heterogeneous Systems

Master of Engineering

ECE 1092H	Smart Grid Case Studies
ECE 1093H	Electrical Insulation Design and Coordination
ECE 1095H	Grounding and Bonding
ECE 1394H	Technical Management of Modern IC Design
ECE 1524H	Service Provider Networks
ECE 1551H	Mobile Broadband Radio Access Network (prerequisite: ECE 316; exclusion: ECE 1508H)
ECE 1779H	Introduction to Cloud Computing
ECE 2500Y	Master of Engineering Project

Reading Course

ECE 1001H	Readings in Cognate Subjects

APS Engineering Course

APS 1012H	Managing Business Innovation and Transformational Change
APS 1041H	Inventrepreneurship (Invention and Entrepreneurship)

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:

1. **Book History and Print Culture**
   - English, MA, PhD
2. **Diaspora and Transnational Studies**
   - English, MA, PhD
3. **Editing Medieval Texts**
   - English, PhD
4. **Jewish Studies**
   - English, MA, PhD
5. **Sexual Diversity Studies**
   - English, MA, PhD
6. **South Asian Studies**
   - English, MA, PhD
7. **Women and Gender Studies**
   - English, MA, PhD
8. **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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Jackman Humanities Building
6th Floor, 170 St. George Street
Toronto, Ontario M5R 2M8
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English: Graduate Faculty

Full Members

Ackerman, Alan - BA, MA, PhD
Akbari, Suzanne - BA, MA, MPH, PhD
Astington, John - BA, MA, PhD
Bewell, Alan - BA, MA, PhD
Bolus-Reichert, Christine - BPhil, AM, PhD
Boyagoda, Randy - PhD
Clarke, George Elliott - BA, MA, PhD
Cobb, Michael - BA, MA, AM, PhD
Cruz, Denise - BA, MA, PhD
Dickie, Simon - BA, MA, PhD
Dolan, Neal - BA, PhD
Downes, Paul - BA, PhD
Dubois, Andrew - BA, PhD
Esch, Deborah - PhD
Esonwanne, Uzoma - BA, MA, PhD
Esterhammer, Angela - BA, PhD
Galbraith, David - MA, PhD
Gillespie, Alexandra - BA, BSc, PhD
Goldman, Marlene Beth - BFA, MA, PhD
Greene, Richard - PhD
Harvey, Elizabeth - PhD
Henderson, Greig - BA, 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, Katherine - BMus, AB, MPH, PhD
Leonard, Garry - BA, MA, PhD

Levene, Mark - BA, MA, PhD
Li, Hao - BA, PhD
Lopez, Jeremy - BA, MA, DPhil
Magnusson, Lynne - BA, MA, PhD
Matus, Jill - BA, MA, PhD
Maurice, Alice - BA, DPhil
McGill, Robert - BA, MPH, MA, PhD
Momma, Haruko - BA, MA, 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
Rubright, Marjorie - AB, MA, DLitt
Ruti, Marjut - BA, MA, PhD
Salih, Sara - BA, DPhil
Schmitt, Emmett - BA, MA, PhD (*Acting Director of Graduate Studies*)
Seitler, Dana - BA, MA, PhD
Stern, Simon - BA, PhD, JD
Stevens, Paul - BA, MA, PhD (*Chair and Graduate Chair*)
Suzack, Cheryl - BA, BE, MA, PhD
Syme, Holger Schott - BA, AM, PhD
Townsend, David Robert - BA, MA, PhD
Vernon, Karina Joan - BA, MA, PhD
Warley, Christopher - BA, MA, DPhil
Weisman, Karen - BA, PhD
White, Daniel - BA, AM, DPhil
Wilson, Sarah - BA, MA, PhD
Woodland, Malcolm - 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
Bruckmann, Patricia - PhD
Cameron, Elspeth - BA, MA, PhD
Chambers, Douglas - PhD
Cook, Eleanor - PhD
Corman, Brian - AB, AM, PhD
Cuddy-Keane, Melba - BA, MA, PhD
de Groot, Hans - MA, PhD
Domville, Eric William - BA, PhD
Duffy, Dennis - AB, MA, PhD
Dutka, JoAnna - BA, MA, PhD, ARCT
Halewood, William - AB, MA, PhD
Harvey, Elisabeth Ruth - BA, MPH, PhD
Hayne, Barrie - BA, AM, PhD
Healey, Antonette - BA, MA, PhD
Hutcheon, Linda - BA, MA, PhD
Johnston, Alexandra - PhD
Kirkham, Michael - BA, MPH
Lancashire, Anne - BA, AM, PhD
Lancashire, Ian - BA, MA, PhD
Leggatt, Alexander - BA, MA, PhD
Marker, Frederick - AB, DFA
McLeod, Randall - AB, MA, PhD
Millgate, Jane - PhD
Millgate, Michael - BA, MA, PhD
Parker, Brian - PhD
Reibetanz, John - BA, MA, PhD
Rigg, Arthur George - BA, MA, DPhil
Saddlemyer, Ann - PhD, DLitt
Sidnell, Michael - BA, MA, PhD
Thomson, H. Leslie - 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
Blayney, Peter - BA, PhD
Dancer, Thomas - MA, PhD
Dooley, Ann - BA, MA, PhD
Hammond, Adam - BA, MA, PhD
Mehta, Rijuta - BA, MA, MA, PhD
Sergi, Matthew - BFA, PhD
Slater, Avery Kristin - BA, MA, MPH, MFA, PhD
Tysdal, Daniel - BA, MA
Uphaus, Maxwell - BA, MA, MA, MPH, 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 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:
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

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.
- B+ average 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 complete **4.0 full-course equivalents (FCEs)** as follows:
    - ENG 6999Y *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.
- B+ average 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 complete **3.0 full-course equivalents (FCEs)** as follows:
    - ENG 6950Y *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).

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

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.
    - ENG 8000H *Texts, Theories, and Archives* (0.5 FCE) unless this or an equivalent course has already been taken
    - ENG 9500H *Professional Development* (0.5 FCE)
    - ENG 9900H *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 ENG 6954H *Studies in Bibliography* if taken before Fall 2011, nor ENG 6999Y *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 ENG 240Y 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:
    - ENG 1001H *Old English I*
    - ENG 6361H *History and Structure of the English Language I*
    - ENG 6362H *History and Structure of the English Language: Post-1500*
    - ENG 6365H *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.

General and Special Field Examinations

- Students are required to pass two separate examinations: the general examination and the special field examination.
  - The **general examination** is designed to give students a broad knowledge of historical periods, works of literature, and critical concepts. It consists of two written papers covering the whole range of English literature, divided at 1700. A reading list is provided for this examination on the department website, and sample examinations are available in the department. Students entering the PhD program with a master's degree take both parts of the general examination in the early fall of Year 2. A January sitting of the examination is designed to accommodate students with special circumstances. Under normal circumstances, students are given two chances to pass the general examination before termination from the program is recommended. Under certain circumstances, subject to the determination of a particular student's academic standing and progress, the department may allow a third attempt.
  - The **special field examination** has three components: a written examination, based on a reading list related to the student's thesis research and 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 entering the PhD program with a master's degree generally take the special field examination no later than the end of the first session of Year 3. A second attempt of the special field 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 November 1 of Year 2 of registration, the student must submit to the Associate Director, PhD, a preliminary thesis proposal, approved by the prospective supervisor. The proposals are circulated to all graduate faculty in the department for information and comment. 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 February 15 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 FCEs** as follows:
    - ENG 6999Y *Critical Topographies: Theory and Practice of Contemporary Literary Studies in English* (1.0 FCE)
    - ENG 8000H *Texts, Theories, and Archives* (0.5 FCE)
    - ENG 9500H *Professional Development* (0.5 FCE)
    - ENG 9900H *Professing Literature* (0.5 FCE)
    - 5.0 additional FCEs in English, as approved by the department. The student must complete ENG 6999Y 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 ENG 9500H *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 ENG 240Y 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:
    - ENG 1001H *Old English I*
    - ENG 6361H *History and Structure of the English Language I*
    - ENG 6362H *History and Structure of the English Language: Post-1500*
    - ENG 6365H *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.

General and Special Field Examinations

- Students are required to pass two separate examinations: the general examination and the special field examination.
    - The **general examination** is designed to give students a broad knowledge of historical periods, works of literature, and critical concepts. It consists of two written papers covering the whole range of English literature, divided at 1700. A reading list is provided for this examination on the department website, and sample examinations are available in the department. Direct-entry students take the examination in the early fall of Year 3. A January sitting of the examination is designed to accommodate students with special circumstances. Under normal circumstances, students are given two chances to pass the general examination before termination from the program is recommended. Under certain circumstances, subject to the determination of a particular student's academic standing and progress, the department may allow a third attempt.
    - The **special field examination** has three components: a written examination, based on a reading list related to the student's thesis research and 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 examination no later than the end of the first session of Year 4. A second attempt of the special field 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 November 1 of Year 3 of registration, the student must submit to the Associate Director, PhD, a preliminary thesis proposal, approved by the prospective supervisor. The proposals are circulated to all graduate faculty in the department for information and comment. 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 February 15 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 courses is subject to revision; further information, including course descriptions, 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 (e.g., 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.

ENG 1001H	Old English I
ENG 1002H	Old English II
ENG 1008H	Medieval Entertainers
ENG 1009H	Writing the Nation: Pre-modern Historiographies
ENG 1011H	Economies of Medieval Drama: East Anglia, Kent, Sussex
ENG 1013H	Women in Medieval Literature: Image and Author
ENG 1025H	Globalization and the Religious Other in Medieval Literature
ENG 1081H	The Anglo-Saxon Riddle Tradition
ENG 1093H	Medieval Vernacular Book
ENG 1094H	Discourses of Vernacular Spirituality
ENG 1324H	The Figure of the Saint
ENG 1333H	Reception of the Classics in Middle English Literature
ENG 1551H	The Canterbury Tales
ENG 1552H	Chaucer's Troilus and Criseyde and Other Works
ENG 1730H	Medieval Drama: The Biblical Cycles and Fragments
ENG 2001H	Animal/Human Interfaces in Early Modern Culture
ENG 2002H	Early Modern Ecologies
ENG 2007H	Gender and Song in the Early Modern Context
ENG 2008H	The Early Modern in the History of Science and Literature
ENG 2019H	Early Modern Psyches: Shakespeare and Psychoanalysis
JEH 2020H	Early Modern Diaspora: A Cross-disciplinary Seminar on the Literature and History of Exile
ENG 2021H	The Global Renaissance
ENG 2054H	John Donne: Theory and Context
ENG 2222H	The Renaissance of Art
ENG 2225H	Renaissance Lyric, in Theory
ENG 2280H	Mimesis and Representation: Studies in Renaissance Texts
ENG 2282H	Ben Jonson
ENG 2288H	Renaissance Keywords
ENG 2423H	Spenser: The Faerie Queene
ENG 2429H	Gender, Courtesy, and Civility in Early Modern England
ENG 2467H	Early Modern Nationalism and Milton's England
ENG 2470H	Milton, Globalism, and the Post-national
ENG 2485H	London Drama 1190–1590
ENG 2505H	Shakespeare's Sonnets: Texts and Contexts
ENG 2510H	Shakespeare and the Renaissance Schoolroom
ENG 2533H	Shakespeare's Language
ENG 2535H	Shakespeare and his Contemporaries
ENG 2537H	Unfamiliar Letters: Language and Culture of Early Modern Correspondence
ENG 2586H	Popular Drama in Early Modern England
ENG 2583H	Popular Legend in the Plays of Shakespeare and His Contemporaries
ENG 2610H	Disguise on the Early Modern Stage
ENG 2653H	Renaissance Tragedy
ENG 2699H	Shakespeare's Sonnets
ENG 2794H	Staging and the Meaning of Early Modern Drama
ENG 2960H	What's Metaphysical About Metaphysical Poetry?
ENG 3043H	Drama 1660–1710
ENG 3044H	English Comedy, 1660–1737
ENG 3066H	Literatures of British Enlightenment
ENG 3073H	Richardson's *Clarissa*: Fiction, Contexts, and Criticism

ENG 3251H	Varieties of (18th-Century) Religious Experience
ENG 3254H	Fielding and Hogarth
ENG 3255H	Fielding's Tom Jones
ENG 3301H	The Social Life of Feeling in Eighteenth-Century Literature
ENG 3303H	Henry Fielding
ENG 3332H	Eighteenth-Century Tragedy and its Discontents
ENG 3403H	Literature of the Seven Years War
ENG 3702H	A History of Violence: Eighteenth-Century Literature and the Politics of Pain
ENG 3707H	Literature and Censorship, 1660–1830
ENG 3900H	The Circum-Atlantic Novel: Utopia to Mansfield Park
ENG 4170H	Extravagant Styles: Romanticism, Orientalism, and the Gothic
ENG 4199H	Vulgar Tongues: Antiquarianism, Slang, and Slumming in the Romantic Era
ENG 4212H	Romanticism and Catastrophe
ENG 4216H	Romanticism and the Literature of Mobility
ENG 4222H	Romanticism and Mobility
ENG 4224H	Early Nineteenth-Century Environmental Literature
ENG 4262H	Realism and the Sociological Impulse
ENG 4266H	Redemptive Realism: The Victorian Novel
ENG 4501H	Victorian Fiction and the Fragility of the Social
ENG 4503H	Darwin and Darwinism
ENG 4504H	Darwin and Literature
ENG 4622H	Brontë and Dickens
ENG 4662H	Romantic Memory
ENG 4664H	Romantic Pastoral Revisited
ENG 4665H	Romantic Cities
ENG 4670H	Romanticism: Local and Global
ENG 4672H	The Literary Scene of the 1820s
ENG 4770H	Aesthetics and Ethics: the Late Victorians
ENG 4741H	Victorian Lyric
ENG 4756H	Class and the Victorian Novel
ENG 4765H	Emotions, Affect Theory, and the Novel
ENG 4801H	Aging and Older Age in the Nineteenth-Century British Novel
ENG 4808H	Public Health Stories: Writing Illness in 19th-Century Britain
ENG 4856H	Character in 19th-Century Fiction
ENG 4875H	George Eliot
ENG 4879H	Christianity in Victorian Literature
ENG 4881H	Victorian Realism and the Victorian Realist Novel: Studies in Narrative
ENG 4883H	Rereading Victorian Realism
ENG 4884H	Nineteenth-Century Fiction and the Discovery of Everyday Life
ENG 4885H	Sociality and its Discontents: the Social and Anti-social in the Victorian Novel
ENG 4906H	Novel, Reconstruction, and the Civil War Amendments
ENG 4924H	The Victorian Novel in Transition
ENG 4947H	Studies in Victorian Poetry (Ballads and Romances)
ENG 4973H	Marx and the American Renaissance
ENG 4987H	Visions and Revisions: The Sublime in Contemporary American Poetry
ENG 5005H	Modern Poetry and Philosophy
ENG 5006H	Modernism and the Politics of Form
ENG 5020H	#BlackLivesMatter: Contemporary Black Canadian Literature
ENG 5022H	Race, Psychoanalysis, and American Literature
ENG 5024H	Anglo-Jewish Fiction and Poetry of the Twentieth Century
ENG 5030H	The Child at the Social Limit in Contemporary US Fiction
ENG 5040H	Pathological Forgetting in Canadian Literature
ENG 5046H	Settler Colonialism and US Literary Studies
ENG 5047H	Class and American Literature
ENG 5049H	Liberalism, Community, and American Literature
ENG 5050H	Literature, Law, and Liberal Culture in the United States 1776–1865
ENG 5051H	Energy and Economy in the American Renaissance
ENG 5052H	Nineteenth-Century American Literature and Industrial Revolution
ENG 5058H	Magical Realism(s): Postcolonialism and Postmodernism
ENG 5062H	The Rise of the Transnational American Novel
ENG 5066H	Realism in the Time of the Anthropocene
ENG 5075H	Aesthetics of Struggle: Revolution, Fugitivity, Survival
ENG 5076H	Theorizing the Caribbean Diaspora
ENG 5130H	Oceanic Modernisms: The Sea and Modernist British Literature
ENG 5150H	British Modernism, 2004–Present
ENG 5200H	Woolf/Beckett/Coetzee
ENG 5206H	Sir Beelzebub's Syllabub: The Poetry of Edith Sitwell
ENG 5253H	Simply Divine! The Novels of Evelyn Waugh and Graham Greene
ENG 5275H	Elizabeth Bishop and Marianne Moore Studies in Poetics
ENG 5276H	The Vietnam War Era and Canadian Literature
ENG 5279H	Class and Community in Postwar American Literature
ENG 5280H	American Realism and Reform
ENG 5282H	American Modernity
ENG 5288H	American Literature: Temporality Studies
ENG 5300H	Avant-Garde Aesthetics and Politics in Contemporary Poetry
ENG 5313H	Poets and Playwrights: Eliot, Stein, Auden
ENG 5317H	Amorous Americans: Sexuality and the United States Novel
ENG 5318H	Catastrophe, Community, Commodity, and Control in the 1930s: Studies in Historical Analysis
ENG 5519H	Narrative, Narratology, and Modernist Fiction: Studies in Narrative
ENG 5524H	Modernism, Modernity and the Crisis in Temporality
ENG 5526H	Monuments of Modernism
ENG 5540H	Modernism and its Media: Fiction and Theatre in an Age of Film and Radio
ENG 5542H	Modernist Creation
ENG 5572H	The City as Archive: Social Memory, Missing Histories, Writing

ENG 5580H	American Pastoral: Agriculture and Environment in Literary Imagination
ENG 5581H	The Idea of the Modern
ENG 5586H	Privacy in American Literature
ENG 5588H	Free Love?: Conjugal Politics and American Literature
ENG 5608H	Modernist Narrative, and Embodied Cognition
ENG 5610H	Space and the Education of Desire: Postcolonialism and Diaspora
ENG 5615H	Ashbery, Bishop, O'Hara
ENG 5618H	Fiction and Virtue in the Late Nineteenth-Century U.S.
ENG 5643H	Jane Austen and Virginia Woolf, In and Out of Their Times
ENG 5717H	The CanLit Boom of the 1960s
ENG 5731H	Transitional Justice and Indigenous Writing in Canada
ENG 5744H	1967: A Year in Letters
ENG 5746H	Urban Canadian Literature and Aesthetics of Spatial Justice
ENG 5751H	Novelists and Terrorists
ENG 5784H	Modernizing Poetry
ENG 5787H	The Poetics of Haunting in Canadian Fiction
ENG 5795H	Canadian Literature at the Border
ENG 5799H	Settler-Colonialism and American Indian Writing
ENG 5800H	Rooted Cosmopolitanism: the Postcolonial Present
ENG 5801H	Kinship in Indigenous Asian Canadian Literatures
ENG 5808H	Zones of Contact and South Asian Writing in English
ENG 5810H	Rethinking Literary History: South Asian Writing in English
ENG 5851H	Faulkner and the American South
ENG 5854H	The Global South
ENG 5905H	Introduction to African-Canadian Literature
ENG 5963H	James Joyce: Modernism, Modernity, Mythology
ENG 5966H	English Literature of the Second World War
ENG 5968H	Actuality, Documentary, Reality
ENG 5977H	Wallace Stevens in Context
ENG 5988H	Posthuman Encounters in Contemporary Canadian Literature
ENG 5991H	Postcolonial Tragedies: Theory, Literature, Criticism
ENG 6010H	Bad Feelings: Between Affect Theory and Psychoanalysis
ENG 6011H	Love and Desire in a Time of Crisis
ENG 6006H	The Age of Anxiety: Theory, Affect, Politics
ENG 6028H	Religion, Secularism, and the Novel
ENG 6029H	Faithful Reading: Interpretation, Christianity, and Poetry
ENG 6032H	The Victorian Novel, Literally
ENG 6034H	Old and New Materialisms
ENG 6043H	Introduction to Contemporary Literary Theory
ENG 6044H	The Literature of Protection
ENG 6049H	Intersections/Interventions: Diaspora Studies Today
ENG 6054H	Construals of the Self: Autobiography in Africa and the Diaspora
ENG 6056H	Ideologies
ENG 6060H	The Giants of Contemporary Theory: Reading the Later Works
ENG 6062H	The Human Condition: Arendt, Adorno, Derrida, Kristeva
ENG 6065H	Repetition in Modern Thought and Culture
ENG 6066H	Style: Authorial Signature in the Age of Cyber Technology
ENG 6068H	Embodiment in a Virtual Age
ENG 6070H	Making Faces: Identity, Performance, and the Face on Film
ENG 6100H	Reading Walter Benjamin
ENG 6152H	Drama After Performance
ENG 6154H	Race and Cinema
ENG 6159H	Poststructuralist Poetics
ENG 6160H	The Politics of Poetic Form: Studies in Poetics
ENG 6161H	The Poetics of Resistance
ENG 6163H	The Fate of Culture in an Age of Globalization
ENG 6171H	Writing a Journal Article
ENG 6192H	Literature as History/History as Literature
ENG 6193H	Communities of Readers
ENG 6199H	Collectivity
ENG 6200H	The World is Too Much With Us: Witnessing and Creativity in Contemporary Long-Form Reporting
ENG 6223H	The Text of Donne: The Variorum Donne
ENG 6271H	Comedies of Capitalism
ENG 6362H	History and Structure of the English Language: Post-1500
ENG 6365H	Diasporic Englishes
ENG 6368H	Inventing Homes and Spaces in Diasporic South Asian Writing
ENG 6490H	The Postcritical Turn
ENG 6494H	Psychogeography and the Mapping of Literary Space
ENG 6496H	Spatializing Marxism: the Postmodern Spatial Turn
ENG 6498H	Dystopian Fiction and Unsettled Space
ENG 6499H	Space in Postcolonial Literature
ENG 6501H	Life, Death, and American Fiction
ENG 6510H	Creative Nonfiction
ENG 6522H	Transnational Masculinity in Literature and Culture
ENG 6525H	Environmental Criticism and Postcolonial Discourse
ENG 6526H	Postcolonial Poetry
ENG 6529H	Critical Animal Studies
ENG 6530H	Death in Theory
ENG 6533H	The Art of Mourning
ENG 6540H	The Victorian Novel, Literally
ENG 6546H	Literature and the Resistance to Being
ENG 6551H	Asian North American Literature: National and Transnational Feminisms
ENG 6552H	Law and Literature
ENG 6553H	Law as Literature: Story and Style in a Culture of Argument
ENG 6554H	Race and Gender in Indigenous Law and Literature
ENG 6818H	Social Robots in the Cultural Imagination
ENG 6825H	Fair Use, Fair Dealing, and Critical Reading Across Media

ENG 6842H	The Culture and Politics of Emotion Theory
ENG 6843H	Between Marxism and Psychoanalysis: Trauma, Ethics, Politics
ENG 6846H	Writing the Foreign: Empathy and Complicity in Canadian Literature
ENG 6847H	From CanLit to Canlits: The Re-formation of a Discipline
ENG 6850H	Palestine/Israel; Israel/Palestine
ENG 6860H	Authoring
ENG 6890H	Reading Auerbach's Mimesis
ENG 6950Y	Workshop in Creative Writing
ENG 6954H	Studies in Bibliography
ENG 6999Y	Critical Topographies: Theory and Practice of Contemporary Literary Studies in English
ENG 8000H	Texts, Theories, and Archives
ENG 9500H	Professional Development
ENG 9900H	Professing Literature
JLE 5116H	Naming the World: Realism Travels the Globe

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:

1. **Ethnic and Pluralism Studies**
   - European and Russian Affairs, MA
2. **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

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Centre for European, Russian, and Eurasian Studies
Munk School of Global Affairs
University of Toronto
Room 127N, 1 Devonshire Place
Toronto, Ontario M5S 3K7
Canada

European, Russian, and Eurasian Studies: Graduate Faculty

Full Members

Ambros, Veronika - MA, PhD
Austin, Robert - BA, MA, PhD (*Graduate Coordinator*)
Bathelt, Harald - MA, PhD, CRC
Bergen, Doris - MA, PhD
Braun, Aurel - BA, MA, PhD
Brym, Robert - 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
Livak, Leonid - BA, AM, PhD
Magocsi, Paul - BA, MA, MA, PhD, FRSC
Noyes, John - BA, MA, PhD
Ornston, Darius - BA, MA, PhD
Orwin, Donna - PhD
Ostapchuk, Victor - BA, PhD
Penslar, Derek - BA, MA, PhD
Pruessen, Ronald - BA, MA, PhD
Retallack, James - BA, DPhil
Schallert, Joseph - PhD
Smith, Alison - AM, PhD
Soldovieri, Stefan - BA, MA, PhD
Stock, Markus - MA, PhD
Subtelny, Maria - BA, PhD
Tarnawsky, Maxim - BA, PhD
Triadafilopoulos, Phil (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

Eddie, Scott - BS, PhD
Griffiths, Franklyn Jc - BA, MIA, PhD
Johnson, Robert - BA, PhD
Perron, Paul - PhD
Solomon, Susan - BA, MA, PhD

Associate Members

Cohen, Paul - AM, PhD

de Miguel Moyer, Carolina - BA, MA, PhD
Gunitskiy, Vsevolod - BA, MA, MPH, PhD
Jenkins, Jennifer - BA, MA, PhD
Jennings, Eric - BA, MA, PhD
Kasekamp, Andres - PhD
Korteweg, Anna - BA, MA, PhD
Light, Matthew - BA, MA, JD, PhD
Schatz, Edward - PhD
Shternshis, Anna - MA, PhD
Way, Lucan Alan - BA, 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 beginning 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 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 journal.

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. 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

- Minimum of two academic years of full-time graduate study.
- **Coursework.** Students must complete **6.0 full-course equivalents (FCEs)** as follows:
  - 2.0 FCEs in a discipline chosen by the student as the major discipline.
  - 1.5 FCEs must be drawn from at least two disciplines other than the major discipline.
  - ERE 2001H (0.5 FCE), taken in Year 1 of the program.
  - ERE 2000Y (1.0 FCE), the interdisciplinary core course, beginning in the second session of Year 1 and continuing into Year 2. As part of ERE 2000Y, each student must write a 30- to 40-page master's essay, based on original research.
  - The remaining 0.5 FCE may be drawn from any discipline relating to the student's course of study.
  - 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 and individual departments for course availability. Consult the centre's Graduate Coordinator for course credit eligibility. The notation (PR) following a course indicates the course has a prerequisite.

Required

ERE 2000Y	Research Seminar
ERE 2001H	Gateway Proseminar in European, Russian, and Eurasian Studies

Elective

ERE 1162H	Topics in the Caucasus
ERE 1165H	International Internship
ERE 1195H	Topics in Ukraine and Eastern Europe

Anthropology

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

ANT 6021H	Political Anthropology: State, Power, and Sovereignty
JSA 5147H	Language, Nationalism, and Post-Nationalism

Comparative Literature

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

COL 5037H	Magic Prague—Questions of Literary Cityscapes
COL 5044H	A Journey from Petersburg to Los Angeles
COL 5099H	Discourse and Iconography of Revolution
COL 5101H	Diasporic Cities: Itinerant Narratives of Metropoles by Travellers and Expatriates
JFC 5105H	Collections of Knowledge: Encyclopedism and Travel Literature in Early Modern Europe (1500–1800)
JGC 1850H	Derrida, the German, the Jew

Criminology and Sociolegal Studies

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

CRI 3120H	Politics and Crime

Economics

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

ECO 2004H	The History of Economic Thought
ECO 2006H	Topics in the History of Economic Thought

Germanic Languages and Literatures

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

GER 1200H	Middle High German
GER 1300H	Cultural History of the German Language
GER 1400H	From Real to Virtual Shtetl: Jewish Culture in Russia, 1917–2010
GER 1470H	Goethe in Context
GER 1480H	Goethe's Faust
GER 1580H	Vienna at the Turn of the Century
GER 1661H	Modernism in Context
GER 1771H	Topics in German Cinema Studies
GER 1772H	The Politics of the Non-fiction Film
GER 1775H	Cinemas of Migration
GER 1780H	Topics in German Visual Culture
JGC 1660H	Modernism and the Other
JGC 1855H	Critical Theory: The French-German Connection

History

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

ERE 1186H	The Past As Prologue: East Central and Southeastern Europe in the Interwar Period
ERE 1191H	Contemporary Southeastern Europe
HIS 1233H	Colonial Urbanism in the Mediterranean World, 1800–1950
HIS 1237H	France: 1870–1968
HIS 1245H	Gender, Men and Women in Europe 1500–1900
HIS 1247H	Ideas of Race in Europe and the Atlantic World
HIS 1264H	Jewish Identity
HIS 1265H	Atrocities and Memory in Postwar Europe and North America
HIS 1268H	The Holocaust and World War II
HIS 1271H	Modern Political Trials
HIS 1272H	Topics in Twentieth-Century European History
HIS 1275H	Imperial Germany, 1871–1918
HIS 1279H	World War II in East Central Europe (joint graduate/undergraduate)
HIS 1281H	History of Real Socialism
HIS 1282H	Totalitarian Culture
HIS 1283H	Crusades, Conversion, and Colonization in the Medieval Baltic (joint graduate/undergraduate)
HIS 1286H	Categories of Imperial Russian Social History
HIS 1287H	Polish Jews Since the Partitions of Poland
HIS 1290H	Topics in Imperial Russian History
HIS 1293Y	Kievan Rus'
HIS 1296H	Stalinism and After: Beyond Cold War History
HIS 1297H	National Survival in Eastern Europe
HIS 1419H	Science and Society in Britain, 1600–1800
JHP 1289Y	Twentieth-Century Ukraine

Near and Middle Eastern Civilizations

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

JNE 2320H	Modern Turkey
NMC 2310Y	Ottoman History to 1800

Political Science

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

JRA 2321H	Topics in Comparative Politics
JRA 2337H	Government Law and Politics in Russia
JRA 2391H	Topics in Comparative Politics
POL 2324H	Ethnonationalism and State-Building: The Communist and Post-Communist Experience
POL 2341H	Topics in Ukrainian and Post-Soviet Politics
POL 2344H	Politics of Independent Ukraine
POL 2429H	Democracy and Ethnic Conflict

Slavic Languages and Literatures

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

Croatian and Serbian Literatures

SLA 1517H	Modern Serbian Bards
SLA 1520H	Bosnia in Literature and Culture: Between Croats and Serbs
SLA 1522Y	The Modern Serbian Novel
SLA 1547H	South Slavic Folklore

Czech and Slovak Literatures

SLA 1605H	Modern Czech Drama
SLA 1606H	Public Places and Private Spaces in Czech Short Story
SLA 1610H	V. Havel: Thinker, Politician, Writer

Polish Literature

SLA 1304H	Staging God, Man, and History: Polish Drama
SLA 1308Y	Topics in Polish Literature
SLA 1312Y	Modernism and Postmodernism in Polish Literature

Russian Literature

SLA 1202H	Gulag Literature
SLA 1203H	The Self and Other in Russian Prose
SLA 1204H	Contemporary Russian Literature
SLA 1207H	The Imaginary Jew
SLA 1211Y	Studies in the Russian Drama: Eighteenth to Twentieth Century
SLA 1215H	Studies in Russian Literature and Criticism in the Eighteenth Century
SLA 1216H	From English to Russian Literature and Back
SLA 1220H	Nineteenth Century Russian Thinkers
SLA 1225H	Russian Literature and Criticism in the 1860s
SLA 1226H	Dostoevsky in Literary Theory and Criticism
SLA 1228H	Themes in Russian Realism
SLA 1231H	Russian Modernism
SLA 1232H	Russian Symbolism
SLA 1233H	Studies in Modern Russian Poets
SLA 1235H	Pasternak
SLA 1238H	Chekhov
SLA 1239H	Vladimir Nabokov
SLA 1240H	Tolstoy
SLA 1241H	Narrative and History
SLA 1410H	Gogol
SLA 1411H	Experiments in Art in the Late Russian Empire—Early Soviet Union

Ukrainian Literature

SLA 1402Y	Studies in Ukrainian Modernism
SLA 1403Y	Contemporary Ukrainian Literature
SLA 1404Y	Studies in Ukrainian Poets
SLA 1405Y	Experiments in Ukrainian Prose
SLA 1406Y	Studies in Ukrainian Literary Criticism
SLA 1407H	Aspects of Literary Translation of Ukrainian

General Slavic

SLA 1037H	Theatre and Cinema in Extremis: Staging Twentieth-Century Aesthetics and Politics
SLA 1039H	Kyiv-Kiev-Kijow: A City through Cultures and Centuries
SLA 1310H	Theatre in the Twentieth Century
SLA 1421H	Women in East European Fiction
SLA 1521H	Post-Modernity and the Mythopoetic Legacy of Mitteleuropa

Reading and Research Courses

ERE 1997H	Reading and Research
ERE 1998H	Reading and Research I
ERE 1999H	Reading and Research II

For further information about graduate programs and study grants, please contact the Director.

Exercise Sciences

Exercise Sciences: Introduction

Faculty Affiliation

Kinesiology and Physical Education

Degree Programs

Exercise Sciences

MSc
PhD

Professional Kinesiology

MPK

Collaborative Specializations

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

1. **Aging, Palliative and Supportive Care Across the Life Course**
   - Exercise Sciences, MSc, PhD
2. **Cardiovascular Sciences**
   - Exercise Sciences, MSc, PhD
3. **Health Services and Policy Research**
   - Exercise Sciences, MSc, PhD
4. **Musculoskeletal Sciences**
   - Exercise Sciences, MSc, PhD
5. **Public Health Policy**
   - Exercise Sciences, MSc, PhD
6. **Sexual Diversity Studies**
   - Exercise Sciences, MSc, PhD
7. **Women and Gender Studies**
   - Exercise Sciences, MSc, PhD
8. **Women's Health**
   - Exercise Sciences, MSc, PhD

Overview

The field of exercise sciences is interdisciplinary. All degree programs are for students interested in research, academic, and professional careers relating to:

1. Applied/exercise/environmental physiology
2. Biomechanics and ergonomics
3. Health-care provision as a kinesiologist
4. Metabolic and endocrinological aspects of physical activity
5. Motor control and motor learning
6. Muscle physiology
7. Physical cultural aspects of sport and physical activity
8. Physical fitness and athletic strength and conditioning
9. Psychological aspects of sport and physical activity
10. Psychophysiological aspects of exercise and stress
11. Women's health and physical activity.

Contact and Address

Web: https://kpe.utoronto.ca
Email: exs.kpe@utoronto.ca
Telephone: (416) 978-6087
Fax: (416) 971-2118

Graduate Department of Exercise Sciences
Faculty of Kinesiology and Physical Education
University of Toronto
55 Harbord Street
Toronto, Ontario M5S 2W6
Canada

Exercise Sciences: Graduate Faculty

Full Members

Amara, Catherine - BSc, MSc, PhD
Atkinson, Michael - BA, MA, PhD
Cairney, John - BA, MA, PhD
Chapman, Kenneth - MSc, MD
Corey, Paul - BSc, MA, PhD
Donnelly, Peter - BA, MS, PhD
Faulkner, Guy - BE, MSc, DPhil
Fernie, Geoffrey - BSc, PhD
Fusco, Caroline - BA, MSc, PhD
Goodman, Jack - BPHE, MSc, PhD
Heslegrave, Ronald - PhD
Jacobs, Ira - MHK, MSD, DipPE (*Dean*)
Kerr, Gretchen - BPHE, MA, PhD (*Associate Dean, Academic*)
Kidd, Bruce - BA, AM, MA, PhD, OC
Lenskyj, Helen - BA, MA, PhD
Locke, Marius - BA, BSc, PhD (*Director of Graduate Studies*)
MacNeill, Margaret - BPHE, MA, PhD
Mainwaring, Lynda - BA, MHK, PhD, CPsych
McKee, Nancy - MD
Plyley, Michael - PhD
Santa Mina, Daniel - BSc, MSc, PhD
Shek, Pang - BSc, MSc, PhD
Thomas, Scott - BSc, MSc, PhD
Tremblay, Luc - BSc, MSc, PhD (*Associate Dean, Research*)
Welsh, Timothy - BPHE, MSc, PhD

Members Emeriti

Radomski, Manny - PhD
Shephard, Roy - BSc, BS, MB, MD, PhD

Associate Members

Arbour, Kelly - BSc, MSc, PhD
Blouin, Jean - BSc, MSc, PhD
Branco Fraga, Alex - EdD
Govindarajan, Anand - BSc, MSc, DrMed
Hutchison, Michael - BPHE, MSc, PhD
Mazalek, Alexandra - PhD
Mertens, Luc - MD

Moore, Daniel - BASc, PhD
Oh, Paul - MSc, MD
Riazi, Sheila - MSc, MD
Stirling, Ashley - BPHE, MS, PhD
Taha, Timur - BA, MEd, PhD
Tamminen, Katherine - BA, MA, PhD
Trinh, Linda - AB, MA, PhD

Exercise Sciences: Exercise Sciences MSc

Master of Science

Program Description

The MSc program is intended to broaden students' understanding of the various interdisciplinary aspects of the exercise sciences 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 Exercise Sciences' 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 Exercise Sciences.
    - 0.5 FCE in Exercise Sciences
    - 0.5 FCE Statistics or Methodology course
    - 1.0 FCE from either Exercise Sciences or another department
- SRM 3335H[+], a graduate seminar in Exercise Sciences (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 and the Graduate Department of Exercise Sciences.

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.*

Exercise Sciences: Exercise Sciences 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 exercise sciences 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.

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 Exercise Sciences' additional admission requirements stated below.
- A master's degree from the University of Toronto or a recognized university. Formal graduate training in exercise sciences 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.** Successful completion of **1.5 full-course equivalents (FCEs)** as follows:
    - 1.0 FCE from either Exercise Sciences or another department
    - 0.5 FCE Statistics or Methodology course
- SRD 4445H+, a graduate **seminar** in Exercise Sciences (0.0 FCE).
- All courses must be approved in advance by the student's supervisor and the Graduate Department of Exercise Sciences.
- The student's annual program plan must be approved by the supervisor and the Graduate Department of Exercise Sciences.
- 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 Exercise Sciences.
- **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 (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 Exercise Sciences' additional admission requirements stated below.
- A master's degree from the University of Toronto or a recognized university. Formal graduate training in exercise sciences 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.** Successful completion of **1.5 full-course equivalents (FCEs)** as follows:
    - 1.0 FCE from either Exercise Sciences or another department
    - 0.5 FCE Statistics or Methodology course
- SRD 4445H+, a graduate **seminar** in Exercise Sciences (0.0 FCE).
- All courses must be approved in advance by the student's supervisor and the Graduate Department of Exercise Sciences.
- The student's annual program plan must be approved by the supervisor and the Graduate Department of Exercise Sciences.
- 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 Exercise Sciences.
- **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.*

Exercise Sciences: Exercise Sciences MSc, PhD Courses

EXS 1150H	Safeguarding Youth in Sport
EXS 1152H	Psychological Issues in Sport-Related Concussion
EXS 5502H	Aging and Functional Capacity: an Integrative Approach
EXS 5503H	Adaptations to Habitual Activity
EXS 5505H	Neuromotor Behaviour
EXS 5507H	Desire and Bodies in Place
EXS 5508H	Cardiovascular Disease and Exercise
EXS 5509H	Applied Muscle Physiology and Biochemistry
EXS 5510H	Qualitative Inquiry and Physical Cultural Studies
EXS 5513H	Current Issues in Exercise Psychology
EXS 5514H	Human Sensory and Motor Neurophysiology
EXS 5515H	Research Methods in Physical Activity and Health
EXS 5516H	Exercise Psychology
EXS 5518H	Physical Cultural Studies and Social Theory
EXS 5521H	Stress and Coping
EXS 5525H	Quantitative Motion Analysis
EXS 5530H	Extreme Human Physiology
EXS 5531H	Skeletal Muscle Plasticity
EXS 5532H	Knowledge Translation
EXS 5533H	Current Issues in Sport Psychology
EXS 5534H	Sport, Politics, and Social Development
EXS 5535H	Neurorehabilitation and Exercise
EXS 5536H	Qualitative Inquiry in Sport and Physical Activity
EXS 5534H	Sport, International Development, and Peace
EXS 7001H	Directed Reading in Exercise Sciences
EXS 7002H[+]	Directed Research Project in Exercise Sciences
JXP 5807H	Health Communications
SRM 3335H[+]	Graduate Seminar Master's
SRD 4445H[+]	Graduate Seminar Doctoral

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

Exercise Sciences: Professional Kinesiology MPK

Master of Professional Kinesiology

Program Description

The first master's-level program of its kind in Ontario, the MPK 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.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies.
- Applicants must also satisfy the Graduate Department of Exercise Sciences' additional admission requirements stated below.
- Applicants must have a four-year bachelor's degree in kinesiology, physical education, human kinetics, or an equivalent degree, with 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 pursing 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

Successful completion of **12.0 full-course equivalents (FCEs)** as listed below. Consult the department for more details on sequence and timing of courses.

MPK 3999H	Introduction to Professional Kinesiology
MPK 4000H	Introduction to Human Movement in Professional Kinesiology
MPK 4001Y	Clinical Assessment and Interventions
MPK 4002Y	Biophysical Assessment and Interventions
MPK 4003Y	Behavioral Assessment and Interventions
MPK 4004Y	Physical, Culture, Health and Social Environments
MPK 4005H	Strength Based Professional Practice
MPK 4006H	Interprofessional Practice
MPK 4007Y	Practice Setting Considerations
MPK 4008Y	Evidence Supported Practice
MPK 4009H	Business of Kinesiology and Entrepreneurship
MPK 4010H+	Professional Practice
MPK 4012Y	Capstone Project: Improving Kinesiology Practice
MPK 4015H	Practice and Program Evaluation
MPK 8001H+	Placement 1 (120 hours)
MPK 8002H	Placement 2 (240 hours)
MPK 8003H	Placement 3 (240 hours)

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

Program Length

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

Time Limit

3 years

Financial Economics

Financial Economics: Introduction

Faculty Affiliation

Arts and Science; Management

Degree Program

Financial Economics

MFE

Overview

The **Master of Financial Economics (MFE)** program is a non-thesis degree program offered by the Department of Economics and the Rotman School of Management. Graduates of the program receive a professional degree called the Master of Financial Economics. The 16-month program is designed to equip talented students with the tools and skills required for successful careers in the financial sector. It provides students with a broad understanding of financial theory and the economic framework upon which that theory is based, both in the classroom and through actual experience working for firms in the financial sector.

Contact and Address

Web: www.economics.utoronto.ca/mfe
Email: mfe@economics.utoronto.ca
Telephone: (416) 978-8623

Master of Financial Economics Program
Department of Economics
University of Toronto
Room 170, 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
Halberstam, Yosh - BA, MA, PhD
Hussain, Sayed - BA, PhD (**Co-director**)
Malinova, Ekaterina - BS, MA, PhD
Melino, Angelo - BA, PhD (**Co-directo***r*)
Mondria, Jordi - BA, MA, PhD
Tian, Xu – BA, MA, MA, PhD

Management

Davydenko, Sergei - MSc, MA, PhD
Dyck, Alexander – BA, PhD
Hull, John - BA, MA, MA, PhD
McCurdy, Thomas - BA, MA, PhD
Stapleton, Maureen - MBA
Wang, Qing (Kevin) - BSc, MA, PhD
White, Alan - BEng, MBA, PhD

Financial Economics: Financial Economics MFE

Master of Financial Economics

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.
- Applicants must have completed or must be in the final year of an appropriate bachelor's degree program from a recognized university, with a B+ standing in the final year of that program.
- Strong preparation in economics, including full-year courses in intermediate-level micro and macro theory, and full-year university-level courses in each of calculus and statistics.
- Evidence of strong communication skills, both oral and written.
- Relevant work experience and/or previous training in finance is useful but not required.

Achievement of the minimum requirements does not guarantee acceptance into the program. Preference is given to students who have completed, with high standing, advanced-level courses in any or all of economics, mathematics, and econometrics.

Program Requirements

Students must complete:

- an intensive **mathematics, statistics, and accounting review**.
- **6.0 full-course equivalents (FCEs)** or 12 half courses as follows:
    - 2.0 FCEs from the Department of Economics. These core courses are the same as those required for the MA degree in Economics plus ECO 2503H Financial Economics I.
    - 1.5 FCEs from the Rotman School drawn from the second-year MBA-level courses to provide students with training in key areas of finance. These core courses are: RSM 2306H *Options and Futures Markets*, RSM 2300H *Corporate Financing*, RSM 2302H *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 may choose from a long list of elective courses offered at the graduate level in Economics or the second-year MBA level (or higher) from the Rotman School, subject to availability.
- a four-month summer **internship**.

Program Length

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

Time Limit

3 years full-time

Forestry

Forestry: Introduction

Faculty Affiliation

Forestry

Degree Programs

Forest Conservation

MFC

Forestry

MScF
PhD

Collaborative Specializations

The following collaborative specialization is available to students in participating degree programs as listed below:

Environmental Studies

- Forest Conservation, MFC
- Forestry, MScF, PhD

Overview

The Faculty 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 Faculty 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: http://forestry.utoronto.ca
Email: deborah.paes@utoronto.ca
Telephone: (416) 946-7952
Fax: (416) 978-3834

Faculty of Forestry
University of Toronto
Earth Sciences Centre
33 Willcocks Street
Toronto, Ontario M5S 3B3
Canada

Forestry: Graduate Faculty

Full Members

Carleton, Terence - BSc, MSc, PhD
Caspersen, John - BA, PhD (*Graduate Coordinator*)
Kant, Shashi - BE, MA, PhD
Krigstin, Sally - MSc, 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
Wotton, Brian Michael - BSc, 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
Roy, Dibyendu - BSc, MA, DPhil
Timmer, Victor - BScF, MScF, PhD

Associate Members

Bourchier, Robert - BA, MSc, PhD
Cole, William - BScF, MScF, PhD
Couto, Laercio - PhD
de Groot, W.J. - BSc, PhD
Feng, Martin W. - MSc
Flannigan, Mike - BSc, MS, PhD
Fleming, Richard - BSc, PhD
Jaffer, Shaffiq - BSChE, PhD
Jones, Trevor A - BSc, MSc, PhD
Kayahara, Gordon John - MSc, PhD
Koven, Anne - PhD
Kuhlberg, Mark - MA, PhD
Kuttner, Benjamin - PhD
Laaksonen-Craig, Susanna - MSc, PhD
Lantz, Van - BEc, MEc, PhD
Maynard, Alex - BA, MA, MPH, PhD
McKenney, Daniel - BSc, MSc, PhD
Moola, Faisal - BSc, MSc, PhD
Morris, Dave - BScF, MSc, PhD
Nanang, David - BSc, MScF, PhD
Nol, Erica - BS, MSc, PhD
Oksman, Kristiina - MSc, PhD
Omar Faruk, Abu - PhD
Peng, Changhui - BSc, PhD
Pinto, Fred - BScF, MScF

Puric-Mladenovic, Danijela - PhD
Ray, Justina - BS, MS, PhD
Regniere, Jacques - BSc, PhD
Sastry, Cherla - BSc, MSc, PhD
Smith, Margaret Anne (Peggy) - BSc, PhD
Spiecker, Heinrich - MSc, PhD
Stocks, Brian - BScF, MScF
Tenkate, Thomas - BASc, MASc, PhD
Tjong, Jimi - BASc, MASc, PhD
Vanderwel, Mark C. - BSc, MScF, PhD
Wang, Sen - BA, MSc, PhD
Webster, Kara L. - BSc, MSc, PhD
Wetzel, Suzanne - BScF, PhD
White, William A. - BSc, MA, PhD
Wilson, Edward - BScF, BScF, BMedSc
Woolford, Douglas - BSc, MMath, PhD

Forestry: Forest Conservation MFC

Master of Forest Conservation

Program Description

The professionally oriented 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 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 Faculty 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 Faculty.
- 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 FOR 3011H, FOR 1585H, or, in unusual circumstances, another related field course appropriate to the program and approved by the graduate coordinator.
- Expected chronology:
    - **Year 1: Fall**
        - FOR 3000H *Current Issues in Forest Conservation*
        - FOR 3001H *Biodiversity of Forest Organisms*
        - FOR 3002H *Applied Forest Ecology and Silviculture*
        - FOR 3003H *Economics of Forest Ecosystems*
        - FOR 3012H *Analytical Methods in Forestry*
    - **Year 1: Spring**
        - FOR 3004H *Forest Management Decision Support Systems*
        - FOR 3005H *Stresses in the Forest Environment*
        - FOR 3009H *Forest Conservation Biology*
        - FOR 3010H *Society and Forest Conservation*
    - **Year 1: Summer**
        - FOR 3007H *Internship in Forest Conservation*
        - FOR 3011H *International Forest Conservation Field Camp* **or** FOR 1585H *Urban Forest Conservation Field Camp* **or**, in unusual circumstances, alternate eligible field course (0.5 elective FCE)
    - **Year 2: Fall**
        - FOR 3006H *Case Study Analysis in Forest Management*
        - FOR 3008H *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 Faculty 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 Faculty.
- 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 FOR 3000H, FOR 3001H, and FOR 3012H in their first session. The remaining MFC course requirements can be completed in any order except that FOR 3007H must be taken in the final Summer session and FOR 3008H 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
        - FOR 3000H *Current Issues in Forest Conservation*
        - FOR 3001H *Biodiversity of Forest Organisms*
        - FOR 3002H *Applied Forest Ecology and Silviculture*
        - FOR 3003H *Economics of Forest Ecosystems*
        - FOR 3012H *Analytical Methods in Forestry*
        - FOR 3004H *Forest Management Decision Support Systems*
        - FOR 3005H *Stresses in the Forest Environment*
        - FOR 3009H *Forest Conservation Biology*
        - FOR 3010H *Society and Forest Conservation*
        - FOR 3006H *Case Study Analysis in Forest Management*
        - FOR 3007H *Internship in Forest Conservation*
        - FOR 3008H *Capstone Project in Forest Conservation*
    - 1.5 elective FCEs:
        - Elective course selection will include the successful completion of one field course (0.5 FCE) from either FOR 3011H *International Forest Conservation Field Camp* **or** FOR 1585H *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 Faculty 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 Faculty.
- 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 FOR 3001H *Biodiversity of Forest Organisms* and FOR 3012H *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 FOR 3011H *International Forest Conservation Field Camp*. The remaining MFC course requirements can be completed in any order except that FOR 3007H must be taken in the final Summer session and FOR 3008H 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:
  - FOR 3000H *Current Issues in Forest Conservation*
  - FOR 3001H *Biodiversity of Forest Organisms*
  - FOR 3002H *Applied Forest Ecology and Silviculture*
  - FOR 3003H *Economics of Forest Ecosystems*
  - FOR 3012H *Analytical Methods in Forestry*
  - FOR 3004H *Forest Management Decision Support Systems*
  - FOR 3005H *Stresses in the Forest Environment*
  - FOR 3009H *Forest Conservation Biology*
  - FOR 3010H *Society and Forest Conservation*
  - FOR 3006H *Case Study Analysis in Forest Management*
  - FOR 3007H *Internship in Forest Conservation*
  - FOR 3008H *Capstone Project in Forest Conservation*
- 1.5 elective FCEs:
  - Elective course selection will include the successful completion of one field course (0.5 FCE) from either FOR 3011H *International Forest Conservation Field Camp* **or** FOR 1585H *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 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 Faculty 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 Faculty 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:
    - FOR 1001H *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 Faculty 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 Faculty 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 Faculty of Forestry.
    - FOR 1001H *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 16 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 Faculty of Forestry.
    - FOR 1001H *Graduate Seminar* (0.5 FCE). Students require credit for FOR 1001H only once.
- Successful completion of a qualifying appraisal examination. The examination will be oral and will ordinarily be taken prior to the completion of 16 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 Faculty 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 Faculty of Forestry.
  - FOR 1001H *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 16 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 Faculty of Forestry offers the following courses. Courses in the 3000 number series are expected to be offered each year; 1000-level courses may be withdrawn in any particular year, depending on student interest/need and departmental resources. 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.

FOR 1001H[0]	Graduate Seminar (Credit/No Credit)
FOR 1270H	Forest Biomaterial Sciences: Fundamentals, Applications, and the Next Frontier
FOR 1288H	Design and Manufacturing of Biomaterials
FOR 1294H	Bioenergy and Biorefinery Technology
FOR 1412H	Natural Resource Management I (Directed Studies Course)
FOR 1413H	Natural Resource Management II (Directed Studies Course)
FOR 1416H	Forest Fire Danger Rating
FOR 1575H	Urban Forest Conservation
FOR 1585H	Urban Forest Conservation Field Camp
JFG 1610H	Sustainable Forest Management and Certification
FOR 1900H	Advanced Topics in Forestry I (Directed Studies Course)
FOR 1901H	Advanced Topics in Forestry II (Directed Studies Course)
FOR 3000H	Current Issues in Forest Conservation
FOR 3001H	Biodiversity of Forest Organisms
FOR 3002H	Applied Forest Ecology and Silviculture
FOR 3003H	Economics of Forest Ecosystems
FOR 3004H	Forest Management Decision Support Systems
FOR 3005H	Stresses in the Forest Environment
FOR 3006H	Case Study Analysis in Forest Management
FOR 3007H[+]	Internship in Forest Conservation (Credit/ No Credit)
FOR 3008H	Capstone Project in Forest Conservation
FOR 3009H	Forest Conservation Biology
FOR 3010H	Society and Forest Conservation
FOR 3011H	International Forest Conservation Field Camp (Credit/No Credit)
FOR 3012H	Analytical Methods in Forestry

[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
PhD

Collaborative Specializations

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

1. **Book History and Print Culture**
   - French Language and Literature, MA, PhD
2. **Sexual Diversity Studies**
   - French Language and Literature, MA, PhD
3. **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.

Our 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
Cahill, James - AB, MA, MA, PhD
Elkabas, Charles - BA, MA, PhD
Havercroft, Barbara - BA, MA, PhD
Holtz, Gregoire - LèsL, MA, DLitt
Kullmann, Dorothea - PhD
Le Huenen, Roland - DèsL, DLitt
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 (***Associate Chair, Graduate; Coordinator, Graduate Admissions and Funding***)
Portebois, Yannick - BA, MA, PhD
Riendeau, Pascal - BA, MA, PhD
Roberge, Yves - BA, MA, PhD
Steele, Jeffrey - BA, MA, PhD
Tcheuyap, Alexie - BA, MA, PhD (*Chair and Graduate Chair*)

Members Emeriti

Bertrand-Jennings, Chantal - LèsL, PhD
Bhatt, Parth - BA, MA, PhD
Boursier, Nicole - BLitt, DèsL, PhD
Cozea, Angela - BA, MA, 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
Grise, Catherine - BA, MA, PhD
Kerslake, Lawrence - PhD
Kushner, Eva - BA, MPH, PhD
Lehouck, Emile - BA, DèsL
Lord, Michel - BA, MA, PhD
McClelland, John Alan - PhD
Nesselroth, Peter - BA, MA, PhD
O'Neill-Karch, Mariel - BA, MA
Perron, Paul - 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
Cochelin, Isabelle - DipdESup, BA, MA, PhD
Colantoni, Laura - MA, PhD
Cuervo, Maria Cristina - PhD
Danesi, Marcel - BA, MA, PhD
Denoyelle, Corinne - BLitt, DLitt
Drouin, Sebastien - BA, MA, PhD
Hamlaoui, Fatima - PhD
Jennings, Eric - BA, MA, PhD
Kastronic, Laura - BA, MA, PhD
Kortenaar, Neil ten - BA, MA, PhD
Labrie, Normand - BA, MA, PhD
Lanza, Andrea - PhD
Liakin, Denis - BA, MA, PhD
Lory, Marie-Paule - BA, MS, MS, PhD
Massam, Diane - BA, MA, PhD
Nagy, Naomi - BA, PhD
Papillon, Joelle - PhD
Perez-Leroux, Ana Teresa - MA, PhD
Peterson, Jordan - BA, BA, PhD
Sarabia, Rosa - BA, PhD
Schallert, Joseph - PhD
Smyth, Ronald - BA, MSc, PhD
Spada, Nina - BA, MA, PhD
Theriault, Patrick - BA, MA, PhD
Thomson, Clive - BA, MA, PhD

French Language and Literature: French Language and Literature MA

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 or 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.

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 and/or linguistics, 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 or linguistics).
- Admission is based upon the evidence of the supporting letters and the applicant's academic record.

Program Requirements

- Prerequisite work, if necessary.
- Students in both literature and linguistics are required to complete **4.0 full-course equivalents (FCEs)** as follows:
    - Students in **literature** complete 1.5 FCEs in literature (the three graduate courses FRE 1202H, FRE 1203H, and FRE 1204H) and
        - 2.5 FCEs from the regular graduate course offerings; or

        - 2.0 FCEs and the 0.5-FCE FRE 5001H *Research Essay*, a memoire of approximately 35 pages; or
        - 1.5 FCEs and the 1.0-FCE FRE 5000Y *Research Essay*, a 65- to 75-page memoire.
    - Students in **linguistics** complete 1.5 FCEs in linguistics (the three graduate courses FRE 1103H, FRE 1104H, and FRE 1141H) and
        - 2.5 FCEs from the regular graduate offerings; or
        - 2.0 FCEs and the 0.5-FCE FRE 5001H *Research Essay*, a memoire of approximately 35 pages; or
        - 1.5 FCEs and the 1.0-FCE FRE 5000Y *Research Essay*, a 65- to 75-page memoire.
- 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 (FRE 1202H, FRE 1203H, and FRE 1204H) or the graduate seminars in linguistics (FRE 1103H, FRE 1104H, and FRE 1141H).
- 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 or the graduate seminars in linguistics during the first year of their programs.

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

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 and/or 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.

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 or 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 literature or 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 literature or linguistics.
- Applicants must satisfy the department that they are capable of independent research in French literature or 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 admitted on the basis of an appropriate **master's degree** must complete 3.5 full-course equivalents (FCEs) with 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.
    - Linguistics students must take FRE 1103H, FRE 1104H, and FRE 1141H unless already completed, and FRE 1201H.
    - Literature students must take FRE 1202H, FRE 1203H, and FRE 1204H, unless these courses or their equivalents have already been completed, and FRE 1201H.
- **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 admitted on the basis of a **master's degree**:
        - **linguistics** students must successfully prepare and submit a synthesis/analysis document and subsequently pass the oral part of the field examination in Year 2;
        - **literature** students must pass the field examination in Year 2.
    - **Linguistics** students will proceed to the oral field examination after they successfully complete the synthesis/analysis document (to be submitted by March 1 of Year 2), which is based on an annotated bibliography of 20 to 25 pages dealing with 50 publications concerning the most important theoretical, empirical, and methodological research in their fields (to be submitted by November 15 of Year 2).
    - **Literature** students will write an examination (by March 1 of Year 2), based on a written field examination document of 10 to 15 pages, plus bibliography (due by November 15 of Year 2), 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. Student will proceed to the oral part of the examination after they successfully complete the written part.
    - In the case of a failure on the **written examination** (by literature students) or on the synthesis/analysis document (by linguistics students), 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 examination be retaken in whole or in part 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 written part of the examination once only.
    - An **oral examination** (to be taken by April 30 of Year 2 by both literature and linguistics students) based on the thesis proposal, designed to test the student's readiness to proceed with thesis research. 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 field examination's written and oral components (literature students) or the synthesis/analysis document and oral field examination (linguistics students) 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/linguistics, with an average grade of at least an A– in the overall program. 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 or linguistics as appropriate.
- Applicants must satisfy the department that they are capable of independent research in French literature or 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 admitted on the basis of an appropriate bachelor's degree (direct entry) 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.
    - In Year 1, complete 4.0 FCEs with an average grade of at least an A–.
    - In Year 2, complete 3.5 FCEs with an average grade of at least an A–.
    - Linguistics students must take FRE 1103H, FRE 1104H, FRE 1141H, and FRE 1201H.
    - Literature students must take FRE 1202H, FRE 1203H, FRE 1204H, and FRE 1201H.
- **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 admitted by **direct entry**:
        - **linguistics** students must successfully prepare and submit a synthesis/analysis document and subsequently pass the oral part of the field examination in Year 3;
        - **literature** students must pass the field examination in Year 3.
    - **Linguistics** students will proceed to the oral field examination after they successfully complete the synthesis/analysis document (to be submitted by March 1 of Year 2), which is based on an annotated bibliography of 20 to 25 pages dealing with 50 publications concerning the most important theoretical, empirical, and methodological research in their fields (to be submitted by November 15 of Year 2).
    - **Literature** students will write an examination (by March 1 of Year 2), based on a written field examination document of 10 to 15 pages, plus bibliography (due by November 15 of Year 2), 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. Student will proceed to the oral part of the examination after they successfully complete the written part.
    - In the case of a failure on the **written examination** (by literature students) or on the synthesis/analysis document (by linguistics students), 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 examination be retaken in whole or in part 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 written part of the examination once only.
    - An **oral examination** (to be taken by April 30 of Year 2 by both literature and linguistics students) based on the thesis proposal, designed to test the student's readiness to proceed with thesis research. 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 field examination's written and oral components (literature students) or the synthesis/analysis document and oral field examination (linguistics students) 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

FRE 1103H	Séminaire de linguistique I : Phonétique et phonologie
FRE 1104H	Séminaire de linguistique II : Syntaxe
FRE 1141H	Séminaire de linguistique III : Linguistique expérimentale et linguistique de corpus

Literature Courses

FRE 1202H	Séminaire de littérature 1 : théorie
FRE 1203H	Séminaire de littérature 2 : période
FRE 1204H	Séminaire de littérature 3 : genre

Linguistic and Literature Courses

FRE 1201H	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

FRE 1125H	Morphologie et sémantique
FRE 1129H	Didactique du français langue seconde: quelle(s) méthode(s) pour quel(s) apprentissage(s)?
FRE 1132H	Problèmes de phonologie : les créoles à base lexicale française
FRE 1133H	L'acquisition du français langue première
FRE 1136H	Arguments, structures et représentations en français
FRE 1137H	Les mots complexes : études de cas en morphologie
FRE 1138H	Bilinguisme et acquisition du langage
FRE 1139H	La variation sociolinguistique en français parlé
FRE 1140H	La syllabe : études expérimentales et théoriques
FRE 1143H	The Evolution of the French Language in Society Throughout the Centuries
FRE 1144H	DP Structure and Adjunct Linearization in French and English
FRE 1145H	La variation linguistique en français hexagonal
FRE 1164H	Initiation au français médiéval

Literature Courses

FRE 1301H	Le merveilleux dans la littérature médiévale : le Voyage de Saint Brendan
FRE 1306H	Chanson de Roland
FRE 1311H	Sexe, mensonge et littérature : le *Roman de Renart*
FRE 1600H	L'humanité de l'homme
FRE 1601H	Histoires de l'homme
FRE 1612H	Satire et parole libre dans la littérature des XVIe et XVIIe siècles
FRE 1613H	Les récits de voyage dans la littérature française des XVIe et XVIIe siècles
FRE 1614H	Le roman aux XVIe et XVIIe siècles
FRE 1806H	Libertins, libertines et libertinage dans le roman du XVIIIe siècle
FRE 1813H	Littérature de contact et pensée anthropologique en France du XVIe au XVIIIe siècle
FRE 1815H	Théorie de l'histoire
FRE 1901H	Le récit de voyage au XIXe siècle
FRE 1905H	Baudelaire et la modernité symboliste (1850–1900)
FRE 1906H	Théories du rire et analyse littéraire du genre comique
FRE 1928H	Zola et le naturalisme : du « roman exprimental » au « roman nouveau »
FRE 1936Y	Littérature et société : Roman et Révolution
FRE 2001H	Fragment et fragmentation au XXe siècle
FRE 2004H	Formes et voies romanesques de l'extrême contemporain
FRE 2007H	Littérature et éthique : nouveaux textes, nouvelles problématiques
FRE 2010H	Proust : qu'est-ce que l'écriture
FRE 2035H	Autour de l'intime en France: les écrits contemporains des femmes
FRE 2036H	Configurations du genre sexuel dans la prose contemporaine des femmes
FRE 2037H	Écriture et folie
FRE 2039H	Roman et critique sociale aux XXe et XXIe siècles
FRE 2041H	Mémoires (Post)coloniales
FRE 2042H	Intertextualité
FRE 2078H	Altérité : formes et significations
FRE 2079H	Le Roman postmoderne
FRE 2080H	Le sujet en mouvement : migrant et transnational
FRE 2092H	La genèse et personnage
FRE 2100H	Du texte à l'image : Images photographiques et cinématographiques dans quelques textes contemporains
FRE 2103H	La nouvelle québécoise contemporaine : l'émergence des voix féminines
FRE 2105H	Écritures du moi: de la représentation textuelle à la représentation visuelle du sujet écrivant
FRE 2107H	Le récit fantastique québécois : formes et transformations
FRE 3000H	Du dialogue au dialogique
FRE 3001H	Poésie et philosophie : du devoir de bavarder de notre Être-là
FRE 3002H	Pourquoi la poésie
FRE 3004H	Rencontres et compagnonnages au coeur de l'oeuvre

FRE 3005H	Méthodologie de l'analyse du dialogue romanesque

Other Courses

FRE 4000Y	Reading Course
FRE 4001H	Reading Course
FRE 4002H	Reading Course
FRE 5000Y[0]	Research Essay (MA)
FRE 5001H[0]	Research Essay (MA)

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

Joint Courses

JFC 1255H	Aspects du Structuralisme
JFC 1813H	Littérature de contact et pensée anthropologique en France du XVIe au XVIIIe siècle / Literature of Contact and Anthropological Thought, 16th–18th Century
JFC 5025H	Feminism and Postmodernism: Theory and Practice
JFC 5056H	Autobiography, Photography, Narrativity
JFC 5105H	Collections of Knowledge: Encyclopedism and Travel Literature in Early Modern Europe (1500–1800)
JFC 5120H	The Gift: Stories of a Paradigm
JFC 5129H	Peformative Autobiographical Acts: Painted and Photographic Representations of Self in Personal and Political Testimonials
JFF 1100H	Surréalisme et cinéma / Surrealism and French Cinema
JFF 1101H	The Art of Exploration: How to Think the World
JIF 1000H	Romance Philology I
JRL 1110H	Second Language Acquisition of Romance Languages
JRL 1111H	Second Language Acquisition of Romance Phonology

Cross-Listed Courses

Book History and Print Culture

BKS 1001H	Introduction to Book History
BKS 1002H	Book History in Practice
BKS 2000H	Advanced Seminar in Book History and Print Culture

Medieval Studies

MST 3154H	Book History and Print Culture
MST 3155H	Chrétien de Troyes, Perceval

Sexual Diversity Studies

SDS 1000H	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

Urban Design Studies

MUDS (admissions have been suspended and the program will close in August 2020)

Collaborative Specializations

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

1. **Community Development**
   - Geography, MA
   - Planning, MScPl
2. **Contemporary East and Southeast Asian Studies**
   - Geography, MA
   - Planning, MScPl
3. **Development Policy and Power**
   - Geography, MA
4. **Diaspora and Transnational Studies**
   - Geography, MA, MSc, PhD
5. **Environment and Health**
   - Geography, MA, MSc, PhD
   - Planning, MScPl, PhD
6. **Environmental Studies**
   - Geography, MA, MSc, PhD
   - Planning, MScPl, PhD
7. **Ethnic and Pluralism Studies**
   - Geography, MA, PhD
8. **Food Studies**
   - Geography, MA, MSc, PhD
9. **Global Health**
   - Geography, MA, MSc, PhD
   - Planning, MScPl, PhD
10. **Indigenous Health**
    - Geography, MA, PhD
11. **Jewish Studies**
    - Geography, PhD
12. **Sexual Diversity Studies**
    - Geography, MA, PhD
13. **South Asian Studies**
    - Geography, MA, PhD
14. **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

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University of Toronto
Sidney Smith Hall
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Toronto, Ontario M5S 3G3
Canada

Geography and Planning: Graduate Faculty

Full Members

Abizaid, Christian - MA, PhD
Adams, Matthew - BES, MES, PhD
Archontitsis, Georgios - BSc, MSc, DScA
Bathelt, Harald - MA, PhD, CRC
Besco, Laurel - BES, MA
Boland, Alana - BA, MA, PhD
Buckley, Michelle - BES, MES, PhD
Buliung, Ronald - MA, 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**)
Duval, Timothy - BSc, MSc, PhD
Ekers, Mike - BES, MES, PhD
Farber, Steven - BA, MA, PhD
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
Han, Ju Hui - BA, PhD
Harvey, Leslie - 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
Kepe, Thembela - MS, PhD
Klenk, Nicole - BS, MSc, PhD
Kuuire, Vincent Zubedaar - BA, MA, PhD
Lehnherr, Igor - BSc, 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
Mahtani, Minelle - BA, 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
Narayanareddy, Rajyashree - BA, MEc, MS, PhD
Olive, Andrea - PhD
Poland, Blake - BA, PhD
Prudham, Scott - BASc, BA, MA, PhD
Rankin, Katharine - BA, MA, PhD
Robinson, John - BA, BA, MES, MES, PhD, PhD,
Ruddick, Susan - PhD
Siemiatycki, Matthew - BA, MSc, PhD
Silvey, Rachel - BA, MA, PhD
Simpson, Myrna - BS, DPhil
Smith, C.Tattersall - BA, MS, PhD
Sorensen, Andre - BFA, MSc, PhD
Wakefield, Sarah - BA, MA, PhD
Walks, Alan - BA, MA, PhD
Wells, Mathew - BS, DPhil
Widener, Michael - PhD
Wilson, Kathleen - AB, AM, PhD

Members Emeriti

Bourne, Larry - BA, MA, PhD
Britton, John - BA, MA, PhD
Bunce, Michael - BA, PhD
Gad, Gunter - DPhil, PhD
Galloway, John - BA, MA, PhD
Greenwood, Brian - BSc, PhD
Price, Anthony - BSc, MSc, PhD
Relph, Edward - BA, MPH, PhD
Savan, Beth - BSc, PhD
Whitney, Joseph - BA, PhD

Associate Members

Allahwala, M. Ahmed - MA, PhD
Boyes, Donald - BS, MA, PhD
Brail, Shauna - BA, MA, PhD
Brown, Laura - BSc, MSc, PhD
Campsie, Philippa - BA, MSc
Dowler, Robert - BA, MSc
Drummond, Lisa - BA, MA, PhD
Farrow, John - MBA
Georgis, Dina - PhD
Laliberte, Nicole - BA, MS, PhD
Leydon, Joseph - BA, MA, PhD
Liu, Jingxian - BSc, MSc, PhD
Makuch, Stanley - LLB, BA, LLM
Murck, Barbara - AB, PhD
Porter, Trevor - BSc, PhD
Roberts, David - DA
Sharpe, Erin - BPHE, MA, PhD
Sotomayor, Luisa - PhD
Teelucksingh, Cheryl - BA, MA, PhD
Wood, Patricia - BA, PhD

Geography and Planning: Geography MA, MSc

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 (RST 9999Y), in conjunction with at least the equivalent of **1.5 FCEs** in coursework including:
    - 0.5 FCE core course GGR 1105H *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 (GGR 1100Y, 1.0 FCE), in conjunction with the equivalent of **3.0 graduate FCEs** in coursework including:
    - 0.5 FCE core course GGR 1105H *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

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 (RST 9999Y), in conjunction with at least the equivalent of **1.5 FCEs** in coursework including:
    - 0.5 FCE core course GGR 1200H *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 (GGR 1100Y; 1.0 FCE), in conjunction with the equivalent of **3.0 graduate FCEs** in coursework including:
    - 0.5 FCE core course GGR 1200H *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

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 GGR 1200H *Physical Geography Core Course.* Students who have taken GGR 1200H 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.

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 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 GGR 1200H *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

Fields:
Environmental Geography and Resource Management
Urban/Economic Geography
Historical/Social/Cultural 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 GGR 1110H *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 GGR 1110H *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.

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 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

GGR 1105H	Human Geography Core Course
GGR 1110H	Issues in Geographic Thought and Practice
GGR 1200H	Physical Geography Core Course

Research Methods Courses

JPG 1111H	Advanced Research Design
JPG 1140H	Discourse Analysis Methodology
JPG 1400H	Advanced Quantitative Methods

Individual Topics Courses

GGR 1149H,Y	Readings in Selected Topics
GGR 2149H,Y	Readings in Selected Topics
GGR 2150H,Y	Advanced Seminar in Selected Topics
JPG 2150H	Advanced Seminars in Selected Topics
GGR 2151H	Advanced Seminars in Selected Topics II
JPG 2151H	Advanced Seminars in Selected Topics II

Physical Geography

GGR 1202 H	Sedimentation and Fluvial Geomorphology
GGR 1211H	The Global Carbon Cycle: From Rubisco to the Earth's Mantle
JGE 1212H	Fate of Contaminants in the Environment
GGR 1214H	Global Ecology and Biogeochemical Cycles
GGR 1215H	Advanced Watershed Hydroecology
GGR 1216H	Advanced Biogeochemical Processes
GGR 1217H	Arctic Environments
GGR 1218H	Quantitative, Open-Source Methods in Physical Geography Research
GGR 1302H	Advanced Hydrology and Water Quality
GGR 1303H	Paleoecology and Paleoclimatology
GGR 1315H	The Cryosphere

Environmental and Resource Geography

GGR 1404H	Global Warming
GGR 1406H	Energy Supply and Use
GGR 1407H	Efficient Use of Energy
GGR 1408H	Carbon-Free Energy
JPG 1410H	Institutional and Organizational Ecology
GGR 1411H	Nature and Justice in the Anthropocene
JGE 1413H	Workshop in Environmental Impact Assessment
JPG 1415H	Global Environmental Justice and Social Movements
JPG 1419H	Aboriginal/Canadian Relations in Environmental and Resource Management
JPG 1421H	Health in Urban Environments
JPG 1423H	Political Ecology of the Global Agrifood System
JPG 1424H	Comparative Farming Systems
JGE 1425H	Livelihoods, Poverty, and Environment in the Developing Countries
JPG 1426H	Natural Resources, Difference, and Conflict
JPG 1427H	The (Re)Localization of Food Production: Debates and Controversies
JPG 1429H	Political Ecology of Food and Agriculture

Urban and Economic Geography

JPG 1428H	Managing Urban Ecosystems
JPG 1501H	The Political Economy of Cities
JPG 1502H	Global Urbanism and Cities of the Global South
JPG 1504H	Institutionalism and Cities: Space, Governance, Property and Power
JPG 1507H	Housing Markets and Housing Policy Analysis
JPG 1508H	Planning for the Urban Poor in Developing Countries
JPG 1510H	Recent Debates on Urban Form
JPG 1512H	Place, Politics, and the Urban
JPG 1516H	Declining Cities
JPG 1518H	Sustainability and Urban Communities
JPG 1554H	Transportation and Urban Form
JPG 1558H	The History and Geography of Cycles and Cycling
JPG 1605H	The Post-Industrial City
JPG 1607H	Geography of Competition
JGE 1609H	Cities, Industry, and the Environment
GGR 1610H	Geography of Finance and Financial Crisis
JPG 1615H	Planning and the Social Economy
JPG 1616H	The Cultural Economy
JPG 1617H	Organization of Economies and Cities
GGR 1620H	Institutional and Evolutionary Economic Geography
JPG 1660H	Regional Dynamics
JPG 1670H	Regional Economic Analysis
JPG 1809H	Spaces of Work: Value, Identity, Agency, Justice
JPG 1812Y	Planning for Change: Community Development in Practice

Historical, Social, and Cultural Geography

JPG 1503H	Space, Time, Revolution
JPG 1505H	The Multicultural City: Diversity, Policy, and Planning
JPG 1506H	State/Space/Difference: Understanding the New Social Geography of the State
JPG 1511H	The Commons: Geography, Planning, Politics
JPG 1520H	Contested Geographies of Class Formation
JPG 1672H	Land and Justice
GGR 1705H	Historical Geographies of Modernity
GGR 1706H	Geographies of Religion and Secularism
JPG 1706H	Violence and Security
GGR 1707H	Situating Identities: Geography and Autobiography
GGR 1714H	Geographies of Citizenship
JPG 1802H	Political Spaces I
JPG 1804H	Space, Power, and Geography: Understanding Spatiality
JPG 1805H	Transnationalism, Diaspora, and Gender
GGR 1806H	Feminist Geographies
GGR 1807H	Geographies of Postcoloniality and Development: Exploring the 'Infrastructure Turn'
GGR 1811H	Troubling Militarism: Space, Affect, Economy
JPG 1813H	Planning and Social Policy
JPG 1814H	Cities and Immigrants
JPG 1815H	Political Economy, the Body, and Health
GGR 1821H	China Development Seminar

Geographical Information Analysis

JPG 1906H	Geographic Information Systems
GGR 1911H	Remote Sensing
GGR 1912H	Advanced Remote Sensing
JPG 1914H	Geographic Information Systems Research Project
GGR 1921H	Land/Geographic Information Systems
GGR 1922H	Topics in Geographical Information Science

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 PLA 4444Y **internship**, taken over two years, as follows:
  - 4.5 FCEs in core courses
  - 3.5 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
  - PLA 4444H *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 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

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:
    1. 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
    2. 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

PLA 1101H	Issues in Planning History, Thought, and Practice
PLA 1102H	Planning Decision Methods I
PLA 1103H	Legal Basis of Planning
PLA 1105H	Planning Decision Methods II
PLA 1106H	Workshop in Planning Practice
PLA 1107Y	Current Issues Paper
PLA 1520H	Project Management and Conflict Resolution for Planners
PLA 1656H	Land Use Planning: Principles and Practice

Core Courses for the PhD in Planning

JPG 1111H	Advanced Research Design (or a methods course in a related department subject to the approval of the supervisor)
PLA 2000H	Advanced Planning Theory
PLA 2001H	Planning Colloquium (CR/NCR)

Elective Courses

JPG 1140H	Discourse Analysis Methodology
PLA 1149H	Independent Study
PLA 1150H	Planning Field Trip Course
JPG 1400H	Advanced Quantitative Methods
JPG 1407H	Efficient Use of Energy
JPG 1410H	Institutional and Organizational Ecology
JGE 1413H	Workshop in Environmental Impact Assessment
JPG 1415H	Global Environmental Justice and Social Movements
JPG 1416H	Environmental Consequences of Land Use Change
JPG 1418H	Rural Land Use Planning
JPG 1419H	Aboriginal/Canadian Relations in Environmental and Resource Management
JGE 1420H	Urban Waste Management: an International Perspective
JPG 1421H	Health in Urban Environments
JPG 1423H	Political Ecology of the Global Agrifood System
JPG 1424H	Comparative Farming Systems
JPG 1426H	Natural Resources, Difference, and Conflict
JPG 1427H	The (Re)Localization of Food Production: Debates and Controversies
JPG 1428H	Managing Urban Ecosystems
JPG 1429H	Political Ecology of Food and Agriculture
JPG 1501H	The Political Economy of Cities
JPG 1502H	Global Urbanism and Cities of the Global South
JPG 1503H	Space, Time, Revolution
JPG 1504H	Institutionalism and Cities: Space, Governance, Property, and Power
JPG 1505H	The Multicultural City: Diversity, Policy, and Planning
JPG 1506H	State/Space/Difference: Understanding the New Social Geography of the State
JPG 1507H	Housing Markets and Housing Policy Analysis
JPG 1508H	Planning for the Urban Poor in Developing Countries
JPG 1510H	Recent Debates on Urban Form
PLA 1510H	Special Topics in Planning
JPG 1511H	The Commons: Geography, Planning, Politics
JPG 1512H	Place, Politics, and the Urban
PLA 1514H	The Role of the Planner
JPG 1516H	Declining Cities
PLA 1516H	Special Topics in Planning II
PLA 1517H	Special Topics in Planning III
JPG 1518H	Sustainability and Urban Communities
PLA 1518H	City Building—Practice and Experience in Toronto and Other World Cities
PLA 1519H	Planning and Governance
PLA 1520H	Project Management and Conflict Resolution for Planners
PLA 1551H	Policy Analysis
PLA 1552H	City Planning and Management
PLA 1553H	Urban Transportation Policy Analysis
JPG 1554H	Transportation and Urban Form
JPG 1558H	The History and Geography of Cycles and Cycling
PLA 1601H	Environmental Planning and Policy
JPG 1605H	The Post-Industrial City
JPG 1607H	Geography of Competition
JPG 1615H	Planning and the Social Economy
JPG 1616H	The Cultural Economy
JPG 1617H	Organization of Economies and Cities
PLA 1650H	Urban Design: History Theory Criticism
PLA 1651H	Planning and Real Estate Development
PLA 1652H	Introductory Studio in Urban Design and Planning
PLA 1653H	Advanced Studio in Urban Design and Planning
PLA 1654H	Urban Design Research Methods
PLA 1655H	Urban Design and Development Controls
PLA 1656H	Land Use Planning: Principles and Practice
JPG 1660H	Regional Dynamics
JPG 1670H	Regional Economic Analysis
JPG 1672H	Land and Justice
PLA 1702H	Pedestrians, Streets, and Public Space
PLA 1703H	Transportation Planning and Infrastructure
JPG 1706H	Violence and Security
PLA 1751H	Public Finance for Planners
PLA 1801H	Urban Infrastructure Planning
JPG 1802H	Political Spaces I
JPG 1804H	Space, Power, and Geography: Understanding Spatiality
JPG 1805H	Transnationalism, Diaspora, and Gender
GGR 1807H	Geographies of Postcoloniality and Development: Exploring the 'Infrastructure Turn'
JPG 1809H	Spaces of Work: Value, Identity, Agency, Justice
JPG 1810H	Globalization and Postmodernism
JPG 1812Y	Planning for Change: Community Development in Practice
JPG 1813H	Planning and Social Policy
JPG 1814H	Cities and Immigrants
JPG 1906H	Geographic Information Systems
JPG 1909H	Social Survey Methods
JPG 1914H	Geographic Information Systems Research Project
JPG 2150H	Advanced Seminars in Selected Topics
JPG 2151H	Advanced Seminars in Selected Topics II
PLA 4444H	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.)

Geography and Planning: Urban Design Studies MUDS

Master of Urban Design Studies

Admissions to the Master of Urban Design Studies have been suspended and the program will close in August 2020.

Students are admitted via one of three routes: 1) with a master's degree in a professional field; 2) with a bachelor's degree (four- or five-year) in planning, architecture, or landscape architecture; 3) with a bachelor's degree (four- or five-year) in any discipline plus evidence of significant professional experience.

The Master of Urban Design Studies program can be completed on a full-time basis only.

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.
- Applicants with prior degrees in a range of disciplines including planning, geography, other social sciences, the design disciplines, business administration, and law are encouraged to apply. Students are admitted via one of three routes:
    - **Master's degree in a professional field** such as planning, architecture, landscape architecture, business administration, and law; an average equivalent to at least at University of Toronto B+ in graduate studies is required.
    - **Bachelor's degree (four- or five-year) in planning, architecture, or landscape architecture,** with a strong design orientation; an average equivalent to at least a University of Toronto B+ (or upper second class) in the final year is required.
    - **Bachelor's degree (four- or five-year) in any discipline plus evidence of significant professional experience** (normally at least five years) in an area related to urban design and planning; an average equivalent to at least a University of Toronto B+ in the final year of the undergraduate program is required.

Program Requirements

- **Students entering with significant prior design workshop/studio experience** (as determined by the admissions committee) must complete a core program of **4.0 full-course equivalents (FCEs)** as follows:
    - 2.5 FCEs
    - 1.5 FCEs chosen from electives given within the Program in Planning; the Faculty of Architecture, Landscape, and Design; and from the offerings of other graduate units.
- **Students entering without significant prior design workshop/studio experience** must complete **5.5 FCEs** as follows:
    - 2.5 FCEs
    - 2.5 FCEs chosen from electives given within the Program in Planning; the Faculty of Architecture, Landscape, and Design; and from the offerings of other graduate units.
    - PLA 1652H *Introductory Studio in Urban Design and Planning*

Program Length

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

Time Limit

3 years full-time

Geography and Planning: Urban Design Studies MUDS Courses

Core Courses

The core program is composed of five half-course equivalents (six half-course equivalents for those entering the program without significant prior design workshop/studio experience) that encompass the practical, theoretical, and methodological aspects of urban design.

Course sequence for the core program:

First Session

PLA 1650H/ URD 1031H	Urban Design: History Theory Criticism
PLA 1652H	Introductory Studio in Urban Design and Planning (students without significant design workshop/studio experience must take PLA 1652H)
PLA 1654H	Urban Design Research Methods

Plus one half-course elective, or two half-course electives if the student is exempted from PLA 1652H.

Second Session

PLA 1653Y	Advanced Studio in Urban Design and Planning
PLA 1655H	Urban Design and Development

Plus one half-course elective.

Electives

Elective courses may be chosen from the following:

JPG 1501H	The Political Economy of Cities
JPG 1510H	Recent Debates on Urban Form
JPG 1512H	Place, Politics, and the Urban
JPG 1554H	Transportation and Urban Form
JPG 1615H	Planning and the Social Economy
PLA 1651H	Planning and Real Estate Development
JPG 1804H	Space, Power, and Geography: Understanding Spatiality
JPG 1914H	Spatial Information Systems
URD 1012H	Urban Design Studio Options
URD 1021H	Urban Design Computation
URD 1032H	Urban Design in the History of the Post-Industrial World
URD 1033H	The City and the Text
URD 2041H	Business and Land Use Planning in Real Estate Development
JPG 2150H	Advanced Seminars in Selected Topics

MUDS students may also select other electives, subject to the approval of the Director, Program in Planning, and the Coordinator of the MUDS program. Courses with a URD designation are offered through the Faculty of Architecture, Landscape, and Design.

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

German Literature, Culture and Theory

PhD	*Field:* German Literature, Culture and Theory

Collaborative Specializations

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

1. **Book History and Print Culture**
   - **Germanic Languages and Literatures, MA**
   - German Literature, Culture and Theory, PhD
2. **Diaspora and Transnational Studies**
   - Germanic Languages and Literatures, MA
   - German Literature, Culture and Theory, PhD
3. **Jewish Studies**
   - Germanic Languages and Literatures, MA
   - German Literature, Culture and Theory, PhD
4. **Women and Gender Studies**
   - Germanic Languages and Literatures, MA
   - German 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: http://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
Shternshis, Anna - MA, PhD
Soldovieri, Stefan - BA, MA, PhD
Stock, Markus - MA, PhD (*Chair and Graduate Chair*)
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
Wetzel, Heinz - DPhil

Associate Members

Bergen, Doris - MA, PhD
Comay, Rebecca - BA, MA, PhD
DiCenso, James - BA, MA, PhD
Jenkins, Jennifer - BA, MA, PhD
Kim, Hang-Sun - AB, MA, PhD
Lahusen, Thomas - MA, PhD

Levy, Evonne - MFA, PhD
Retallack, James - BA, DPhil
Revermann, Martin - 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 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 programing, 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 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 complete **3.5 FCEs** including:
  - GER 1000H *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 complete **3.5 FCEs** including:
  - GER 1000H *German Studies Seminar: Culture, Theory, Text* (0.5 FCE)
  - CJS 1000H *Core Methods Seminar in Jewish Studies* (0.5 FCE)
  - GER 1050H *Methods and Texts in Yiddish Studies* (0.5 FCE)
  - GER 2050Y *Research Paper in Yiddish Studies* (1.0 FCE)

    - The remaining elective courses (1.0 FCE) are 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: German Literature, Culture and Theory PhD

Doctor of Philosophy

Program Description

The PhD Program in German 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 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:
    - GER 1000H *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 three components:
    - The proficiency exam is based on a student-created and committee-approved, comprehensive list of works.
    - The focus exam is based on a student-created and committee-approved list of works organized around a genre, topic, author, or theoretical issue.
    - The research field paper on an approved topic must be distinct from the focus exam topic and reference methodological/theoretical readings essential to gaining a deep understanding of the research area of the future thesis. It is completed during the Summer session following the first two portions of the qualifying examination.
- Students must pass a *thesis field review* and make an oral presentation of their thesis.
- Students must submit the **doctoral thesis** and 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 FCEs**, including:
  - GER 1000H 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 three components:
  - The proficiency exam is based on a student-created and committee-approved, comprehensive list of works.
  - The focus exam is based on a student-created and committee-approved list of works organized around a genre, topic, author, or theoretical issue.
  - The research field paper on an approved topic must be distinct from the focus exam topic and reference methodological/theoretical readings essential to gaining a deep understanding of the research area of the future thesis. It is completed during the Summer session following the first two portions of the qualifying examination.
- Students must pass a **thesis field review** and make an oral presentation of their thesis.
- Students must submit the **doctoral thesis** and 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 German 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.

GER 1000H	German Studies Seminar: Culture, Theory, Text
GER 1050H	Methods and Texts in Yiddish Studies
GER 1051Y	Yiddish Language and Literature for German Speakers
GER 1200H	Middle High German
GER 1210H	Medieval German Romance: Tristan und Isolde
GER 1220H	Medieval Arthurian Romance
GER 1400H	From Real to Virtual Shtetl: Jewish Culture in Russia, 1917–2010
GER 1470H	Goethe in Context
GER 1480H	Goethe's Faust
GER 1485H	Goethe's Novels
GER 1505H	Romanticism
GER 1530H	Heine and Critical Theory
GER 1540H	Revolutions
GER 1550H	Origins: Myths of Beginning in German Literature and Thought
GER 1661H	Modernism in Context
GER 1665H	Modernism and the Other

GER 1690H	Theatre in the Weimar Republic
GER 1710H	Weimar Cinema
GER 1722H	Kafka
GER 1730H	Travel Writing
GER 1735H	Transnational Literatures
GER 1752H	Germany's Colonial Imaginary
GER 1770H	Reviewing the 50s: German Cinemas under Reconstruction
GER 1771H	Topics in German Cinema Studies
GER 1772H	The Politics of the Non-fiction Film
GER 1775H	Cinemas of Migration
GER 1777H	Locations of East German Cinema
GER 1780H	Topics in German Visual Culture
GER 1785H	Remaking the Movies in German Cinemas
GER 1820H	The Learning and Teaching of German
GER 1821H	Reading Course in Second Language Acquisition
GER 1860H	Introduction to Critical Theory
GER 1880H	Gottfried Keller and the Politics of Poetic Realism in a Minor Key
GER 2000H,Y	Reading Course in Approved Field
GER 2050Y	Research Paper in Yiddish Studies
GER 3000H	Trends in German Literature
GER 6000H	Reading German for Graduate Students
JGC 1660H	Modernism and the Other
JGC 1740H	Humans and Things
JGC 1850H	Derrida, the German, the Jew
JGC 1855H	Critical Theory in Context: The French-German Connection
JGF 1733H	Autobiographical Documentary: History, Alterity, and Performativity

Global Affairs and Public Policy

Global Affairs and Public Policy: Introduction

Faculty Affiliation

Arts and Science

Degree Programs Offered

Global Affairs

MGA	*Emphases:* Development Innovation Policy Justice Markets Security
	Dual Degree Program: MGA (University of Toronto) / MPP (Sciences Po, Paris)

Public Policy

MPP

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:

1. **Contemporary East and Southeast Asian Studies**
   - Global Affairs, MGA
   - Public Policy, MPP
2. **Environmental Studies**
   - Global Affairs, MGA
   - Public Policy, MPP
3. **Ethnic and Pluralism Studies**
   - Global Affairs, MGA
   - Public Policy, MPP
4. **Public Health Policy**
   - Public Policy, MPP
5. **Sexual Diversity Studies**
   - Public Policy, MPP

Overview

The **Master of Global Affairs (MGA)** program will equip 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. The MGA integrates the study of global institutions, global civil society, and the global economy and markets into the same program, and requires that students learn about each area and about the interconnections between them. In offering a curriculum that provides both breadth and depth, the MGA draws on the scholarly strength of faculty from a range of disciplines and subject areas.

The professional two-year **Master of Public Policy (MPP)** program is highly interdisciplinary and bridges the spheres of domestic policy and international or global policy, providing comprehensive coverage of the broad sweep of complex issues facing modern governments and other policymaking organizations.

Contact and Address

Web: www.munkschool.utoronto.ca/mga
Email: mga@utoronto.ca
Telephone: (416) 946-8917
Fax: (416) 946-8915

Munk School of Global Affairs and Public Policy
University of Toronto
315 Bloor Street West
Toronto, Ontario M5S 0A7
Canada

Web: http://publicpolicy.utoronto.ca
Email: public.policy@utoronto.ca
Telephone: (416) 978-5120
Fax: (416) 978-5079

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

Anand, Anita - BA, LLB, MA, LLM
Baker, Michael - BComm, MA, PhD
Benjamin, Dwayne - BSc, MA, PhD
Bernstein, Steven - PhD
Bertoldi, Nancy - BA, MA, PhD
Bobonis, Gustavo - BA, PhD
Breznitz, Dan - BA, PhD
Brunnée, Jutta - LLM, SJD
Cameron, David - PhD, FRSC
Deibert, Ronald - BA, MA, PhD
Frazer, Garth - BE, BM, MPH, MA, PhD
Friedmann, Harriet - AB, MA, PhD
Goh, M Cynthia - PhD
Green, Andrew - LLB, BA, LLM, MA, PhD
Haddow, Rodney - BA, MSc, PhD

Hall, Jonathan - BA, PhD
Hansen, Randall - BA, MPH, PhD, CRC (***Interim Director, July 1 to Dec. 31, 2018***)
Heath, Joseph - BA, MA, PhD, FRSC
Hoffmann, Matthew - BSc, PhD
Karney, Bryan - BSc, MEng, PhD, Erwin Edward Hart Professor, PEng
Kirton, John - BA, MA, PhD
Kohler, Jillian - BA, MA, PhD
Kroft, Kory - BA, MA, PhD
Levi, Ron - BCL, LLB, LLM, SJD
Macklin, Audrey - BSc, LLB, LLM
MacLean, Heather L - BASc, MASc, MBA, PhD, PEng
Marchildon, Gregory - PhD
McGahan, Anita - BA, MA, MBA, PhD
Miller, Eric - BASc, MASc, PhD
Mundy, Karen - BA, MA, PhD
Nevitte, Neil - BA, MA, PhD, FRSC
Orbinski, James - BSc, MA, MD
Oreopoulos, Philip - BA, MA, PhD
Ornston, Darius - BA, MA, PhD
Pauly, Louis - BA, MA, MSc, MSc, PhD, CRC, FRSC
Peng, Ito - BSW, BSc, MA, PhD
Perlman, Michal - BA, MA, PhD
Pesando, James - BA, MA, PhD
Polanyi, John - MSc, PhD, DSc, FRSC, FRS
Pruessen, Ronald - BA, MA, PhD
Reeve, Douglas - BSc, MASc, PhD
Reitz, Jeffrey - PhD
Rittich, Kerry - BAMus, LLB, SJD
Robinson, John - BA, BA, MES, MES, PhD, PhD,
Schieman, Scott - BA, MA, PhD
Shachar, Ayelet - LLB, BA, LLM, SJD
Smart, Michael - BA, BA, PhD
Stabile, Mark - BA, MA, PhD
Stein, Janice - BA, MA, PhD, OC, FRSC
Vipond, Robert - BA, MA, AM, PhD
Wark, Wesley - BA, BA, MA, PhD
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
Zuberi, Daniyal - BA, MSc, PhD

Members Emeriti

Donnelly, Michael - BSc, MA, PhD
Gunderson, Morley - BA, MA, PhD
Myles, John - BA, BTh, MA, PhD
Stefanovic, Ingrid - BA, MA, PhD

Associate Members

Breznitz, Shiri - BA, MA, PhD
Eli, Shari - BA, PhD
Hejazi, Walid - BA, MA, PhD
Lindsay, Jon - BS, MS, PhD
Manger, Mark - DrRerPol
Oschinski, Matthias - MA, MEc, PhD
Stark, Andrew - BA, MSc, AM, PhD
Triadafilopoulos, Phil (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.

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+.
- Open to all disciplinary backgrounds.

Program Requirements

This is a two-year program taken on a full-time basis over 20 consecutive months.

- Students must complete **8.5 full-course equivalents (FCEs)**, as follows:
  - 4.5 FCEs in core courses in Year 1 (nine half-course equivalents)
  - 0.5 FCE: GLA 1007H *Global Internship* in the Summer session between Years 1 and 2
  - 1.0 FCE in core courses in Year 2: GLA 2000H *Capstone Seminar* and GLA 1009H *Financial Management for Global Organizations*
  - additional 2.5 FCEs in Year 2 (five half courses) at the 2000 level from the Munk School.
- Students have the option of completing an emphasis as part of their degree program. In order for students to graduate, they must complete at least 1.5 FCEs in that emphasis; see details below. Students may use courses taken in other departments towards their chosen emphasis with the approval of the MGA Program Director. Verification of completion of an emphasis will be at the discretion of the MGA Program Director. Students must formally request that the emphasis be listed on their transcript.

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:

GLA 2002H; GLA 2014H; GLA 2019H; GLA 2028H; GLA 2060H; GLA 2061H GLA 2062H; and JCR 1000Y.

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:

GLA 2014H; GLA 2018H; GLA 2021H; GLA 2080H; GLA 2081H; and GLA 2082H.

Emphasis: Justice

MGA students who wish to complete an emphasis in Justice must successfully complete **1.5 full-course equivalents (FCEs)** from the following list:

GLA 2013H; GLA 2016H; GLA 2023H; GLA 2066H; GLA 2067H; and GLA 2068H.

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:

GLA 2001H; GLA 2006H; GLA 2012H; GLA 2015H; GLA 2025H; GLA 2069H; GLA 2070H; and GLA 2071H.

Emphasis: Security

MGA students who wish to complete an emphasis in Security must successfully complete **1.5 full-course equivalents (FCEs)** from the following list:

GLA2010H; GLA2024H; GLA2030H; GLA 2063H; GLA 2064H; GLA 2065H

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 and the Sciences Po Master of Public Policy (MPP) programs. In Year 1, students complete MPP coursework in France at Sciences Po. In the summer 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, complete a Grand Oral Exam as part of the dual degree requirements.

Contact

Master of Global Affairs / Master of Public Policy Program
Web: https://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.riviereduf our@sciencespo.fr

Application Process

- Applicants must apply through the Sciences Po admission 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 register in 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:
    - TOEFL: 100/120 overall;
    - IELTS (International English language testing system): 7, with at least 6.5 for each component;

    - Cambridge English: Advanced;
    - TOEIC: Listening and Reading: 945/990; Speaking and Writing: 360/400;
    - PTE (Pearson Test of English) Academic: 68.
- 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.
- The program welcomes applicants from all disciplinary backgrounds.

Global Affairs and Public Policy: Global Affairs MGA Courses

Year 1

Core Courses (Required)

GLA 1001H	Macroeconomics: Markets, Institutions, and Growth
GLA 1003H	Global Security
GLA 1004H	Global Policy Analysis
GLA 1005H	Decision Making and Strategic Thinking in the Global System
GLA 1006H	International Legal Challenges
GLA 1010H	Microeconomics for Global Affairs
GLA 1011H	Global Innovation Policy
GLA 1012H	Statistics for Global Affairs
GLA 1014H	Global Development

Summer Course (Required)

GLA 1007H	Global Internship

Year 2

Core Courses (Required)

GLA 1009H	Financial Management for Global Organizations (not required for students in the Combined Degree Program: Management, MBA / MGA)
GLA 2000H	Capstone Seminar

Elective Courses (Subject to Change)

GLA 1013H	Logic of Global Inquiry
GLA 2001H	Global Capital Markets and Global Strategies
GLA 2002H	Issues in Development Policy and Practice
GLA 2003H	Global Governance
GLA 2005H	Negotiating Internationally
GLA 2006H	The Global Political Economy of Finance and Investment
GLA 2007H	Global Affairs Externship (Credit/No Credit)
GLA 2009H	The Political Economy of Global Cities
GLA 2010H	Geopolitics of Cyberspace
GLA 2012H	The Global Political Economy of Trade
GLA 2013H	Topics in Global Violence
GLA 2014H	Innovation and Economic Development
GLA 2015H	Economic Competitiveness and Social Protection
GLA 2016H	Global Legal Strategy
GLA 2018H	Innovation and the City
GLA 2019H	The Political Economy of Development
GLA 2021H	Innovation, Institutions, Governments, and Growth
GLA 2022H	Global Institutions and Diplomacy
GLA 2023H	Justice Reforms in Global Context
GLA 2024H	Intelligence and Covert Action
GLA 2025H	Global Affairs Lab
GLA 2026H	Global Affairs Lab II
GLA 2028H	Global Civil Society
GLA 2030H	Grand Strategy and Global Threats
GLA 2050H	Selected Topics in International Studies
GLA 2051H	Global Violence
GLA 2060H	Topics in Development I
GLA 2061H	Topics in Development II
GLA 2062H	Topics in Development III
GLA 2063H	Topics in Security I
GLA 2064H	Topics in Security II
GLA 2065H	Topics in Security III
GLA 2066H	Topics in Justice I
GLA 2067H	Topics in Justice II
GLA 2068H	Topics in Justice III
GLA 2069H	Topics in Markets I
GLA 2070H	Topics in Markets II
GLA 2071H	Topics in Markets III
GLA 2080H	Topics in Innovation I
GLA 2081H	Topics in Innovation II
GLA 2082H	Topics in Innovation III
GLA 2090H	Topics in Global Affairs I
GLA 2091H	Topics in Global Affairs II
GLA 2092H	Topics in Global Affairs III
GLA 2093H	Topics in Global Affairs IV
GLA 2095H	MGA Reading Course
GLA 2096H	Topics in Global Affairs V
GLA 2097H	Topics in Global Affairs VI
GLA 2098H	Topics in Global Affairs VII
GLA 2555H	Intensive Course in Innovation Policy I
GLA 2556H	Intensive Course in Innovation Policy II
GLA 2557H	Intensive Course in Innovation Policy III
GLA 2888H	MGA Research Paper
GLA 2999H	Global Problem Solving: Laboratory Opportunities (exclusion: GLA 2999Y)
JCR 1000Y	An Interdisciplinary Approach to Addressing Global Challenges
JMG 2020H	Big Data
JSE 1708H	The Development of Sustainability Thought

Global Affairs and Public Policy: Public Policy MPP

Master of Public Policy

Program Description

The MPP program features core instruction on a peer-cohort learning model. In addition to the core material considered essential for policy practice, students take electives both within the school and in the broader university. Integrating seminars are led by faculty members. Invited visiting public sector leaders and external researchers bridge theory and practice, providing contact with senior professionals in government and the broader public, private, and community sectors. The program also provides access to courses and research facilities available in many other graduate departments, centres, and institutes across the University.

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.
- An appropriate bachelor's degree with an overall standing equivalent to at least a University of Toronto B+ in the final year.
- The program is open to applicants of all disciplinary backgrounds. A basic competency in mathematics and a basic understanding of the Canadian political system are assumed. Applicants without such preparation should consult with the Program Director. University-level courses in these areas are not required for admission.

Program Requirements

- **Coursework**. Students must complete **8.0 full-course equivalents (FCEs)** as follows:
  - 6.5 required core FCEs (see list of required core courses below)
  - 1.5 FCEs from the list of electives offered by University-wide graduate units, one of which must be a PPG course
- **Internship**:
  - PPG 2006Y *MPP Internship*; a mandatory internship taken in the summer between Year 1 and Year 2 or during Year 2. The internship research report is graded on a credit/no-credit basis.

Program Length

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

Time Limit

3 years full-time

Global Affairs and Public Policy: Public Policy MPP Courses

Course List

Required Core Courses

PPG 1000H	Governance and Institutions
PPG 1001H	The Policy Process
PPG 1002H	Microeconomics for Policy Analysis
PPG 1003H	Macroeconomics for Policy Analysis
PPG 1004H	Quantitative Methods for Policy Analysis
PPG 1005H	The Social Context of Policy-Making
PPG 1007H	Putting Policy into Action: Strategic Implementation of Public Objectives
PPG 1008H	Program Evaluation for Public Policy (prerequisite: PPG 1004H)
PPG 2001H	Legal Analysis of Public Policy (prerequisite: successful completion of at least 3.5 FCEs in MPP1 courses)
PPG 2002H	Topics in Applied Economics for Public Policy (prerequisite: successful completion of at least 3.5 FCEs in MPP1 courses)
PPG 2003H	Capstone Course: Integrating Issues in Public Policy (prerequisite: successful completion of at least 5.5 FCEs in MPP1 courses)
PPG 2008H	Comparative Public Policy and Transnational Forces (prerequisite: successful completion of at least 3.5 FCEs in MPP1 courses)

Choose one of:

PPG 2011H	Ethics and the Public Interest (prerequisite: successful completion of at least 3.5 FCEs in MPP1 courses)
PPG 2022H	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:

PPG 2010H	Panel Data Methods for Public Policy Analysis
PPG 2012H	Topics in Public Policy
PPG 2013H	Topics in Public Policy I
PPG 2014H	Topics in Public Policy II
PPG 2015H	Topics In Public Policy III
PPG 2017H	Topics in Public Policy: Urban Policy
PPG 2018H	The Role of Government
PPG 2020H	MPP Reading Course
PPG 2021H	Priority Topics in Public Administration

Offered by the Faculty of Law:

LAW 7030H	Issues in Aboriginal Law and Policy

Internship

PPG 2006Y	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 Health Technology Assessment and Management *(admissions have closed)* 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

Collaborative Specializations

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

1. **Aging, Palliative and Supportive Care Across the Life Course**
   - Health Administration, MHSc
   - Health Policy, Management and Evaluation, MSc, PhD
2. **Bioethics**
   - Health Administration, MHSc
   - Health Policy, Management and Evaluation, MSc, PhD
3. **Global Health**
   - Health Policy, Management and Evaluation, PhD
4. **Health Care, Technology, and Place (admissions have closed)**
   - Health Policy, Management and Evaluation, PhD
5. **Health Services and Policy Research**
   - Health Policy, Management and Evaluation, MSc, PhD
6. **Musculoskeletal Sciences**
   - Health Policy, Management and Evaluation, MSc, PhD
7. **Public Health Policy**
   - Health Administration, MHSc
   - Health Policy, Management and Evaluation, MSc, PhD
8. **Resuscitation Sciences**
   - Health Policy, Management and Evaluation, MSc, PhD
9. **Women and Gender Studies**
   - Health Administration, MHSc
   - Health Policy, Management and Evaluation, MSc, PhD
10. **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 Informatics Research; Health Economics; Health Policy; Health Services Management; Health Services Outcomes and Evaluation; Health Technology Assessment; Knowledge Translation; Systems Leadership and Innovation; and Quality Improvement and Patient Safety.

More than 200 faculty members from a variety of disciplines are represented in IHPME. At least 130 senior health care executives serve as adjunct faculty.

Please note the **application deadlines.**

November 15

- MSc in Health Policy, Management and Evaluation concentrations: Clinical Epidemiology and Health Care Research; Health Services Research; Quality Improvement and Patient Safety
- PhD in Health Policy, Management and Evaluation concentrations: Clinical Epidemiology and Health Care Research; Health Professions Education Research; Health Services Research

January 15

- MSc in Health Policy, Management and Evaluation concentration: System Leadership and Innovation (Undergraduate Medical Education applicants)

February 1

- Master of Health Informatics
- MHSc in Health Administration
- MHSc in Health Administration / MSW combined degree program
- MHSc in Health Administration / MN combined degree program

March 1

- Master of Health Informatics (executive option)

March 15

- MSc in Health Policy, Management and Evaluation concentration: System Leadership and Innovation (Postgraduate Medical Education applicants)

Contact and Address

Web: http://ihpme.utoronto.ca
Email: ihpme@utoronto.ca
Telephone: (416) 978-4326
Fax: (416) 978-7350

Institute of Health Policy, Management and Evaluation
University of Toronto
4th Floor, 155 College Street
Toronto, Ontario M5T 3M6
Canada

HPME: Graduate Faculty

Full Members

Alibhai, Shabbir - MD
Alter, David - MD
Anderson, Geoff - MD
Austin, Zubin - BA, BScPhm, MBA, MISt, MEd, PhD
Baker, G. Ross - AB, MA, PhD
Bayoumi, Ahmed - MD
Bell, Chaim - MD
Berta, Whitney - BS, MBA, PhD (*Graduate Coordinator*)
Bombardier, Claire - MA, MD
Bronskill, Susan - MSc
Brown, Adalsteinn - AB, PhD
Cassidy, David - BSc, MSc, PhD
Cheung, Angela - BA, MD, PhD
Coburn, Natalie - BSc, MSc, DrMed
Cockerill, Rhonda W - BA, MA, PhD
Côté, Pierre - MSc, PhD
Coyte, Peter C - BA, MA, PhD
Cuthbertson, Brian - MBCHB, PhD
Dainty, Katie - BA, MSc, PhD
Davis, Aileen - BSc(PT), MSc, PhD
Davis, David - BA, MD
Deber, Raisa - BS, MS, PhD
Dell, Sharon - MD
Detsky, Allan - BS, MD, PhD
Donnelly, Peter - MBA, MPH, MBCHB, MD
Doria, Andrea - MSc, MD, PhD
Etchells, Edward - MSc, MD
Eysenbach, Gunther - MD
Feldman, Brian - MD
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Kreder, Hans - MPH, MD
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Kurdyak, Paul - BSc, MSc, MD
Kuriya, Bindee - BSc, MD
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Lo, Alex - BSc, MD
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Moore, Lynn - MHSA
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Muller, Matthew - MD
Murphy, Kellie - MD
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O'Brien, Kelly - BSc(PT), BS, PhD
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Okun, Nanette - MD
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Palda, Valerie - MD
Paprica, Alison - DSc
Paszat, Lawrence - MS, MD
Paterson, Michael - MS
Penner, Melanie - MD
Perkins, Bruce - MPH, MD
Perreira, Tyrone - BPHE, MEd, PhD
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Rac, Valeria - MD, PhD
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Rai-Lewis, Surjeet - MBA

Rampersaud, Yoga - LMCC, MD
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Richardson, Lisa - BSc, MD
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Steele-Gray, Carolyn - BS, MA, PhD
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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 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.
- Applicants to the Systems Leadership and Innovation concentration must be active as a trainee within the Post-Graduate Medical Education (PGME) program, or be registered in the Undergraduate Medical Education (UME) program at the University of Toronto, Faculty of Medicine. UME students who are accepted must register part-time; PGME students who are accepted may register full-time or part-time.

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.

Thesis MSc

- Completion of **3.0 FCEs** as follows:
  - 1.5 FCEs required: HAD 5301H, HAD 5307H, and one of HAD 5303H, HAD 5304H, HAD 5306H, or HAD 5309H
  - 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: HAD 5301H, HAD 5307H, HAD 6360H, and one of HAD 5303H, HAD 5304H, or HAD 5309H
  - 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.
- Applicants to the Systems Leadership and Innovation concentration must be active as a trainee within the Post-Graduate Medical Education (PGME) program, or be registered in the Undergraduate Medical Education (UME) program at the University of Toronto, Faculty of Medicine. UME students who are accepted must register part-time; PGME students who are accepted may register full-time or part-time.

Program Requirements

- 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
    - 1.0 FCE in electives.
- A **thesis** written under the supervision of a thesis committee and its defence before an examination committee.

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 Technology Assessment and Management *(admissions have closed)*

Program Requirements

- Completion of **3.0 full-course equivalents (FCEs)** as follows:
    - HAD 5308H, HAD 5730H, HAD 5760H, HAD 5763H, and either HAD 5727H or HAD 5771, and
    - either and HAD 5301H or HAD 5304H
- Participation in two non-credit seminars.
- The courses in this field are offered in a modular fashion.
- A **thesis** written under the supervision of a thesis committee and its defence before an examination committee.

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: 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.

Thesis MSc

- Completion of **3.0 FCEs** as follows:
  - 2.5 FCEs required: HAD 3010H, HAD 3020H, HAD 3041Y[0], HAD 3050H.
  - 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 (HAD 3010H, HAD 3020H, HAD 3030H, HAD 3050H, HAD 3060H, HAD 3070H)
  - 1.0 required FCE in a research project practicum (HAD 3040Y)
  - 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

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

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 be active as a trainee within the Post-Graduate Medical Education (PGME) program, or be registered in the Undergraduate Medical Education (UME) program at the University of Toronto, Faculty of Medicine. UME students who are accepted must register part-time; PGME students who are accepted may register full-time or part-time.

Program Requirements

The MSc in System Leadership and Innovation is a coursework-only program.

- Completion of **5.0 full-course equivalents (FCEs)** as follows:
  - 2.0 required FCEs (HAD 2001H, HAD 2002H, HAD 2003H, HAD 2004H)
  - 1.0 required practicum FCE (HAD 2010H, HAD 2020H)
  - 2.0 elective FCEs, of which a maximum 1.0 FCE can be a practicum; please consult with the department about electives
- Students begin this concentration in the Summer session.

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 in Clinical Epidemiology and Health Care Research; Health Professions Education Research; and 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.
- 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

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.
- 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: MSc, PhD Courses

Concentration: Clinical Epidemiology and Health Care Research

Compulsory Courses

HAD 5301H	Introduction to Clinical Epidemiology and Health Care Research
HAD 5307H	Introduction to Applied Biostatistics
HAD 5311H[0]	Comprehensive/Synthesis (one year)
HAD 5316H	Biostatistics II: Advanced Techniques in Applied Regression Methods

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

Recommended Courses

HAD 5302H	Measurement in Clinical Research
HAD 5303H	Controlled Clinical Trials
HAD 5304H	Clinical Decision Making and Cost Effectiveness
HAD 5305H	Evidence-Based Guidelines
HAD 5306H	Introduction to Health Services Research and the Use of Health Administrative Data
HAD 5308H	Evidence Synthesis: Systematic Reviews and Meta-Analysis
HAD 5309H	Observational Studies: Theory, Design, and Methods
HAD 5310H	Pragmatic Issues in Conduct of Controlled Trials
HAD 5730H	Economic Evaluation Methods for Health Service Research
HAD 5760H	Advanced Health Economics and Policy Analysis
JNH 5000H	Measurement of Patients' Preferences in Health Care Decision Making

Elective Courses

HAD 5312H	Decision Modelling for Clinical Policy and Economic Evaluation
HAD 5313H	Advanced Design and Analysis Issues in Clinical Trials
HAD 5314H	Applied Bayesian Methods in Clinical Epidemiology and Health Care Research
HAD 5315H	Advanced Topics in Measurement
HAD 5316H	Biostatistics II: Advanced Techniques in Applied Regression Methods (prerequisite: HAD5307H Introduction to Applied Biostatistics or CHL 5201H Introductory Biostatistics for Students in Biological Sciences I)
HAD 6360H[0]	Required Research Practicum in Clinical Epidemiology (Credit/No Credit)
HAD 6361H[0]	Optional Research Practicum in Clinical Epidemiology (Credit/No Credit)
HAD 7002H	Reading Course

Other IHPME courses or extradepartmental 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

Required Courses

HAD 5011H	Canada's Health Care System and Health Policy (Doctoral Stream)
HAD 6500H	Essential Skills in HPER
HAD 6501H	Intro to Methods/Methodologies for HPER
HAD 6502H **or** HAD 6503H	Survey of Critical and Interpretive Social Science Theory for HPER **or** Survey of Cognitive, Behavioural, and Epidemiological Sciences Theory
HAD 6504H **or** HAD 6505H	Intermediate Critical and Interpretive Social Science Methods **or** Intermediate Cognitive, Behavioural, and Epidemiological Sciences Methods
HAD 6510H	Comprehensive in HPER

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

HAD 3020H	Quality Improvement Methods
HAD 3030H	Concepts and Strategies in Patient Safety
HAD 3040Y[+]	Project Practicum
HAD 3050H	Leading and Managing Change
HAD 3060H	Quality Improvement in Health Systems
HAD 3070H	Legal and Regulatory Environment and Risk Management
HAD 3080H	External Practicum
HAD 3090H	The Application of Lean in Healthcare
HAD 5011H	Canada's Health Care System and Health Policy (Doctoral Stream)
HAD 5021H	Canada's Health System and Health Policy Part 2 (Doctoral Stream)
HAD 5022H	Politics, Policy, Public Health, and Health Technology
HAD 5726H	Evaluation and Research Design in Health Informatics
HAD 5727H	Knowledge Transfer and Exchange
HAD 5728H	Performance Measurement in Health Care: Theory and Application
HAD 5729H	Theoretical, Conceptual and Methodological Issues in Knowledge Translation

HAD 5730H	Economic Evaluation Methods for Health Service Research
HAD 5734H	Organizational Learning and Knowledge Transfer
HAD 5737H	Tools for Implementation of Best Evidence
HAD 5738H	Advanced Methods in Economic Evaluation
HAD 5739H	Ideas and Arguments in Health Care Policy
HAD 5740H	Intermediate-Level Qualitative Research for Health Services and Policy Research
HAD 5742H	Mixed Methods for Health Services Research
HAD 5743H	Evaluation Design for Complex Interventions
HAD 5744H	Introduction to Health Econometrics
HAD 5745H	Where Health Economics Hits the Road: Practical Applications of Economics to Real Health Care Problems
HAD 5746H	Applied Health Econometrics
HAD 5755Y	Health Economics Graduate Seminar Series (CR/NCR)
HAD 5760H	Advanced Health Economics and Policy Analysis
HAD 5763H	Advanced Methods in Health Services Research
HAD 5768H	International Perspectives on Health Services Management
HAD 5771H	Resource Allocation Ethics
HAD 5772H	Intermediate Statistics for Health Services Researchers
HAD 5773H	Introduction to Theories of Organizational Behaviour and Applications to the Health Care Sector
HAD 5776H	Issues in Qualitative Health Services Research Methodologies and Methods
HAD 5777H	Leading and Managing Change: Building Adaptive Capacity
HAD 5778H	Comparative Health Systems and Policy
HAD 5779H	Evidence Synthesis for Health Services, Systems and Policy Research
HAD 5780H	Program Planning and Evaluation for Health Services and Policy Research
HAD 6750H	Advanced Health Economics and Policy Analysis II
HAD 6760H	Introduction to Health Services Research Theory and Methods
HAD 6761H	Health Services Outcomes and Evaluation Comprehensive Course
HAD 6762H	Health Services Organization and Management Comprehensive Course
HAD 6763H	Health Policy Comprehensive Course
HAD 6764H	eHealth Innovation and Health Information Management Comprehensive Course
HAD 6770H	Applying Health Services Research Methods (prerequisite: HAD 6760H Introduction to Health Services Research Theory and Methods)
HAD 7001H	Reading Course
JNH 5001H	Health Care Settings, Site, and Human Well Being
JNH 5003H	Home and Community Care Knowledge Translation

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

Concentration: Quality Improvement and Patient Safety

Required Courses

HAD 3010H	Fundamentals of Improvement Science
HAD 3020H	Quality Improvement Methods
HAD 3030H	Concepts and Strategies in Patient Safety
HAD 3040Y[+]	Project Practicum
HAD 3041Y[0]	Design and Methods for Thesis Research
HAD 3050H	Leading and Managing Change
HAD 3060H	Quality Improvement in Health Systems
HAD 3070H	Legal and Regulatory Environment and Risk Management

Practicum Course

HAD 3080H	External Practicum

Elective Courses

HAD 3090H	The Application of Lean in Healthcare
HAD 4000H	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

HAD 2001H	Strategic Vision and Planning for Health System Change
HAD 2002H	Research Methods for Evaluating Health System Innovation
HAD 2003H	Leading and Responding to Health Policy and System Change
HAD 2004H	Leadership, Motivation, and Partnering

Practicum Courses

HAD 2010H	System Leadership and Innovation Practicum (Individual) (Credit/No Credit)
HAD 2011H[0]	Individual Practicum—Quality Improvement
HAD 2020H	System Leadership and Innovation Practicum (Team) (Credit/No Credit)

Elective Courses

HAD 2005H	Quality Improvement Skills for Healthcare Leaders

Cross-Listed Courses

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

BME 1456H	Changing Health Care Technologies, People, and Places
HSR 1000H	Research and/or Policy Practicum
HSR 1001H	Introduction to Qualitative Methods for Health Services and Policy Research
HSR 1002H	Health Services Research Seminar (Credit/No Credit)
JCV 3060H	Advanced Topics in Cardiovascular Sciences—Molecular Biology and Heart Signal Transduction
JCV 3061H	Advanced Topics in Cardiovascular Sciences—Hormones
JCV 3062H	Advanced Topics in Cardiovascular Sciences—Heart Function
JCV 3063H	Advanced Topics in Cardiovascular Sciences—Vascular
LAW 404H	Health System Law and Policy
LAW 465H	Conflicts of Interest in Medicine: Evidence, Public Policy, and the Law

[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:
  - 8.5 FCEs are required subjects, which include a minimum of 1.0 FCE in a field placement.
  - the remaining 1.5 FCEs are elective courses.

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

Required Courses

All courses are offered in modular format unless marked otherwise.

HAD 5010H	Canada's Health System and Health Policy: Part I
HAD 5020H	Canada's Health System and Health Policy: Part II
HAD 5711H	Theory and Practice of Strategic Planning and Management in Health Services Organization
HAD 5713H	Introduction to Health Information Systems
HAD 5721H	Strategic Management of Quality and Organizational Behaviour in Health Services Organizations
HAD 5723H	Health Services Accounting
HAD 5724H	Quantitative Methods for Health Services Management and Policy
HAD 5725H	Health Economics
HAD 5731H	Translating Leadership Into Practice
HAD 5733H	Health Services Finance
HAD 5741H	Health Law and Ethics
HAD 5761H	Introduction to eHealth: Informatics, Innovations, and Information Systems
HAD 5767H	Health Services Marketing
HAD 5769H	Human Resources Management in the Health Field
HAD 5770H	Program Planning and Evaluation
HAD 6010Y[+]	Required MHSc Practicum (Credit/No Credit)
HAD 6011H[+]	Optional 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.

HAD 5736H	Operations Research Tools for Quantitative Health Care Decision Making
HAD 5765H	Case Studies in Health Policy
HAD 5774H	Comparative Health Care Systems
HAD 5775H	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), and
  - a four-month, full-time practicum or field placement (MHI 2005Y [2.0 FCEs]).
- Degree requirements will be completed in 16 months across four consecutive sessions.

Required Courses for the Regular MHI Option

HAD 5010H	Canada's Health System and Health Policy: Part I
INF 1003H	Information Systems, Services, and Design
INF 1341H	Systems Analysis and Process Innovation
INF 2183H	Knowledge Management and Systems
MHI 1001H	Information and Communication Technology in Health Informatics
MHI 1002H	Complexity of Clinical Care
MHI 2001H	Fundamentals of Health Informatics
MHI 2002H	Emergent Topics in Health Informatics
MHI 2003H	Consumer and Public Health Informatics
MHI 2004H	Human Factors and Change Management
MHI 2006H	Advanced Topics in Health Informatics (Strategic Frameworks for Solution Architecture)
MHI 2007H	Quantitative Skills in Health Informatics
MHI 2008H	Project Management for Health Informatics
MHI 2009H	Evaluation Methods for Health Informatics
MHI 2011H	Performance Measurements in Health Care: Theory and Application

Practicum Course

MHI 2005Y	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.

MHI 2010H	Extended Health Informatics Practicum
MHI 3000H	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), and
    - a four-month, employer-sponsored *Health Informatics Project* (MHI 2015Y [1.5 FCEs]).
- The executive MHI degree requirements will be completed in 22 months across six consecutive sessions.

Required Courses

HAD 5010H	Canada's Health System and Health Policy: Part 1
INF 1003H	Information Systems, Services, and Design
INF 1341H	Analyzing Information Systems
INF 2183H	Knowledge Management and Systems
MHI 1001H	Information and Communication Technology in Health Informatics
MHI 1002H	Complexity of Clinical Care
MHI 2001H	Health Informatics I
MHI 2002H	Health Informatics II
MHI 2003H	Consumer and Public Health Informatics
MHI 2004H	Human Factors and Change Management
MHI 2006H	Advanced Topics in Health Informatics (Strategic Frameworks for Solution Architecture)
MHI 2007H	Quantitative Skills in Health Informatics
MHI 2008H or HAD 5731H or HAD 5733H	Project Management for Health Informatics or Translating Leadership into Practice or Health Services Finance
MHI 2009H	Evaluation Methods for Health Informatics
MHI 2011H	Performance Measurements in Health Care: Theory and Application
MHI 3000H	Independent Reading for Health Informatics

Practicum Course

MHI 2015Y	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.

MHI 2016H	Health Informatics Project Extension
MHI 3000H	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: 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:

1. **Book History and Print Culture**
   - History, MA, PhD
2. **Contemporary East and Southeast Asian Studies**
   - History, MA
3. **Diaspora and Transnational Studies**
   - History, MA, PhD
4. **Editing Medieval Texts**
   - History, PhD
5. **Ethnic and Pluralism Studies**
   - History, MA, PhD
6. **Food Studies**
   - History, MA, PhD
7. **Jewish Studies**
   - History, MA, PhD
8. **Sexual Diversity Studies**
   - History, MA, PhD
9. **South Asian Studies**
   - History, MA, PhD
10. **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; 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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Room 2074, 100 St. George Street
Toronto, Ontario M5S 3G3
Canada

History: Graduate Faculty

Full Members

Austin, Robert - BA, MA, PhD
Bartlett, Kenneth - BA, MA, PhD
Bender, Daniel Eric - BA, PhD
Bergen, Doris - 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 (**Acting Chair and Acting Graduate Chair, July 1 to Dec. 31, 2018**)
Cochelin, Isabelle - DipdESup, BA, MA, PhD
Cohen, Paul - AM, PhD

Emon, Anver - LLB, BA, LLM, MA, PhD, SJD, CRC
English, John - AM, PhD
Everett, Nicholas - BA, MA, PhD
Eyoh, Dickson - MA, PhD
Fernandez, Angela - LLB, BA, BCL, LLM, MA, SJD,
Fujitani, Takashi - BA, MA, PhD
Gabaccia, Donna R. - 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, Eric (Rick) - PhD
Hanssen, Jens - BPhil, DPhil
Hastings, Paula P. - BA, MA, PhD
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, Charles - BA, MA, PhD
Kidd, Bruce - BA, AM, MA, PhD, OC
Kivimae, Juri - AM, PhD
Lahusen, Thomas - MA, PhD
Lam, Tong - BSc, MA, PhD
Lambek, Michael - BA, MA, PhD
Langins, Janis - BEng, MEng, MA, PhD
Loeb, Lori - BA, 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, Kenneth - MA, PhD
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, Steven - MA, PhD
Penslar, Derek - BA, 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, Ella Natalie - MA, DPhil
Sandwell, Ruth - BA, MA, PhD
Sayle, Timothy - AM, MPA, PhD
Schmid, Andre - BA, MA, PhD
Sharma, Jayeeta - BA, MPH, MA, PhD
Shorter, Edward - BA, MA, PhD
Shternshis, Anna - 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
Viola, Lynne - BA, MA, PhD
Virani, Shafique - 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
Bliss, J Michael - BA, MA, PhD
Brown, Robert Craig - MA, PhD
Callahan, William - AB, MA, PhD
Cook, Ramsay - MA, PhD
Davis, Natalie - BA, MA, PhD
Dent, Julian - BA, MA, PhD
Dowler, E Wayne - BA, AM, 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
Morton, Desmond - BA, MA, PhD
Nelson, Wendy - BS, MHSc
Raby, David - BA, PhD
Robertson, Ian - BA, MA, PhD
Robson, Ann - BA, MA, PhD
Van Kirk, Sylvia - BA, MA, PhD
Wagle, Narendra - BA, MA, PhD
Wayne, Michael - BA, BA, PhD

Associate Members

Dacome, Lucia - BA, MPH, PhD
Haque, Eve - MA
Walker, Tamara - 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 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 Department of History's additional admission requirements stated below.
- The closing date for applications to the MA program is January 15. Later applications will be considered only in exceptional circumstances.
- 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 information form,
    - three letters of recommendation,
    - a 500-word specific research proposal outlining a precise field and area of historical investigation, and
    - 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 pass the required reading examination in a language other than English.

Coursework and Research Paper

- 3.5 full-course equivalents (FCEs) as follows:
    - 0.5 FCE must be either HIS 1997H or HIS 1201H taken following consultation with Graduate Coordinator
    - HIS 2000Y[0] MA essay (1.0 FCE),
    - 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

- 2.0 FCEs as follows:
    - 0.5 FCE must be either HIS 1997H or HIS 1201H taken following consultation with Graduate Coordinator
    - present an MA thesis (1.5 FCE)
- The thesis MA might take longer than the course 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

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 information form,
  - three letters of recommendation,
  - a 500-word specific research proposal outlining a precise field and area of historical investigation, and
  - 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**: 2.0 full-course equivalents (FCEs) with a B+ average throughout 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 information form
  - three letters of recommendation
  - a 500-word specific research proposal outlining a precise field and area of historical investigation, and
  - 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**: 4.5 full-course equivalents (FCEs), 0.5 of which must be either HIS 1997H or HIS 1201H. 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.

HIS 1001H	Topics in History
HIS 1003H	Theory and History
HIS 1004H	History and Biopolitics
HIS 1006H	Historiography From Below: Comparative and Critical Perspectives
HIS 1007H	Theories, Histories, Imaginaries: Themes in Technoscience
HIS 1008H	The Practice of Public History and Archival Research
HIS 1009H	Empire and Governmentality: Economy, Culture, and Liberal Governance
HIS 1011H	Queer and Trans Oral History
HIS 1016H	Historical Readings in Gender and Sexuality
HIS 1020H	Cultural Theory/Cultural History
HIS 1023H	Translation, Time, History
HIS 1031H	Images as History: Photography, Historical Method, and Conceptualizing Visuality
HIS 1032H	Modernity and Its Visual Cultures
HIS 1037H	Populism in American Film and Media
HIS 1040H	Maps in History: Power and Identity, Conflict and Imagination
HIS 1101H	Race and Gender in the Northern Colonies of North America
HIS 1104H	Natives and Empires: Colonial History of the Americas, 1492–1800
HIS 1105H	Colonial North America, 1600–1783
HIS 1106H	Topics in Canadian Social History
HIS 1107H	Religion, Culture, and Society in Canada (joint graduate/undergraduate)
HIS 1109H	Readings in Canadian History
HIS 1111H	Topics in North American Environmental History (joint graduate/undergraduate)
HIS 1112H	Canada in Comparative Contexts, Gender, Labour, Migration
HIS 1113H	Politics and Society in North American History
HIS 1115H	The World Car
HIS 1116H	Canada: Foundations to 1867
HIS 1117H	Canada: Colonialism/Postcolonialism
HIS 1118H	Canada By Treaty: Alliances, Title Transfers, and Land Claims
HIS 1128H	Canada and Transnational History
HIS 1142Y	Canadian Foreign Relations, 1940–2003 (joint graduate/undergraduate)
HIS 1168H	History of the Sex Trade in Canadian and Comparative Contexts
HIS 1180H	Race in Law, Society, and Policy: Comparing USA and Canada
HIS 1200H	Readings in European Intellectual History
HIS 1201H	The Materials of Medieval History (Credit/No Credit)
HIS 1203H	Jus Commune
HIS 1204H	Topics in Medieval Church History
HIS 1213H	Medieval Institutes of Perfection (joint graduate/undergraduate)
HIS 1215H	Social Change in Medieval England, 1154–1279
HIS 1221H	Topics in Early Modern European Social History
HIS 1222H	Ritual in Renaissance and Early Modern Europe
HIS 1223H	Humanism and the Renaissance
HIS 1230H	The Sexes in the Western World, 1450–1650
HIS 1231H	Topics in French History
HIS 1232H	European Colonialism, 1870–1970: A Comparative History
HIS 1233H	Colonial Urbanism in the Mediterranean World, 1800–1950
HIS 1234H	Readings in Early Modern French History
HIS 1236H	French Colonial History: 1830–1962
HIS 1237H	France: 1870–1968
HIS 1245H	Gender, Men, and Women in Europe 1500–1900
HIS 1247H	Ideas of Race in Europe and the Atlantic World
HIS 1264H	Jewish Identity

HIS 1265H	Atrocities and Memory in Postwar Europe and North America
HIS 1268H	The Holocaust and World War II
HIS 1269H	The Social History of Medicine in the Nineteenth and Twentieth Centuries (joint graduate/undergraduate)
HIS 1270H	History of Psychiatry and Psychiatric Illness (joint graduate/undergraduate)
HIS 1271H	Modern Political Trials
HIS 1272H	Topics in Twentieth-Century European History
HIS 1275H	Imperial Germany, 1871–1918
HIS 1276H	Nations and Nationalism in Global Perspective
HIS 1278H	Topics in 20th C German History
HIS 1279H	World War II in East Central Europe (joint graduate/undergraduate)
HIS 1281H	History of Real Socialism
HIS 1282H	Totalitarian Culture
HIS 1283H	Crusades, Conversion, and Colonization in the Medieval Baltic (joint graduate/undergraduate)
HIS 1286H	Categories of Imperial Russian Social History
HIS 1287H	Polish Jews Since the Partitions of Poland (joint graduate/undergraduate)
HIS 1289H	The Cold War Through Its Archives
HIS 1289Y	Twentieth Century Ukraine
HIS 1290H	Topics in Imperial Russian History
HIS 1293Y	Kievan Rus' (joint graduate/undergraduate)
HIS 1296H	Stalinism and After: Beyond Cold War History
HIS 1297H	National Survival in Eastern Europe
HIS 1300H	Empires and Nation-States in the Balkans Since 1800
HIS 1301H	History of Food and Drink
HIS 1411H	Theory and Practice in Early Modern British History
HIS 1419H	Science and Society in Britain, 1600–1800
HIS 1435H	Studies in Victorian Society
HIS 1440H	Irish Nationalism in Canada, 1858–1870 (joint graduate/undergraduate)
HIS 1510H	Readings in American History to 1877
HIS 1511H	History and Present-Day Policy Analysis
HIS 1531H	American Political History Since 1877
HIS 1532H	American Foreign Policy in the Cold War
HIS 1533H	Gender and International Relations (joint graduate/undergraduate)
HIS 1538H	Reading in U.S. History
HIS 1539H	Film Comedy and Popular Culture
HIS 1541H	Cultural History and the American Empire
HIS 1543H	Topics in Material Culture
HIS 1544H	The History of Sex, Gender, and Sexuality in the United States, 1945–Present
HIS 1552H	Historical Perspectives on Gender and Migration, 1500–2010
HIS 1555H	Gender and Slavery in the Atlantic World, Seventeenth to Nineteenth Century
HIS 1615H	Research Methods in Japanese Historical and Cultural Studies
HIS 1620H	Asian Diasporas
HIS 1662H	Rethinking Modernity Through Japan
HIS 1664H	Religion and Society in Southeast Asia
HIS 1667H	Transnational Gender Histories
HIS 1673H	Critical Historiography of Late Imperial and Modern China
HIS 1674H	China in Global History
HIS 1675H	Imperial Circulation and Diasporic Flows in the British Empire
HIS 1677H	Empire and Nation in Modern East Asia
HIS 1678H	War and Memory in Twentieth-Century East Asia
HIS 1679H	Genealogies of Regionalism and Globalization in East Asia
HIS 1680H	Gender, Culture, and the Political in Modern China
HIS 1705H	Trends in Women and Gender History in the Global South
HIS 1707H	Topics in African History
HIS 1708H	Labour in the Age of Imperialism
HIS 1709H	Conversion and Christianities in the Early Modern Spanish World (joint graduate/undergraduate)
HIS 1712H	Topics on the History of Ethiopia
HIS 1720H	Emancipate Yourselves from Mental Slavery? Historical Narratives of Caribbean Decolonization
HIS 1725H	Topics in Latin American History: Race, Gender, and Citizenship
HIS 1784H	The Islamic Revolution
HIS 1785H	International Relations in the Middle East
HIS 1800H	Global Histories of the Archives
HIS 1810H	Indigenous Economies and Imperialism
HIS 1820H	Law, Space, and History
HIS 1825H	Changing Skylines: (Re)mapping Urban History in the Global Age
HIS 1830H	Critical Approaches to Historical Anthropology
HIS 1840H	Empires in World War II
HIS 1850H	Queer Archives and LGBTQ History
HIS 1860H	Global Rights: A Critical History
HIS 1870H	History on Film/Film on History
HIS 1880H	Digital History
HIS 1890H	Regimes of Value
HIS 1997H	The Practice of History (Credit/No Credit)
HIS 1998H	Reading Course
HIS 1999H	Reading Course
HIS 2000Y[0]	Directed Research
JBP 2230H	Topics in International Politics
JHP 1289Y	Twentieth-Century Ukraine (joint graduate/undergraduate)
JHP 1631H	Intelligence and International Relations
JHP 2231H	The History and Philosophy of International Relations Thought
JHP 2351Y	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

COL 5027H	Memory, Trauma, and History
COL 5044H	A Journey from Petersburg to Los Angeles
MST 1110H	Diplomatics and Diplomatic Editing
MST 3205H	Violence in Medieval Society (joint graduate/undergraduate)
MST 3225Y	Jews and Christians in Medieval and Renaissance Europe (joint graduate/ undergraduate)
MST 3262H	Monastic Identities

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:

1. **Book History and Print Culture**
   - History and Philosophy of Science and Technology, MA, PhD
2. **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: http://hps.utoronto.ca
Email: ihpst.info@utoronto.ca
Telephone: (416) 978-5397
Fax: (416) 978-3003

Institute for the History and Philosophy of Science and Technology (IHPST)
University of Toronto
Old Victoria College
Room 316, 91 Charles Street West
Toronto, Ontario M5S 1K7
Canada

HPST: Graduate Faculty

Full Members

Baigrie, Brian - BA, MA, PhD
Berkovitz, Joseph - BSc, MA, PhD
Brown, James - BA, MA, PhD, FRSC
Chakravartty, Anjan - BSc, MPH, MA, PhD
Dacome, Lucia - BA, MPH, PhD
Fehige, Yiftach - BSc, MTh, MPH, PhD, DTh
Fraser, Craig - BA, MA, PhD
Gingras, Yves - BSc, MSc, PhD
Goldenberg, Maya - BA, MA, PhD
Huneman, Philippe - BM, MMath, PhD
Jones-Imhotep, Edward - BA, PhD
Krementsov, Nikolai - PhD
Langins, Janis - BEng, MEng, MA, PhD
Lightman, Bernard - BA, MA, PhD
Murphy, Michelle - BA, PhD
Penfold, Steven - MA, PhD
Seager, William Edward - BA, MA, PhD
Shorter, 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, Maria - BA, MA, PhD, PhD
Walsh, Denis - BA, BSc, MPH, PhD, PhD
Wolfe, David - BA, MA, PhD
Woods, Rebecca - BA, MA, PhD
Yeang, Chen-Pang - BS, SM, PhD, ScD (***Director***)

Members Emeriti

De Sousa, Ronald - BA, PhD, FRSC
Goldstick, Daniel - BA, BPhil, DPhil
Hall, Bert - BA, PhD
Levere, Trevor - BA, MA, DPhil
Mazumdar, Pauline - MSc, MD, PhD
Thompson, Paul - BA, MA, PhD
Winsor, Mary - AB, MPH, PhD

Associate Members

Miller, Michael - AB, AM, 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.

All the forms required for application, including the standard application form, can be downloaded from IHPST's website. The website also contains detailed instructions for completing applications. Applications must be accompanied by transcripts, a statement of interest, letters of reference, 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.
- An appropriate 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 is required.
- Application deadline is January 15 of every year.
- 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

- **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 HPS 1000H *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 HPS 1000H *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 and 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.

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.

All the forms required for application, including the standard application form, can be downloaded from IHPST's website.

The website also contains detailed instructions for completing applications. Applications must be accompanied by transcripts, a statement of interest, letters of reference, 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 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 extended research paper (required for HPS 1100Y) 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 HPS 1100Y 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

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 extended research paper (required for HPS 1100Y), 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 HPS 1100Y 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

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 HPS 1100Y, 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 extended research paper (required for HPS 1100Y), 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 HPS 1100Y 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

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

HPS 1000H	Introduction to the History and Philosophy of Science and Technology (pro-seminar: required for all students in their first session)
HPS 1001H	Individual Reading and Research in History and Philosophy of Science and Technology
HPS 1002H	Individual Reading and Research in History and Philosophy of Science and Technology
HPS 1003H	Individual Reading and Research in History and Philosophy of Science and Technology

HPS 1005Y	Individual Reading and Research in History and/or Philosophy of Science and Technology
HPS 1100Y	Advanced Research Paper (required for all students)
HPS 1500H+	Research Paper (available only to pre-2005 admitted students)
HPS 2000H	History of Mathematics
HPS 2001H	History of Physics
HPS 2002H	History of Chemistry
HPS 2003H	History of Biology
HPS 2004H	History of Medicine
HPS 2005H	History of Technology I
HPS 2006H	History of Technology II
HPS 2007H	History of Astronomy
HPS 2008H	History of Psychology
HPS 2009H	History and Philosophy of the Social Sciences
HPS 2010H	The Sciences of Human Nature
HPS 2011H	History of Engineering
HPS 3000H	Philosophy of Science
HPS 3001H	The Philosophy of Biology
HPS 3002H	The History and Philosophy of Science
HPS 3003H	Social Studies of Medicine
HPS 3004H	Philosophy of Medicine
HPS 3005H	Philosophy of Physics
HPS 3006H	Philosophy of Probability
HPS 3007H	Philosophy of Economics
HPS 3008H	Philosophy of Science and Religion
HPS 4001H	The Scientific Revolution: Galileo to Newton
HPS 4003H	History of Evolutionary Biology
HPS 4007H	Body, Medicine, and Society in Early Modern Europe
HPS 4009H	The Invention of Modern Biology
HPS 4012H	Science in Canadian History
HPS 4015H	Science in the Renaissance
HPS 4017H	The Rise of Eugenics: A Comparative History
HPS 4018H	The Emergence of Modern Mathematics in the Eighteenth and Nineteenth Centuries
HPS 4019H	Studies in Ancient and Medieval Science
HPS 4022H	Theory of Scientific Change
HPS 4100H	Historical Topics in Scientific Methodology
HPS 4101H	Topics in the History of Physics in the Eighteenth and Nineteenth Centuries
HPS 4102H	Topics in the History of Technology
HPS 4105H	Topics in the History of the Social and Behavioural Sciences
HPS 4106H	Technology, Environment, and History
HPS 4300H	Historical Research: Methods, Sources, Approaches
HPS 4500H	Religion and Science on Human Sexuality
HPS 4502H	Teleology, Adaptation, and Design
HPS 4503H	Philosophy Applied to History of Science
HPS 4504H	Laws of Nature
HPS 4505H	Complexity, Reduction, and Emergence in Contemporary Biology
HPS 4512H	Thought Experiments
HPS 4514H	Conceptual and Theoretical Foundations of Historiography
HPS 4601H	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

BKS 1001H	Introduction to Book History
BKS 1002H	Book History in Practice
BKS 2000H	Advanced Seminar in Book History and Print Culture

Philosophy

PHL 2010H	Late Greek Philosophy
PHL 2051H	The Rationalists
PHL 2101H	Seminar in Metaphysics
PHL 2175H	Philosophy of Perception
PHL 2191H	Seminar in the Philosophy of Language
PHL 2196H	Topics in the Philosophy of Science
PHL 2199H	Seminar in Philosophy of Science

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:

1. **Developmental Biology**
   - Immunology, MSc, PhD
2. **Human Development (admissions have been suspended)**
   - Immunology, PhD
3. **Resuscitation Sciences**
   - Immunology, MSc, PhD
4. **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
Fax: (416) 978-1938

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
Carlyle, James - BSc, PhD
Croitoru, Ken - MDCM
Cybulsky, Myron - MD
Danska, Jayne - AB, PhD
Dosch, Hans - MD
Dunn, Shannon - BSc, MSc, PhD
Eiwegger, Thomas - MD
Fish, Eleanor - BSc, MPH, PhD
Gehring, Adam - BA, PhD
Girardin, Stephen - BSc, PhD
Gommerman, Jennifer - BSc, PhD (*Associate Chair, Graduate Studies*)
Gorczynski, Reginald - BSc, BA, MA, MD, PhD
Guidos, Cynthia - BSc, PhD
Hirano, Naoto - MD, PhD
Inman, Robert - BA, MD
Iscove, Norman - MD, PhD
Jeschke, Marc - DrMed, PhD
Julius, Michael - BSc, PhD
Kaul, Rupert - MD, PhD
Kelvin, David - MASc, PhD
Levy, Gary - BSc, MD
MacDonald, Kelly - MD
Mak, Tak - BSc, MSc, PhD
Martin, Alberto - BSc, MSc, PhD
McGaha, Tracy Lynn - BSc, MS, PhD
Ohashi, Pam - BSc, PhD
Ostrowski, Mario - MD
Paige, Christopher - BSc, PhD
Philpott, Dana - BS, PhD
Poussier, Philippe - MD
Ratcliffe, Michael - PhD
Roifman, Chaim - MD
Rottapel, Robert - BA, MD
Siminovitch, Katherine - MD
Tsui, Florence - BSc, MSc, PhD
Wall, Donna - MD
Watts, Tania - BSc, PhD
Williams, David - BSc, MSc, PhD
Wither, Joan - MD, PhD
Woo, Minna Nancy - MD
Yeung, Rae - DrMed, MD
Zhang, Li - MSc, MD, PhD
Zuniga-Pflucker, Juan Carlos - BSc, PhD (*Chair and Graduate Chair*)

Members Emeriti

Hay, John - BSc, MSc, PhD
Isenman, David - BSc, BSc, PhD
Letarte, Michelle - BSc, PhD
Painter, Robert - BSc, PhD
Shulman, Marc - AB, PhD
Wu, Gillian - BSc, MSc, PhD

Associate Members

Grunebaum, Eyal - MD
Jongstra-Bilen, Jenny - BSc, MSc, PhD
Julien, Jean-Philippe - PhD
Keystone, Edward - BSc, MD
Lee, Hyung-Ran - PhD
MacParland, Sonya - BS, MS, PhD
Mortha, Arthur - MSc, PhD
Robbins, Clinton Shane - BS, PhD
Serghides, Lena - BSc, PhD

Immunology: Immunology MSc

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 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 3128H (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

- **Coursework.** Successful completion of **7.5 full-course equivalents (FCEs)** as follows:
  - Year 1:
    - 2.5 FCEs: IMM 1435H, IMM 1450Y, IMM 1550Y
    - 1.0 FCE selected from IMM 1428H, IMM 1429H, or IMM 1430H
    - 0.5 FCE: IMM 1436H
  - Year 2:
    - 1.0 FCE: IMM 1025H[0], IMM 1075H[0]
    - 1.0 FCE: IMM 1650Y (completed over three sessions)
    - 0.5 FCE: IMM 1651H
    - 1.0 FCE selected from the elective course list below.
- **Residence.** Students are required to be on campus and participating full-time until the program requirements of research and coursework have been completed.

Required Course List

IMM 1025H[0]	Student Seminar Series (I)
IMM 1075H[0]	Special Topics in Immunology (I)
IMM 1428H	Molecular Immunology
IMM 1429H	Developmental Immunology
IMM 1430H	Clinical Immunology
IMM 1435H	Practical Immunology
IMM 1436H	Techniques in Immunology
IMM 1450Y	Major Research Project in Immunology (I)
IMM 1550Y	Major Research Project in Immunology (II)
IMM 1650Y	Major Research Project in Immunology (III)
IMM 1651H	Applied Research in Immunology

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

Elective Course List

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.

BTC 1850H	Creating Life Science Products
BTC 1860H	Generation of Advanced Medicine: Biologics in Therapy (GAMBiT)
CSB 1472H	Computational Genomics and Bioinformatics
IMM 1888H	Immunology of Pandemic Disease
JBZ 1472H	Computational Genomics and Bioinformatics
JDB 1025H	Developmental Biology
JFK 1120H	Selected Topics in Drug Development I
JFK 1121H	Selected Topics in Drug Development II
JTB 2010H	Proteomics and Functional Genomics
JTB 2020H	Applied Bioinformatics
LMP 1006H	Cellular Imaging in Pathobiology
LMP 1019H	Research Techniques in Molecular Biology and Pathobiology
LMP 1020H	Inflammation, Immunity, and Immunopathology of Atherosclerosis
LMP 1407H	Introductory Biostatistics and Clinical Investigation
MMG 1012H	Topics in Molecular Genetics I
MSC 7000Y	Regenerative Medicine
PHM 1122H	Fundamentals of Drug Discovery
PSL 1014H	Advanced Topics: the Gastrointestinal Epithelium

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, 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.
- Applicants must have completed the following University of Toronto undergraduate courses: IMM 435H, IMM 450Y, and two of IMM 428H, IMM 429H, or IMM 430H.
- Applicants must already have a 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: IMM 1550Y, completed in the first Summer session
  - 1.0 FCE: IMM 1650Y, completed over the last three sessions
  - 2.0 FCEs: IMM 1025H[0], IMM 1436H, IMM 1651H, IMM 1075H[0]
  - 1.0 FCE selected from the elective course list below.

Required Courses

IMM 1025H[0]	Student Seminar Series (I)
IMM 1075H[0]	Special Topics in Immunology (I)
IMM 1436H	Techniques in Immunology
IMM 1550Y	Major Research Project in Immunology (II)
IMM 1650Y	Major Research Project in Immunology (III)
IMM 1651H	Applied Research in Immunology

[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.

BTC 1850H	Creating Life Science Products
BTC 1860H	Generation of Advanced Medicine: Biologics in Therapy (GAMBiT)
CSB 1472H	Computational Genomics and Bioinformatics
IMM 1888H	Immunology of Pandemic Disease
JBZ 1472H	Computational Genomics and Bioinformatics
JDB 1025H	Developmental Biology
JFK 1120H	Selected Topics in Drug Development I
JFK 1121H	Selected Topics in Drug Development II
JTB 2010H	Proteomics and Functional Genomics

JTB 2020H	Applied Bioinformatics
LMP 1006H	Cellular Imaging in Pathobiology
LMP 1019H	Research Techniques in Molecular Biology and Pathobiology
LMP 1020H	Inflammation, Immunity, and Immunopathology of Atherosclerosis
LMP 1407H	Introductory Biostatistics and Clinical Investigation
MMG 1012H	Topics in Molecular Genetics I
MSC 7000Y	Regenerative Medicine
PHM 1122H	Fundamentals of Drug Discovery
PSL 1014H	Advanced Topics: the Gastrointestinal Epithelium

Program Length

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

Time Limit

3 years full-time

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 **2.5 full-course equivalents (FCEs)**: IMM 1000Y, IMM 1025H[0], IMM 1050H[0], and IMM 1075H[0].
- A satisfactory **thesis** embodying the student's research.
- Upon of completion of the thesis, pass an **oral examination**.

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

Program Length

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

Time Limit

3 years full-time

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 Department of Immunology's MSc in Fundamental Immunology program; 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.
- Applicants may be accepted for direct entry with a BSc degree, with at least an A- average in the final two years.

Program Requirements

- The PhD program emphasizes research. In addition, students must complete **coursework** worth **3.0 full-course equivalents (FCEs)** as follows:
    - 1.0 FCE: IMM 1000Y

    - 1.5 FCEs: IMM 2025H[0], IMM 2050H[0], and IMM 2075H[0]
    - 0.5 FCE: a graduate course from either Immunology or outside the department in a subject relevant to the thesis topic (see details below).
- Students must complete a **qualifying exam** within 16 months of starting the PhD program.
- Candidates must submit a **thesis** and defend it at a **Doctoral Final Oral Examination** conducted by the School of Graduate Studies.
- **Residence.** Students are required to be on campus and participating full-time until the program requirements of research and coursework have been completed.

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

Required Courses

IMM 1000Y	Recent Advances in Immunology
IMM 2025H[0]	Student Seminar Series (II) (Credit/No Credit)
IMM 2050H[0]	Easton Seminar Series (II) (Credit/No Credit)
IMM 2075H[0]	Special Topics in Immunology (II)

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.

BTC 1850H	Creating Life Science Products
BTC 1860H	Generation of Advanced Medicine: Biologics in Therapy (GAMBiT)
IMM 1888H	Immunology of Pandemic Disease
JBZ 1472H	Computational Genomics and Bioinformatics
JDB 1025H	Developmental Biology
JFK 1120H	Selected Topics in Drug Development I
JFK 1121H	Selected Topics in Drug Development II
JTB 2010H	Proteomics and Functional Genomics
JTB 2020H	Applied Bioinformatics
LMP 1006H	Cellular Imaging in Pathobiology
LMP 1019H	Research Techniques in Molecular Biology and Pathobiology
LMP 1020H	Inflammation, Immunity, and Immunopathology of Atherosclerosis
LMP 1407H	Introductory Biostatistics and Clinical Investigation
MMG 1012H	Topics in Molecular Genetics
MSC 7000Y	Regenerative Medicine
PHM 1122H	Fundamentals of Drug Discovery
PSL 1014H	Gastrointestinal Epithelium

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

Program Length

4 years full-time; 5 years direct-entry

Time Limit

6 years full-time; 7 years direct-entry

PhD Program (Transfer)

Transfer Requirements

- Applicants must pass a reclassification (transfer) exam which takes place within 16 months of the start of their MSc studies.

Program Requirements

- The PhD program emphasizes research. In addition, students must complete **coursework** worth **3.0 full-course equivalents (FCEs)** as follows:
    - 1.0 FCE: IMM 1000Y
    - 1.5 FCEs: IMM 2025H[0], IMM 2050H[0], and IMM 2075H[0]
    - 0.5 FCE: a graduate course from either Immunology or outside the department in a subject relevant to the thesis topic (see details below).
- Candidates must submit a **thesis** and defend it at a **Doctoral Final Oral Examination** conducted by the School of Graduate Studies.
- **Residence.** Students are required to be on campus and participating full-time until the program requirements of research and coursework have been completed.

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

Required Courses

IMM 1000Y	Recent Advances in Immunology
IMM 2025H[0]	Student Seminar Series (II) (Credit/No Credit)
IMM 2050H[0]	Easton Seminar Series (II) (Credit/No Credit)
IMM 2075H[0]	Special Topics in Immunology (II)

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.

BTC 1850H	Creating Life Science Products
BTC 1860H	Generation of Advanced Medicine: Biologics in Therapy (GAMBiT)
IMM 1888H	Immunology of Pandemic Disease
JBZ 1472H	Computational Genomics and Bioinformatics
JDB 1025H	Developmental Biology
JFK 1120H	Selected Topics in Drug Development I
JFK 1121H	Selected Topics in Drug Development II
JTB 2010H	Proteomics and Functional Genomics
JTB 2020H	Applied Bioinformatics
LMP 1006H	Cellular Imaging in Pathobiology
LMP 1019H	Research Techniques in Molecular Biology and Pathobiology
LMP 1020H	Inflammation, Immunity, and Immunopathology of Atherosclerosis
LMP 1407H	Introductory Biostatistics and Clinical Investigation
MMG 1012H	Topics in Molecular Genetics
MSC 7000Y	Regenerative Medicine
PHM 1122H	Fundamentals of Drug Discovery
PSL 1014H	Gastrointestinal Epithelium

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

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:

1. **Ethnic and Pluralism Studies**
   - Industrial Relations and Human Resources, MIRHR, PhD
2. **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

IRHR: Graduate Faculty

Full Members

Campolieti, Michele - BSc, MA, PhD
Dhuey, Elizabeth Ann - BA, MEc, PhD
Gomez, Rafael - BA, MA, MIR, PhD (*Director*)
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
MacDowell, Laurel - BA, MSc, PhD
Macklem, Patrick - BA, LLB, LLM
Reitz, Jeffrey - PhD
Rotundo, Maria - BA, MA, PhD
Saks, Alan - BA, MSc, PhD
Verma, Anil - BTech, MBA, PhD

Members Emeriti

Gunderson, Morley - BA, MA, PhD
Reid, Frank - BA, MSc, PhD (*Coordinator of Graduate Studies*)

Associate Members

Heathcote, Joanna - BA, MA, PhD
Pohler, Dionne - BComm, PhD
Rittich, Kerry - BAMus, LLB, SJD
Riznek, Lori - BA, MA, DA
Sawchuk, Peter - BSc, BEd, 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:
    - IRE 1002H *Applied Statistics in Industrial Relations*
    - IRE 1010H *Economic Foundations of Industrial Relations and Human Resources*
    - IRE 1126H *Economics of Labour and Human Resources (PR)*
    - IRE 1362H *Organizational Behaviour*
    - IRE 1609H *Strategic Human Resources Management* (exclusion: RSM 2609H *Aligning People and Strategy*)
    - IRE 1610H *Industrial Relations*
    - plus one of the following law courses:
        - IRE 1270H *Law of Labour Relations*
        - IRE 1338H *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 IRE 4000H, 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):
    - IRE 2001H *Foundations and Current Issues in Industrial Relations and Human Resources*
    - IRE 2002H *Research Methods for Industrial Relations and Human Resources* (PR)
    - plus one of the following courses:
        - IRE 2003H *Research Project in Industrial Relations and Human Resources* (PR)
        - IRE 2004H *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:
    - IRE 1010H *Economic Foundations of Industrial Relations and Human Resources*
    - IRE 1126H *Economics of Labour and Human Resources* (PR)
    - IRE 2001H *Foundations and Current Issues in Industrial Relations and Human Resources*
    - IRE 2002H *Research Methods for Industrial Relations and Human Resources* (PR)
    - plus one of the following courses:
        - IRE 2003H *Research Project in Industrial Relations and Human Resources* (PR)
        - IRE 2004H *Data Analytics and Metrics in Industrial Relations and Human Resources* (PR)
    - plus one of the following law courses:
        - IRE 1270H *Law of Labour Relations*
        - IRE 1338H *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:
        - IRE 3004H *Special Topics in Employment and Industrial Relations*.
    - The research and statistics requirements are met by completing:
        - IRE 3002Y *Research Seminar I*
        - IRE 3003H *Research Seminar II* (PR)
        - RSM 3062H *Methods and Research in Organizational Behaviour and Industrial Relations*
        - 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:
    - IRE 3005H *Workshop in Industrial Relations I* (Credit/No-Credit)
    - IRE 3006H *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:
    - IRE 3004H *Special Topics in Employment and Industrial Relations*.
  - The research and statistics requirements are met by completing:
    - IRE 3002Y *Research Seminar I*
    - IRE 3003H *Research Seminar II* (PR)
    - RSM 3062H *Methods and Research in Organizational Behaviour and Industrial Relations*
    - 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:
  - IRE 3005H *Workshop in Industrial Relations I* (Credit/No-Credit)
  - IRE 3006H *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

IRE 1002H	Applied Statistics in Industrial Relations
IRE 1010H	Economic Foundations of Industrial Relations and Human Resources
IRE 1126H	Economics of Labour and Human Resources (PR)
IRE 1270H	Law of Labour Relations
IRE 1338H	Law in the Workplace
IRE 1362H	Organizational Behaviour
IRE 1609H	Strategic Human Resources Management
IRE 1610H	Industrial Relations
IRE 2001H	Foundations and Current Issues in Industrial Relations and Human Resources
IRE 2002H	Research Methods for Industrial Relations and Human Resources (PR)
IRE 2003H	Research Project in Industrial Relations and Human Resources (PR)
IRE 2004H	Data Analytics and Metrics for Industrial Relations and Human Resources (PR)
IRE 3002Y	Research Seminar I
IRE 3003H	Research Seminar II (PR)
IRE 3004H	Special Topics in Employment and Industrial Relations
IRE 3005H	Workshop in Industrial Relations I (Credit/No Credit)
IRE 3006H	Workshop in Industrial Relations II (Credit/No Credit)
RSM 3062H	Methods and Research in Organizational Behaviour and Industrial Relations

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

IRE 1260H	Seminar on Labour Arbitration (PR)
IRE 1270H	Law of Labour Relations
IRE 1338H	Law in the Workplace
IRE 1600H	International Developments in Labour and Human Resource Policy (PR)
IRE 1611H	Sociology of Industrial Relations
IRE 1615H	Labour and Globalization (PR)
IRE 1620H	Labour Relations Problems in Historical Perspective
IRE 1625H	Contemporary Issues in Public Sector Labour-Management Relations (PR)
IRE 1630H	Negotiation Skills, Theory, and Practice (PR)
IRE 1635H	Collective Bargaining (PR)
IRE 1640H	Contemporary Trade Unionism: Issues, Challenges, Strategy (PR)
IRE 1650H	Managing Workplace Conflict (PR)
IRE 1655H	Health and Safety
IRE 1715H	Special Topics in Industrial Relations and Human Resources
IRE 1720H	Managing Organizational Change (PR)
IRE 1725H	Cross Cultural Differences in Organizational Contexts (PR)
IRE 1730H	Contemporary Challenges Facing Today's Organizations (PR)
IRE 2021H	Business Strategy for IR/HR
IRE 2715H	Special Topics in Industrial Relations and Human Resources
IRE 3615H	Performance Management Systems (PR)
IRE 3635H	Compensation (PR)
IRE 3640H	Recruitment and Selection (PR)
IRE 3645H	Training and Development (PR)
IRE 3650H	Human Resource Planning and Strategy (PR)
IRE 3655H	Leadership (PR)
IRE 3715H	Special Topics in Industrial Relations and Human Resources

Adult Education and Counselling Psychology

APD 1268H	Career Counselling and Development: Transition in Adulthood
LHA 1101H	Approaches to Teaching Adults
LHA 1148H	Introduction to Workplace, Organizational, and Economic Democracy

Economics

ECO 2800H	Labour Economics I
ECO 2801H	Labour Economics II (PR)

Management

RSM 2027	Not-for-Profit Consulting
RSM 2129H	Forecasting Models and Econometric Methods (PR)
RSM 2605H	International Organizational Behaviour (PR)
RSM 2612H	Managing Talent for Global Operations
RSM 2615H	Special Topics in Organizational Behaviour

Political Science

JPJ 2042H	Labour Policy
POL 2307H	The Political Economy of Technology: from the Auto-Industrial to the Information Age

Public Health Sciences

CHL 5904H	Perspectives in Occupational Health and Safety—Legal and Social Context

Sociology

SOC 6003H	Immigration II
SOC 6012H	Sociology of Work I
SOC 6112H	Sociology of Work II

Other Elective Courses

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

IRE 4000H	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:

IRE 1090H	A reading course or individual research in an approved field
IRE 2090H	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) 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 Philosophy of Information

Museum Studies

MMSt

Combined Degree Programs

STG, Law, JD / MI
STG, MI /MMSt
UTM, Communication, Information and Technology (Major), Honours BA / MI
UTM, Digital Enterprise Management (Specialist), Honours BA / MI
UTM, Interactive Digital Media (Specialist), Honours BA / MI

Diploma Program

Information Studies

Graduate Diploma of Advanced Study in 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:

1. **Addiction Studies**
   - Information, PhD
2. **Aging, Palliative and Supportive Care Across the Life Course**
   - Information, MI, PhD
3. **Book History and Print Culture**
   - Information, MI, PhD
   - Museum Studies, MMSt
4. **Environmental Studies**
   - Information, MI, PhD
5. **Food Studies**
   - Information, MI
   - Museum Studies, MMSt
6. **Jewish Studies**
   - Information, PhD
   - Museum Studies, MMSt
7. **Knowledge Media Design**
   - Information, MI, PhD
   - Museum Studies, MMSt
8. **Sexual Diversity Studies**
   - Information, MI, PhD
   - Museum Studies, MMSt
9. **Women and Gender Studies**
   - Information, MI, PhD
10. **Women's Health**
    - Information, 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

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Faculty of Information
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Canada

Information: Graduate Faculty

Full Members

Andritsos, Periklis - BSc, MSc, PhD, PhD
Boase, Jeffrey - BA, MA, PhD
Brower, Matthew - PhD
Caidi, Nadia - PhD
Choo, Chun Wei - BA, MSc, PhD
Cohen, Nicole - BA, MA, PhD
Cowan, Theresa - BA, MA, PhD
Dallas, Constantinos - BA, MPH, PhD, PhD
Delfanti, Alessandro - PhD
Dilevko, Juris - MLIS, MA, PhD, PhD
Duff, Wendy - BA, BA, MLS, PhD (*Dean*)
Foscarini, Fiorella - PhD
Galey, Alan - PhD
Grimes, Sara - PhD
Hanna, Alex - BS, BA, MS
Hartel, Jenna - PhD
Howarth, Lynne - BA, MLS, PhD
Karppi, Tero Jukka - MA, PhD
Keilty, Patrick - BA, MLIS, PhD
Krmpotich, Cara - PhD
Lyons, Kelly - BSc, MSc, PhD
MacNeil, Heather - PhD
McArthur, Victoria - BA, MA
McEwen, Rhonda - PhD
Mihalache, Irina - BA, MA, PhD
Nieborg, David Bartzoon - PhD
Packer, Jeremy - BA, MA, PhD
Petit, Michael - BA, MA, PhD
Phillips, David - PhD
Ratto, Matthew - PhD
Ross, Seamus - BA, MA, 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
Yu, Eric - BSc, MMath, PhD
Yu, Sherry (Soomin) - BA, MA, PhD

Members Emeriti

Clement, Andrew - BSc, MSc, PhD
Craig, Barbara - AM, PhD
Fleming, E Patricia - BA, BLS, MLS
Williamson, Nancy - BA, BLS, MLS

Associate Members

Bowen, Tracey - BFA, MEd, PhD
Furness, Colin - BSc, PhD
Scheffel-Dunand, Dominique - BA, MA
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 seven 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.
- An appropriate bachelor's degree with at least a B average (3.0 GPA) from a university recognized by the University of Toronto. Generally, successful applicants hold an academic level of B+ (3.3 GPA) or higher in the final year.
- 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:

1. 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.
2. Michigan English Language Assessment Battery (MELAB) with a minimum required score of 95.
3. International English Language Testing System (IELTS) with a minimum required score of 8.0.
4. English Language Diagnosis and Assessment (ELDA)/Certificate of Proficiency in English (COPE) with a minimum required score of 6 and at least 3 in the writing portion.

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.

Concentration-Plus-Executive-Delivery Option—ISD Only (Under Review)

- Applicants interested in completing the Master of Information degree in the executive delivery option must submit application documents (transcript, a minimum of two references, personal statement). For more information, visit the Faculty of Information website.
- A third letter, from the applicant's current place of employment, will be required as a condition of admission. This letter must confirm supervisory support and the intent to complete the required workplace project.
- Proof of employment (minimum two years) full-time (35 hours a week) in an area that requires interacting with the creation and design of information systems (ISD).

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 seven concentrations leading to the MI degree:
  1. Archives and Records Management
  2. Critical Information Policy Studies
  3. Culture and Technology
  4. Information Systems and Design
  5. Knowledge Management and Information Management
  6. Library and Information Science
  7. User Experience Design
- Each concentration requires **a total of 8.0 FCEs**.
- **Concentration-only option:**
  - Two quarter-weight core courses (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: INF 1005H and INF 1006H (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 (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).
  - INF 3900H *Workplace Integrated Learning* (0.5 FCE).
  - One 24-week or two 12-week co-op placement courses (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-plus-executive-delivery option—ISD only (under review):**
  The executive delivery option is specifically for students who are full-time working professionals and who have the support of their employer to participate in an executive program delivery model. This option is currently only available for the Information Systems & Design (ISD) concentration.
    - Two quarter-weight core courses: INF 1005H and INF 1006H (0.5 FCE total).
    - Five required half courses: INF 1340H, INF 1341H, INF 1342H, INF 1343H, and INF 2177H (2.5 FCEs total).
    - INF 3910Y *Workplace Project* 1.0 FCE), to be taken after the core and required courses are completed.
    - Right elective half courses (4.0 FCEs total).

Concentration: Archives and Records Management (ARM)

- 0.5 core FCE (INF 1005H and 1006H).
- 2.5 required FCEs (INF 1003H, INF 1330H, INF 1331H or INF 2186H, INF 2175H, and INF 2184H).
- 5.0 elective FCEs or
  co-op (1.0 FCE), INF 3900H (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 (INF 1005H and 1006H).
- 2.5 required FCEs (INF 1001H, INF 2181H, INF 2240H, INF 2243H, and INF 2242H).
- 5.0 elective FCEs or
  co-op (1.0 FCE), INF 3900H (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 (INF 1005H and 1006H).
- 2.5 required FCEs (INF 1501H, INF 1502H, INF 2241H, INF 2243H, and either INF 2331H or INF 2320H).
- 5.0 elective FCEs or
  co-op (1.0 FCE), INF 3900H (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 (INF 1005H and 1006H).
- 2.5 required FCEs (INF 1340H, INF 1341H, INF 1342H, INF 1343H, and INF 2177H).
- 5.0 elective FCEs or
  co-op (1.0 FCE), INF 3900H (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 or
  executive delivery option and INF 3910Y *Workplace Project* (1.0 FCE) plus 4.0 elective FCEs.

Concentration: Knowledge Management and Information Management (KMIM)

- 0.5 core FCE (INF 1005H and 1006H).
- 2.5 required FCEs (INF 1003H, INF 1230H, INF 2175H, INF 2176H, and INF 2186H).
- 5.0 elective FCEs or
  co-op (1.0 FCE), INF 3900H (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 (INF 1005H and 1006H).
- 2.0 required FCEs (INF 1321H, INF 1322H, INF 1323H, and INF 1324H).
- 5.5 elective FCEs or
  co-op (1.0 FCE), INF 3900H (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 (INF 1005H and 1006H).
- 2.5 required FCEs (INF 1602H, INF 2169H, INF 2170H, INF 2191H, and INF 2192H).
- 5.0 elective FCEs or
  co-op (1.0 FCE), INF 3900H (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: INF 1005H and INF 1006H (0.5 FCE total).
- Three required half courses: INF 1001H, INF 1003H, and INF 1240H (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: INF 1005H and INF 1006H (0.5 FCE total).

- Three required half courses: INF 1001H, INF 1003H, and INF 1240H (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–. INF 1240H 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), which 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.
    - Michigan English Language Assessment Battery (MELAB) with a minimum required score of 95.
    - the International English Language Testing System (IELTS) with a minimum required score of 8.0.
    - English Language Diagnosis and Assessment (ELDA)/Certificate of Proficiency in English (COPE) with a minimum required score of 6 and at least 3 in the writing portion.

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.

INF 1001H	Knowledge and Information in Society
INF 1002H	Representation, Organization, Classification, and Meaning-Making
INF 1003H	Information Systems, Services, and Design
INF 1005H	Information Workshop I
INF 1006H	Information Workshop II
INF 1230H	Management of Information Organizations
INF 1240H	Research Methods
INF 1300H	Foundations in Library and Information Science
INF 1310H	Introduction to Reference
INF 1320H	Knowledge Organization
INF 1321H	Representing, Documenting, and Accessing the Cultural Record
INF 1322H	Communities and Values
INF 1323H	The Information Experience
INF 1324H	Critical Infrastructures
INF 1325H	Online Information Retrieval
INF 1330H	Archives Concepts and Issues
INF 1331H	Archival Arrangement and Description
INF 1339H	Introduction to Computational Thinking
INF 1340H	Programming for Information Systems
INF 1341H	Systems Analysis and Process Innovation
INF 1342H	System Requirements and Architectural Design
INF 1343H	Data Modeling and Database Design
INF 1501H	Culture and Technology I
INF 1502H	Culture and Technology II (prerequisite: INF 1501H Culture and Technology I)
INF 1601Y	User Experience Design Capstone Project (CR/NCR)
INF 1602H	Fundamentals of User Experience
INF 2010H	Reading Course
INF 2011H	Reading Course
INF 2040H	Project Management
INF 2102H	Geographic Information Systems (GIS) in Libraries
INF 2103H	Recordkeeping Cultures
INF 2110H	Design and Evaluation of Information Literacy Programs
INF 2115H	Data Librarianship
INF 2120H	Conservation and Preservation of Recorded Information
INF 2121H	Specialized Archives
INF 2122H	Digital Preservation and Curation
INF 2124H	Surveillance and Identity
INF 2125H	Information and Culture in a Global Context
INF 2126H	Public Library Services to Culturally Diverse Communities
INF 2127H	Collection Development, Evaluation, and Management
INF 2128H	Serials Management
INF 2129H	Graphic Novels and Comic Books in the Library
INF 2131H	The Literature of the Humanities and Social Sciences
INF 2133H	Legal Literature and Librarianship
INF 2134H	Business Information Resources
INF 2135H	Evidence-Based Healthcare for Librarians
INF 2136H	Government Information and Publications
INF 2137H	International Organizations: Their Documents and Publications
INF 2141H	Children's Cultural Texts and Artifacts
INF 2143H	Issues in Children's and Young Adults' Services
INF 2145H	Creation and Organization of Bibliographic Records
INF 2146H	Trusting Records
INF 2149H	Administrative Decision-Making in Information Organizations
INF 2150H	Legal Issues in Archives
INF 2152H	Advocacy and Library Issues
INF 2155H	The Public Library in the Community: Developing a Critical Practice
INF 2156H	Reading and the Reading Public in North America and Around the World
INF 2157H	Theory and Practice of Intellectual Freedom in Libraries
INF 2158H	Management of Corporate and Other Special Information Centres
INF 2159H	Analytical and Historical Bibliography
INF 2161H	History of Books and Printing
INF 2162H	Rare Books and Manuscripts
INF 2165H	Social Issues in Information and Communication Technologies
INF 2169H	User-Centred Information Systems Development
INF 2170H	Information Architecture
INF 2171H	Major Subject Heading and Classification Systems
INF 2172H	Readers' Advisory: Reference Work and Resources
INF 2173H	Information Professional Practicum
INF 2174H	History of Records and Records-Keeping
INF 2175H	Managing Organizational Records I
INF 2176H	Information Management in Organizations—Models and Platforms
INF 2177H	Information Management and Systems (prerequisite: INF 1341H Systems Analysis and Process Innovation)
INF 2180H	Archives: Access, Advocacy, and Outreach
INF 2181H	Information Policy, Regulation and Law
INF 2183H	Knowledge Management and Systems
INF 2184H	Appraisal for Records Retention and Archives Acquisition
INF 2186H	Metadata Schemas and Applications
INF 2188H	Advanced Arrangement and Description: Archival Representational Practices
INF 2189H	Managing Organizational Records II: Digital Environments
INF 2190H	Data Analytics: Introduction, Methods and Practical Approaches
INF 2191H	User Interface Design
INF 2192H	Representing UX
INF 2194Y	Information Systems Design Project
INF 2195H	Special Topics in Information Studies
INF 2196H	Special Topics in Information Studies
INF 2197H	Special Topics in Information Studies
INF 2198H	Special Topics in Information Studies
INF 2199H	Special Topics in Information Studies
INF 2221H	Digital Divides and Information Professionals: Developing a Critical Practice
INF 2225H	Digital Discourse

INF 2240H	Political Economy and Cultural Studies of Information
INF 2241H	Critical Making: Information Studies, Social Values, and Physical Computing
INF 2242H	Studying Information and Knowledge Practice
INF 2243H	Critical Histories of Information and Communication Technologies
INF 2300H	Special Topics in Information Studies
INF 2301H	Special Topics in Information Studies
INF 2302H	Special Topics in Information Studies
INF 2303H	Special Topics in Information Studies
INF 2304H	Special Topics in Information Studies
INF 2305H	Special Topics in Information Studies
INF 2306H	Special Topics in Information Studies
INF 2307H	Special Topics in Information Studies
INF 2308H	Special Topics in Information Studies
INF 2309H	Special Topics in Information Studies
INF 2310H	Special Topics in Information Studies
INF 2311H	Managing Audiovisual Materials
INF 2312H	Art Librarianship: Theory Informs Practice
INF 2313H	Introduction to Service Science
INF 2320H	Remix Culture
INF 2325H	Launching Information Ventures
INF 2330H	Information Ethnography
INF 2331H	The Future of the Book
INF 2332H	Information Behaviour
INF 3900H	Workplace Integrated Learning
INF 3901Y	Co-operative Workplace Placement I
INF 3902H	Co-operative Workplace Placement II
INF 3903H	Co-operative Workplace Placement III
INF 3910Y	Workplace Project
JDM 3619H	Digital Media Distribution
JIE 1001H	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.
    - Michigan English Language Assessment Battery (MELAB) with a minimum required score of 95.
    - International English Language Testing System (IELTS) with a minimum required score of 8.0.
    - Certificate of Proficiency in English (COPE): with a minimum required score of 95 overall; 41 on the writing component; 27 on each of the other components.
    - Academic English Level 60, U of T School of Continuing Studies: "A" overall score.
- 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:

    - INF 3001H *Research in Information: Foundations* (0.5 FCE)
    - INF 3003H *Research in Information: Frameworks and Design* (0.5 FCE)
    - INF 3006Y *Major Area Reading Course* (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.
- PhD students must be regularly registered in the School of Graduate Studies during each year of their program.

Program Length

4 years

Time Limit

6 years

PhD Program (Flexible-Time Option; Under Review)

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.
    - Michigan English Language Assessment Battery (MELAB) with a minimum required score of 95.
    - International English Language Testing System (IELTS) with a minimum required score of 8.0.
    - Certificate of Proficiency in English (COPE): with a minimum required score of 95 overall; 41 on the writing component; 27 on each of the other components.
    - Academic English Level 60, U of T School of Continuing Studies: "A" overall score.
- 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:
    - INF 3001H *Research in Information: Foundations* (0.5 FCE)
    - INF 3003H *Research in Information: Frameworks and Design* (0.5 FCE)
    - INF 3006Y *Major Area Reading Course* (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

INF 3001H	Research in Information: Foundations
INF 3003H	Research in Information: Frameworks and Design
INF 3006Y	Major Area Reading Course

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.
- An appropriate bachelor's degree with an overall average grade of at least B+ 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:
- 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:
    1. 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.
    2. Michigan English Language Assessment Battery (MELAB) with a minimum required score of 95.
    3. International English Language Testing System (IELTS) with a minimum required score of 8.0.
    4. English Language Diagnosis and Assessment (ELDA)/Certificate of Proficiency in English (COPE) with a minimum required score of 6 and at least 3 in the writing portion.
- Thesis option: Faculty approval is required to enter this 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.

Program Requirements

Coursework Option

- Students must complete a minimum of **7.5 full-course equivalents (FCEs)** including:
    - five required half courses (2.5 FCEs)
    - MSL 4000Y (1.0 FCE)
    - either one required full course (1.0 FCE) and 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.
- Before the end of their program, students whose primary language is English will be required to demonstrate a reading knowledge of a second language (preferably French) by means of a written exam and achieve a minimum grade of 70%.

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)

MSL 1150H	Collection Management
MSL 1230H	Ethics, Leadership, Management
MSL 2331H	Exhibitions, Interpretation, Communication
MSL 2370H	Museums and Cultural Heritage: Context and Critical Issues
either MSL 2350H *or* INF 2040H	Museum Planning and Management: Projects and Fundraising Project Management
either MSL 4000Y *or* Thesis option	Exhibition Project

MMSt Elective Courses

Internal (Museum Studies) Elective Courses

MSL 1300H	Contemporary Theories of Art and Culture
MSL 1350H	Museums and their Publics
MSL 2000H	Curatorial Practice
MSL 2050H	Curating Science
MSL 2100H	Museum Environment
MSL 2115H	Global Cultures and Museums
MSL 2240H	The Photographic Record
MSL 2301H	Special Topics in Museum Studies
MSL 2302H	Special Topics in Museum Studies
MSL 2303H	Special Topics in Museum Studies
MSL 2325H	Museums and New Media Practice
MSL 2330H	Interpretation and Meaning-Making in Cultural Institutions
MSL 2332H	Public Programs and Education
MSL 2340H	Issues in Cultural Policy and Contemporary Culture
MSL 2360H	Museums and Indigenous Communities: Changing Relationships, Changing Practice
MSL 2500H	Constructing and Curating Digital Heritage
MSL 3000Y	Internship
MSL 5050H	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&T 1006H	Media, Mind, and Society I
C&T 1008H	Media, Mind, and Society II
C&T 1009H	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:

1. **Book History and Print Culture**
   - Italian Studies, MA, PhD
2. **Editing Medieval Texts**
   - Italian Studies, PhD
3. **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: http://italianstudies.utoronto.ca
Email: italian.grad@utoronto.ca
Telephone: (416) 926-2346
Fax: (416) 926-7107

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 (*Chair and Graduate Chair*)
Eisenbichler, Konrad - BA, MA, PhD
Guardiani, Francesco - MA, PhD
Lettieri, Michael - BA, MA, PhD
Pierno, Franco - BA, MA, PhD (*Graduate Coordinator*)
Pietropaolo, Domenico - BSc, MA, PhD
Robins, William - BA, MPH, PhD
Rupp, Stephen - BA, MA, MPH, MA, PhD
Somigli, Luca - PhD
Terpstra, Nicholas - BA, MA, PhD

Members Emeriti

Capozzi, Rocco - BA, MA, PhD

Associate Members

Brilli, Elisa - MA, PhD
Casini, Simone - BA, MA, PhD
Morra, Eloisa - BA, MA, MA, PhD, PhD
Piccardo, Enrica - MA, PhD
Rigoletto, Sergio - AB, AM, PhD
Zambenedetti, Alberto - 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.
- 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

- **Coursework.** Successful completion of **4.5 full-course equivalents (FCEs)** as follows:
  - ITA 1000H *Methodologies for the Teaching and Study of Italian* (0.5 FCE)
  - 4.0 graduate FCEs.
- 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.
- A personal statement of intent.
- 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 **4.5 full-course equivalents (FCEs)** as follows:
  - 4.0 graduate FCEs including a mandatory extra-departmental course (0.5 FCE) chosen in consultation with the Graduate Coordinator.
  - ITA 1000H *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.
- A personal statement of intent.
- 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 will normally complete **8.5 full-course equivalents (FCEs)** as follows:
    - 8.0 graduate FCEs, including a mandatory extra-departmental course (0.5 FCE) In consultation with the Graduate Coordinator.
    - ITA 1000H *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.

ITA 1000H	Methodologies for the Teaching and Study of Italian (Credit/No Credit)
ITA 1001Y	Colloquia and Professional Development (Credit/No Credit)
ITA 1025H	Old Italian
ITA 1029H	History of Italian Religious Language
ITA 1030H	Italian Lexicography
ITA 1031H	History of Italian Language in North America
ITA 1165H	Introduction to Italian Philology
ITA 1170H	Textual Criticism and the Editing of Early Italian Texts
ITA 1177H	The Italian Questione della Lingua
ITA 1200H	Dante
ITA 1202H	Dante as a Reader of Augustine's City of God: Augustinian Textual Communities at the Beginning of the 14th Century
ITA 1203H	Boccaccio
ITA 1235H	Topics in Italian Studies
ITA 1330H	Petrarch and Petrarchism
ITA 1520H	Renaissance Humanism
ITA 1530H	Machiavelli
ITA 1535H	Topics in Italian Literature
ITA 1540H	Renaissance Italian Theatre
ITA 1545H	The Sacra Rappresentazione
ITA 1550H	Sixteenth-Century Florence
ITA 1551H	Sixteenth-Century Italian Tragedy
ITA 1552H	Pietro Aretino and the Italian Renaissance
ITA 1555H	Literature and Society in Renaissance Italy
ITA 1565H	Tasso
ITA 1591H	Baroque Poetics and Poetry
ITA 1597H	The Commedia dell'Arte
ITA 1601H	Vico
ITA 1605H	Theories of the Stage and Dramatic Criticism
ITA 1610H	Seventeenth and Eighteenth-Century Theatre
ITA 1645H	Post-Tridentine Religious Drama
ITA 1650H	Neoclassical and Pre-Romantic Literary Culture
ITA 1661H	Topics in Nineteenth-Century Italian Literature
ITA 1705H	Pirandello
ITA 1710H	Aspects of Modern Italian Poetry
ITA 1723H	Trends in the Italian Novel 1900–1960
ITA 1728H	New Trends in the Italian Novel From 1957 to the Present
ITA 1735H	Topics in Italian Studies I
ITA 1736H	Topics in Italian Studies II
ITA 1737H	Topics in Italian Studies
ITA 1755H	Italian Modernism
ITA 1760H	Futurism
ITA 1810H	Studies in Italian Literature and Film
ITA 1815H	Issues in Italian Film Historiography
ITA 2010Y	Directed Research in Italian Linguistics
JIF 1000H	Romance Philology I

JIF 1001H	Romance Philology II
MST 3162H	Boccaccio and Chaucer

Laboratory Medicine and Pathobiology

LMP: Introduction

Faculty Affiliation

Medicine

Degree Programs

Laboratory Medicine and Pathobiology

MSc
PhD

Combined Degree Programs

STG, MD / PhD

Collaborative Specializations

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

1. **Biomedical Engineering**
   - Laboratory Medicine and Pathobiology, MSc, PhD
2. **Biomedical Toxicology**
   - Laboratory Medicine and Pathobiology, MSc, PhD
3. **Cardiovascular Sciences**
   - Laboratory Medicine and Pathobiology, MSc, PhD
4. **Developmental Biology**
   - Laboratory Medicine and Pathobiology, MSc, PhD
5. **Genome Biology and Bioinformatics**
   - Laboratory Medicine and Pathobiology, PhD
6. **Musculoskeletal Sciences**
   - Laboratory Medicine and Pathobiology, MSc, PhD
7. **Neuroscience**
   - Laboratory Medicine and Pathobiology, MSc, PhD
8. **Resuscitation Sciences**
   - 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

Admission

Web: www.lmp.utoronto.ca
Email: r.ponda@utoronto.ca
Telephone: (416) 978-2550
Fax: (416) 978-7361

Program

Web: www.lmp.utoronto.ca
Email: ferzeen.sammy@utoronto.ca
Telephone: (416) 978-2663
Fax: (416) 978-7361

Department of Laboratory Medicine and Pathobiology
University of Toronto
Medical Sciences Building
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LMP: Graduate Faculty

Full Members

Abdelhaleem, Mohamed - MSc, MBCHB, PhD
Adeli, Khosrow - DipChem, MSc, PhD
Alman, Benjamin - BSc, MD
Andrulis, Irene - BA, PhD
Asa, Sylvia - MD

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
Bognar, Andrew - BSc, PhD
Boyd, Shelley - BM
Branch, Donald - BA, BSc, PhD
Bremner, Roderick Angus - BSc, PhD
Brown, Martha - BSc, MSc, PhD
Buchan, Alison - BSc, MASc, PhD
Cole, David - BSc, MD, PhD
Connelly, Philip - BA, PhD
Crowcroft, Natasha - BA, MA, MSc, MBBS, PhD
Cutz, Ernest - MD
Cybulsky, Myron - MD
Delabie, Jan - MD, PhD
Dennis, James - PhD
Diamandis, Eleftherios - BSc, MD, PhD
Dirks, Peter - MD, PhD
Dittakavi, Sarma - BSc, MSc, PhD
Done, Susan - BA, MA, MBA, BCh, MB, PhD
Drucker, Daniel - MD
Elsholtz, Harry - BSc, MSc, PhD (*Coordinator of Graduate Studies*)
Fish, Jason - BSc, PhD
Girardin, Stephen - BSc, PhD
Gotlieb, Avrum - BSc, MDCM
Grynpas, Marc - MSc, PhD
Hakem, Razqallah - PhD
Hamel, Paul - BSc, PhD
Harrison, Rene - BS, MS, PhD
Hawkins, Cynthia - 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
Joshi-Sukhwal, Sadhna - BSc, MSc, PhD, DSc
Jothy, Serge - MSc, MD, PhD
Kain, Kevin - MD
Kamel-Reid, Suzanne - BA, MA, PhD
Kandel, Rita - MD (*Chair and Graduate Chair*)
Keeley, Frederick - BSc, PhD
Khokha, Rama - BSc, MSc, PhD
Kingdom, John - DipCH, MB, MD
Laflamme, Michael - BS, MD, PhD
Lee, Jeffrey - BSc, PhD
Levy, Gary - BSc, 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
Mogridge, Jeremy - BSc, PhD
Ni, Heyu - MSc, MD, PhD
O'Brien, Catherine - BSc, MSc, DrMed, PhD
Ohh, Michael - BSc, PhD
Opas, Michal - MSc, PhD
Ostrowski, Mario - MD
Palaniyar, Nades - MSc, PhD
Post, Martin - PhD
Pritzker, Kenneth - BSc, MD
Prud'homme, Gerald - MD
Rajalakshmi, Srinivasan - BSc, MA, PhD
Rand, Margaret - BSc, PhD
Reis, Marciano - MD
Richardson, Susan - BSc, MDCM
Robertson, Janice - BSc, PhD
Rosenblum, Norman - MD
Rozakis-Adcock, Maria - BSc, PhD
Rutka, James - BSc, LMCC, MD, PhD
Schmitt-Ulms, Gerold - BSc, MSc, DrRerNat
Seth, Arun - MS, PhD
Shaw, Patricia - SB, MD
Sherman, Philip - MD
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
Tron, Victor - MD
Tsao, Ming-Sound - BSc, MD
van der Kwast, Theodorus - MD, PhD
Wang, Chen - MD, PhD
Wilson, Gregory - MSc, MD
Wong, Pui-Yuen - BSc, PhD
Yang, Burton - BSc, MSc, PhD
Yeger, Herman - BSc, MScPhm, PhD
Yousef, George - MSc, MD, PhD
Yucel, Yeni - MD
Zacksenhaus, Eldad - PhD
Zhang, Li - MSc, MD, PhD

Members Emeriti

Johnston, Miles - BSc, PhD
Marks, Alexander - MD, PhD
Minta, Joe - BSc, MBA, MSc, PhD
Shek, Pang - BSc, MSc, PhD

Associate Members

Aldape, Kenneth - BASc, MD
Allen, Vanessa G - BA, MD
Berman, Hal K. - MD, PhD
Blasutig, Ivan M. - BSc, PhD
Broukhanski, Gueorgui - MSc, PhD
Callum, Jeannie - BA, MD
Chandran, Vinod - MBBS, PhD
Chang, Hong - MSc, MD, PhD
Charames, George - BS, MS, PhD
Clarke, Blaise - MBCHB
Coburn, Bryan - BSc, DrMed
Colantonio, David - BSc, MSc, PhD
Das, Sunit - DrMed
Diamandis, Phedias - BS, MD, PhD
Drabovich, Andrei - MS, PhD
Fittipaldi, Nahuel Vicente - BS, MS, PhD
Gandhi, Rajiv - BSc, MSc, MD
Gubbay, Jonathan B. - BSc, MSc, MBBS
Hazrati, Lili-Naz - BSc, MSc, MD, PhD
Kalia, Lorraine - BSc, MD, PhD
Kalia, Suneil - BSc, MD, PhD
Keating, Sarah - MSc, MD
Kulasingam, Vathany - BSc, PhD
Kus, Julianne - BS, MS, PhD

Lerner-Ellis, Jordan - BS, PhD
Li, Ren-Ke - MHSc, MSc, MD, PhD
Licht, Christoph - MD
MacParland, Sonya - BS, MS, PhD
Mallo, Gustavo - MSc, PhD
Melano, Roberto - MSc, PhD
Mete, Ozgur - MD
Moraes, Theo - MD
Mubareka, Samira - MD
Munoz, David - MSc, MD
Ng, Dominic - MD
Pasic, Maria - BS, PhD
Patel, Samir - MSc, PhD
Petrich, Astrid - BSc, PhD
Pollanen, Michael - BSc, MD, PhD
Poutanen, Susan - MPH, MD
Riddell, Robert - LMCC, LRCP, MBBS
Robbins, Clinton Shane - BS, PhD
Romaschin, Alexander - DipChem, BSc, PhD
Rouzbahman, Marjan - MD
Shlien, Adam - BS, PhD
Simor, Andrew - MD
So, Joyce - MD, PhD
Somers, Gino - MBBS, BMedSc, PhD
Spears, Melanie - BS, PhD
Stockley, Tracy - BSc, PhD
Sung, Hoon-Ki - MS, MD, PhD
Tein, Ingrid - MD
Waters, Valerie - MD
Winer, Daniel - BS, MD

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. Departmental appraisal forms must be used.
- 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 and an interview with a member of the departmental graduate faculty.

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:
    - Students who have not previously completed LMP 1404H *Molecular and Cellular Mechanisms of Disease* (0.5 FCE), or an approved equivalent, will be required to take this course in Year 1. Students exempted from LMP 1404H will take a departmental half course (0.5 FCE) as a substitute. The student's advisory committee may recommend additional courses.
    - Students must enrol and participate in a credit/no-credit course, LMP 1001Y *Graduate Seminars in Laboratory Medicine and Pathobiology* (1.0 FCE), which must be taken throughout the program. Students must present at least once in LMP 1001Y prior to defending their thesis.
    - Students must attend the LMP Monday Seminar Series, a departmental guest lecture series that immediately follows the student seminar course LMP 1001Y.
- Completion of a **thesis** under the direction of the student's supervisor, assisted by the advisory committee.
- Within 12 to 18 months of entry, students will be advised by their committee to do one of the following:
    - write and orally defend a thesis on research completed,
    - transfer to the PhD program, or
    - withdraw from the MSc program.
- 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.

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.
- Two routes of entry are available:
    1. **Track A:**
        - Direct entry is available for highly qualified BSc graduates having 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. These students are encouraged to apply directly to the PhD program.
        - Excellent students with high academic standing (normally 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. Transfer to the PhD program is based on the student's performance at an assessment examination, which is held 12 to 18 months after the start of the MSc program. The student's supervisor will schedule the assessment examination. The examining committee consists of at least six members of the graduate faculty:
            - the Graduate Coordinator (or a representative from the graduate faculty of the department) who chairs the examination committee,
            - the student's advisory committee, and
            - two other graduate faculty members, one of whom is a member from another graduate department.
    2. **Track B:** MSc graduates and applicants with an MD, DDS, DVM (or equivalent) degree are eligible for the PhD program. An A– average or higher is required in graduate courses or in an appropriate BSc program if there were no course requirements in the MSc program.
- 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. Departmental appraisal forms must be used. 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 and successful performance at an interview with a member of the departmental graduate faculty. 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.
- Excellent students with high academic standing (normally 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. Transfer to the PhD program is based on the student's performance at an assessment examination, which is held 12 to 18 months after the start of the MSc program. The student's supervisor will schedule the assessment examination. The examining committee consists of at least six members of the graduate faculty:
    - the Graduate Coordinator (or a representative from the graduate faculty of the department) who chairs the examination committee,
    - the student's advisory committee, and
    - two other graduate faculty members, one of whom is a member from another graduate department.
- 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 **3.0 full-course equivalents (FCEs)** as follows:
  - Students must enrol and participate in a credit/no-credit course, LMP 1001Y *Graduate Seminars in Laboratory Medicine and Pathobiology* (1.0 FCE), which must be taken throughout the program. Students must present at least twice in LMP 1001Y prior to defending their thesis.
  - Students must attend the LMP Monday Seminar Series, a weekly departmental guest lecture series that immediately follows the student seminar course LMP 1001Y.
  - Students who have not previously completed LMP 1404H *Molecular and Cellular Mechanisms of Disease* (0.5 FCE) or an approved equivalent are required to take this course in Year 1 of their PhD program. The student's advisory committee may recommend additional courses. Students exempted from LMP 1404H take an approved departmental half course (0.5 FCE) as a substitute.
  - Three half-course equivalents (1.5 FCEs), of which at least one half course is from Laboratory Medicine and Pathobiology. Exception: students having completed the undergraduate Pathobiology Specialist Program (or equivalent) are required to take only two additional half courses (0.5 FCe).
  - Coursework should be completed in the first two years of the program, the continuing seminar course excepted. The latter half of the program is focused on research.
  - Students who take additional graduate courses during the MSc program and who continue their graduate studies in the PhD program may request a transfer credit up to one full-course towards doctoral course requirements. Credit for courses must be approved by the Graduate Coordinator; certain restrictions may apply.
- Prior to the start of Year 3, the advisory committee may recommend that a PhD student transfer to the MSc program. The student may also request the transfer.
- The PhD **thesis** 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

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

LMP: Laboratory Medicine and Pathobiology MSc, PhD Courses

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

LMP 1001Y	Graduate Seminars in Laboratory Medicine and Pathobiology (Credit/No Credit) (mandatory for all MSc and PhD students in the Department of Laboratory Medicine and Pathobiology)
LMP 1005Y	General and Special Pathology (for Oral Pathology Residents only)
LMP 1006H	Cellular Imaging in Pathobiology
LMP 1013H	Neoplasia
LMP 1017H	Tissue Injury, Repair, and Regeneration
LMP 1019H	Research Techniques in Molecular Biology and Pathobiology
LMP 1020H	Inflammation, Immunity, and Immunopathology of Atherosclerosis
LMP 1404H	Molecular and Cellular Mechanisms of Disease (mandatory for all MSc and PhD students in the Department of Laboratory Medicine and Pathobiology)
LMP 1407H	Introductory Biostatistics and Clinical Investigation
LMP 1503H	Signal Transduction Pathways in Normal and Diseased Tissues
LMP 1504H	Cell and Molecular Biology of Cardiovascular Diseases
LMP 1505H	Analytical Clinical Biochemistry: Basic Principles
LMP 1510H	Molecular Biology Techniques
LMP 1520H	Translational Research in Pathobiology
LMP 1525H	The Role of Genomics in the Era of Personalized Medicine
LMP 1530H	Next Generation Genomics in Clinical Medicine
LMP 1535H	Mass Spectrometry, Proteomics, and Their Clinical Applications
LMP 2115H	Selected Topics in Medical Microbiology
LMP 2120H	Molecular Clinical Microbiology and Infectious Diseases
LMP 2222H	Neurodegenerative Disease—Mechanisms, Models, and Methods
RST 9999Y	Research Project (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 (not offered during 2018-2019) *Dual Degree Program:* LLB (National University of Singapore) / LLM (University of Toronto)
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:

1. **Bioethics**
   - Law, LLM, SJD
2. **Global Health**
   - Law, LLM, SJD
3. **Jewish Studies**
   - Law, LLM, MSL, SJD
4. **Sexual Diversity Studies**
   - Law, LLM, MSL, SJD
5. **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

Faculty of Law
University of Toronto
Falconer Hall, 84 Queen's Park West
Toronto, Ontario M5S 2C5
Canada

GPLLM Program Inquiries

Web: https://gpllm.law.utoronto.ca
Email: gpllm@utoronto.ca

Faculty of Law
University of Toronto
Falconer Hall, 84 Queen's Park West
Toronto, Ontario M5S 2C5
Canada

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
Brudner, Alan S - BA, MA, PhD
Brunnée, Jutta - LLM, SJD
Chapman, Bruce - BA, LLB, PhD
Chiao, Vincent - BA, PhD, JD
Cook, Rebecca - BA, LLM, MA, MPA, JD, SJD,
Cossman, Brenda - LLB, LLM
Dawood, Yasmin - BA, MA, JD, PhD, CRC
Drassinower, Abraham - BPhil, LLB, MA, PhD
Dubber, Markus - AB, JD
Duggan, Anthony - BA, LLB, LLM, LLD, Honourable Frank Iacobucci Chair in Capital Markets Regulation
Dyzenhaus, David - BA, LLB, DPhil
Emon, Anver - LLB, BA, LLM, MA, PhD, SJD, CRC
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
Iacobucci, Edward - LLB, MPH, James Marshall Tory Dean's Chair (*Dean*)
Katz, Ariel - LLB, LLM, SJD, Chair in Electronic Commerce
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, Toronto Stock Exchange Chair in Capital Markets
Macklem, Patrick - BA, LLB, LLM
Macklin, Audrey - BSc, LLB, LLM
Moran, Mayo - BA, LLB, LLM, SJD
Moreau, Sophia - BA, BPhil, PhD, JD
Niblett, Anthony - BCom, PhD, CRC
Phillips, James - LLB, MA, PhD
Prado, Mariana - LLB, LLM, SJD (*Associate Dean, Graduate Program*)
Reaume, Denise - BA, LLB, BCL
Ripstein, Arthur S - BA, MA, LLM, PhD
Rittich, Kerry - BAMus, LLB, SJD
Roach, Kent - BA, LLB, LLM
Robertson, Adriana - BA, MA, MPH, JD
Rogerson, Carol - BA, LLB, MA, LLM
Schneiderman, David - BA, LLB, LLM
Shachar, Ayelet - LLB, BA, LLM, SJD
Shaffer, Martha - LLB, LLM, MAcct
Stacey, Richard - LLB, BA, SJD
Stern, Simon - BA, PhD, JD
Stewart, Hamish - BA, LLB, MA, PhD
Su, Anna - LLM, SJD, JD
Thorburn, Malcolm - BA, MA, LLM, JD, SJD
Trebilcock, Michael - LLB, LLM
Valcke, Catherine - BCL, LLB, LLM, SJD
Valverde, Mariana - BA, MA, PhD, FRSC
Waddams, Stephen - BA, LLB, BA, LLM, PhD, SJD, Goodman/Schipper Chair
Weinrib, Ernest - BA, LLB, PhD
Weinrib, Lorraine - BA, LLB, LLM
Yoon, Albert - BA, LLB, MA, PhD, Chair in Law and Economics

Members Emeriti

Dickens, Bernard - LLB, LLM, PhD
Friedland, Martin - BCom, LLB, PhD
Nedelsky, Jennifer R - BA, MA, PhD

Associate Members

Conklin, David - LLB, BA, LLM
Hirschl, Ran - BA, LLB, MA, MPH, PhD, CRC
Sanderson, Douglas - BA, LLM, JD
Spade, Dean - BA, JD
Stack, Alexander - JD, SJD

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:

- an LLM with a Concentration in Business Law
- an LLM with a Concentration in Criminal Law
- an LLM with a Concentration in Health Law, Ethics, and Policy
- an 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 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 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:
  - 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 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 in each component.
- No conditional offers of admission will be given based on successful completion of an English language test.

Program Requirements

- 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: LAW 1000H *Alternative Approaches to Legal Scholarship* (0.75 FCE) and
  - the mandatory graduate seminar for all LLM students: LAW 7572H *LLM Seminar* (0.25 FCE).
- All coursework and the student's thesis shall be 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 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 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:
  - 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 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 in each component.
- No conditional offers of admission will be given based on successful completion of an English language test.

Program Requirements

- 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. LAW 1000H *Alternative Approaches to Legal Scholarship* and LAW 7572H *LLM Seminar* do not qualify as designated writing requirement courses.
- All students in the LLM program must complete the mandatory graduate seminar: LAW 7572H *LLM Seminar* (0.25 FCE);
- All coursework shall be graded using the graduate grading scale as outlined in the *University Assessment and Grading Practices Policy*.
- In determining the composition of the course of studies, the Faculty of Law will endeavour to structure a program designed to accommodate an individual student. However, such course of studies shall at all times be determined by the Faculty.
- 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 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:
  - 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 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 in each component.
- No conditional offers of admission will be given based on successful completion of an English language test.
- Students applying to one of the four areas of concentration must address their interest in the area of concentration in their statement of interest/personal statement. Applicants must substantiate their interest in and suitability for the particular area of concentration in their statement of interest, letters of reference, and research proposal. Students may only be accepted to one of the concentrations.

Program Requirements

- The total number of credits to be completed, through a combination of **a course of studies and the thesis**, is 24 credits (**6.0 full-course equivalents [FCEs]**). 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 of coursework 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 and approximately 45 pages or 13,000 words, 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. At least 2 course credits (0.5 FCE) 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.
    - Students pursuing the concentration in Legal Theory must complete the mandatory 3-credit course LAW 7081H *Foundations of Legal Theory* (0.75 FCE). This course will count towards the credits required for the area of concentration.
    - Write a thesis worth 16 credit hours, equivalent to 4.0 FCEs and approximately 175 pages or 52,000 words, in the area of concentration 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: LAW 1000H *Alternative Approaches to Legal Scholarship* (0.75 FCE).
    - The mandatory graduate seminar for all LLM students: LAW 7572H *LLM Seminar* (0.25 FCE).
- All coursework and the student's thesis shall be 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 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 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:
    - 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 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 in each component.
- No conditional offers of admission will be given based on successful completion of an English language test.
- Students applying to one of the four areas of concentration must address their interest in the area of concentration in their statement of interest/personal statement. Applicants must substantiate their interest in and suitability for the particular area of concentration through this statement, and their two letters of reference. Students may only be accepted into concentration. Students may be admitted into the LLM program without a concentration.

Program Requirements

- The total number of credits will be 28 credit hours (**7.0 full-course equivalents [FCEs]**).
- At least 12 of the credits 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, LAW 7081H *Foundations of Legal Theory* (0.75 FCE). This

course will count towards the credits required for the area of concentration.
- One of the courses must be a designated writing requirement course in the area of concentration. Only courses requiring one or more written assignments of at least 3,500 words (combined) will qualify as designated writing requirement courses. LAW 1000H and **LAW 7077H** do not qualify as writing requirement courses. At least 12 of the credits must be completed from a list of courses in the area of concentration which will be provided annually on the program website.
- All students in the LLM program must complete the mandatory graduate seminar: LAW 7572H *LLM Seminar* (0.25 FCE).
- All coursework shall be graded using the graduate grading scale as outlined in the *University Assessment and Grading Practices Policy*.
- In determining the composition of the course of study, the Faculty of Law will endeavour to structure a program designed to accommodate an individual student. However, such course of studies shall at all times be determined by the Faculty.
- 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)

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 LLM's coursework-only option, with or without a concentration. Students are not eligible to take the thesis option. The four areas of concentration are: Business Law; Criminal Law; Health Law, Ethics, and Policy; and Legal Theory.

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 it would take to attain them separately. See the LLM requirements 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.
- Applicants are eligible for admission to the LLM's coursework-only option, with or without a concentration.

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 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:

    - 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 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 in each component.
- No conditional offers of admission will be given based on successful completion of an English language test.
- Students applying to one of the four areas of concentration must address their interest in the area of concentration in their statement of interest/personal statement. Applicants must substantiate their interest in and suitability for the particular area of concentration through this statement, and their two letters of reference. Students may only apply to one of the areas of concentration. Students 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 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 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) with the following minimum scores:
    - paper-based TOEFL: 600 and 5 on the Test of Written English (TWE)
    - Internet-based TOEFL: 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

- The student 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 (8.0 FCEs), and will include at least three of the following subjects: contracts, torts, property, criminal law, constitutional law, and civil procedure. One of the courses must be a designated writing requirement course. Only courses requiring one or more written assignments of at least 3,500 words (combined) will qualify as a designated writing requirement course.
    - A mandatory graduate seminar: LAW 1000H *Alternative Approaches to Legal Scholarship* (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 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 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) with the following minimum scores:
    - paper-based TOEFL: 600 and 5 on the Test of Written English (TWE)
    - Internet-based TOEFL: 100/120 and 24/30 on the writing and speaking sections.
- 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 LAW 1000H *Alternative Approaches to Legal Scholarship* (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, 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. Normally, a student will have satisfied 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.
- **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 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) with the following minimum scores:
    - paper-based TOEFL: 600 and 5 on the Test of Written English (TWE)
    - Internet-based TOEFL: 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: LAW 1000H *Alternative Approaches to Legal Scholarship* (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, 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. Normally, a student will have satisfied 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.
- **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

LAW 1000H	Alternative Approaches to Legal Scholarship
LAW 1001Y	First Year: Contracts Law (MSL only)
LAW 1002Y	Contracts
LAW 1003Y	First Year: Criminal Law (MSL only)
LAW 1004Y	Criminal Law
LAW 1005Y	First Year: Property Law (MSL only)
LAW 1006Y	Property
LAW 1007Y	First Year: Torts Law (MSL only)
LAW 1008Y	Torts
LAW 1009Y	First Year: Constitutional Law (MSL only)
LAW 1010Y	Constitutional Law
LAW 1011Y	First Year: Constitutional Law (MSL only)
LAW 2001H	Advanced Contracts: The Law of Contractual Interpretation
LAW 2002H	Advanced Corporate Law and Securities Regulation
LAW 2003H	Advanced Labour Law: Bargaining Rights and Following Rights in a Global Economy
LAW 2005H	The Art of the Deal
LAW 2007H	Bankruptcy Law
LAW 2007Y	Bankruptcy and Insolvency Law
LAW 2008H	Business Organizations
LAW 2009Y	Canadian Income Tax Law
LAW 2010H	Class Action Law
LAW 2011H	Climate Change Law
LAW 2013H	Competition Law and Intellectual Property
LAW 2014H	Competition Policy
LAW 2015H	Contested Corporate Transactions
LAW 2017Y	Corporate Income Tax
LAW 2018H	Corporate Transactions
LAW 2019H	Corporations, Individuals, and the State
LAW 2020H	Digital Content and the Creative Economy
LAW 2021H	Economic and Social Regulation
LAW 2022H	Entertainment Law
LAW 2023H	Environmental Law
LAW 2024Y	Evidence
LAW 2026H	Franchise and Distribution Law
LAW 2027H	From Blueprints to Buildings: Legal Issues in the Construction Industry

LAW 2029H	Governing Governance: Legal Institutions and Corporate Performance in Comparative Perspective
LAW 2033H	Intensive: Key Concepts in Trademark Law
LAW 2035H	International Commercial and Investor-State Arbitration
LAW 2036H	International Investment Law
LAW 2037H	International Taxation
LAW 2038H	International Trade Regulation
LAW 2039H	Investment and Growth in Emerging Markets
LAW 2040Y	Labour and Employment Law
LAW 2042H	Law of Good Governance and Ethics in Government and Business
LAW 2044H	Legal History of Money
LAW 2045H	Natural Resources and Energy Law
LAW 2046H	Negotiation
LAW 2047H	Patent and Trade Secrets Law
LAW 2048H	New Directions in Energy Regulation
LAW 2049H	Principle and Policy in Contract Law
LAW 2051H	Real Estate Law
LAW 2053Y	Secured Transactions
LAW 2054H	Securities Law in Adversarial Setting
LAW 2055H	The Supreme Court of Canada: A Unique and Comprehensive View
LAW 2056H	Shareholder Activism
LAW 2057H	Sustainability and Corporate Social Responsibility
LAW 2059H	Venture Capital Financing
LAW 2060H	Workshop: Innovation Law and Policy
LAW 2061H	Intensive Course: Corporations, Individuals, and the State
LAW 2062H	Applied Corporate Law
LAW 2063H	Banking, Negotiable Instruments, and Payment Mechanisms
LAW 2064H	Fundamental Themes in Securities Litigation Practice
LAW 2065H	Innovation, Intellectual Property, and the Internet
LAW 2066H	Law of International Business and Finance Transactions
LAW 2067H	Powering the Green Economy: New Directions in Energy Regulation
LAW 2068H	The Private Sector in Economic Development
LAW 2069H	Regulation of Financial Institutions
LAW 2070Y	Intellectual Property: Copyright, Trademark, and Patent
LAW 2072H	Data and Governance
LAW 2085Y	Trusts
LAW 3001H	Aboriginal Peoples and Canadian Criminal Justice
LAW 3002H	Aboriginal Peoples and Canadian Criminal Justice Practicum
LAW 3003H	Advanced Constitutional Law: Comparative Remedial and Security Issues
LAW 3004H	Advanced Criminal Evidence
LAW 3005H	Advanced Criminal Procedure and Charter Issues
LAW 3007H	Comparative Anti-terrorism and National Security Law
LAW 3008H	Comparative Criminal Law
LAW 3012H	Criminal Law Theory
LAW 3013Y	Criminal Procedure
LAW 3014H	Criminalization: Use and Abuse
LAW 3015H	Criminalization in Historical and Theoretical Perspective
LAW 3017H	Financial Crimes
LAW 3018H	Forensic Evidence: Science, Medicine, and the Law
LAW 3019H	History of Crime and Punishment
LAW 3020H	Homicide
LAW 3021H	Issues in Criminal Justice
LAW 3023H	Mentally Disordered Accused
LAW 3025H	Sentencing and Penal Policy
LAW 3026H	Women, Violence, and the Law
LAW 3027H	Wrongful Convictions
LAW 3028H	Youth Criminal Justice
LAW 3029H	Crime and Punishment: Mandatory Minimums, the Death Penalty, and Other Current Debates
LAW 3030H	International Criminal Law
LAW 3031H	Perspectives on Crime and Law
LAW 3032H	Intensive Course: "Black Lives Matter" and Criminal Procedure: Race and the Fourth Amendment
LAW 3033H	Law and Society: Theoretical Perspectives
LAW 4001H	Law and Business in a Global Economy
LAW 4002H	Comparative Corporate Governance
LAW 4003H	Securities Regulation and Corporate Finance
LAW 4004H	Mergers and Acquisitions
LAW 4005H	Canadian and Cross-Border Issues in Corporate Tax
LAW 4006H	International Dispute Resolution
LAW 4007H	Canadian Administrative Law
LAW 4008H	Canadian Constitutional Law
LAW 4009H	Canadian Criminal Law
LAW 4010H	Foundations of Canadian Law
LAW 4011H	Law and Policy of Public Private Partnerships
LAW 4012H	Intellectual Property Law
LAW 4013H	Economic and Social Regulation and Competition Law
LAW 4014H	International Insolvency Law
LAW 4015H	Organization of Transactional Legal Practice
LAW 4016H	Corporate Social Responsibility, Ethics, and the Law
LAW 4017H	Professional Responsibility
LAW 4018H	Foundations of Legal Theory
LAW 4019H	Anti-Corruption Law: International, Domestic, and Practical Perspectives
LAW 5002H	Advanced Private Law
LAW 5003H	Authorship and Copyright: Theory and History
LAW 5004H	Civil Law
LAW 5005H	Comparative Constitutional Law and Politics
LAW 5006H	Comparative Law Theory
LAW 5007H	Workshop: Contemporary Problems in Legal Theory
LAW 5008H	Crime and Punishment
LAW 5011H	Critical Theory and Global Law: Resisting Economic Globalization
LAW 5012H	Empirical Studies Seminar
LAW 5014H	History and Theory of the Common Law
LAW 5017H	Ethics, Value Pluralism, and International Justice
LAW 5018H	Property Theory
LAW 5020H	Trademark Theory

LAW 5021H	Introduction to Contemporary Legal Theory
LAW 5022H	Introduction to Islamic Law
LAW 5024H	Judgement in Law and Politics
LAW 5025H	Kant's Philosophy of Law
LAW 5026H	The Law of Democracy
LAW 5027H	Law and Literature
LAW 5028H	Law and Multiculturalism
LAW 5029H	Law, Religion, and Public Discourse
LAW 5030H	Legal Archaeology: Studies in Cases in Context
LAW 5032H	Modern Political Trials
LAW 5033H	Peoples and Minorities in International Law
LAW 5034H	Political Justice and Liberal Democracy
LAW 5037H	Religion and the Liberal State: The Case of Islam
LAW 5039H	Restitution
LAW 5040H	Rights
LAW 5042H	Theories of Equality
LAW 5043H	Theory of Contract Law
LAW 5044H	Theory of Private Law: Selected Topics and Texts
LAW 5045H	Critical Analysis of Law Workshop
LAW 5047H	Law and Economics Workshop Seminar
LAW 5048H	From Patriarchy to Equal Citizenship
LAW 5049H	History and Theory of International Law
LAW 5050H	Introduction to Legal Philosophy
LAW 5051H	Workshop: Legal History Seminar
LAW 5052Y	Political Theory of Hegel
LAW 5053H	Workshop: Legal Theory
LAW 5054H	Intensive Course: Constitutional Theory
LAW 5055H	Intensive Course: Purposive Interpretation in Law
LAW 5056H	Intensive Course: The Adversarial Trial: Theory and Critique
LAW 5057H	John Rawls' Theory of Justice: An Introduction
LAW 5058H	Law, Religion, and Democracy
LAW 5059H	Philosophical Approaches to Equality and Discrimination
LAW 5060H	Sanctity of Contracts in a Secular Age
LAW 6001H	Contemporary Issues in Health Law and Policy
LAW 6002H	Governance of Pharmaceuticals in the International Context
LAW 6003Y	Health Law and Bioethics
LAW 6004H	Comparative Health Systems Law and Policy
LAW 6005H	Intellectual Property, Medicine, and Health
LAW 6006H	Public Health Law
LAW 6007H	Patent Law for Life Sciences
LAW 6010H	Scientific Evidence: Its Use and Abuse in Law
LAW 6012H	Reproductive and Sexual Health Law
LAW 6013H	Law and Policy of Biotechnology
LAW 6015Y	Administrative Law
LAW 6019H	Privacy Law
LAW 6020H	International Intellectual Property Law
LAW 6021H	Women's Rights in Transnational Law
LAW 6023H	International Human Rights Law
LAW 6024H	Human Rights and Global Justice
LAW 6025H	Law and Policy of Public Private Partnerships
LAW 6026H	Law, Institutions, and Development
LAW 6029Y	International Human Rights Clinic
LAW 6030H	Law of Mental Health
LAW 6031H	Occupational Health and Safety
LAW 6032H	Health Systems Law and Policy
LAW 6042H	Human Rights and Their Critics
LAW 7000Y	Securities Regulation
LAW 7001H	Legal Process Professionalism and Ethics
LAW 7002H	Advanced Civil Procedure
LAW 7003Y	Administrative Law
LAW 7004H	Admiralty Law
LAW 7005Y	Trial Advocacy
LAW 7006H	Advanced Torts
LAW 7007H	Tax Law and Policy Workshop
LAW 7008H	Private International Law
LAW 7009H	Perspectives on Law
LAW 7010H	Broadcasting Law and Policy
LAW 7011H	Telecommunications and Internet Law
LAW 7012H	Community Planning
LAW 7013H	International Environmental Law
LAW 7014H	Advanced Property Law
LAW 7015Y	Charter Litigation 101
LAW 7016H	Fiduciary Law
LAW 7017H	Trusts
LAW 7018Y	Family Law
LAW 7019H	Finance and Accounting in Business Law
LAW 7020H	Introduction to Animal Law
LAW 7021H	Sports Law
LAW 7022H	Human Rights as Law, Ethics, and Politics
LAW 7023H	Public Sector Labour Law
LAW 7024H	Citizenship: Inside and Out
LAW 7025H	Citizenship, Immigration, and Globalization
LAW 7026H	Labour Law Writers Workshop
LAW 7027H	Introduction to the Legal System of the People's Republic of China
LAW 7028H	Municipal Plan and Environmental Law
LAW 7029H	Remedies
LAW 7030H	Issues in Aboriginal Law and Policy
LAW 7031H	Legal Ethics and Lawyer Regulation Intensive
LAW 7032H	Idea to Legislation: Policy and Legislative Change
LAW 7033H	Perspectives on Civil Litigation, Procedure, and Professionalism
LAW 7034H	Education Law
LAW 7035H	Advanced Legal Research, Analysis, and Writing
LAW 7036H	Foreign Affairs and the Canadian Constitution
LAW 7037H	Litigation and Social Change
LAW 7038H	Advanced Family Law: Resolving Family Law Case
LAW 7039H	Advanced Aboriginal Studies
LAW 7040H	Constitutional Law of the U.S.
LAW 7041Y	Feminist Theory
LAW 7042Y	Clinical Legal Education: Health Equity and Law Clinic
LAW 7043H	Proportionality, Constitutional Rights, and Their Limitations
LAW 7044H	Wills and Estate Planning
LAW 7045H	Exploring the Intersections of Law and Social Work
LAW 7046H	Freedom of Expression and Press
LAW 7047H	Introduction to Law and Development
LAW 7048H	Canadian Legal History: The Development of Legal Doctrine in Ontario Court of Appeal

LAW 7049H	Legal Ethics
LAW 7050H	Comparative Indigenous Law
LAW 7051H	Media and Defamation Law
LAW 7052Y	Aboriginal Peoples and Canadian Law
LAW 7053H	Intensive Course: Who Belongs? Dilemmas of Citizenship and Immigration
LAW 7054H	Copyright Law
LAW 7055Y	Copyright, Trademark, and Patent Law
LAW 7056H	International Criminal Law
LAW 7057H	Private Pensions, Public Responsibilities, and Regulation of the Canadian Pension System
LAW 7058H	Canadian Legal Methods and Writing
LAW 7059H	Contemporary Problems in Legal Theory
LAW 7060Y	Discrimination Law
LAW 7061Y	Children and Families
LAW 7062Y	Constitutional Courts and Constitutional Rights
LAW 7063H	Statutes and Statutory Interpretation
LAW 7064H	Adhesion Contracts: The Perils of Clicking "I Agree"
LAW 7065H	Advanced Advocacy: Problems and Techniques
LAW 7066H	Canadian Migration Law
LAW 7067H	Class Actions Practice
LAW 7068H	Judicial Decision-Making
LAW 7069H	Internet Law and Governance
LAW 7070H	Economic Analysis of Law
LAW 7071H	Youth and the Law
LAW 7072H	Constitutional Design for Divided Societies: Theory and Cases
LAW 7073H	Student Scholarship Workshop
LAW 7074H	Alternative Dispute Resolution in the Legal Environment
LAW 7075H	Ethics in the Business Law Setting
LAW 7076H	Refugee Law
LAW 7077H	Introduction to the Canadian Legal System
LAW 7078H	Law of Forced Migration
LAW 7079H	Litigation and Dispute Resolution
LAW 7080H	Clinical Legal Education Connect Legal
LAW 7081H	Foundations of Legal Theory
LAW 7082H	International Humanitarian Law (the Law of Armed Conflict)
LAW 7083H	Law and Globalization Workshop
LAW 7084H	Capstone Course: Intersection Between Criminal and Family Law: Challenges of Concurrent Proceedings
LAW 7085H	Capstone Course: the Role of the Judge
LAW 7086H	Refugee Rights
LAW 7087H	Practice and Theory of Indigenous Law
LAW 7088H	Geographies of International Law
LAW 7089H	Intensive Course: Brecht: A Case Study in Law and Literature
LAW 7090H	Legal Innovation
LAW 7091H	Values and Models of Federalism in a Comparative Perspective
LAW 7092H	Intensive Course: International Intellectual Property and Development
LAW 7093H	Advanced Constitutional Law
LAW 7094Y	Public International Law
LAW 7103H	Appeals: Principles and Practice
LAW 7104H	Indigenous Legal Traditions and the Imperial Response
LAW 7105H	Indigenous People and Canadian Courts: Advocacy, Evidentiary, and Ethical Issues
LAW 7572H	LLM Seminar
LAW 8000Y	Thesis
LAW 8001H	Directed Research Program (Graduate Students Only)
CHL 5704H	International Human Rights Law and Global Health: The Right to Health in Theory and Practice
HAD 5765H	Case Studies in Health Policy
HAD 5768H	International Perspectives on Health Services Management
HAD 5775H	Competition, Cooperation, and Strategy in Health Care
HAD 6762H	Health Services Organization and Management Comprehensive Course
JDM 3619H	Digital Media Distribution (Credit/No Credit)
RSM 2120H	Health Policy and Health Care Markets

Law: Global Professional Law GPLLM

Global Professional Master of Laws

Program Description

The Global Professional Master of Laws (GPLLM) program is designed for lawyers, business executives, and professionals from all industries. It is completed through an intensive 12-month delivery model with classes offered in the evenings and on weekends.

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 B+ average or equivalent in their final year of study
- Applicants must demonstrate a minimum of three years of work experience.

- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English complete an English-language proficiency test as set out below:
    - 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 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

- **Coursework: 30 credits (7.5 full-course equivalents [FCEs])**, as follows:
    - One required 3-credit course (equivalent to 0.75 FCE) as follows:
        - LAW 4001H *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:
        - LAW 4002H *Comparative Corporate Governance*
        - LAW 4003H *Securities Regulation and Corporate Finance*
        - LAW 4004H *Mergers and Acquisitions*
        - LAW 4005H *Canadian and Cross-Border Issues in Corporate Tax*
        - LAW 4006H *International Dispute Resolution*
        - LAW 4011H *Law and Policy of Public Private Partnerships*
        - LAW 4012H *Intellectual Property Law*
        - LAW 4013H *Economic and Social Regulation and Competition Law*
        - LAW 4014H *International Insolvency Law*
        - LAW 4015H *Organization of Transactional Legal Practice*
        - LAW 4016H *Corporate Social Responsibility, Ethics, and the Law*
        - LAW 4018H *Foundations of Legal Theory*
        - LAW 4019H *Anti-Corruption Law: International, Domestic, and Practical Perspectives*
        - LAW 4028H *Cryptocurrencies, Cryptoventures, and the Future of Exchange*
        - LAW 4032H *Intellectual Property and Strategy*
        - LAW 4036H *Applied Contract Law*
        - LAW 4053H *Law and Regulation of Banks and Financial Institutions*
    - 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.

Program Length

3 sessions full-time (typical registration sequence: 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 B+ average or equivalent in their final year of study
- A minimum of two years of full-time work experience is strongly preferred but not required.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English complete an English-language proficiency test as set out below:
    - 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 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

- **Coursework: 30 credits (7.5 full-course equivalents [FCEs])**, as follows:
    - One required 3-credit course (equivalent to 0.75 FCE) as follows:

        - LAW 4010H *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:
        - LAW 4007H *Canadian Administrative Law*
        - LAW 4008H *Canadian Constitutional Law*
        - LAW 4009H *Canadian Criminal Law*
        - LAW 4017H *Professional Responsibility*
        - LAW 4020H *Property Law*
        - LAW 4021H *Tort Law*
        - LAW 4022H *Contract Law*
        - LAW 4023H *Business Organizations*
        - LAW 4024H *Applied Legal Research and Writing*
        - LAW 4051H *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.

Program Length

3 sessions full-time (typical registration sequence: 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 B+ average or equivalent in their final year of study
- A minimum of two years of full-time work experience is strongly preferred but not required.
- Applicants should demonstrate an interest in technology and entrepreneurship in their application materials.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English complete an English-language proficiency test as set out below:
    - 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 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

- **Coursework: 30 credits (7.5 full-course equivalents [FCEs])**, as follows:
    - One required 3-credit course (equivalent to 0.75 FCE) as follows:
        - LAW 4026H *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:
        - LAW 4027H *Legal Technology and Informatics*
        - LAW 4028H *Cryptocurrencies, Cryptoventures, and the Future of Exchange*
        - LAW 4029H *Computational Law*
        - LAW 4030H *Financing Technological Innovation*
        - LAW 4031H *Cybersecurity and Data Protection in a Global Information Economy*
        - LAW 4032H *Intellectual Property and Strategy*
        - LAW 4033H *Design Thinking*
        - LAW 4034H *Launching Technology Ventures*
        - LAW 4035H *The Internet of Things*
        - LAW 4046H *Privacy and Data Governance*
        - LAW 4047H *The Legal Challenges of Digital Environments*
        - LAW 4048H *Health, Innovation, and the Law*
        - LAW 4052H *Law of Software Development and Commercialization*
        - LAW 4055H *Taxonomy of Innovation: Solving Business Problems and Reducing Legal Friction*
    - 15 credits (equivalent to 3.75 FCEs) consisting 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.

Program Length

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

Time Limit

3 years full-time

Concentration: Law of Leadership

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 B+ average or equivalent in their final year of study
- A minimum of three years of full-time work experience is required.
- 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 an English-language proficiency test as set out below:
    - 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 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

- **Coursework: 30 credits (7.5 full-course equivalents [FCEs])**, as follows:
    - One required 3-credit course (equivalent to 0.75 FCE) as follows:
        - LAW 4050H *Perspectives on Leadership and the Law*
    - 12 credits (equivalent to 3.00 FCEs) consisting of four courses within this concentration worth 3 credits each (0.75 FCE) from this list:
        - LAW 4016H *Corporate Social Responsibility, Ethics, and the Law*
        - LAW 4036H *Applied Contract Law*
        - LAW 4037H *Procedural Fairness in Decision Making*
        - LAW 4038H *Dispute Resolution and Negotiations*
        - LAW 4039H *Law of the Workplace*
        - LAW 4040H *Harassment, Discrimination, and the Duty to Accommodate*
        - LAW 4041H *Health Law*
        - LAW 4042H *Procurement Law*
        - LAW 4043H *Freedom of Speech and Cyberbullying in the Age of the Internet*
        - LAW 4044H *Education Law*
        - LAW 4045H *Executive Compensation*
        - LAW 4049H *Privacy and Freedom of Information*
        - LAW 4054H *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.

Program Length

3 sessions full-time (typical registration sequence: 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, with a minimum of eight contact hours per day. A large portion of the learning for the modules will take place outside of class through carefully designed reading, assignments, projects, and group study.

LAW 4001H	Law and Business in a Global Economy
LAW 4002H	Comparative Corporate Governance
LAW 4003H	Securities Regulation and Corporate Finance
LAW 4004H	Mergers and Acquisitions
LAW 4005H	Canadian and Cross-Border Issues in Corporate Tax
LAW 4006H	International Dispute Resolution
LAW 4007H	Canadian Administrative Law
LAW 4008H	Canadian Constitutional Law
LAW 4009H	Canadian Criminal Law
LAW 4010H	Foundations of Canadian Law
LAW 4011H	Law and Policy of Public Private Partnerships
LAW 4012H	Intellectual Property Law
LAW 4013H	Economic and Social Regulation and Competition Law
LAW 4014H	International Insolvency Law
LAW 4015H	Organization of Transactional Legal Practice

LAW 4016H	Corporate Social Responsibility, Ethics, and the Law
LAW 4017H	Professional Responsibility
LAW 4018H	Foundations of Legal Theory
LAW 4019H	Anti-Corruption Law: International, Domestic, and Practical Perspectives
LAW 4020H	Property Law
LAW 4021H	Tort Law
LAW 4022H	Contract Law
LAW 4023H	Business Organizations
LAW 4024H	Applied Legal Research and Writing
LAW 4026H	The Law of Disruptive Technologies and Artificial Intelligence
LAW 4027H	Legal Technology and Informatics
LAW 4028H	Cryptocurrencies, Cryptoventures, and the Future of Exchange
LAW 4029H	Computational Law
LAW 4030H	Financing Technological Innovation
LAW 4031H	Cybersecurity and Data Protection in a Global Information Economy
LAW 4032H	Intellectual Property and Strategy
LAW 4033H	Design Thinking
LAW 4034H	Launching Technology Ventures
LAW 4035H	The Internet of Things
LAW 4036H	Applied Contract Law
LAW 4037H	Procedural Fairness in Decision Making
LAW 4038H	Dispute Resolution and Negotiations
LAW 4039H	Law of the Workplace
LAW 4040H	Harassment, Discrimination, and the Duty to Accommodate
LAW 4041H	Health Law
LAW 4042H	Procurement Law
LAW 4043H	Freedom of Speech and Cyberbullying in the Age of the Internet
LAW 4044H	Education Law
LAW 4045H	Executive Compensation
LAW 4046H	Privacy and Data Governance
LAW 4047H	The Legal Challenges of Digital Environments
LAW 4048H	Health, Innovation, and the Law
LAW 4049H	Privacy and Freedom of Information
LAW 4050H	Perspectives on Leadership and the Law
LAW 4051H	Evidence Law
LAW 4052H	Law of Software Development and Commercialization
LAW 4053H	Law and Regulation of Banks and Financial Institutions
LAW 4054H	Management and Resolution of Legal Disputes
LAW 4055H	Taxonomy of Innovation: Solving Business Problems and Reducing Legal Friction

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	*Field:* Adult Education and Community Development

Educational Leadership and Policy

MA, MEd, EdD, and PhD	*Field:* Educational Leadership and Policy

Higher Education

MA	*Field:* Higher Education
MEd	*Fields:* Education in the Professions Higher Education 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:

1. **Aging, Palliative and Supportive Care Across the Life Course**
   - Adult Education and Community Development, MA, MEd, PhD
2. **Community Development**
   - Adult Education and Community Development, MA, MEd
3. **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
4. **Educational Policy**
   - Adult Education and Community Development, MA, MEd, PhD
   - Educational Leadership and Policy, MA, MEd, EdD, PhD
   - Higher Education, MA, MEd, EdD, PhD
5. **Environmental Studies**
   - Adult Education and Community Development, MA, MEd, PhD
6. **Environment and Health**
   - Adult Education and Community Development, MA, MEd, PhD
7. **Ethnic and Pluralism Studies**
   - Educational Leadership and Policy, MA, MEd, EdD, PhD
8. **Indigenous Health**
   - Adult Education and Community Development, MA, MEd, PhD
9. **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
10. **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
11. **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

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

LHAE: Graduate Faculty

Full Members

Anderson, Stephen - BA, MA, PhD
Bascia, Nina - PhD (*Chair and Graduate Chair*)
Buckner, Elizabeth - PhD
Burstow, Bonnie - BA, MEd, MA, PhD
Campbell, Carol - BA, PhD
Childs, Ruth - BS, MA, PhD
Davies, Robert Scott - BA, MA, PhD
Flessa, Joseph - BA, MA, PhD
Gagne, Antoinette - BEd, MEd, PhD
Gallagher, Kathleen Marie - PhD
Gaskell, Jane - BA, EdD
Hayhoe, Ruth - BA, MA, PhD
Hildyard, Angela - BSc, MA, PhD
Jones, Glen - BA, BEd, MEd, PhD
Joshee, Reva - BLitt, MA, PhD
Kerekes, Julie - BA, MA, PhD
Kerr, Gretchen - BPHE, MA, PhD
Kuper, Ayelet - AB, MEd, MD, PhD
Magnusson, Jamie-Lynn - BA, MA, PhD
Martimianakis, Maria Athina - MA, MEd, PhD
McCready, Lance - BA, MA, PhD
Mirchandani, Kiran - BA, MPH, PhD
Mojab, Shahrzad - BA, MEd, EdD
Mundy, Karen - BA, MA, PhD
Muzzin, Linda - BA, MA, MPsy, PhD
Mylopoulos, Maria - BS, MA, PhD
Portelli, John - MEd, PhD
Quarter, Jack - PhD
Reithmeier, Reinhart - BSc, PhD
Restoule, Jean-Paul - BA, MA, DPhil
Ryan, James - BEd, MEd, PhD
Sa, Creso - BA, MA, DPhil
Sawchuk, Peter - BSc, BEd, PhD
Seifert, Tricia - BA, MS, PhD
Vieta, Marcelo A - BA, MA, PhD
Wheelahan, Elizabeth Leesa - BA, MA, PhD
Zuker, Marvin - BA, LLB, MEd

Members Emeriti

Antone, Eileen - AB, BE, MEd, EdD
Berry, R Albert - BA, PhD
Chambers, Anthony - BS, MS, EdD
Knowles, J Gary - MS, EdD
Lang, Daniel - BA, MAT, PhD
Leithwood, Kenneth - BA, BPHE, MPE, PhD
Miles, Angela - BA, MA, PhD
Stiegelbauer, Suzanne - BS, MA, MA, PhD

Associate Members

Albert, Mathieu - PhD
Belanger, Stephanie - PhD
Broad, Kathy - BEd, BA, MEd, PhD
Chmielewski, Anna - BA, MA, PhD
Colgan, Lynda - BSc, BEd, MEd, PhD
Drea, Catherine - AB, MA, EdD
Farahmandpur, Ramin - PhD
Goldstein, Tara - BA, PhD
Gorman, Rachel - BA, MA, PhD
Haque, Eve - MA
Hedley, Patricia - MEd, BMR(PT), PhD
Knight, Jane - PhD
Kohl-Arenas, Erica - BA, MS, PhD
Lopes, Valerie Mary - BA, MA, PhD
Lopez, Ann - BA, BE, MEd, PhD
McColm, Marjorie - BSc, MA, MA
McMurtry, John-Justin - BA, MA, DrRerPol
Mensah, Joseph - BA, MA, PhD
Moodie, Gavin - PhD
Pan, Julia - BA, MEd, PhD
Pinto, Laura Elizabeth - BEd, BCom, MEd, PhD
Springgay, Stephanie - BEd, BFA, MA, PhD
Sumner, George - PhD
Von Lieres, Bettina - BS, MS, DrRerPol
Walton, Fiona - BE, BA, MEd, EdD
Weinstein Cayuela, Jose - PhD
Wright, Sarah Robin - PhD
Young, Lynne - 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)**, including:
  - Either LHA 1100H *Introduction to Adult Education* (0.5 FCE) or LHA 1102H *Community Development: Innovative Models* (0.5 FCE).
  - LHA 1183H *Master's Thesis Seminar* (0.5 FCE).
  - Research methods course (0.5 FCE).
  - Coursework taken is mainly at the 1000 level or 5000 Special Topics level, 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. 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)**, including:
  - Either LHA 1100H *Introduction to Adult Education* (0.5 FCE) or LHA 1102H *Community Development: Innovative Models* (0.5 FCE).
  - Coursework is mainly taken at the 1000 level or 5000 Special Topics level, and at least 2.5 FCEs must be in Adult Education and Community Development.
  - 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)**, including:
  - LHA 3102H[+] *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.
  - Normally, at least 0.5 FCE in research methods.
- **Comprehensive requirement.** Normally, a major paper between 5,000 and 7,000 words in length (including tables, figures, and references). It 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 normally 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.

Program Requirements

- **Coursework.** Students must complete **3.0 full-course equivalents (FCEs)**, including:
  - LHA 3102H[+] *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.
  - Normally, at least 0.5 FCE in research methods.
- **Comprehensive requirement.** Normally, a major paper between 5,000 and 7,000 words in length (including tables, figures, and references). It 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 normally 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
LHA 1101H	Program Planning in Adult Education
LHA 1102H	Community Development: Innovative Models
LHA 1103H	Introduction to Research Methods in Adult Education (RM)
LHA 1104H	Social Action Education: Community Development, Social Services, and Social Movements
LHA 1105H	Introduction to Qualitative Research: Part I (RM)
LHA 1106H	Introduction to Qualitative Research: Part II (RM)
LHA 1107H	Developing and Leading High Performing Teams: Theory and Practice
LHA 1108H	Adult Learning
LHA 1109H	Creative Empowerment Work with the Disenfranchised
LHA 1110H	Approaches to Teaching Adults
LHA 1111H	Working with Survivors of Trauma
LHA 1113H	Gender and Race at Work
LHA 1114H	Commons, Community and Social Justice
LHA 1115H	Learning for the Global Economy
LHA 1119H	Creating a Learning Organization
LHA 1122H	Practicum in Adult Education and Community Development (Credit/No Credit)
LHA 1141H	Organizations and the Adult Educator: Historical and Theoretical Perspectives on Organization Development
LHA 1142H	Young Adulthood in Crisis: Learning, Transitions, and Activism
LHA 1143H	Introduction to Feminist Perspectives on Society and Education
LHA 1144H	Queer Interventions: Tools for Community Organizing
LHA 1145H	Participatory Research in the Community and the Workplace (RM)
LHA 1146H	Women, War, and Learning
LHA 1147H	Women, Migration, and Work
LHA 1148H	Introduction to Workplace, Organizational, and Economic Democracy
LHA 1149H	Precarity and Dispossession: Urban Poverty and Rebel Cities
LHA 1150H	Critical Perspectives on Organizational Change
LHA 1152H	Individual Reading and Research in Adult Education: Master's Level
LHA 1160H	Introduction to Transformative Learning Studies
LHA 1171H	Foundations of Indigenous Education in Canada
LHA 1180H	Indigenous Worldviews: Implications for Education
LHA 1181H	Embodied Learning and Alternative Approaches to Community Wellness
LHA 1182H	Nonprofits, Co-operatives, and the Social Economy: An Overview
LHA 1183H[+]	Master's Research Seminar (Credit/No Credit)
LHA 1184H	Indigenous Knowledge: Implications for Education
LHA 1185H	Leadership in Organizations: Changing Perspectives
LHA 1186H	Organizational Change in the Nonprofit and Public Sectors
LHA 1190H	Community Healing and Peacebuilding
LHA 1192H	Adult Literacies in Social Justice Perspective
LHA 1193H	Adult Education for Sustainability
LHA 1194H	Cyberliteracy, Workplace, and Adult Education
LHA 1195H	Technology @Work: The Internet in Workplace Learning and Change
LHA 1196H	Walking Together, Talking Together: The Praxis of Reconciliation
LHA 1197H	The Pedagogy of Food
LHA 3102H[+]	Doctoral Thesis Seminar (Credit/No Credit)
LHA 3103H	Teaching about Global and Social Issues
LHA 3104H	Adult Education, Marxism, and Feminism
LHA 3119H	Global Perspectives on Feminist Education, Community Development, and Community Transformation
LHA 3152H	Individual Reading and Research in Adult Education: Doctoral Level
LHA 3153H	Individual Reading and Research in Women in Development and Community Transformation: Doctoral Level
LHA 3180H	Global Governance and Educational Change: the Politics of International Cooperation in Education
LHA 3181H	Feminist Standpoints
LHA 3182H	Citizenship Learning and Participatory Democracy
LHA 3183H	Introduction to Institutional Ethnography (RM)
LHA 3184H	Indigenous Research Methodologies (RM)
LHA 5100H	Special Topics in Adult Education and Community Development: Master's Level
LHA 6100H	Special Topics in Adult Education and Community Development: Doctoral Level
CIE 1001H	Introduction to Comparative, International, and Development Education
CIE 1002H	Practicum in Comparative, International, and Development Education
CIE 1006H	Transnational Perspectives on Democracy, Human Rights, and Democratic Education in an Era of Globalization
CIE 6000H	Special Topics in Comparative, International, and Development Education
WPL 1131H	Introduction to Workplace Learning and Social Change
WPL 2944H	Sociology of Learning and Social Movements

WPL 3931H	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 courses are accepted for credit in the Adult Education and Community Development program and will satisfy the program's specialty requirement. For descriptions, see the relevant programs.

SJE 1925H	Indigenous Knowledge and Decolonization: Pedagogical Implications
SJE 2942H	Education and Work

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:
  - LHA 1003H *Conducting Research in Educational Leadership and Policy* (0.5 FCE).
  - LHA 1004H *Research Literacy in Educational Leadership and Policy* (RM) (0.5 FCE).
  - LHA 1040H *Policy, Leadership, and Change* (0.5 FCE).
  - At least 2.0 FCEs must be in Educational Leadership and Policy, 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. Additional courses may be required of some applicants.

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 three MEd options available: Option II, Option III, and Option IV. Students initially apply to and register in the MEd Option IV. For registration in Options II and III, department permission is required.

Option IV is available in two delivery models:

- Regular MEd stream: students are accepted every year and can register on a full-time or part-time basis.
- Online/Hybrid Cohort-based stream: available in select years. Students move through the program as a cohort and register part-time. Applicants to the MEd

Option IV who are interested in the Online/Hybrid Cohort must specify their interest in the Online/Hybrid Cohort in their Statement of Intent. However, due to limited space, admission to the MEd degree program does not guarantee membership in the Cohort.

MEd Program (Option II—Coursework Plus Major Research Paper)

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:
    - LHA 1003H *Conducting Research in Educational Leadership and Policy* (RM) (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.
    - LHA 1040H *Policy, Leadership, and Change* (0.5 FCE), to be taken at the beginning of the program.
    - LHA 1041H *Social and Policy Contexts of Schooling* (0.5 FCE), to be taken at the beginning of the program.
    - 2.5 other FCEs, of which at least 1.0 FCE must be in Educational Leadership and Policy. Students may choose to focus on one of the four program strands: Policy, Leadership, Change, or Social Diversity. LHA 1004H *Research Literacy in Educational Leadership and Policy* is strongly recommended.
- **Major Research Paper (MRP)**: LHA 2001Y^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

MEd Program (Option III—Coursework Plus Thesis)

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 **3.0 full-course equivalents (FCEs)** as follows:
    - LHA 1003H *Conducting Research in Educational Leadership and Policy* (RM) (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.
    - LHA 1040H *Policy, Leadership, and Change* (0.5 FCE), to be taken at the beginning of the program.
    - LHA 1041H *Social and Policy Contexts of Schooling* (0.5 FCE), to be taken at the beginning of the program.
    - 1.5 other FCEs, of which at least 0.5 FCE must be in Educational Leadership and Policy. LHA 1004H *Research Literacy in Educational Leadership and Policy* is strongly recommended.
- A **thesis,** to be carried out 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

MEd Program (Option IV—Coursework [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:
  - LHA 1004H *Research Literacy in Educational Leadership and Policy* (0.5 FCE), to be taken at the beginning of the program.
  - LHA 1040H *Policy, Leadership, and Change* (0.5 FCE), to be taken at the beginning of the program.
  - LHA 1041H *Social and Policy Contexts of Schooling* (0.5 FCE), to be taken at the beginning of the program.
  - LHA 1050H *Themes and Issues in Policy, Leadership, Change, and Social Diversity* (0.5 FCE), to be taken towards the end of the program.
  - 3.0 other FCEs, of which at least 1.0 FCE must be in Educational Leadership and Policy. 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 (Option IV—Coursework [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:
  - LHA 1004H *Research Literacy in Educational Leadership and Policy* (0.5 FCE), to be taken at the beginning of the program.
  - LHA 1040H *Policy, Leadership, and Change* (0.5 FCE), to be taken at the beginning of the program.
  - LHA 1041H *Social and Policy Contexts of Schooling* (0.5 FCE), to be taken at the beginning of the program.
  - LHA 1050H *Themes and Issues in Policy, Leadership, Change, and Social Diversity* (0.5 FCE), to be taken towards the end of the program, often as the final course.
  - 3.0 other FCEs, of which at least 1.0 FCE must be in Educational Leadership and Policy. Students may choose to focus on one of the four research areas: Policy, Leadership, Change, or Social Diversity. Online versions of LHA 1018H *Political Skill in the Education Arena* and LHA 1029H *Special Applications of Educational Leadership and Policy* are available.

Program Length

10 sessions part-time

Time Limit

6 years part-time

LHAE: Educational Leadership and Policy EdD

Doctor of Education

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.

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:
  - LHA 3003H *Designing Research Proposals in Educational Leadership and Policy* (Credit/No Credit; 0.5 FCE).
  - LHA 3004H *Research and Literacy* (0.5 FCE).
  - LHA 3005H *Introduction to Research Methods* (0.5 FCE).
  - LHA 3006H *Research Methods Part 2* (0.5 FCE) **or** another research methods course.
  - LHA 3007H *Literature Review Course* (0.5 FCE).
  - LHA 3040H *People and Power in Organizations* (0.5 FCE).
  - LHA 3041H *Doctoral Seminar on Policy Issues in Education* (0.5 FCE).
  - 0.5 additional FCE at the 3000 level or 6000 Special Topics level.
- **Comprehensive examination.** Successful oral defence of a 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 cannot normally transfer between the EdD and PhD programs.
- 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.

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:
  - LHA 3040H *People and Power in Organizations* (0.5 FCE).
  - 1.0 FCE in research methods at the 3000 level, to be chosen in consultation with the faculty advisor. 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 in Educational Leadership and Policy at the 3000 level or the 6000 Special Topics level.
- **Comprehensive examination.** Successful oral defence of a **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 normally 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 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.

Program Requirements

- **Coursework.** Students must complete a minimum of **3.0 full-course equivalents (FCEs)** as follows:
  - LHA 3040H *People and Power in Organizations* (0.5 FCE).
  - 1.0 FCE in research methods at the 3000 level, to be chosen in consultation with the faculty advisor. 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 in Educational Leadership and Policy at the 3000 level or the 6000 Special Topics level.
- **Comprehensive examination.** Successful oral defence of a **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 normally 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.

EDP 3045H	Educational Policy and Program Evaluation
EDP 3145H	Advanced Issues in Educational Policy Analysis and Program Evaluation
JOI 3048H	Intermediate Statistics in Educational Research: Multiple Regression Analysis (RM)
LHA 1003H	Conducting Research in Educational Leadership and Policy (RM)
LHA 1004H	Research Literacy in Educational Leadership and Policy (RM)
LHA 1012H	Organizational Culture and Decision Making
LHA 1016H	School Program Development and Implementation
LHA 1018H	Political Skill in the Education Arena
LHA 1019H	Diversity and the Ethics of Educational Leadership and Policy
LHA 1020H	Teachers and Educational Change
LHA 1024H	Critical Conversations: Philosophy, Educational Leadership, and Educational Policy Studies
LHA 1025H	School Effectiveness and School Improvement
LHA 1026H	Evaluation of Professional Personnel in Education
LHA 1030H	The Legal Context of Education
LHA 1035H	Sociology of Education
LHA 1040H	Policy, Leadership, and Change
LHA 1041H	Social and Policy Contexts of Schooling
LHA 1042H	Educational Leadership and Diversity
LHA 1047H	Managing Changes in Classroom Practice
LHA 1048H	Educational Leadership and School Improvement
LHA 1050H	Themes and Issues in Policy, Leadership, Change, and Social Diversity
LHA 1052H	Individual Reading and Research in Educational Leadership and Policy: Master's Level
LHA 1060H	School Leadership Seminar 1
LHA 1061H	School Leadership Seminar 2
LHA 1065H	Educational Equity and Excellence in International Comparison
LHA 2001Y[0]	Major Research Paper
LHA 3003H	Designing Research Proposals in Educational Leadership and Policy (Credit/No Credit)
LHA 3004H	Research Literacy for the EdD Program
LHA 3005H	Introduction to Research Methods for the EdD (prerequisite: LHA 3004H)
LHA 3006H	Data Analysis for the Education Doctorate (prerequisite: LHA 3005H)
LHA 3007H	Literature Reviews for EdD Program (prerequisite: LHA 3004H)
LHA 3022H	The Investigation of School Culture: An Examination of the Daily Life of Schools
LHA 3025H	Personal and Professional Values of Educational Leadership
LHA 3030H	Advanced Legal Issues in Education
LHA 3037H	Strategic Planning in Educational Organizations
LHA 3040H	People and Power in Organizations
LHA 3041H	Doctoral Seminar on Policy Issues in Education
LHA 3042H	Field Research in Educational Leadership and Policy (RM)
LHA 3043H	Survey Research in Educational Leadership and Policy (RM)
LHA 3044H	Internship/Practicum in Educational Leadership and Policy
LHA 3046H	Gender Issues in Educational Leadership
LHA 3047H	Research Seminar on Leadership and Educational Change
LHA 3052H	Individual Reading and Research in Educational Leadership and Policy: Doctoral Level
LHA 5000H	Special Topics in Educational Leadership and Policy: Master's Level
LHA 6000H	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.

LHA 2006H	Educational Finance and Economics (exclusion: students who have taken LHA 1017H or LHA 1841H are not eligible to take LHA 2006H)

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:
  - LHA 1803H *Recurring Issues in Postsecondary Education* (0.5 FCE).
  - 0.5 FCE in research methods approved by the faculty advisor.
  - 3.0 other FCEs, of which 1.5 FCEs must be in 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.

The Master of Education is offered in three fields: Education in the Professions; Higher Education; and Student Development and Student Services in Higher Education.

The **Education in the Professions** field is offered in two options: Option II and Option IV. Students initially apply to and register in the MEd Option IV. For registration in Option II, department permission is required. 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. The program introduces the broader area of higher education as well as current issues and research methods in education research in the professions.

The **Higher Education** field is offered in two delivery models:

- Regular MEd stream: students are accepted every year and can register on a full-time or part-time basis.
- Leadership Cohort stream: available in select years. The focus of the cohort is on leadership in higher education, and the expectation is that students have experience in, or are aspiring to, work in that professional capacity in colleges or universities. Students move through the program as a cohort and register part-time. Classes are generally offered in a compressed format to suit working professionals. Applicants must specify interest in the cohort in their Statement of Intent. However, due to limited space, admission to the program does not guarantee membership in the Leadership Cohort.

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.

MEd Program (Field: Education in the Professions)

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 (Option IV)

- **Coursework.** Students must complete **5.0 full-course equivalents (FCEs)** as follows:
  - LHA 1803H *Recurring Issues in Postsecondary Education* (0.5 FCE).
  - 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.
  - Of the above elective or required courses, 0.5 FCE must have an equity focus. Equity-focused courses must be approved by the faculty advisor; see the course listing for samples.

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 (Option II)

Students initially apply to and register in the MEd Option IV. For registration in Option II, department permission is required.

- **Coursework.** Students must complete **4.0 full-course equivalents (FCEs)** as follows:
  - LHA 1803H *Recurring Issues in Postsecondary Education (*0.5 FCE).
  - 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.
  - Of the above elective or required courses, 0.5 FCE must have an equity focus. Equity-focused courses must be approved by the faculty advisor; see the course listing for samples.
- **Major Research Paper (MRP)**: LHA 2001Y^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

MEd Program (Field: 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 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 pursue the MEd Option IV degree program and must complete **5.0 full-course equivalents (FCEs)** as follows:
  - LHA 1803H *Recurring Issues in Postsecondary Education* (0.5 FCE).
  - 0.5 FCE in research methods.
  - 4.0 FCEs, of which 1.5 FCEs must be in the Higher Education 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

MEd Program (Field: Student Development and Student Services in 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 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 pursue the MEd Option IV degree program and must complete **5.0 full-course equivalents (FCEs)** as follows:
  - LHA 1803H *Recurring Issues in Postsecondary Education* (0.5 FCE).
  - 1.5 FCEs in Student Development and Student Services.
    - LHA 1844H *The Student Experience in Postsecondary Education* (0.5 FCE).
    - LHA 1854H *Student Development Theory* (0.5 FCE).
    - LHA 1856H *Advanced Student Development Theories in Higher Education* (0.5 FCE).
  - 3.0 FCEs including
    - 0.5 FCE from the Higher Education program.
    - 0.5 FCE in research methods.
    - 0.5 FCE with an equity focus. Equity-focused courses must be approved by the faculty advisor; see the course listing for samples.
  - Depending on an individual student's professional experience, students may be advised to take LHA 1853H *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.

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.
- 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:
  - LHA 1803H *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.
- Students cannot normally transfer between the EdD and PhD programs.

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 Community College Leadership (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.

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:
  - LHA 1803H *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.
- **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 normally 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 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. 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:
  - LHA 1803H *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.
- **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 normally 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.

Some sections of existing courses are offered off campus and by computer conferencing in order to make them available to students in localities far from Toronto.

LHA 1802Y	Theory in Higher Education
LHA 1803H	Recurring Issues in Postsecondary Education
LHA 1804H	Issues in Medical/Health Professional Education
LHA 1805H	The Community College
LHA 1806H	Systems of Higher Education
LHA 1807H	System-Wide Planning and Policy for Higher Education
LHA 1808H	Research in Health Professional Education
LHA 1809H	Administration of Colleges and Universities
LHA 1810H	Evaluation of Knowledge, Clinical Competence, and Professional Behaviour in the Health Professions
LHA 1811H	Institutional Research and Planning
LHA 1812H	Education and the Professions
LHA 1813H	Issues in Cognitive and Educational Psychology: Implications for Health Professional Education
LHA 1815H	Teaching in Institutions of Higher Education
LHA 1817H	Nurturing Professional Education
LHA 1819H	Governance in Higher Education
LHA 1821H	Institutional Differentiation in Postsecondary Education
LHA 1825H	Comparative Education: Theory and Methodology
LHA 1826H	Comparative Higher Education
LHA 1828H	Evaluation in Higher Education
LHA 1832H	East Asian Higher Education
LHA 1833H	Academic Capitalism: Higher Education with a Corporate Agenda
LHA 1834H	Qualitative Research in Higher Education
LHA 1835H	Logics and Strategies of Case Study Research
LHA 1836H	Critical Analysis of Research in Higher Education
LHA 1837H	Environmental Health, Transformative Higher Education, and Policy Change: Education Toward Social and Ecosystem Healing
LHA 1843H	Higher Education and the Law
LHA 1844H	The Student Experience in Postsecondary Education
LHA 1845H	Applications in the Student Experience
LHA 1846H	Internationalization of Higher Education in a Comparative Perspective
LHA 1848H	Innovative Curricula in Higher Education and the Professions
LHA 1849H	Faculty in Colleges and Universities
LHA 1850H	Quantitative Research Process and Design
LHA 1851H	Survey Methodology
LHA 1852H	Individual Reading and Research in Higher Education: Master's Level
LHA 1853H	Introduction to Student Services
LHA 1854H	Student Development Theory
LHA 1855H	Capstone in Student Development and Student Services
LHA 1856H	Advanced Student Development Theories in Higher Education
LHA 1857H	Leadership in Student Affairs and Services
LHA 2006H	Educational Finance and Economics (exclusion: students who have taken LHA 1017H or LHA 1841H are not eligible to take LHA 2006H)
LHA 3810H	International Academic Relations
LHA 3852H	Individual Reading and Research in Higher Education: Doctoral Level
LHA 5800H	Special Topics in Higher Education: Master's Level
LHA 6800H	Special Topics in Higher Education: Doctoral Level

Higher Education Courses With Equity Focus

For a complete listing, check with the department.

LHA 1029H	Special Applications of Educational Leadership and Policy: Master's Level
LHA 1042H	Educational Leadership and Diversity
LHA 1150H	Critical Perspectives on Organizational Change
LHA 1833H	Academic Capitalism: Higher Education with a Corporate Agenda
LHA 1843H	Higher Education and the Law
LHA 3810H	International Academic Relations
LHA 5800H	Special Topics in Higher Education: Master's Level
SJE 1922H	Sociology of Race and Ethnicity
WPL 1131H	Introduction to Workplace Learning and Social Change

Linguistics

Linguistics: Introduction

Faculty Affiliation

Arts and Science

Degree Programs

Linguistics

MA	*Fields:* Language Variation Psycholinguistics Theoretical Linguistics
PhD	*Fields:* Language Variation Psycholinguistics Theoretical Linguistics

Collaborative Specializations

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

1. **Jewish Studies**
   - Linguistics, PhD
2. **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

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Linguistics: Graduate Faculty

Full Members

Bejar, Susana - BA, MA, PhD
Chambers, Craig - BA, MA, MA, PhD
Cuervo, Maria Cristina - PhD
Heller, Daphna - PhD
Ippolito, Michela - BA, MPH, PhD
Kahnemuyipour, Arsalan - PhD
Kang, Yoon Jung - BA, PhD
Kochetov, Alexei - BA, MA, PhD
Monahan, Philip Joseph - BPhil, MPH, PhD
Nagy, Naomi - BA, 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*)

Members Emeriti

Chambers, J - 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
Denis, Derek John - BA, MA, PhD
Dinkin, Aaron - PhD
Hachimi, Atiqa - BA, MA, PhD
Helms-Park, Rena - BA, MA, AM, DPhil
Johnson, Elizabeth - BA, MA, PhD
Jones, Caroline - PhD
Jurgec, Peter - BA, PhD, ScD
Nikiema, Emmanuel - PhD
Pirvulescu, Mihaela - MA, PhD
Sanders, Nathan - PhD
Schallert, Joseph - PhD
Sidnell, Jack - BA, MA, PhD
Steele, Jeffrey - BA, MA, PhD
Thomas, Guillaume - PhD

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 program.

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 **4.0 full-course equivalents (FCEs)** including
    - 2.0 FCEs: JAL 1145H, LIN 1121H, LIN 1131H, and LIN 1181H or their equivalents, if not already taken;
    - 1.0 FCE from other Linguistics course offerings determined by the Graduate Coordinator;
    - 1.0 FCE: LIN 1290Y *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 **8.0 full-course equivalents (FCEs)** including
    - in Year 1: 4.0 FCEs in phonetics, phonology, morphology, and syntax if not completed during the student's undergraduate degree;
    - in Year 2: 4.0 FCEs as follows:
        - 2.0 FCEs: JAL 1145H, LIN 1121H, LIN 1131H, LIN 1181H or their equivalents, if not already taken,
        - 1.0 FCE from other Linguistics course offerings as determined by the Graduate Coordinator,
        - 1.0 FCE: LIN 1290Y *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.

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 complete **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: JAL 1145H, LIN 1005H, LIN 1121H, LIN 1131H, LIN 1145H, LIN 1181H
        - 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 JLP 2451H, JLP 2452H, LIN 1127H, LIN 1156H, LIN 1205H, LIN 1211H, LIN 1250H, LIN 1256H, LIN 1270H
    - 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: LIN 2101H, taken in Year 1
    - 1.0 FCE: LIN 2201H and LIN 2202H: the completion of Generals Papers 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

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.

JAL 1140H	Special Topics in Anthropology and Linguistics
JAL 1145H	Field Methods
JAL 1153H	Conversational Structures
JAL 1155H	Language and Gender
JLP 2450H	Psycholinguistics
JLP 2451H	Language Acquisition
JLP 2452H	Language Acquisition and Linguistic Theory
LIN 1001H	Introduction to Linguistics: Sound Structure
LIN 1002H	Introduction to Linguistics: Sentence Structure and Meaning
LIN 1005H	Quantitative Methods in Linguistics (Credit/No Credit)
LIN 1028H	Phonetics
LIN 1029H	Sound Patterns in Language
LIN 1031H	Morphological Patterns in Language
LIN 1032H	Syntactic Patterns
LIN 1041H	Introduction to Semantics
LIN 1105H	Advanced Quantitative Methods in Linguistics (prerequisite: LIN 1005H)
LIN 1121H	Phonological Theory
LIN 1126H	Acoustic Phonetics
LIN 1127H	Phonetic Analysis
LIN 1131H	Introduction to Syntactic Theory
LIN 1133H	Morphology: Morphosyntactic Issues
LIN 1145H	Semantics

LIN 1146H	Intensional Semantics (prerequisite: LIN 1145H)
LIN 1151H	Urban Dialectology
LIN 1152H	Topics in Language Variation and Change
LIN 1156H	Language Variation and Change: Theory and Analysis
LIN 1162H	Comparative-Historical Linguistics I
LIN 1181H	Introduction to Analysis and Argumentation
LIN 1205H	Topics in Experimental Design
LIN 1211H	Advanced Phonetics (prerequisite: LIN 228H, LIN 323H, or permission of the instructor)
LIN 1221H	Advanced Phonology I
LIN 1222H	Advanced Phonology II
LIN 1223H	Advanced Phonology III
LIN 1224H	Advanced Phonology IV
LIN 1226H	Advanced Phonetics
LIN 1231H	Advanced Syntax I
LIN 1232H	Advanced Syntax II
LIN 1233H	Advanced Syntax III
LIN 1234H	Advanced Syntax IV
LIN 1245H	Advanced Semantics I
LIN 1246H	Advanced Semantics II
LIN 1247H	Advanced Semantics III
LIN 1248H	Advanced Semantics IV
LIN 1250H	Topics in Speech Perception
LIN 1256H	Advanced Language Variation II
LIN 1270H	Language Processing
LIN 1290Y	Linguistic Forum
LIN 1321H	Research in Phonology
LIN 1331H	Research in Syntax
LIN 1502Y	Reading Seminar
LIN 1503H	Reading Seminar
LIN 1504Y	Research Seminar
LIN 1505H	Research Seminar
LIN 1507H	Individual Readings I
LIN 1509H	Individual Readings II
LIN 2101H	Junior Forum (Credit/No Credit)
LIN 2201H	Generals Paper I
LIN 2202H	Generals Paper II

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

Combined Degree Programs

UTM, Environmental Management (Major) Honours BA / MScSM
UTM, Environmental Management (Specialist) Honours BA / MScSM
UTM, Environmental Science (Major) Honours BA / MScSM
UTM, Environmental Science (Specialist) Honours BA / MScSM

Diploma Programs

Investigative & Forensic Accounting

DIFA (admissions to this diploma program have been suspended)

Collaborative Specializations

The following collaborative specialization is available to students in participating degree programs as listed below:

1. **Environmental Studies**
    - Sustainability Management, MScSM

Overview

The Institute for Management & Innovation (IMI) is the centre for management education at the University of Toronto Mississauga (UTM). This collaborative institute provides students with access to professional master's programs in biotechnology, accounting, innovation and sustainability, and undergraduate programs in accounting, finance, marketing and human resource management.

IMI is a cross-disciplinary institute producing mission-focused managers and future leaders with a combination of management skills and depth in their chosen field. IMI also provides an academic platform to foster close interactions and sharing of expertise between the faculty, staff, and students in these programs, along with our community partners.

Contact and Address

Institute for Management & Innovation

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University of Toronto Mississauga
Innovation Complex, Suite 2200
3359 Mississauga Road
Mississauga, Ontario
L5L 1C6 Canada

Biotechnology

Web: www.utm.utoronto.ca/mbiotech
Email: mbiotech@utoronto.ca
Telephone: (905) 569-4737
Fax: (905) 569-4302

Master of Biotechnology Program
University of Toronto Mississauga
Innovation Complex, Suite 2200
3359 Mississauga Road
Mississauga, Ontario
L5L 1C6 Canada

Forensic Accounting

Web: https://mfacc.utoronto.ca
Email: mfacc@utoronto.ca
Telephone: 905-569-4331
Fax: 905-569-4306

Master of Forensic Accounting
University of Toronto Mississauga
Innovation Complex, Suite 2200
3359 Mississauga Road
Mississauga, Ontario
L5L 1C6 Canada

Management & Professional Accounting

Web: https://mmpa.utoronto.ca
Email: mmpa@utoronto.ca
Telephone: (905) 569-4318
Fax: (905) 569-4306

Master of Management & Professional Accounting Program
University of Toronto Mississauga
Innovation Complex, Suite 2200
3359 Mississauga Road
Mississauga, Ontario
L5L 1C6 Canada

Management of Innovation

Web: www.utm.utoronto.ca/mmi
Email: mmi.utm@utoronto.ca
Telephone: (905) 569-4743
Fax: (905) 569-4302

Master of Management of Innovation
University of Toronto Mississauga
Innovation Complex, Suite 2200
3359 Mississauga Road
Mississauga, Ontario
L5L 1C6 Canada

Sustainability Management

Web: www.utm.utoronto.ca/mscsm
Email: mscsm.utm@utoronto.ca
Telephone: (905) 569-5803
Fax: (905) 569-4302

Master of Science in Sustainability Management
University of Toronto Mississauga
Innovation Complex, Suite 2200
3359 Mississauga Road
Mississauga, Ontario
L5L 1C6 Canada

Investigative & Forensic Accounting

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

Telephone: (905) 569-4331
Fax: (905) 569-4306

Diploma in Investigative & Forensic Accounting Program
University of Toronto Mississauga
Innovation Complex, Suite 2200
3359 Mississauga Road
Mississauga, Ontario
L5L 1C6 Canada

Management & Innovation: Graduate Faculty

Full Members

Aggarwal, Pankaj - BEc, MBA, MBA, PhD
Aivazian, Varouj - BS, MA, PhD
Brooks, Leonard - BCom, MBA, CA, CPA
Daniere, Amrita - AB, PhD
Galasso, Alberto - PhD
Hossain, Tanjim - BA, BS, 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, MBA, AM, PhD
Wensley, Anthony - MA, MA, MBA, PhD
Zweig, David - BA, MASc, DPhil

Associate Members

Allen, Guy - BA, MA, PhD
Besco, Laurel - BES, MA
Gaetani, Ruben - BA, MA, MSc, PhD
Goetz, Daniel Thomas - BA, MA
Hirsh, Jacob - BSc, MA, PhD
Iqbal, Abraham - BCom, MA, CPA
Jones, Duncan - BSc, MBA, MSc
Kirsch, Tanya - BCom
Kitunen, Joan - BBM, CA, CPA
Lehnherr, Igor - BSc, PhD
Osborne, Matthew James - BA, PhD
Parker, Jayson - PhD, PhD
Parkinson, John - BA, MA, PhD
Radhakrishnan, Phanikiran - DPhil
Revers, Leigh - PhD
Schneider, Manfred - BCom, MBA, JD, CA, CPA
Schumann, Eckhard - Bcomm, CA, CPA
Trippen, Gerhard - MCS, PhD
Wiecek, Irene - Bcomm, CA, CPA
Yung, Otto - BComm, BASc, MBA, MA
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.

IMI 1001H	Innovation and Entrepreneurship
IMI 2001H	Special Topics in Management and Innovation
IMI 3001H[+]	Biocommercialization: Analysis of Technology Driven Innovation

[+] *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 an 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. Lecturers 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 broadly 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 **9.0 graduate full-course equivalents (FCEs)** over a 24-month period:
  - 4.5 FCEs MBiotech courses (includes credits for Seminar and Placement)
  - 3.5 FCEs Biopharmaceutical courses
  - 1.0 FCE elective course.
- 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.

BTC 1600H	Biopartnering I
BTC 1610H	Biopartnering II
BTC 1700H	Molecular Biology Laboratory
BTC 1710H	Biomaterials and Protein Chemistry Theory
BTC 1720H	Biomaterials and Protein Chemistry Lab
BTC 1800H	Biotechnology in Medicine
BTC 1810H	Biotechnology and Drug Manufacturing
BTC 1820H	Biotechnology in Agriculture and Natural Products
BTC 1900Y[0]	Work Term I (Internship)
BTC 1910Y[0]	Work Term II (Internship)
BTC 2000H[+]	Effective Management Practices
BTC 2010H	Fundamentals of Managerial Concepts
BTC 2020H	Society, Organizations, and Technology
BTC 2030H	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

BTC 1830H	Medical and Scientific Challenges in Marketing Therapeutics
BTC 1840H	Patent Law for the Life Sciences
BTC 1850H	Creating Life Science Products
BTC 1860H	Generations of Advanced Medicine: Biologics in Therapy (GAMBiT)
BTC 1920Y	Work Term III
BTC 2040H	Change Management
BTC 2100Y	Topics in Biotechnology
BTC 2110H	Topics in Biotechnology
BTC 2120H	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 **9.0 graduate full-course equivalents (FCEs)** over a 24-month period:
  - 4.5 FCEs MBiotech courses (includes credits for Seminar and Placement)
  - 4.0 FCEs Digital Health Technologies courses
  - 0.5 FCE elective course.
- 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.

BTC 1600H	Biopartnering I
BTC 1610H	Biopartnering II
BTC 1842H	Medical Device Reimbursement
BTC 1859H	Data Science in Health I
BTC 1877H	Data Science in Health II
BTC 1882H	Digital Ethnography in Health
BTC 1895H	Introduction to IT Consulting
BTC 1899H	Data Science and Digital Health Technologies
BTC 1900Y[0]	Work Term I (Internship)
BTC 1910Y[0]	Work Term II (Internship)
BTC 2000H[+]	Effective Management Practices
BTC 2010H	Fundamentals of Managerial Concepts
BTC 2030H	Management of Technological Innovation
MSC 2011H	Special Topics in Biomedical Communications
MSC 2019H	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

BTC 1830H	Medical and Scientific Challenges in Marketing Therapeutics
BTC 1840H	Patent Law for the Life Sciences
BTC 1850H	Creating Life Science Products
BTC 1860H	Generations of Advanced Medicine: Biologics in Therapy (GAMBiT)
BTC 1920Y	Work Term III
BTC 2040H	Change Management
BTC 2100Y	Topics in Biotechnology
BTC 2110H	Topics in Biotechnology
BTC 2120H	Topics in Biotechnology

Other graduate courses approved by Program Directors.

Management & Innovation: Forensic Accounting MFAcc

Master of Forensic Accounting

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 Length

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

Time Limit

6 years part-time

MFAcc Program (Four-Month Advanced-Standing Option)

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

This part-time advanced-standing option will only be available in 2018 (as a four-month option) and in 2019 and 2020 (as an eight-month option).

- **Coursework.** Students must successfully complete **2.0 full-course equivalents (FCEs)** in required courses as follows:
  - 0.5 FCE: IFA 1905H involves weekly online sessions, beginning in May for nine weeks
  - 0.5 FCE: IFA 1906H involves weekly online sessions, beginning in May for nine weeks
  - 0.5 FCE: IFA 2905H involves weekly online and residency sessions, beginning in July*
  - 0.5 FCE: IFA 2906H involves weekly online and residency sessions, beginning in July*

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

Program Length

1 session part-time (typical registration sequence: S)

Time Limit

2 years part-time

Management & Innovation: Forensic Accounting MFAcc Courses

Required Courses

Year 1

IFA 1900H	Forensic Accounting & Investigation, Fraud & Cybercrime
IFA 1901H	Forensic Accounting Professional & Practice Issues

IFA 1905H	Fraud Prevention, Risk and Investigation, Data Analytics & Security
IFA 1906H	International Aspects of Fraud, Money Laundering, Asset Tracing & Recovery
IFA 1907H	Legal & Legal Process Issues for Forensic Accountants

Year 2

IFA 2900H	Loss Quantification
IFA 2903H	Research Project on Emerging Issues/Advanced Topics
IFA 2904H	Integrative Capstone
IFA 2905H	Advanced Forensic Investigation & Psychological Aspects of White Collar Crime
IFA 2906H	Business Valuation, Bankruptcy & Insolvency, & 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 any applicant graduating from:
  - a North American university with high distinction (i.e., cumulative grade point average of 3.5 or higher) or
  - 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 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**. The program requires the successful completion 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 (MGT 1090H and MGT 2090H) 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.

MGT 1090H(0)+	Accounting Work-Term Course I
MGT 1160H(1)	Communications
MGT 1181H(1)	Introduction to Integration and Professional Decision Making
MGT 1202H(2)	Ethics and Governance
MGT 1210H(2)	Managerial Economics
MGT 1211H(2)	Economic Environment of Business
MGT 1221H(2)	Financial Accounting I
MGT 1222H(2)	Managerial Accounting

MGT 1241H(2)	Operations Management
MGT 1250H(2)	Marketing
MGT 1272H(2)	Management Information Systems
MGT 1301H(3)	Fundamentals of Strategic Management
MGT 1323H(3)	Auditing and Reporting
MGT 1330H(3)	Business Finance
MGT 1362H(3)	Managing People in Organizations
MGT 1382H(3)	Statistics for Management
MGT 2004H(2)	Advanced Concepts in Strategic Management
MGT 2014H(2)	The Legal Environment of Professions and Corporations
MGT 2090H(0)+	Accounting Work-Term Course II
MGT 2200H(1)	Government and Not-for-Profit Accounting, Reporting, and Control
MGT 2205H(3)	Advanced Financial Accounting
MGT 2206H(3)	Taxation I
MGT 2207H(3)	Taxation II
MGT 2224H(2)	Computer Auditing
MGT 2225H(2)	Advanced Auditing Topics
MGT 2250H(3)	Financial Reporting I
MGT 2251H(3)	Financial Reporting II
MGT 2260H(2)	Management Control
MGT 2261H(2)	Advanced Management Accounting
MGT 2280H(2)	Accounting Theory and Research
MGT 2281H(1)	Mergers, Acquisitions, and Valuations
MGT 2282H(2)+	Integration and Professional Decision Making Initiatives I
MGT 2283H(2)	Integration and Professional Decision Making Initiatives II
MGT 2284H(1)	Capstone—Integrative Board Report
MGT 2301H(2)	Financial Management

Plus one of the following electives:

MGT 2070H(1)	Management Consulting
MGT 2208H(1)	Taxation III

Program Length

7 sessions full-time (typical registration sequence: S/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.*

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 any applicant graduating from:
  - a North American university with high distinction (i.e., cumulative grade point average of 3.5 or higher) or
  - 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 demonstrate proficiency in English. See General Regulations section 4.3 for requirements.
- Applicants who have previously completed MGT 1210H, MGT 1211H, MGT 1221H, MGT 1222H, MGT 1250H, and MGT 1382H, 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**. Successful completion of **14.75 full-course equivalents (FCEs)** in required courses, as follows: MGT 1160H, MGT 1181H, MGT 1202H, MGT 1241H, MGT 1272H, MGT 1301H, MGT 1323H, MGT 1330H, MGT 1362H, MGT 2004H, MGT 2014H, MGT 2200H, MGT 2205H, MGT 2206H, MGT 2207H, MGT 2224H, MGT 2225H, MGT 2250H, MGT 2251H,

MGT 2260H, MGT 2261H, MGT 2280H, MGT 2281H, MGT 2282H+, MGT 2283H, MGT 2284H, MGT 2301H, and one of MGT 2070H or MGT 2208H;
- **Co-op work placements**. Two co-op work placements (MGT 1090H and MGT 2090H) 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 at least a University of Toronto mid-B.
- Satisfactory Graduate Management Admission Test (GMAT) score. Note: the GMAT requirement will be waived for any applicant graduating from:
  - a North American university with high distinction (i.e., cumulative grade point average of 3.5 or higher) or
  - 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 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 MGT 1210H, MGT 1211H, MGT 1221H, MGT 1222H, MGT 1272H, MGT 1323H, MGT 1330H, MGT 1382H, MGT 2014H, MGT 2205H, MGT 2206H, MGT 2207H, MGT 2224H, MGT 2225H, MGT 2250H, MGT 2251H, MGT 2260H, MGT 2261H, and MGT 2301H, 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**. Successful completion of **6.5 full-course equivalents (FCEs)** in required courses as follows: MGT 1160H, MGT 1181H, MGT 1202H, MGT 1241H, MGT 1250H, MGT 1301H, MGT 1362H, MGT 2004H, MGT 2200H, MGT 2208H, MGT 2280H, MGT 2281H, MGT 2282H+, MGT 2283H, MGT 2284H; and;
- **Co-op work placement**. One co-op work placement (MGT 2090H) 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: MMI 1100H *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

MMI 1010H	Prices and Markets
MMI 1020H	Introduction to Big Data Analysis
MMI 1030H	Marketing Science
MMI 1040H	Accounting
MMI 1050H	Negotiations
MMI 1060H	Finance
MMI 1070H	Economics of Business Strategy
MMI 1080H	Management of Technology
MMI 1090H	Technology, Strategy, and Policy
MMI 1100H	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**. A total of **9.0 FCEs** as follows:
  - 6.0 FCEs (10 required courses) including SSM 1090H *Capstone Course* and SSM 1100Y *Research Paper*

    - 3.0 FCEs (6 elective courses) selected by chosen concentration as follows:
        - 2.0 FCEs from the Management elective courses
        - 1.0 FCE from the Science elective courses.
- **Internship**. A summer internship placement (two to four months).

Science Concentration

- **Coursework**. A total of **9.0 FCEs** as follows:
    - 6.0 FCEs (10 required courses) including SSM 1090H *Capstone Course* and SSM 1100Y *Research Paper*
    - 3.0 FCEs (6 elective courses) selected by chosen concentration as follows:
        - 2.0 FCEs from the Science elective courses
        - 1.0 FCE from the Management elective courses.
- **Internship**. A summer internship placement (two to four months).

Program Path

Year 1: Fall

SSM 1010Y	Principles of Sustainability Management
SSM 1020H	Decision Making for Sustainability Management
SSM 1040H	Managerial Economics for Sustainability Management
SSM 1050H	Ecosystem Science

Year 1: Winter

SSM 1030H	Environmental Science
SSM 1060H	Managing Sustainable Organizations
SSM 1070H	Sustainability Law and Policy
SSM 1080H	Strategies for Sustainability Management
Plus 0.5 FCE elective	

Year 1: Summer

SSM 1110H	Sustainability Management Internship

Year 2: Fall

SSM 1100Y	Research Paper
Plus 1.5 FCE elective	

Year 2: Winter

SSM 1090H	Capstone Course—Sustainable Enterprise
SSM 1100Y	Research Paper
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

SSM 1010Y	Principles of Sustainability Management
SSM 1020H	Decision Making for Sustainability Management
SSM 1030H	Environmental Science
SSM 1040H	Managerial Economics for Sustainability Management
SSM 1050H	Ecosystem Science
SSM 1060H	Managing Sustainable Organizations
SSM 1070H	Sustainability Law and Policy
SSM 1080H	Strategies for Sustainability Management
SSM 1090H	Capstone Course—Sustainable Enterprise
SSM 1100Y	Research Paper

Elective Courses

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

Science Electives

JPG 1407H	Efficient Use of Energy
JPG 1408H	Carbon Free Energy
EES 1107H	Remediation Methods
EES 1117H	Climate Change and Impact Assessment
EES 1125H	Contaminated Site Remediation
ENV 1002H	Environmental Policy
ENV 1704H	Environmental Risk Analysis and Management

Management Electives

SSM 2010H	Marketing in Sustainability Management
SSM 2020H	Sustainability Ethics
SSM 2030H	Advanced Sustainability Management
SSM 2040H	Applied Sustainability Management
ENV 1707H	Environmental Finance and Sustainable Investing
EES 1124H	Environmental Project Management
ECO 2908H	Environmental and Resource Economics
MGT 2918H	Multidisciplinary Special Topics
RSM 2216H	Special Topics in Accounting

Management & Innovation: Investigative & Forensic Accounting DIFA

Diploma of Investigative & Forensic Accounting

Admissions to this diploma program have been suspended.

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

IFA 1900H	Forensic Accounting and Investigation, Fraud, and Cybercrime
IFA 1901H	Forensic Accounting Professional and Practice Issues
IFA 1902H	Legal Process—Introductory
IFA 1903H	Investigative-Related Matters—Introductory
IFA 1904H	Loss Quantification—Introductory
IFA 2900H	Loss Quantification
IFA 2901H	Investigative-Related Matters—Advanced
IFA 2902H	Legal Process—Advanced
IFA 2903H	Research Project on Emerging Issues/Advanced Topics
IFA 2904H	Integrative Capstone

The courses IFA 1900H and IFA 2904H each involve a mandatory in-residence session at the University of Toronto Mississauga. IFA 2904H requires participation in moot court and other experiential learning sessions. The remaining eight courses are offered via weekly online sessions.

Management, Rotman School of Management

Management, Rotman School: Introduction

Faculty Affiliation

Management, Rotman School of Management

Degree Programs

Management

MBA
Extended Full-Time MBA (Morning and Evening)
Executive MBA (EMBA)
Omnium Global Executive MBA (GEMBA)
Global Executive MBA for Healthcare and the Life Sciences (GEMBA-HLS)

Finance

MF

Financial Risk Management

MFRM

Management Analytics

MMA

Combined Degree Programs

STG, BASc / MBA
STG, JD / MBA
STG, MBA / MGA
STG, PharmD / MBA

Collaborative Specializations

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

1. **Contemporary East and Southeast Asian Studies**
   - Management, MBA
2. **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: www.rotman.utoronto.ca
Full-Time
MBA: www.rotman.utoronto.ca/Degrees/MastersPrograms/MBAPrograms/FullTimeMBA
Morning and Evening MBA: www.rotman.utoronto.ca/ME-MBA
Executive
MBA: www.rotman.utoronto.ca/Degrees/MastersPrograms/MBAPrograms/ExecutiveMBA
Omnium Global Executive
MBA: www.rotman.utoronto.ca/Degrees/MastersPrograms/MBAPrograms/GlobalEMBA
Global Executive MBA for Healthcare and the Life Sciences: www.rotman.utoronto.ca/Degrees/MastersPrograms/MBAPrograms/GEMBA-Health
Master of Finance: www.rotman.utoronto.ca/Degrees/MastersPrograms/MasterOfFinance
Master of Financial Risk Management: www.rotman.utoronto.ca/Degrees/MastersPrograms/MFRM
Master of Management Analytics: www.rotman.utoronto.ca/Degrees/MastersPrograms/MMA
Graduate Diploma in Professional Accounting: www.rotman.utoronto.ca/Degrees/GDPA

Telephone

MBA: (416) 978-3499
Morning and Evening MBA: (416) 946-5916
Executive MBA: (416) 946-3022
Omnium Global Executive MBA: (416) 946-3022
Global Executive MBA for Healthcare and the Life Sciences: (416) 946-3638
Master of Finance: (416) 946-5916
Master of Financial Risk Management: (416) 978-2230
Master of Management Analytics: (416) 946-3638
Graduate Diploma in Professional Accounting: (416) 978-2230

Address

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University of Toronto
105 St. George Street
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Canada

Management, Rotman School: Graduate Faculty

Full Members

Afeche, Philipp - BA, MS, PhD
Agrawal, Ajay - BASc, MEng, MBA, PhD
Amburgey, Terry - BS, MA, PhD
Amernic, Joel - BSc, MBA, CA
Bar-Isaac, Yeheskel (Heski) - BA, MSc, PhD
Baron, Opher - BSc, MBA, PhD
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
Brean, Donald - BA, MBA, MSc, PhD
Callen, Jeffrey - BM, MBA, DPhil
Casciaro, Tiziana - BA, MS, PhD
Ching, Andrew Tat Tin - BA, MA, MA, PhD
Christianson, Marlys - MD, PhD
Christoffersen, Peter - BA, PhD
Christoffersen, Susan - BA, MA, PhD (***Vice-Dean, Undergraduate and Pre-Experience Programs***)
Corts, Kenneth - BA, MA, PhD (***Vice-Dean, Faculty and Research***)
Côté, Stéphane - BSc, MA, PhD (***Director, PhD Program***)
Cunningham, William - BA, MPH, MS, MA, PhD
Dart, Beatrix - MISt, MEc, PhD
Davydenko, Sergei - MA, MSc, PhD
DeCelles, Katherine - BS, PhD
Doidge, Craig Andrew - BComm, MSc, PhD
Dungan, D Peter - BA, MA, PhD
Dyck, Alexander - BA, PhD
Elitzur, Ramy - BA, MBA, PHM, PhD
Elkamhi, Redouane - BE, MBA, PhD
Florida, Richard - BA, PhD
Gans, Joshua - BEc, PhD
Golden, Brian - BS, MS, PhD (***Vice-Dean, Professional Programs; Academic Director, GEMBA and Co-Academic Director, GEMBA-HLS Programs***)
Goldfarb, Avi - BA, MA, PhD
Goldreich, David - BS, MS, MS, PhD (***Academic Director, Rotman Commerce Program***)
Han, Bing - PhD
Han, Lu - BA, MA, PhD
Hawkins, Scott - BA, MS, PhD
Hejazi, Walid - BA, MA, PhD
Hope, Ole-Kristian - MBA, PhD
Horstmann, Ignatius - BA, PhD
Hu, Ming - BS, MS, PhD
Hull, John - BA, MA, MA, PhD (***Co-Director, MF and MFRM Programs***)
Hyatt, Douglas - BA, MA, PhD
Kan, Raymond - BBA, MBA, DPhil
Kaplan, Sarah - BA, MA, PhD
Kirzner, Eric - BA, MBA
Krass, Dmitry - BS, MEng, PhD (***Academic Director, MMA Program***)
Latham, Gary - BA, MS, PhD
Lederman, Mara - BA, PhD
Lee, Byung Soo - BS, MA, PhD
Leonardelli, Geoffrey - BA, MA, PhD
Liao, Wei-Yi (Scott) - MA, PhD
Lu, Hai - MBA, PhD, PhD
Macklem, Tiff - BA, MA, PhD (*Dean*)
Mahrt-Smith, Jan - BSc, PhD
Martin, Roger - AB, MBA
McCurdy, Thomas - BA, MA, PhD
McEvily, William - BS, PhD
McGahan, Anita - BA, MA, MBA, PhD
Mehta, Nitin - BTech, MS, MS, PhD (**Co-Academic Director, MMA Program**)
Milner, Joseph - BSc, MS, PhD (**Academic Director, Full-Time MBA Program**)
Mitchell, Matthew - BS, MA, PhD
Mitchell, William - BBA, PhD (**Co-Academic Director, GEMBA-HLS Program**)
Mohanram, Partha Sarathy - BTech, MBA, PhD
Moldoveanu, Mihnea (Michael) - BSc, MSc, DBA (***Vice-Dean, Learning and Innovation***)
Moorthy, Sridhar - BSc, MBA, MS, PhD
Oxley, Joanne - BSc, MA, MBA, PhD (***Associate Dean, Faculty***)
Pauly, Peter - MA, PhD
Reuber, Rebecca - BA, MSc, PhD
Richardson, Gordon - BA, MBA, PhD, CA
Rotenberg, Wendy - BA, MBA, PhD
Rotundo, Maria - BA, MA, PhD
Rowley, Timothy - BA, MBA, PhD
Rutherford, Scott - BSc, MBA
Ryall, Michael - BS, MBA, PhD
Shi, Mengze - BSc, MBA, PhD
Silverman, Brian - AB, MA, SM, PhD (***Associate Dean, Research and Academic Resources***)
Simutin, Mikhail - BA, PhD
Smieliauskas, Waldemar - BS, MS, PhD
Soberman, David - BSc, MBA, PhD
Soman, Dilip - BE, MBA, PhD
Strange, William - BA, MA, PhD
Tilcsik, Andras - AB, AM, PhD
Trefler, Daniel - BA, MPH, PhD
Tsai, I-Wen (Claire) - BBA, MBA, PhD
Verma, Anil - BTech, MBA, PhD
Wang, Qing (Kevin) - BS, MA, PhD
White, Alan - BEng, MBA, PhD
Whyte, Glen - LLB, MA, MPH, MBA, PhD
Wong, Moon Hung (Franco) - BA, MA, PhD
Xie, Jia Lin - BA, MBA, PhD
Xin, Baohua - PhD
Yang, Liyan - BA, MA, PhD

Zhang, Ping - BA, MAcct, MA, PhD
Zhao, Min - BA, MA, PhD
Zhong, Chenbo - BA, MA, PhD

Members Emeriti

Bird, Richard - BA, MA, PhD
Dunne, David - BComm, DPhil
Fisher, James - BA, MBA
Fleck, James - BA, DBA
Gordon, Myron - BA, MA, PhD
Halpern, Paul - BCom, MBA, PhD
Kolodny, Harvey - BEng, MBA, PhD
Menzefricke, Ulrich - MBA, DBA
Mitchell, Andrew - BA, PhD
Ondrack, Daniel - BComm, MBA, PhD
Sawyer, John - BCom, MA, PhD
Wilson, Thomas - BA, AM, PhD

Associate Members

Ambachtsheer, Keith - BA, MA
Arnold, Hugh - BA, MA, PhD
Ashraf, Syed Nouman - BCom, MBA
Bamber, Matthew Alan - PhD
Bar (Borkovsky), Ron - BSc, MA, PhD
Barrette, Catherine - BCom, BCom
Beatty, David - BA, MA
Beausoleil, Angele - BAA, MA, PhD
Blundell, Richard - BSc, MBA
Boyko, Dana Marta - BA, BA, MA
Bryan, Kevin - BA, MS, MS, PhD
Carr, Melanie - MD
Celerier, Claire - PhD
Corhay, Alexandre - BCom, MSc
Dessaint, Olivier - MSc, MA, PhD
Djikic, Maja - PhD
Dobson, Wendy - BScN, MPA, SM, PhD
Doering, Laura - BA, MA, MA, PhD
Drory, Asher - BA, MBA, MA
Feinberg, Matthew - BA, MEd, PhD
Geoffrey, Craig - BA, MBA
Golubov, Andrey - MSc, PhD
Hampton, Delaine - BSc
Hoffman, Mitchell - BA, PhD
Khan, Michael - BCom
Kim, Daehyun - PhD
Kitunen, Joan - BBM, CA, CPA
Lee, Wing Sing (Spike) - MS, PhD
Losell, Donna - BA, MBA
MacKay, Alexandra - BSc, MA, PhD
Malekian, Azarakhsh - BSc, MS, PhD
Manning, Ryann - BA, MA, PhD
Martin, Joe - BA
McCullough, Tom - MBA
Nesbitt, Richard - BA, MBA, MSc
Oesch, John - BS, MSc, MBA, MEd, PhD (***Academic Director, Morning and Evening MBA Program***)
Powers, Richard - BPHE, BA, LLB, MBA
Romero, Gonzalo - BS, BS, PhD
Schneider, Manfred - BCom, MBA, JD, CA, CPA
Stapleton, Maureen - MBA
Stojanovic, Dragan - BComm, MEd
Tassone, Ralph - BCom, MEd
Tolias, Fotini - BCom, MBA (***Academic Director, MF Program***)
Trippen, Gerhard - MCS, PhD
Webb, Ryan - BA, MA, PhD
Wiecek, Irene - Bcomm, CA, CPA
Zuliani, Elisa - BBM, CA (***Academic Director, Graduate Diploma in Professional Accounting***)

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.
- 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 the set 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.
  - Complete 0.5 full-course equivalent (FCE):
    - a full-time internship work placement and RSM 1380H *Applied Management: Placement*, which includes in-class lectures and coursework assessments; **or**
    - if they are not taking an internship, RSM 1381H *Applied Management: Independent Study*.
  - Complete 6.0 elective FCEs at the 2000 level (equivalent to twelve 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.

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

RSM 1160H	Business Ethics
RSM 1165H	Leveraging Diverse Teams (Credit/No Credit)
RSM 1201H	Fundamentals of Strategic Management
RSM 1210H	Managerial Economics
RSM 1211H	Economic Environment of Business
RSM 1213H	Model-Based Decision Making in Practice
RSM 1215H	Decision Making with Models and Data
RSM 1220H	Financial Accounting
RSM 1222H	Managerial Accounting
RSM 1231H	Finance I: Global Markets and Valuation
RSM 1232H	Finance II: Corporate Finance
RSM 1240H	Operations Management
RSM 1250H	Managing Customer Value
RSM 1260H	Leading People in Organizations
RSM 1282H	Statistics for Management

Required Courses to be Completed Any Time After Year 1

RSM 1380H or RSM 1381H	Applied Management: Placement or Applied Management: Independent Study

Elective Courses for the Full-Time MBA Program

Consult the department each session about course offerings.

RSM 2000H	Multi-disciplinary Special Topics
RSM 2002Y	Research Project
RSM 2003H	Research Project
RSM 2011H	International Strategy
RSM 2012H	Entrepreneurship
RSM 2013Y	Creative Destruction Lab
RSM 2014H	Sustainability Strategy
RSM 2015H	Non-Market Strategy

RSM 2016H	Data-Based Strategic Modelling
RSM 2017H	Pharmaceutical Strategy
RSM 2018H	Emerging Markets Strategy
RSM 2019H	Corporation 360
RSM 2020H	Health Sector Strategy and Organizations
RSM 2021H	Corporate Strategy
RSM 2022H	Creative Industry Strategy
RSM 2023H	Strategic Change and Implementation
RSM 2027H	Not-for-Profit Consulting
RSM 2030H	Canadian Business History
RSM 2050H	Technology/Management Interface
RSM 2052H	Management Consulting
RSM 2053H	Organizational Strategy
RSM 2054H	Technology Strategy
RSM 2055H	Cooperative Strategy
RSM 2056H	Competitive Strategic Analysis
RSM 2057H	Entrepreneurial Finance
RSM 2058H	Communicating Strategy
RSM 2059H	Health Systems Consulting
RSM 2060H	Digital Strategy
RSM 2061H	Strategic Networks
RSM 2062H	Management Consulting Practicum
RSM 2063H	Catastrophic Failure in Organizations
RSM 2081H	Social Entrepreneurship
RSM 2083H	Special Topics in Strategic Management
RSM 2109H	Rotman Study Tour
RSM 2115H	Creative Regional Strategies
RSM 2116H	Special Topics in Business Economics
RSM 2117H	Special Topics in Business Economics
RSM 2118H	Special Topics in Business Economics
RSM 2119H	Special Topics in Business Economics
RSM 2120H	Health Policy and Health Care Markets
RSM 2122H	Clean Energy: Policy Context and Business Opportunities
RSM 2123H	International Business in the World Economy
RSM 2125H	Game Theory and Applications for Management
RSM 2126H	Real Estate Development
RSM 2127H	Economic Environment of International Business
RSM 2128H	Real Estate Economics
RSM 2129H	Forecasting Models and Econometric Methods
RSM 2130H	Real Estate Investment
RSM 2131H	Economics of Innovation and Intellectual Property
RSM 2132H	Prosperity and Competitiveness
RSM 2140H	Special Topics in Business Economics
RSM 2141H	Special Topics in Business Economics
RSM 2142H	Special Topics in Business Economics
RSM 2202H	Planning and Control Systems
RSM 2203H	Current Issues in Financial Reporting and Disclosure
RSM 2204H	Taxation and Decision-Making
RSM 2209H	Financial Statement Analysis
RSM 2210H	Financial Distress and Insolvency
RSM 2211H	Business Law
RSM 2212H	Business Analysis and Valuation
RSM 2215H	Special Topics in Accounting
RSM 2216H	Special Topics in Accounting
RSM 2300H	Corporate Financing
RSM 2301H	Financial Management
RSM 2302H	Security Analysis and Portfolio Management
RSM 2303H	Risk Modelling and Financial Trading Strategies
RSM 2304H	Financial Institutions and Capital Markets
RSM 2305H	International Financial Management
RSM 2306H	Options and Futures Markets
RSM 2307H	Advanced Derivatives

RSM 2308H	Financial Risk Management
RSM 2309H	Mergers and Acquisitions
RSM 2310H	Analysis and Management of Fixed Income Securities
RSM 2311H	Applied Portfolio Management
RSM 2312H	Value Investing
RSM 2314H	Private Equity and Entrepreneurial Finance
RSM 2315H	Management of Private Wealth
RSM 2316H	Introduction to Hedge Funds and Broker Dealers
RSM 2317H	How Banks Work: Management in a New Technological Age
RSM 2319H	The Revolution in Finance: Markets, Institutions, and Organizations
RSM 2320H	The Canadian and American Financial Systems—Comparisons and Contrasts
RSM 2321H	Special Topics in Finance
RSM 2326H	How Banks Work: Management in a New Technological Age
RSM 2327H	Islamic Finance in Canada
RSM 2405H	Supply Chain Management
RSM 2406H	Operations Management Strategy
RSM 2407H	Services Operations Management
RSM 2408H	The Art of Modeling Spreadsheets
RSM 2409H	Predictive Analytics
RSM 2410H	Analytics and Operations Consulting
RSM 2415H	Special Topics in Management Science
RSM 2416H	Special Topics in Operations Management
RSM 2417H	Special Topics in Operations Management
RSM 2500H	Marketing Strategy
RSM 2501H	Global Marketing
RSM 2504H	Consumer Behaviour
RSM 2505H	Strategic Marketing Communications
RSM 2506H	Marketing Research
RSM 2507H	Marketing Analysis and Decision Making
RSM 2508H	Sales Management
RSM 2510H	Distribution Channel Strategy
RSM 2511H	Fintech Marketing: Innovation in the Marketing of Financial Services
RSM 2512H	Branding
RSM 2513H	Pricing
RSM 2514H	Healthcare Marketing
RSM 2515H	Special Topics in Marketing
RSM 2516H	Special Topics in Marketing
RSM 2517H	Design, Foresight, and Innovation
RSM 2518H	Special Topics in Marketing
RSM 2519H	Special Topics in Marketing
RSM 2520H	Special Topics in Marketing
RSM 2521H	Marketing Using Information Technology
RSM 2522H	Marketing and Behavioural Economics
RSM 2524H	Business Design Practicum
RSM 2530H	Special Topics in Marketing
RSM 2531H	Special Topics in Marketing
RSM 2532H	Special Topics in Marketing
RSM 2601H	Organization Design
RSM 2603H	Advanced Negotiations and Conflict Management
RSM 2604H	Managerial Negotiations
RSM 2605H	International Organizational Behaviour
RSM 2606H	Designing New Work Organizations
RSM 2609H	Aligning People and Strategy
RSM 2610H	Industrial Relations
RSM 2612H	Managing Talent for Global Operations
RSM 2616H	Special Topics in Organizational Behaviour
RSM 2618H	Special Topics in Organizational Behaviour
RSM 2619H	Power and Influence in Organizations
RSM 2620H	Leading Teams
RSM 2621H	Effective Leadership
RSM 2640H	Leading Social Innovation
RSM 2704H	Information Technology Management

RSM 2800H	Management Science
RSM 2910H	Learning How to Learn
RSM 2913H	Getting It Done®
RSM 2916H	Leadership from the Inside Out
RSM 2917H	Multidisciplinary Special Topics
RSM 2918H	Multidisciplinary Special Topics
RSM 2920H	Top Manager's Perspective
RSM 2922H	The Opposable Mind
RSM 2923H	Business Problem Solving
JDM 3619H	Digital Media Distribution (Credit/No Credit)

Management, Rotman School: Management MBA Extended Full-Time

Extended Full-Time MBA Program (Morning and Evening)

Program Description

The Rotman Morning or 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:

1. The Morning MBA lets working professionals complete their master's before work—from 7:00 to 8:59 am, two mornings a week.
2. 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). Test results are valid for five years.
- A minimum of two years of full-time work experience.
- The Extended Full-Time (Morning and 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.
- There are two sections in the Morning and Evening MBA programs. The Morning section holds classes twice a week from 7:00 am to 8:59 am; the Evening section holds classes twice a week from 6:30 pm to 8:30 pm.
- **Coursework**: students must complete required and elective courses as follows:
    - **Required**: 1000-level courses as set out in the required courses chart. 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.
    - **Elective**: 4.0 full-course equivalents (FCEs) at the 2000 level (equivalent to eight 2000-level courses). With the permission of the Academic Director, Morning and 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 and 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

RSM 1160H	Business Ethics
RSM 1210H	Managerial Economics
RSM 1220H	Financial Accounting
RSM 1222H	Managerial Accounting
RSM 1232H	Finance II: Corporate Finance
RSM 1240H	Operations Management
RSM 1250H	Managing Customer Value
RSM 1291H	Business Problem Solving: A Model-Based Approach
RSM 1301H	Fundamentals of Strategic Management
RSM 1310H	Economic Environment of Business
RSM 1331H	Finance I: Capital Markets and Valuation
RSM 1360H	Leading People in Organizations
RSM 1361H	Managerial Negotiations
RSM 1365H[0]	Leadership Development Practicum
RSM 1382H	Statistics for Management

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

Elective Courses

See the full-time MBA courses.

Management, Rotman School: Management Executive MBA

Executive Master of Business Administration

Program Description

The Rotman One-Year Executive MBA provides senior working professionals with 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 significant professional work and managerial experience.
- 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). Test results are valid for five years. For further details, refer to the website or contact the program office.
- 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 13-month program:
  - Students must complete 23 courses, including the set of 14 required courses, with an accumulated credit weighting of 11.50.
  - *At the discretion of the Academic Director and the Vice-Dean, Professional 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 and Evening) Programs.
  - 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.
- The Executive MBA is offered on Fridays and weekends every other week, plus four week-long residential modules and study periods.

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

*At the discretion of the Academic Director and the Vice-Dean, Professional 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 and Evening) Programs.

RSM 5001H	Strategy 1
RSM 5002H	Strategy 2*
RSM 5006H	Corporate Governance*
RSM 5007H	International Business*
RSM 5009H	Topics in Strategic Management*
RSM 5011H	Capstone Project
RSM 5101H	Economics 1
RSM 5102H	Economics 2
RSM 5201H	Accounting 1
RSM 5202H	Accounting 2*
RSM 5291H	Business Problem Solving: A Model-Based Approach*
RSM 5301H	Finance 1
RSM 5302H	Finance 2
RSM 5401H	Business Operations
RSM 5501H	Marketing 1
RSM 5502H	Marketing 2*
RSM 5600H	Personal Leadership
RSM 5601H	Organizational Leadership*
RSM 5602H	Negotiations
RSM 5603H	The Business Environment: Ethics
RSM 5604H[0]	Leadership Development Practicum
RSM 5605H	The Thoughtful Leader*
RSM 5801H	Quantitative Reasoning for Management

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

Management, Rotman School: Management Executive MBA Global

Omnium Global Executive Master of Business Administration

Program Description

Over 18 months, the Rotman Global Executive MBA program travels to five continents, exposing students to some of the world's most exciting markets. The program allows the flexibility to maintain a career in a home country while earning a global executive MBA. International senior managers participate in two-week residential modules in key business centres, with a strong focus on emergent economies. Module destinations include: North America, East Asia, South Asia, Europe, the Americas, the Middle East, and Africa. Students will build a network of international contacts, learn invaluable tools to advance their careers, and gain the ability to tackle the global business challenges of the future.

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.
- 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). Test results are valid for five years. For further details, refer to the website or contact the program office.
- 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 complete 23 courses, including the set of 14 required courses, with an accumulated credit weighting of 11.50.
  - *At the discretion of the Academic Director and the Vice-Dean, Professional 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 and Evening MBA) Programs.
  - Students complete six two-week, international modules at various international locations which are subject to change. For further details, please refer to the website or contact the program.
  - The curriculum is closely aligned with courses offered in the Executive MBA program. Between modules, participants continue their academic work by utilizing our electronic learning tools.
  - See details on visa and travel requirements to fulfil the international modules.

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 Global Courses

Required Courses

*At the discretion of the Academic Director and the Vice-Dean, Professional 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 and Evening MBA) Programs.

RSM 5001H	Strategy 1
RSM 5002H	Strategy 2*
RSM 5006H	Corporate Governance
RSM 5007H	International Business*
RSM 5009H	Topics in Strategic Management*
RSM 5010H	Industry Analysis Project*
RSM 5015H[0]	Capstone Project
RSM 5101H	Economics 1
RSM 5102H	Economics 2
RSM 5201H	Accounting 1
RSM 5202H	Accounting 2*
RSM 5301H	Finance 1
RSM 5302H	Finance 2
RSM 5401H	Business Operations
RSM 5501H	Marketing 1
RSM 5502H	Marketing 2*
RSM 5601H	Organizational Leadership*
RSM 5602H	Negotiations
RSM 5603H	The Business Environment: Ethics
RSM 5604H[0]	Leadership Development Practicum
RSM 5606H	Emancipatory Leadership*
RSM 5801H	Quantitative Reasoning for Management
RSM 5901H	Managing Innovation*

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

Management, Rotman School: Management Executive MBA Global Healthcare and the Life Sciences

Global Executive Master of Business Administration for Healthcare and the Life Sciences

Program Description

The Global Executive MBA for Healthcare and the Life Sciences (GEMBAHLS) is an intensive 18-month program designed for working professionals. It immerses students in key healthcare 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.

The program leverages the strengths of the Rotman School, as well as relationships with the University of Toronto and the global healthcare community. 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. This includes
- 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). Test results are valid for five years. See further details or contact the program office.
- 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 complete 23 courses with an accumulated credit weighting of 11.50.
  - 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 and study periods. 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 Global Healthcare and the Life Sciences Courses

Required Courses

*At the discretion of the Academic Director and the Vice-Dean, Professional 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 and Evening MBA) Programs.

RSM 1215H	Decision-Making with Models and Data
RSM 2020H	Health Sector Strategy and Organizations
RSM 2083H	Special Topics in Strategic Management
RSM 2522H	Marketing and Behavioural Economics
RSM 2524H	Business Design Practicum
RSM 5001H	Strategy 1
RSM 5007H	International Business
RSM 5013H	Digital Health
RSM 5014H	Data Analytics and Strategic Decision-Making in Health and Life Sciences
RSM 5015H[0]	Capstone Project
RSM 5023H	Strategic Change and Implementation
RSM 5101H	Economics 1
RSM 5109H	Rotman Study Tour
RSM 5201H	Accounting 1
RSM 5301H	Finance 1
RSM 5303H	Corporate Finance and Corporate Governance for Healthcare and the Life Sciences
RSM 5401H	Business Operations
RSM 5501H	Marketing 1
RSM 5600H	Personal Leadership
RSM 5602H	Negotiations
RSM 5603H	The Business Environment: Ethics
RSM 5604H[0]	Leadership Development Practicum
RSM 5801H	Quantitative Reasoning for Management

[0] Course that may continue over a program. The course is graded when 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) 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, video essay, 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 (including Summer). No advanced standing will be granted for previous academic work completed or professional designations earned.
    - Students may be required to do some pre-program studies during the Summer prior to the start of the program, depending on background preparation.

RSM 4113H (0.25 FCE)	Macroeconomics for Financial Professionals
RSM 4216H	Financial Reporting and Financial Statement Analysis
RSM 4220H	Advanced Accounting Topics for Finance
RSM 4310H	Foundations of Finance
RSM 4314H	Risk Management and Financial Institutions
RSM 4315H	Investment Banking and Corporate Valuation
RSM 4317H	Analysis of Fixed Income Markets
RSM 4318H	Applied Portfolio Management
RSM 4319H	Forecasting Risks and Opportunities for Financial Securities
RSM 4322H	Applications of Derivatives Products
RSM 4323H	Investments
RSM 4324H	Innovations in Financial Technology

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, eight-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 two-month project, students will be taken out of the classroom and into industry, working in-house with practicing 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.
- **Prerequisite knowledge in the following areas, usually demonstrated through the completion of university-level courses:**
  - Foundation of finance
  - Financial accounting
  - Investments
  - Futures and options.
  - 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.
- **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.
- Applicants who meet all the criteria will be assessed on the basis of their application essays, answers to video questions, grades, and two 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 eight-month, full-time program (two sessions), students must complete 11 half courses (**5.5 full-course equivalents [FCEs]**) as follows:

RSM 6301H	Market Risk
RSM 6302H	Financial Markets, Risk, and Institutions
RSM 6303H	Regulation of Financial Institutions
RSM 6304H	Operational Risk
RSM 6305H	Credit Risk
RSM 6306H	Probabilistic Modelling for Risk-Informed Decisions
RSM 6307H	Macroeconomics for Financial Risk Management Professionals
RSM 6308H	Advanced Investments
RSM 6309H	Risk Management in Pension Funds and Insurance Companies
RSM 6310H	Derivative Models for Risk Management
RSM 6311H	Rotman Risk Management Project

Program Length

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

Time Limit

3 years full-time

Management, Rotman School: Management Analytics

Master of Management Analytics

Program Description

The professional Master of Management Analytics (MMA) degree program offers a curriculum that combines analytical depth and a focus on business issues and applications. Analytic depth is provided by courses on business models and data generation, acquiring and structuring data, predictive and prescriptive analytics, big data methods, decision analysis, and spreadsheet modelling. Courses applying analytics to business

feature the use of analytics in marketing, operations, supply chain management, accounting, and finance.

The MMA degree program is offered over two sessions using a cohort-based model. Students must complete a structured sequence of 12 courses on a full-time basis. 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.
- **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.
- **Quantitative proficiency:** Evidence of a high level of proficiency (a minimum B average) in quantitative subjects such as calculus, linear algebra, and statistics or econometrics is required. 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.
- All successful applicants are expected to demonstrate effective oral and written communication skills.
- Applicants who meet all the criteria will be assessed on the basis of their application essays, answers to the video questions, grades, and two 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. Visit the website for more details about the admission process.

Program Requirements

Within this two-session program, students must complete **6.0 full-course equivalents (FCEs)** (12 half-course equivalents) as follows:

RSM 8224H	Analytic Insights Using Accounting and Financial Data
RSM 8411H	Structuring and Visualizing Data for Analytics
RSM 8413H	Big Data Analytics
RSM 8414H	Tools for Probabilistic Models and Prescriptive Analytics
RSM 8423H	Optimizing Supply Chain Management and Logistics
RSM 8431H	Analytics Colloquia
RSM 8432H	Management Analytics Practicum
RSM 8502H	Data-Based Management Decisions
RSM 8512H	Modeling Tools for Predictive Analytics
RSM 8521H	Improving Customer Value with Analytics
RSM 8522H	Analytics for Marketing Strategy
RSM 8901H	Analytics in Management

Program Length

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

Time Limit

3 years full-time

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, Public Accounting Stream)
  - 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.
- Interested students from other undergraduate programs may be eligible to apply to the GDipPA if they demonstrate that their undergraduate learning outcomes are similar to those of U of T's accounting programs. Contact the department.
- **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 essays, answers to video questions, grades, and two 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. Find out more about the admission process.

Program Requirements

Students must complete **2.5 full-course equivalents (FCEs)** (five half courses) as follows:

RSM 7201H	Advanced Financial Reporting
RSM 7202H	Advanced Taxation
RSM 7203H	Advanced Topics in Assurance and Control
RSM 7301H	Finance and Professional Practice
RSM 7204H	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:

1. **Environmental Studies**
   - Management, PhD
2. **Global Health**
   - 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.aspx
Email: shirley.vanderpuye@rotman.utoronto.ca
Telephone: (416) 978-4226

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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
Amburgey, Terry - BS, MA, PhD
Amernic, Joel - BSc, MBA, CA
Averbakh, Igor - MSc, PhD
Bar-Isaac, Yeheskel (Heski) - BA, MSc, PhD
Baron, Opher - BSc, MBA, PhD
Baum-Snow, Nathaniel - AB, PhD
Baum, Joel - BA, MBA, PhD
Berman, Oded - BA, PhD
Borins, Sandford - BA, PhD
Bova, Francesco - BComm, MPH, MBA, MA, PhD
Blum, Bernardo - BA, MA, MA, PhD
Booth, Laurence - BSc, MBA, MA, DBA
Bowers, Anne - BA, MBA, PhD
Brean, Donald - BA, MBA, MSc, PhD
Brooks, Leonard - BCom, MBA, CA, CPA
Callen, Jeffrey - BM, MBA, DPhil
Casciaro, Tiziana - BA, MS, PhD
Cen, Ling - BEc, MEc, PhD
Christianson, Marlys - MD, PhD
Christoffersen, Peter - BA, PhD
Christoffersen, Susan - BA, MA, PhD (***Vice-Dean, Undergraduate and Pre-Experience Programs***)
Chen, Feng - MA, PhD, CGA, CPA
Ching, Andrew Tat Tin - BA, MA, MA, PhD
Connelly, Brian Samuel - BA, PhD
Corts, Kenneth - BA, MA, PhD (***Vice-Dean, Faculty and Research***)
Côté, Stéphane - BSc, MA, PhD (***Academic Director, PhD Program***)
Cunningham, William - BA, MPH, MS, MA, PhD
Davydenko, Sergei - MA, MSc, PhD
DeCelles, Katherine - BS, PhD
Doidge, Craig Andrew - BComm, MSc, PhD
Dyck, Alexander - BA, PhD
Elitzur, Ramy - BA, MBA, PHM, PhD
Elkamhi, Redouane - BE, MBA, 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 (***Vice-Dean, Professional Programs; Academic Director, GEMBA and Co-Academic Director, GEMBA-HLS Programs***)
Goldfarb, Avi - BA, MA, PhD
Goldreich, David - BS, MS, MS, PhD (***Academic Director, Rotman Commerce Program***)
Gunz, Hugh - DPhil, PhD
Han, Bing - PhD
Han, Lu - BA, MA, PhD
Hansen, Samantha - BA, MA, PhD
Hawkins, Scott - BA, MS, PhD
Hejazi, Walid - BA, MA, PhD
Hope, Ole-Kristian - MBA, PhD
Horstmann, Ignatius - BA, PhD
Hossain, Tanjim - BA, BS, PhD
Hu, Ming - BS, MS, PhD
Hull, John - BA, MA, MA, PhD (***Co-Director, MF and MFRM Programs***)
Hyatt, Douglas - BA, MA, PhD
Kan, Raymond - BBA, MBA, DPhil
Kaplan, Sarah - BA, MA, PhD
Kramer, Lisa - BBA, PhD
Krass, Dmitry - BS, MEng, PhD (***Academic Director, MMA Program***)
Lacetera, Nicola - PhD
Latham, Gary - BA, MS, PhD
Lederman, Mara - BA, PhD
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Leonardelli, Geoffrey - BA, MA, PhD
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Li, Yue - BSc, MBA, PhD
Lu, Hai - MBA, PhD, PhD
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Mahrt-Smith, Jan - BSc, PhD
Martin, Roger - AB, MBA
McCarthy, Julie - BA, MPsy, PhD
McCurdy, Thomas - BA, MA, PhD
McEvily, William - BS, PhD
McGahan, Anita - BA, MA, MBA, PhD
Mehta, Nitin - BTech, MS, MS, PhD (***Co-Academic Director, MMA Program***)
Milner, Joseph - BSc, MS, PhD (***Academic Director, Full-Time MBA Program***)
Mitchell, Matthew - BS, MA, PhD
Mitchell, William - BBA, PhD (***Co-Academic Director, GEMBA-HLS Program***)
Mohanram, Partha Sarathy - BTech, MBA, PhD
Moldoveanu, Mihnea (Michael) - BSc, MSc, DBA (***Vice-Dean, Learning and Innovation***)
Moorthy, Sridhar - BSc, MBA, MS, PhD
Oxley, Joanne - BSc, MA, MBA, PhD (***Associate Dean, Faculty***)
Park, Andreas - MEc, MPH, PhD
Pauly, Peter - MA, PhD
Reuber, Rebecca - BA, MSc, PhD
Richardson, Gordon - BA, MBA, PhD, CA
Rotundo, Maria - BA, MA, PhD
Rotenberg, Wendy - BA, MBA, PhD
Rowley, Timothy - BA, MBA, PhD
Ryall, Michael - BS, MBA, PhD
Saks, Alan - BA, MSc, PhD
Shi, Mengze - BSc, MBA, PhD
Silverman, Brian - AB, MA, SM, PhD (***Associate Dean, Research and Academic Resources***)
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
Toh, Soo Min - BBA, PhD
Tombak, Mihkel - BS, MBA, AM, PhD
Tilcsik, Andras - AB, AM, PhD
Trefler, Daniel - BA, MPH, PhD
Trougakos, John Peter - BS, MBA, PhD
Tsai, I-Wen (Claire) - BBA, MBA, PhD
Verma, Anil - BTech, MBA, PhD
Wang, Qing (Kevin) - BS, MA, PhD
Wei, Jason - BSc, MBA, PhD
Wensley, Anthony - MA, MA, MBA, PhD
White, Alan - BEng, MBA, PhD
Whyte, Glen - LLB, MA, MPH, MBA, PhD
Wong, Moon Hung (Franco) - BA, MA, PhD
Xin, Baohua - PhD
Yang, Liyan - BA, MA, PhD
Xie, Jia Lin - BA, MBA, PhD
Zhang, Ping - BA, MAcct, MA, PhD
Zhao, Min - BA, MA, PhD
Zhong, Chenbo - BA, MA, PhD
Zweig, David - BA, MASc, DPhil

Members Emeriti

Fisher, James - BA, MBA
Fleck, James - BA, DBA
Halpern, Paul - BCom, MBA, PhD
Kolodny, Harvey - BEng, MBA, PhD
Menzefricke, Ulrich - MBA, DBA
Mitchell, Andrew - BA, PhD
Ondrack, Daniel - BComm, MBA, PhD
Sawyer, John - BCom, MA, PhD
Wilson, Thomas - BA, AM, PhD

Associate Members

Akey JR, Patrick - BComPhD
Ambuehl, Sandro - BSc, MA, PhD
Bryan, Kevin - BA, MS, MS, PhD
Cavenaile, Laurent Xavier C - MA, MSc, PhD
Celerier, Claire - PhD
Chan, Cindy - BA, MS, PhD
Chandra, Ambarish - BMath, MEc, PhD
Cire, Andre Augusto - BSc, MSc, PhD
Chattopadhyay, Akash - BE, MBA
Corhay, Alexandre - BCom, MSc
Derksen, Laura - BSc, MSc, PhD
Dessaint, Olivier - MSc, MA, PhD
Doering, Laura - BA, MA, MA, PhD
Feinberg, Matthew - BA, MEd, PhD
Gaetani, Ruben - BA, MA, MSc, PhD
Goetz, Daniel Thomas - BA, MA
Golubov, Andrey - MSc, PhD
Hasler, Michael Nicolas - BSc, MSc, PhD
Hirsh, Jacob - BSc, MA, PhD
Hoffman, Mitchell - BA, PhD
Khapko, Mariana - BEc, MA, PhD
Kim, Daehyun - PhD
Landry, Peter - BS, MS, PhD
Lee, Wing Sing (Spike) - MS, PhD
Li, Nan - BA, MA, MBA, PhD
Malekian, Azarakhsh - BSc, MS, PhD
Manning, Ryann - BA, MA, PhD
Martineau, Charles - BComm, MSc, PhD
McElheran, Kristina S. - BA, AB, AM, PhD
Medina Quispe, Pamela Milagros - BA, MA, PhD
Osborne, Matthew James - BA, PhD

Romero, Gonzalo - BS, BS, PhD
Shah, Avni Mahesh - AB, PhD
Small, Randolph Christopher - BA, MA, PhD
Wahid, Aida - BA, MA, PhD
Webb, Ryan - BA, MA, 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 major 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 RSM 3080H *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 RSM 3080H *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

RSM 3001H	Research Methods in Strategic Management
RSM 3002H	Advanced Topics in Strategy and Organization
RSM 3003H	Advanced Topics in Strategy and Economics
RSM 3004H	Advanced Topics in International Strategy
RSM 3005H+	Strategic Management Workshop
RSM 3010H	Special Topics in the Economics of Technology and Innovation
RSM 3011H	Advanced Topics in the Theory of Industrial Organization
RSM 3012H	Advanced Topics in Urban and Real Estate Economics
RSM 3009H	Special Topics in Strategic Management
RSM 3020H	Financial Accounting: Theory and Empirical Research
RSM 3021H	Managerial Accounting Research Methods
RSM 3022H	Auditing Seminar
RSM 3023H	Topics in Accounting Research
RSM 3025H+	Workshop in Accounting
RSM 3029H	Special Topics in Accounting
RSM 3030H	Financial Theory I
RSM 3031H	Financial Theory II
RSM 3032H	Empirical Methods in Finance
RSM 3033H	Current Topics in Finance
RSM 3034H	Capital Markets Workshop
RSM 3039H	Special Topics in Finance

RSM 3041H	Seminar in Operations Management
RSM 3045H	Advanced Topics in Operations Management I
RSM 3046H	Advanced Topics in Operations Management II
RSM 3049H	Special Topics in Operations Management
RSM 3051H	Marketing Theory I: Consumer Behaviour
RSM 3052H	Marketing Theory II: Strategy
RSM 3053H	Behavioural Research Methods in Marketing
RSM 3054H	Current Topics in Consumer Behaviour
RSM 3055H	Econometric Methods in Marketing
RSM 3056H	Current Topics in Marketing Strategy
RSM 3057H	Workshop in Marketing (Credit/No Credit)
RSM 3058H	The Psychology of Judgement and Decision Making
RSM 3059H	Special Topics in Marketing
RSM 3060H	Advances in Human Resource Management
RSM 3062H	Methods and Research in Organizational Behaviour and Industrial Relations
RSM 3063H	Advanced Topics in Organization Theory
RSM 3064H	Advanced Topics in Organizational Behaviour
RSM 3065H	New Directions in Organizational Research
RSM 3069H	Special Topics in Organizational Behaviour and Human Resources Management
RSM 3080H	Research Methods in Business
RSM 3090H	Reading Course in Approved Field
RSM 3091 H	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 program caters to students who seek careers in account management, wealth management, consultancy, entrepreneurship, and project management. Besides emphasizing the integration between accounting and finance, the program incorporates other management disciplines as well as the latest research on big data and data analytics. These are all critical to solving multi-faceted issues in today's business world.

The MAccFin offers students a co-op internship to incorporate work experience into their academic studies.

Contact and Address

Graduate Department of Management, University of Toronto Scarborough

Web: www.utsc.utoronto.ca/mgmt/maccfin
Email: annamaria.russo@utoronto.ca
Telephone: (416) 208-5151

Department of Management
University of Toronto Scarborough
1095 Military Trail
Toronto, Ontario M1C 1A4
Canada

Management, University of Toronto Scarborough: Graduate Faculty

Full Members

Wei, Jason - BSc, MBA, PhD
Zweig, David - BA, MASc, DPhil (***Chair***)

Associate Members

Ahmed, Syed - BCom, MA, MBA
Chau, Koon Yee (Derek) - BCom, MBA, PhD
Chen, Liang - BA, MBA, MSc, PhD
Cire, Andre Augusto - BSc, MSc, PhD
Daga, Sandra - BA, Med, CGA, CA
Harvey, Lisa - BBA, MAcct
Hasler, Michael Nicolas - BSc, MSc, PhD
Khapko, Mariana - BEc, MA, PhD
Kong, Douglas - BBA, MBA
Laurence, Hugh - BA, LLB, MA, DPhil
Li, Nan - BA, MA, MBA, PhD
McConkey, William - BSc, MBA
Quan Fun, George - BA, CMA, CA

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 **8.0 full-course-equivalents (FCEs)** as follows:
  - Session 1: Summer
    - MAF 1001H *Advanced Topics in Financial Reporting* (0.5 FCE)
    - MAF 1002H *Strategy, Governance and Management Accounting* (0.5 FCE)
    - MAF 2001H *Economics and Quantitative Methods* (0.5 FCE)
    - MAF 2002H *Advanced Corporate Finance* (0.5 FCE)
    - MAF 2003H *Investment Analysis and Portfolio Management I* (0.5 FCE)
  - Session 2: Fall
    - MAF 1003H *Advanced Topics in Assurance* (0.5 FCE)
    - MAF 1004H *Advanced Taxation* (0.5 FCE)
    - MAF 2004H *Financial Statement Analysis and Equity Valuation* (0.5 FCE)
    - MAF 2005H *Derivatives* (0.5 FCE)
    - MAF 2006H *Investment Analysis and Portfolio Management II* (0.5 FCE)
  - Session 1: Summer and Session 2: Fall
    - MAF 3005H *Integration and Analysis: Critical Thinking and Decision Making I* (0.25 FCE)
  - Session 3: Winter
    - MAF 4000H *Co-op Internship* (0.5 FCE)
  - Session 4: Summer
    - MAF 1005H *Current Issues in Accounting and Assurance* (0.5 FCE)
    - MAF 2007H *Fixed Income* (0.5 FCE)
    - MAF 3001H *Leadership in the 21st Century* (0.25 FCE)
    - MAF 3002H *Strategy, Business Development and Sales* (0.25 FCE)
    - MAF 3003H *Business Data Analytics* (0.5 FCE)
    - MAF 3004H *Integration and Analysis: Board Report* (0.5 FCE)
    - MAF 3006H *Integration and Analysis: Critical Thinking and Decision Making II* (0.25 FCE)

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

MAF 1001H	Advanced Topics in Financial Reporting
MAF 1002H	Strategy, Governance and Management Accounting
MAF 1003H	Advanced Topics in Assurance
MAF 1004H	Advanced Taxation
MAF 1005H	Current Issues in Accounting and Assurance
MAF 2001H	Economics and Quantitative Methods
MAF 2002H	Advanced Corporate Finance
MAF 2003H	Investment Analysis and Portfolio Management I
MAF 2004H	Financial Statement Analysis and Equity Valuation
MAF 2005H	Derivatives
MAF 2006H	Investment Analysis and Portfolio Management II
MAF 2007H	Fixed Income
MAF 3001H	Leadership in the 21st Century
MAF 3002H	Strategy, Business Development and Sales
MAF 3003H	Business Data Analytics
MAF 3004H	Integration and Analysis: Board Report
MAF 3005H	Integration and Analysis: Critical Thinking and Decision Making I
MAF 3006H	Integration and Analysis: Critical Thinking and Decision Making II
MAF 4000H	Co-op Internship

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 Water Technologies Engineering and Globalization Entrepreneurship, Leadership, Innovation and Technology in Engineering (ELITE) Forensic Engineering Sustainable Energy
PhD	*Emphasis:* Sustainable Energy

Collaborative Specializations

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

1. **Biomedical Engineering**
   - Materials Science and Engineering, MASc, PhD
2. **Optics**
   - Materials Science and Engineering, MASc

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: http://mse.utoronto.ca
Email: materials.engineering@utoronto.ca
Telephone: (416) 978-3012
Fax: (416) 978-4155

Department of Materials Science and Engineering
University of Toronto
Wallberg Building
Room 140, 184 College Street
Toronto, Ontario M5S 3E4
Canada

MSE Graduate Faculty

Full Members

Barati Sedeh, Mansoor - BSc, MASc, PhD
Bobicki, Erin - BASc, PhD
Chattopadhyay, Kinnor - BEng, MEng, PhD
Coyle, Thomas - BS, BA, ScD (*Associate Chair, Graduate Studies*)
Erb, Uwe - MSc, PhD
Grynpas, Marc - MSc, PhD
Hatton, Benjamin - BASc, MASc, PhD
Hibbard, Glenn - BASc, 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 (***Chair and Graduate Chair***)
Perovic, Doug - BASc, MASc, PhD
Ramsay, Scott - BASc, MASc, PhD
Ruda, Harry - BSc, PhD
Singh, Chandra Veer - BASc, MTech, PhD
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
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:
    - MSE 1000H^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.
- JDE 1000H *Ethics in Research*, a non-credit graduate **ethics seminar**.
- 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

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 Water Technologies; 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 Water Technologies; 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 Water Technologies; 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 two 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.

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.
- 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. A student who is permitted such a transfer must complete the PhD Graduate Research Seminar, plus one more graduate-level course (0.5 full-course equivalent [FCE]), in addition to the four courses (2.0 FCEs) already completed in the MASc 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 FCEs (four half courses), including the weekly PhD Graduate Research Seminar, and a thesis.
- Normally, the coursework selected includes:
  - The PhD Graduate Research Seminar (0.5 FCE), which is a half-year course ;
  - 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 comprises a minimum of two seminars presented to the academic staff and students of MSE.
- A general **Qualifying Examination** must be scheduled and taken within 12 months of initial registration. In case of failure, one further attempt within three months is allowed, no later than within 15 months of initial registration. No further attempts are permitted.
- 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.
    - All required coursework, Graduate Seminar excepted, must be completed in order to take this examination.
- **Note:** students wishing to bypass (transfer) to PhD, no later than 12 months after initial registration in MASc, must also fulfil these Qualifying Examination requirements.
- 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 full-time; 5 years transfer-from-master's

Time Limit

6 years full-time; 7 years transfer-from-master's

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

AER 501H, AER 1403H, APS 1028H, CHE 1123H, MIE 519H, MIE 1740H.

Elective Courses—Manufacturing Engineering

AER 521H, AER 1415H,
CHE 575H, CHE 1134H,
MIE 506H, MIE 540H, MIE 1706H, MIE 1713H, MIE 1718H, MIE 1743H,
MSE 1013H, MSE 1015H, MSE 1028H, MSE 1029H, MSE 1031H, MSE 1058H, MSE 1061H,
ROB 501H.

Elective Courses—Manufacturing Management

APS 1005H, APS 1011H, APS 1012H, APS 1013H, APS 1014H, APS 1017H, APS 1020H, APS 1023H, APS 1026H, APS 1040H, APS 1088H, APS 1420H, APS 1501H,
CHE 561H, CHE 1434H,
MIE 523H, MIE 1505H, MIE 1514H, MIE 1715H, MIE 1721H, MIE 1723H, MIE 1727H.

Emphasis: Advanced Water Technologies (MEng only)

MEng students must successfully complete two core courses (1.0 full-course equivalent [FCE]) and two specialization courses (1.0 FCE).

- Two core courses (1.0 FCE):
    1. CHE 1150H *Industrial Water Technology*
    2. at least one of the following (any of the other three can count as a specialized course):
        - CIV 541H *Environmental Biotechnology*
        - CIV 1308H *Physical and Chemical Treatment Processes*
        - CIV 1311H *Advanced and Sustainable Drinking Water Treatment* and
        - CIV 1319H *Chemistry and Analysis of Water and Wastes*.
- Two specialized courses selected from the following (1.0 FCE):
    - CHE 565H *Aqueous Process Engineering*
    - CHE 1213H *Corrosion*
    - CHE 1430H *Hydrometallurgy Theory and Practice*
    - CIV 549H *Groundwater Flow and Contamination*
    - CIV 550H *Water Resources Engineering*
    - CIV 1303H *Water Resources Systems Modeling*
    - JNC 2503H *Environmental Pathways*
    - MIE 1807H *Principles of Measurements*
    - STA 1004H *Introduction to Experimental Design*
    - or one of the remaining courses from item 2.

Upon successful completion of the emphasis requirements and the successful completion of the MEng degree requirements, the student will receive a Letter of Completion.

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

APS 510H, APS 530H, APS 1420H, GLA 1000H, JCR 1000Y (full-year course)

Group B

APS 1015H, APS 1020H, APS 1024H, CHL 5700H, JMG 2020H

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.

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

APS 1010H, APS 1011H, APS 1026H, APS 1027H, APS 1029H, APS 1030H, APS 1501H

Entrepreneurship and Innovation

APS 1012H, APS 1013H, APS 1015H, APS 1023H, APS 1033H, APS 1035H, APS 1036H, APS 1088H

Finance and Management

APS 502H, APS 1001H, APS 1004H, APS 1005H, APS 1009H, APS 1016H, APS 1017H, APS 1020H, APS 1022H, APS 1028H, APS 1032H, APS 1038H, APS 1039H, APS 1040H

Engineering and Society

APS 510H, APS 1018H, APS 1024H, APS 1025H, APS 1031H, APS 1034H, APS 1420H, JMG 2020H

Emphasis: Forensic Engineering (MEng only)

MEng students must successfully complete four courses (one core course and three elective courses).

Core Course

MSE 1031H

Elective Courses

APS 540H, APS 1034H, APS 1039H, APS 1040H,
BME 1800H, BME 1801H, BME 1480H,
CHE 561H, CHE 568H, CHE 1213H, CHE 1431H, CHE 1432H, CHE 1434H,
CIV 510H, CIV 518H, CIV 1163H, CIV 1171H, CIV 1174H, CIV 1190H, CIV 1201H, CIV 1279H, CIV 1282H, CIV 1422H, CIV 1429H,
JMB 1050H,
JNC 2503H,
MSE 1015H, MSE 1016H, MSE 1022H, MSE 1032H,
MIE 566H, MIE 1224H, MIE 1301H, MIE 1303H, MIE 1411H, MIE 1414H, MIE 1616H, MIE 1713H, MIE 1714H, MIE 1721H, MIE 1723H, MIE 1727H, MIE 1804H.

Emphasis: Sustainable Energy (MASc, MEng, PhD)

Doctoral-stream (MASc/PhD) students must successfully complete:

- At least three half courses (1.5 full-course equivalents [FCEs]) from the course lists below.
- A thesis in an area of relevance to sustainable energy with approval of the Institute of Sustainable Energy steering committee.

MEng students must successfully complete:

- Four courses (2.0 FCEs) from the following lists below, of which at least one (0.5 FCE) must be a core course.

Core Courses

APS 1032H,
MIE 515H, MIE 1120H.

Elective Courses

AER 507H, AER 1304H, AER 1315H, AER 1415H,
CHE 568H, CHE 1053H, CHE 1118H, CHE 1123H, CHE 1142H, CHE 1143H,
CIV 575H, CIV 576H, CIV 577H, CIV 1303H, CIV 1307H,
ECE 533H, ECE 1030H, ECE 1055H, ECE 1057H, ECE 1085H, ECE 1086H, ECE 1092H, ECE 1094H,
MIE 516H, MIE 517H, MIE 1128H, MIE 1129H, MIE 1130H,

MIE 1240H, MIE 1715H,
MSE 1022H, MSE 1023H, MSE 1028H, MSE 1058H.

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

MSE 1000H[0]	Graduate Research Seminar MASc
MSE 1004H	Extractive Metallurgy
MSE 1013H	Growth and Characterization of Semiconductors
MSE 1015H	Mechanical Properties of Solids I
MSE 1016H	Mechanical Properties of Solids II
MSE 1022H	Special Topics in Materials Science I
MSE 1023H	Special Topics in Materials Science II
MSE 1024H	Interface and Nanophase Engineering
MSE 1025H	Non-Crystalline Solids
MSE 1026H	Analytical Electron Microscopy
MSE 1028H	Advanced Materials Science
MSE 1029H	Electrochemical Synthesis of Nanomaterials
MSE 1031H	Forensic Engineering
MSE 1032H	Polymers and Composites Engineering (exclusion: MSE 432H)
MSE 1033H	Advanced Rate Phenomena in Materials Processing
MSE 1034H	Directed Readings in Materials Science and Engineering I
MSE 1035H	Optical and Photonic Materials
MSE 1036H	Application of Electrochemical Techniques in Materials Science
MSE 1037H	Process Metallurgy of Iron and Steel
MSE 1038H	Computational Materials Design
MSE 1043H	Polymers and Composites Engineering (exclusion: MSE 432H)
MSE 1044H	Directed Readings in Materials Science and Engineering II
MSE 1051H	Advanced Physical Properties of Structural Nanomaterials
MSE 1058H	Nanotechnology in Alternate Energy Systems
MSE 1061H	Engineered Ceramics
MSE 1062H	Materials Physics
MSE 2000H[0]	Graduate Research Seminar PhD
MSE 3000Y	MEng Project
APS 1012H	Managing Business Innovation and Transformational Change
JMB 1050H	Biological and Bio-inspired Materials
JMZ 1704H	Polymer Process Engineering
JTC 1020H	Ceramics
JTC 1135H	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, Thomas - 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

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

MMF 1900Y	Internship (Credit/No Credit)
MMF 1910H	Introduction to Financial Industry (Credit/ No Credit)
MMF 1914H	Information Technology (Credit/No Credit)
MMF 1915H	Introduction of Financial Products (Credit/ No Credit)
MMF 1920H	Investment and Finance
MMF 1921H	Operations Research
MMF 1922H	Data Science Methods for Investment, Finance, and Risk Management
MMF 1923H	Financial Markets and Corporate Policy
MMF 1926H	Workshop in Mathematical Finance
MMF 1927H	Workshop in Mathematical Finance
MMF 1928H	Pricing Theory 1
MMF 1929H	Asset Management
MMF 1941H	Stochastic Analysis
MMF 1943Y[0]	Communication
MMF 2000H	Risk Management
MMF 2011H	Advanced Stochastic Processes
MMF 2012H	Volatility Modelling and Forecasting
MMF 2021H	Numerical Methods for Finance
MMF 2025H	Risk Management Laboratory

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

Mathematics

Mathematics: Introduction

Faculty Affiliation

Arts and Science

Degree Programs

Mathematics

MSc
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
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
Khovanskii, 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 (*Chair and Graduate Chair*)
Rafi, Kasra - BSc, PhD
Repka, Joseph - 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

Members Emeriti

Akcoglu, Mustafa - MSc, PhD
Andrews, David - BSc, MSc, PhD
Davis, H Chandler - BS, MA, PhD
Ellers, Erich - DrRerNat, DrRerNat
Fraser, Donald AS - BA, MA, PhD, FRSC
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
Brando Albino Galvao de Sousa, Bernardo - PhD
De Simoi, Jacopo - PhD
Farah, Ilijas - PhD
Haslhofer, Robert - BSc, MSc, PhD
Jaimungal, Sebastian - BSc, MSc, PhD
Lefebvre, Jeremie - BSc, PhD
Rossman, Benjamin - BA, MA, PhD
Shankar, Arul - BSc, PhD
Shi, Xianwen - PhD
Stinchcombe, Adam - BMath, PhD
Tiozzo, Giulio - BA, MA, 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 (MAT 4000Y), 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.

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 (MAT 4000Y), 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.

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 (MAT 4000Y), 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.

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 complete at least **3.0 full-course equivalents (FCEs)** (six half courses).
- Students must pass a **comprehensive examination** in basic mathematics before beginning an area of research. This examination should be taken as soon as possible, and not later than the beginning of the third session of PhD study. The usual examination covers the three general areas of analysis, algebra, and topology, at the level of Year 1 graduate courses offered by the department in these subjects. Students planning to specialize in applied mathematics must take the analysis and/or algebra portion of the comprehensive examination, but may substitute from several areas of applied mathematics for the remaining portions.

- 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)** (eight half courses).
- Students must pass a **comprehensive examination** in basic mathematics before beginning an area of research. This examination should be taken as soon as possible, and not later than the beginning of the third session of PhD study. The usual examination covers the three general areas of analysis, algebra, and topology, at the level of Year 1 graduate courses offered by the department in these subjects. Students planning to specialize in applied mathematics must take the analysis and/or algebra portion of the comprehensive examination, but may substitute from several areas of applied mathematics for the remaining portions.
- 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 MAT 1000H, 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.

MAT 1000H	Real Analysis I
MAT 1001H	Real Analysis II
MAT 1002H	Complex Analysis
MAT 1003H	Theory of Several Complex Variables
MAT 1004H	Theory of Approximation
MAT 1005H	Fourier Analysis
MAT 1006H	Topics in Real Analysis
MAT 1007H	Topics in Complex Variables
MAT 1008H	Functions of a Complex Variable
MAT 1010H	Functional Analysis
MAT 1011H	Introduction to Linear Operators
MAT 1012H	Real Analysis II
MAT 1013H	Theory of Several Complex Variables II
MAT 1015H	Topics in Operator Theory
MAT 1016Y	Topics in Operator Algebras
MAT 1017H	Introduction to K-theory for Operator Algebras
MAT 1034H	Topics in Harmonic Analysis
MAT 1037H	Von Neumann Algebras
MAT 1044H	Potential Theory
MAT 1045H	Topics in Ergodic Theory
MAT 1051H	Introduction to Ordinary Differential Equations
MAT 1052H	Topics in Ordinary Differential Equations
MAT 1060H	Partial Differential Equations I
MAT 1061H	Partial Differential Equations II
MAT 1062H	Topics in Partial Differential Equations I
MAT 1063H	Topics in Partial Differential Equations II
MAT 1075H	Differential Analysis
MAT 1100H	Algebra I
MAT 1101H	Algebra II
MAT 1102H	Topics in the Theory of Groups
MAT 1103H	Topics in Algebra I
MAT 1104H	Topics in Algebra II
MAT 1105H	Topics in Representation Theory

MAT 1109H	Classical Groups
MAT 1110H	Algebraic Groups
MAT 1120H	Lie Groups and Lie Algebras I
MAT 1122H	Lie Groups and Representations I
MAT 1124H	Topics in Matrix Theory
MAT 1126H	Lie Groups and Fluid Dynamics
MAT 1128H	Topics in Probability
MAT 1155H	Commutative Algebra
MAT 1190H	Algebraic Geometry
MAT 1191H	Topics in Algebraic Geometry
MAT 1192H	Advanced Topics in Algebraic Geometry
MAT 1194H	Algebraic Curves
MAT 1195H	Elliptic Curves and Cryptography
MAT 1196H	Representation Theory
MAT 1197H	Automorphic Forms and Representation Theory I
MAT 1198H	Automorphic Forms and Representation Theory II
MAT 1199H	Automorphic Forms
MAT 1200H	Algebraic Number Theory
MAT 1202H	Analytic Number Theory
MAT 1203H	Computational Aspects of Number Theory
MAT 1210H	Topics in Number Theory
MAT 1300H	Topology I
MAT 1301H	Topology II
MAT 1302H	Combinatorial Methods
MAT 1303H	Combinatorial Designs
MAT 1304H	Topics in Combinatorics
MAT 1305H	Topics in Geometric Topology
MAT 1309H	Geometrical Inequalities
MAT 1312H	Topics in Geometry
MAT 1313Y	Seminar in Geometry
MAT 1314H	Introduction to Noncommutative Geometry
MAT 1318H	Seminar in Geometry and Topology
MAT 1340H	Differential Topology
MAT 1341H	Topics in Differential Geometry
MAT 1342H	Introduction to Differential Geometry
MAT 1343H	Riemannian Manifolds
MAT 1344H	Symplectic Geometry
MAT 1346H	Homotopy Theory
MAT 1347H	Topics in Symplectic Geometry and Topology
MAT 1350H	Topics in Algebraic Topology I
MAT 1351H	Topics in Homotopy Theory
MAT 1352H	Topics in Algebraic Topology II
MAT 1355H	Singularity Theory
MAT 1359H	Moduli Spaces of Flat Connections
MAT 1360H	Complex Manifolds
MAT 1392H	Algebra Seminar
MAT 1399H	Advanced Point Set Topology
MAT 1403H	Model Theory
MAT 1404H	Introduction to Model Theory and Set Theory
MAT 1430H	Set Theory
MAT 1435H	Topics in Set Theory
MAT 1436H	Large Cardinals, Structure Theory of Ideals, and Applications (prerequisites: MAT 309H or MAT 409H)
MAT 1448H	Topics in Set Theoretic Topology
MAT 1449H	Seminar in Foundations
MAT 1450H	Topics in Foundations
MAT 1498H	Communicating Mathematics to a General Audience (Credit/No Credit)
MAT 1499H	Teaching Large Mathematics Courses (Credit/No Credit)

Applied Mathematics

MAT 1500Y	Applied Analysis
MAT 1501H	Applied Analysis I
MAT 1502H	Topics in Geometric Analysis
MAT 1507H	Asymptotic and Perturbation Methods
MAT 1508H	Techniques of Applied Mathematics
MAT 1509H	Mathematical and Computational Linguistics
MAT 1520H	Wave Propagation
MAT 1525H	Topics in Inverse Problems and Image Analysis
MAT 1525Y	Inverse Problems of X-Ray and Radar Imaging
MAT 1600H	Mathematical Probability I
MAT 1601H	Mathematical Probability II
MAT 1638H	Fluid Mechanics
MAT 1639Y	Topics in Fluid Mechanics
MAT 1700H	General Relativity
MAT 1710H	Group Theory and Quantum Mechanics
MAT 1711H	Topics in Quantum Mechanics
MAT 1722H	C* Algebras and Quantum Mechanics
MAT 1723H	Foundations of Quantum Mechanics
MAT 1724H	Functional Analysis in Quantum Mechanics
MAT 1725Y	Scattering Theory
MAT 1739H	Topics in Mathematical Physics
MAT 1750H	Computational Mathematics
MAT 1751H	Quantum Computing, Foundations to Frontier
MAT 1760H	Computer Algebra
MAT 1761H	Algorithms in Algebraic Geometry
MAT 1840H	Control Theory
MAT 1841H	Mathematics of Massive Data Analysis: Fundamentals and Applications
MAT 1845H	Dynamical Systems
MAT 1847H	Holomorphic Dynamics
MAT 1855H	Mathematical Economics
MAT 1856H	Mathematical Finance
MAT 1880H	Case Studies in Applied Mathematics

Individual Reading Courses

MAT 1900Y	Readings in Pure Mathematics
MAT 1901H	Readings in Pure Mathematics
MAT 1902H	Readings in Pure Mathematics
MAT 1951H	Readings in Applied Mathematics
MAT 2001H	Readings in Theoretical Mathematics I
MAT 2002H	Readings in Theoretical Mathematics II

MSc Project

MAT 4000Y [+]	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 and Mechatronics Sustainable Energy
MEng	*Emphases*: Advanced Manufacturing Analytics Engineering and Globalization Entrepreneurship, Leadership, Innovation and Technology in Engineering (ELITE) Forensic Engineering Robotics and Mechatronics Sustainable Energy *Dual Degree Program:* BEng (South China University of Technology) / MEng (University of Toronto)
PhD	*Emphases*: Robotics and Mechatronics Sustainable Energy

Collaborative Specializations

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

1. **Biomedical Engineering**
   - Mechanical and Industrial Engineering, MASc, PhD
2. **Engineering Education**
   - Mechanical and Industrial Engineering, MASc, PhD
3. **Health Care, Technology, and Place (admissions have closed)**
   - Mechanical and Industrial Engineering, PhD
4. **Knowledge Media Design**
   - Mechanical and Industrial Engineering, MASc, MEng, PhD
5. **Psychology and Engineering**
   - Mechanical and Industrial Engineering, MASc, PhD
6. **Resuscitation Sciences**
   - 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/about-mie/contact-us
Email: grad.admission@mie.utoronto.ca
Telephone: (416) 978-8823
Fax: (416) 978-7753

Department of Mechanical and Industrial Engineering
University of Toronto
Mechanical Engineering Building
5 King's College Road
Toronto, Ontario M5S 3G8
Canada

MIE: Graduate Faculty

Full Members

Aleman, Dionne - BSc, MSc, PhD
Amon, Cristina - BASc, MSc, ScD
Ashgriz, Nasser - BS, ME, DPhil
Bazylak, Aimy - PhD
Beck, J. Christopher - 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*)
Carter, Michael - BM, MMath, PhD
Chan, Timothy - BSc, PhD
Chandra, Sanjeev - PhD
Chignell, Mark - BSc, PhD
Consens, Mariano - BEng, MSc, PhD
Donmez, Birsen - BS, MS, PhD
Ethier, C Ross - BSc, MMath, SM, PhD
Filleter, Tobin - BE, PhD, PhD
Fox, Mark - BSc, PhD
Gruninger, Michael - BSc, MS, PhD
Guenther, Axel - DipIng, DE
Jamieson, Gregory - BS, MASc, PhD
Kesler, Olivera - BSE, SM, ScD
Kwon, Roy - BA, MS, MSc, PhD
Lee, Chi-Guhn - DPhil (***Coordinator of Graduate Studies***)
Liu, Xinyu - PhD
Makis, Viliam - MSc, PhD
Mandelis, Andreas - BSc, MA, MSc, PhD
McCahan, Susan - BS, PhD
Meguid, Shaker - BSc, MSc, PhD
Milgram, Paul - BASc, MSc, PhD
Mills, James - BSc, MASc, PhD
Mostaghimi, Javad - PhD
Naguib, Hani - BSc, ME, PhD, PEng
Nejat, Goldie - BASc, PhD
Park, Chul - PhD
Sarhangian, Vahid - BASc, MASc, PhD

Shu, Lily - PhD
Simmons, Craig - BSc, MSc, PhD
Sinclair, Anthony - BSc, MSc, PhD
Sinton, David - BASc, MEng, PhD
Spelt, Jan - BASc, MASc, ME, 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
Wallace, James - BA, BME, MEng, PhD
You, Lidan - BS, MS, PhD
Young, Edmond - BASc, MASc, PhD
Zu, Jean - BEng, PhD

Members Emeriti

Abdelmessih, Abdo - BME, MS, PhD
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
Neumann, A Wilhelm - BA, DrRerNat
Paradi, Joseph - BSc, PhD
Posner, Morton - BASc, PhD
Rogers, John - BSc, MS, PhD
Senders, John - AB
Turksen, Ismail - BSc, MSc, PhD
Van De Vegte, John - MASc, PhD
Venter, Ronald - BSc, MEng, PhD
Ward, Charles - BS, PhD

Associate Members

Azhari, Faezeh - BEng, PhD
Bodur, Merve - BM
Croft, Elizabeth - BASc, MASc, PhD
Fels, Deborah - BSc, MHSc, PhD
Frances, Daniel - BASc, MASc, PhD, PEng
Hollands, Justin - PhD
Mackay, Matthew - BASc, PhD
Olechowski, Alison - BS, MS, PhD
Papini, Marcello - BASc, MASc, PhD
Purdie, Thomas
Sanner, Scott - BCS, BCS, PhD
Singh, Chandra Veer - BASc, MTech, PhD
Windisch, Marianne Frances - BASc, 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 requirements stated on the department's website.

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 JDE 1000H 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 SRM 3333Y *MIE Seminar Series for MASc Students*.
- Students in the MASc program have the option of completing an emphasis in Robotics and Mechatronics 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 on the department's website.

Program Requirements

- 5.0 full-course equivalents (FCEs) or 3.5 FCEs plus a supervised project. A majority of the courses must be taught by the Department of MIE.
- 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; Engineering and Globalization; Entrepreneurship, Leadership, Innovation and Technology in Engineering (ELITE); Forensic Engineering; Robotics and Mechatronics; 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 requirements stated on the department's website.

Program Requirements

- 5.0 full-course equivalents (FCEs) or 3.5 FCEs plus a supervised project. A majority of the courses must be taught by the Department of MIE.
- 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 in the MEng program have the option of completing an emphasis in Advanced Manufacturing; Analytics; Engineering and Globalization; Entrepreneurship, Leadership, Innovation and Technology in Engineering (ELITE); Forensic Engineering; Robotics and Mechatronics; 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 requirements stated on the department's website.

Program Requirements

- 5.0 full-course equivalents (FCEs) or 3.5 FCEs plus a supervised project. A majority of the courses must be taught by the Department of MIE.
- 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; Engineering and Globalization; Entrepreneurship, Leadership, Innovation and Technology in Engineering (ELITE); Forensic Engineering; Robotics and Mechatronics; 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

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: grad.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 JDE 1000H 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 SRD 4444Y *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 and Mechatronics 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 JDE 1000H 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 SRD 4444Y *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 and Mechatronics 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 JDE 1000H 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 SRD 4444Y *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 and Mechatronics 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 JDE 1000H 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 SRD 4444Y *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 and Mechatronics 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

AER 501H, AER 1403H, APS 1028H, CHE 1123H, MIE 519H, MIE 1740H.

Elective Courses—Manufacturing Engineering

AER 521H, AER 1415H,
CHE 575H, CHE 1134H,
MIE 506H, MIE 540H, MIE 1706H, MIE 1713H, MIE 1718H, MIE 1743H,
MSE 558H, MSE 561H, MSE 1013H, MSE 1015H, MSE 1028H, MSE 1029H, MSE 1031H,
ROB 501H.

Elective Courses—Manufacturing Management

APS 1005H, APS 1011H, APS 1012H, APS 1013H, APS 1014H, APS 1017H, APS 1020H, APS 1023H, APS 1026H, APS 1040H, APS 1088H, APS 1420H, APS 1501H,
CHE 561H, CHE 1434H,
MIE 523H, MIE 1505H, MIE 1514H, MIE 1715H, MIE 1721H, MIE 1723H, MIE 1727H.

Emphasis: Analytics (MEng only)

MEng students must successfully complete four half courses (2.0 full-course equivalents [FCEs]) from the following lists. These must include at least one core course; the remaining courses must be selected from the list of elective courses.

Core Courses

ECE 1504H Statistical Learning
MIE 1624H Introduction to Data Science and Analytics

Elective Courses

APS 502H, APS 1005H, APS 1017H, APS 1022H
CHE 507H, CHE 1148H, CHE 1434H
CIV 1504H, CIV 1506H, CIV 1507H, CIV 1532H, CIV 1538H
ECE 537H, ECE 1505H, ECE 1510H, ECE 1657H, ECE 1778H, ECE 1779H
MIE 562H, MIE 1413H, MIE 1501H, MIE 1512H, MIE 1513H, MIE 1620H, MIE 1621H, MIE 1622H, MIE 1623H, MIE 1653H, MIE 1721H, MIE 1723H, MIE 1727H.

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

APS 510H, APS 530H, APS 1420H, GLA 1000H, JCR 1000Y (full-year course)

Group B

APS 1015H, APS 1020H, APS 1024H, CHL 5700H, JMG 2020H

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.

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

APS 1010H, APS 1011H, APS 1026H, APS 1027H, APS 1029H, APS 1030H, APS 1501H

Entrepreneurship and Innovation

APS 1012H, APS 1013H, APS 1015H, APS 1023H, APS 1033H, APS 1035H, APS 1036H, APS 1088H

Finance and Management

APS 502H, APS 1001H, APS 1004H, APS 1005H, APS 1009H, APS 1016H, APS 1017H, APS 1020H, APS 1022H, APS 1028H, APS 1032H, APS 1038H, APS 1039H, APS 1040H

Engineering and Society

APS 510H, APS 1018H, APS 1024H, APS 1025H, APS 1031H, APS 1034H, APS 1420H, JMG 2020H

Emphasis: Forensic Engineering (MEng only)

MEng students must successfully complete four courses (one core course and three elective courses).

Core Course

MSE 1031H

Elective Courses

APS 540H, APS 1034H, APS 1039H, APS 1040H,
BME 1800H, BME 1801H, BME 1480H,
CHE 561H, CHE 568H, CHE 1213H, CHE 1431H, CHE 1432H, CHE 1434H,
CIV 510H, CIV 518H, CIV 1163H, CIV 1171H, CIV 1174H, CIV 1190H, CIV 1201H, CIV 1279H, CIV 1282H, CIV 1422H, CIV 1429H,
JMB 1050H,
JNC 2503H,
MSE 1015H, MSE 1016H, MSE 1022H, MSE 1032H,
MIE 566H, MIE 1224H, MIE 1301H, MIE 1303H, MIE 1411H, MIE 1414H, MIE 1616H, MIE 1713H, MIE 1714H, MIE 1721H, MIE 1723H, MIE 1727H, MIE 1804H.

Emphasis: Robotics and Mechatronics (MASc, MEng, PhD)

MASc, MEng, and PhD students must successfully complete four courses chosen (2.0 full-course equivalents [FCEs]) from at least three of the following groups:

Group 1: Control

ECE 1619H, ECE 1636H, ECE 1647H, ECE 1653H, ECE 1657H, ECE 557H (exclusion: ECE 410H),
MIE 1064H, MIE 1068H

Group 2: Signal and Image Processing

AER 1513H,
CSC 2503H, CSC 2506H, CSC 2515H,
ECE 1511H, ECE 1512H, ECE 516H,
JEB 1433H

Group 3: Dynamics

AER 1503H, AER 1512H, AER 506H,
JEB 1444H,
MIE 1001H

Group 4: Systems Integration

AER 1514H, AER 525H (exclusion: ECE 470H),
ECE 1373H, ECE 1460H, ECE 532H,
MIE 1070H, MIE 1071H, MIE 1809H, MIE 505H, MIE 506H

Emphasis: Sustainable Energy (MASc, MEng, PhD)

Doctoral-stream (MASc/PhD) students must successfully complete:

- At least three half courses (1.5 full-course equivalents [FCEs]) from the course lists below.
- A thesis in an area of relevance to sustainable energy with approval of the Institute of Sustainable Energy steering committee.

MEng students must successfully complete:

- Four courses (2.0 FCEs) from the following lists below, of which at least one (0.5 FCE) must be a core course.

Core Courses

APS 1032H,
MIE 515H, MIE 1120H

Elective Courses

AER 507H, AER 1304H, AER 1315H, AER 1415H,
CHE 568H, CHE 1053H, CHE 1118H, CHE 1123H, CHE 1142H, CHE 1143H,
CIV 575H, CIV 576H, CIV 577H, CIV 1303H, CIV 1307H,
ECE 533H, ECE 1030H, ECE 1055H, ECE 1057H, ECE 1085H, ECE 1086H, ECE 1092H, ECE 1094H,
MIE 516H, MIE 517H, MIE 1128H, MIE 1129H, MIE 1130H, MIE 1240H, MIE 1715H,
MSE 1022H, MSE 1023H, MSE 1028H, MSE 1058H.

MIE: Mechanical and Industrial Engineering MASc, MEng, PhD Courses

See the departmental website for a schedule of available courses.

Fluid Mechanics

MIE 520H	Biotransport Phenomena
MIE 1201H	Advanced Fluid Mechanics I
MIE 1202H	Advanced Fluid Mechanics II
MIE 1206H	Non Newtonian Fluid Mechanics
MIE 1207H	Structure of Turbulent Flows
MIE 1210H	Computational Fluid Mechanics and Heat Transfer
MIE 1212H	Convective Heat Transfer
MIE 1214H	Applied Computational Fluid Dynamics (CFD)
MIE 1222H	Multiphase Flows
MIE 1224H	Heating, Ventilating, and Air Conditioning (HVAC)
MIE 1232H	Microfluidics and Laboratory-on-a-Chip Systems
MIE 1233H	Flow and Transport through Porous Media
MIE 1240H	Wind Power
MIE 1241H	Energy Management
MIE 1299H	Special Topics in Fluid Mechanics

Mechanics and Materials

MIE 517H	Fuel Cell System
MIE 540H	Product Design
MIE 1128H	Materials for Clean Energy Technologies
MIE 1301H	Solid Mechanics
MIE 1303H	Fracture Mechanics
MIE 1359H	Engineering Cell Biology and Micro-Nanoengineered Platforms
MIE 1399H	Special Topics in Solid Mechanics
MIE 1706H	Manufacturing of Cellular and Microcellular Polymers
MIE 1707H	Structure-Property Relationships of Thermoplastic and Composite Foams
MIE 1708H	Collision Reconstruction
MIE 1713H	Analysis and Design of Joints in Manufactured Products
MIE 1715H	Life Cycle Engineering
MIE 1720H	Creativity in Conceptual Design
MIE 1732H	Tribology
MIE 1740H	Smart Materials and Structures
MIE 1741H	Multiphysics Materials Modelling
MIE 1742H	Composite Materials Design
MIE 1743H	Axiomatic Design Principles for Conceptual and Embodiment Design
MIE 1744H	Nanomechanics of Materials
MIE 1804H	The Finite Element Method in Mechanical Engineering
MIE 1807H	Principles of Measurements

Mechatronics and Dynamics

MIE 506H	MEMS Design and Microfabrication
MIE 1001H	Advanced Dynamics
MIE 1005H	Theory of Vibrations
MIE 1010H	Acoustics and Noise Control
MIE 1064H	Control Analysis Methods with Applications to Robotics
MIE 1068H	Applied Nonlinear Control
MIE 1070H	Intelligent Robots for Society
MIE 1071H	Advanced Robotics
MIE 1355H	Ultrasonic Non-Destructive Testing
MIE 1718H	Computer Integrated Manufacturing
MIE 1809H	Advanced Mechatronics

Thermal Sciences

MIE 515H	Alternative Energy Systems
MIE 516H	Combustion and Fuels
MIE 1101H	Advanced Classical Thermodynamics
MIE 1107H	Statistical Thermodynamics
MIE 1110H	Non-equilibrium Thermodynamics
MIE 1115H	Heat Transfer with Phase Change
MIE 1118H	Partially Ionized Gases
MIE 1120H	Current Energy Infrastructure and Resources
MIE 1122H	Combustion Engine Processes
MIE 1123H	Fundamentals of Combustion
MIE 1127H	Engineering Applications of Waves
MIE 1129H	Nuclear Engineering I: Reactor Physics and the Nuclear Fuel Cycle
MIE 1130H	Nuclear Engineering II: Thermal and Mechanical Design of Nuclear Power Reactors
MIE 1132H	Heat Exchanger Design
MIE 1133H	Laser Applications in Engineering
MIE 1199H	Special Topics in Thermal Sciences
MIE 1357H	Laser Biomedical Photoacoustics, Biothermophotonics, and Imaging
MIE 1801H	Advanced Engineering Analysis

Human Factors and Ergonomics

MIE 542H	Human Factors Integration
MIE 1401H	Human Factors Engineering
MIE 1402H	Experimental Methods in Human Factors Research
MIE 1403H	Analytical Methods in Human Factors Research
MIE 1411H	Design of Work Places
MIE 1412H	Human-Automation Interaction
MIE 1413H	Statistical Models in Empirical Research
MIE 1414H	Human Factors in Transportation
MIE 1415H	Analysis and Design of Cognitive Work
MIE 1444H	Engineering for Psychologists

Information Engineering

JMG 2020H	Big Data
MIE 1501H	Knowledge Modelling and Management
MIE 1505H	Enterprise Modelling
MIE 1510H	Formal Techniques in Ontology Engineering
MIE 1512H	Data Analytics
MIE 1513H	Decision Support Systems
MIE 1514H	Systems Design and Engineering: A Product Perspective
MIE 1515H	Information Privacy and Security
MIE 1516H	Structured Learning and Inference

Operations Research

MIE 561H	Healthcare Systems
MIE 562H	Scheduling
MIE 566H	Decision Analysis
MIE 1603H	Integer Programming
MIE 1605H	Stochastic Processes
MIE 1606H	Queuing Theory
MIE 1607H	Stochastic Modelling and Optimization
MIE 1613H	Stochastic Simulation
MIE 1615H	Markov Decision Processes
MIE 1616H	Research Topics in Healthcare Engineering
MIE 1619H	Constraint Programming and Hybrid Algorithms
MIE 1620H	Linear Programming and Network Flows
MIE 1621H	Non-Linear Optimization
MIE 1622H	Computational Finance and Risk Management
MIE 1623H	Introduction to Healthcare Engineering
MIE 1624H	Introduction to Data Science and Analytics
MIE 1653H	Integer Programming Applications
MIE 1699H	Special Topics in Operations Research
MIE 1714H	Failure Analysis
MIE 1721H	Reliability
MIE 1723H	Engineering Asset Management
MIE 1727H	Quality Assurance I

APS Engineering Courses

APS 1002H	Financial Engineering
APS 1003H	Professional Education and Instruction
APS 1005H	Operations Research for Engineering Management
APS 1012H	Managing Business Innovation and Transformational Change
APS 1013H	Applying Innovation in Engineering and Business Operations
APS 1014H	Advanced Project Management
APS 1015H	Social Entrepreneurship
APS 1016H	Financial Management for Engineers
APS 1017H	Supply Chain Management and Logistics
APS 1022H	Financial Engineering 2
APS 1023H	New Product Innovation
APS 1028H	Operations and Production Management for Manufacturing and Services

APS 1032H	Introduction to Energy Project Management
APS 1034H	Understanding Technological Catastrophes
APS 1049H	Management Consulting for Engineers
APS 1050H	Blockchain Technologies and Cryptocurrencies
APS 1051H	Portfolio Management Praxis Under Real Market Constraints
APS 1061H	Business Strategy and Intrapreneurship
APS 1203H	Teaching Engineering in Higher Education
APS 1204H	Instructional Design in Engineering Education
APS 1801H	Multidisciplinary MEng Project
APS 1802Y	Multidisciplinary MEng Project
APS 1803Y	Multidisciplinary MEng Project

SCFI MEng Courses

MIE 1750H	Innovation Management I
MIE 1751H	Innovation Management II
MIE 1752H	Innovation Finance and Economics
MIE 1753H	Legal Framework for Innovation
MIE 1754H	Laser Applications in Manufacturing
MIE 1755H	CAE Technologies in Automotive Engineering
MIE 1756H	Materials in Automotive Design and Manufacturing
MIE 1757H	Electric Motor Technologies in Automotive Engineering
MIE 1758H	Polymers and Composites in Automotive Design and Manufacturing
MIE 1759H	Polymers and Composites Processing in Automotive
MIE 1760H	Metals in Automotive Design and Manufacturing
MIE 1761H	Metal Forming Simulation
MIE 1762H	Centrifugal and Positive Displacement Pumps I
MIE 1763H	Hot Stamping 1.—Metallurgy, Materials, Thermomechanical Treatment, and Welding
MIE 1764H	Hot Stamping 2.—Process and Product Performance Simulation and Optimization
MIE 1765H	Aluminum Die Casting 1.—Metallurgy, Process Design, and Optimization

Reading Courses

MIE 2002H	Readings in Industrial Engineering I (Credit/ No Credit)
MIE 2003H	Readings in Industrial Engineering II (Credit/No Credit)
MIE 2004H	Readings in Mechanical Engineering I (Credit/No Credit)
MIE 2005H	Readings in Mechanical Engineering II (Credit/No Credit)

Seminar Courses

SRM 3333Y	MIE Seminar Series for MASc Students
SRD 4444Y	MIE Seminar Series for PhD Students

Thesis/Project

MIE 8888Y	MEng Research Project
RST 9999Y	Research Thesis

Medical Biophysics

Medical Biophysics: Introduction

Faculty Affiliation

Medicine

Degree Programs

Medical Biophysics

MSc
PhD

Combined Degree Programs

STG, MD / PhD

Collaborative Specializations

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

1. **Biomedical Engineering**
   - Medical Biophysics, MSc, PhD
2. **Cardiovascular Sciences**
   - Medical Biophysics, MSc, PhD
3. **Genome Biology and Bioinformatics**
   - Medical Biophysics, PhD
4. **Human Development (admissions have been suspended)**
   - Medical Biophysics, PhD
5. **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. Projects include the following areas: tumour biology, radiobiology, membrane function, proteomics, epigenetics, molecular interactions, gene expression, cell differentiation and growth control, viral and chemical carcinogenesis, cellular and molecular immunology, hematopoiesis, macromolecular structure via x-ray crystallography, NMR spectroscopy and electron microscopy, the physics and engineering of diagnostic imaging and image-guided therapy, development of imaging and therapy systems using x-rays, ultrasound, nuclear magnetic resonance, light and electron optics. For detailed information, please visit the departmental website.

Contact and Address

Web: http://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
Arrowsmith, Cheryl - BSc, PhD
Attisano, Liliana - BSc, PhD
Barber, Dwayne - BSc, PhD
Bjerknes, Matthew - BSc, MSc, PhD
Boutros, Paul - PhD
Boyd, Norman - MD
Bristow, Robert Glen - MD, PhD
Burns, Peter - BSc, PhD
Chakrabartty, Avijit - BSc, MSc, PhD
Chen, Jean - PhD
Cunningham, Charles - BSc, MSc, PhD (***Graduate Coordinator, Physics Stream***)
Czarnota, Gregory - MD, PhD
Danska, Jayne - AB, PhD
Done, Susan - BA, MA, MBA, BCh, MB, 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
Goertz, David - MSc, PhD
Graham, Simon - BSc, PhD
Hakem, Razqallah - PhD (***Graduate Coordinator, Biology Stream***)
Hedley, David - MD
Henkelman, Mark - BSc, MSc, PhD
Hoffman, Michael - 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*)
Lerch, Jason - BA, PhD
Lilge, Lothar - DipPhy, PhD
Liu, Fei-Fei - MD
Liu, Geoffrey - BSc, MSc, MD
Liu, Stanley - MD, PhD
Lupien, Mathieu - PhD
Macgowan, Christopher - BSc, MSc, PhD
Mak, Tak - BSc, MSc, PhD
Malkin, David - MD
Marsden, Philip - MD
Martel, Anne - BSc, PhD
Mcglade-Dolson, Jane - BSc, PhD
Medin, Jeffrey - BSc, PhD
Minden, Mark - MD, PhD
Minkin, Salomon - BSc, MSc, PhD
Moody, Alan - BA, MA, MBBS
Nieman, Brian - PhD
Ohashi, Pam - BSc, PhD
Pai, Emil - PhD
Paige, Christopher - BSc, PhD
Penn, Linda - BSc, PhD
Prive, Gil - BSc, PhD
Pugh, Trevor - PhD
Puri, Mira - BSc, PhD
Raught, Brian - BS, MS, PhD
Reedijk, Michael - BSc, MSc, MD, PhD
Ross, Bernard - DipIng, PhD
Rottapel, Robert - BA, MD
Santyr, Giles - PhD
Schimmer, Aaron - MD, PhD
Sled, John - BASc, MSc, PhD (*Vice-Chair*)
Spaner, David - PhD
Stambolic, Vuk - BSc, MSc, PhD
Stanisz, Greg - PhD
Stefanovic, Bojana - BASc, PhD
Strother, Stephen - BSc, MS, PhD
Tabori, Uri - MBBS
Trudel, Suzanne - MSc, MD
Tsao, Ming-Sound - BSc, MD
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
Zheng, Gang - MSc, PhD

Members Emeriti

Hill, Richard - BA, PhD
Ottensmeyer, Peter - BASc, MA, PhD
Plewes, Donald - BSc, MSc, PhD
Rauth, A Michael - BSc, PhD
Tannock, Ian - MD, PhD

Associate Members

Akens, Margarete - DVM, PhD
Bratman, Scott - MD, PhD
Chan, Steven - MD, PhD
DaCosta, Ralph - PhD
Demore, Christine - PhD
Ghugre, Nilesh - BS, MS, MS, PhD
Haibe-Kains, Benjamin - PhD
He, Housheng - PhD
Lau, Angus - PhD
Mazhab-Jafari, Mohammad - MSc, PhD
Notta, Faiyaz - MS, PhD
Pang, Geordi - PhD
Reimand, Juri - MSc, PhD
Tiedemann, Rodger - MBCHB, PhD
Tiedemann, Rodger - MBCHB, PhD
Zarrine-Afsar, Arash - BSc, PhD

Medical Biophysics: Medical Biophysics MSc

Master of Science

Program Description

The MSc program has two entry streams: 1) physics for students with a background in physical sciences; and 2) biology for students with a background in disciplines such as chemistry, biochemistry and life sciences.

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 with diverse academic backgrounds are encouraged to apply.
- Applicants holding bachelor's degrees from non-Canadian universities are required to provide

Graduate Record Examination (GRE) scores (General and Subject) with their application.

Program Requirements

Biology Stream

- **Coursework.** Students must complete **2.5 full-course equivalents (FCEs)** as follows:
  - MBP 1015Y *Biophysics Seminar* (1.0 FCE). Note that students must attend this continuous course until their degree program is completed.
  - six modules, consisting of two modules per course, as follows (1.5 FCEs):
    - Biostatistics module; and Scientific Exposition and Ethics module: MBP 1101H (0.5 FCE)
    - One biology-stream module (0.25 FCE)
    - The balance of 0.75 FCE is chosen from physics- or biology-stream 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.

Physics Stream

- **Coursework.** Students must complete **2.5 full-course equivalents (FCEs)** as follows:
  - MBP 1015Y *Biophysics Seminar* (1.0 FCE). Note that students must attend this continuous course until their degree program is completed.
  - six modules, consisting of two modules per course, as follows (1.5 FCEs):
    - Biostatistics module; and Scientific Exposition and Ethics module: MBP 1101H (0.5 FCE)
    - Either the Cell and Molecular Biology for Physicists—Introduction module **or** one biology-stream module; **or** a graduate course chosen in consultation with the department that provides a foundation in biology (0.5 FCE or 1.0 FCE)
    - The balance is chosen from physics- or biology-stream 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 PhD program has two entry streams: 1) physics for students with a background in physical sciences; and 2) biology for students with a background in disciplines such as chemistry, biochemistry and life sciences.

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.
- 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

- 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 MBP 1015Y[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.

Biology Stream

- **Coursework.** Students must complete **3.5 full-course equivalents (FCEs)** as follows:
  - MBP 1015Y[0] *Biophysics Seminar* (1.0 FCE). Note that this is a continuous course which students must attend until their degree is completed.
  - 10 modules, consisting of two modules per course, as follows (2.5 FCEs):
    - *Biostatistics* (0.25 FCE)
    - *Scientific Exposition and Ethics* (0.25 FCE)
    - At least one biology-stream course module (0.25 FCE)
    - The balance of 1.75 FCE is chosen from physics- or biology-stream course modules; or (with departmental approval) graduate courses in another department.
    - Modules are taken within courses. See the course list below.
- Students are required to take a **PhD Qualifying Examination** in Year 2.
- Successful completion of a **Doctoral Final Oral Examination** of the student's research thesis.

Physics Stream

- **Coursework.** Students must complete **3.5 full-course equivalents (FCEs)** as follows:
  - MBP 1015Y[0] *Biophysics Seminar* (1.0 FCE). Note that this is a continuous course which students must attend until their degree is completed.
  - 10 modules selected as follows:
    - *Biostatistics* (0.25 FCE)
    - *Scientific Exposition and Ethics* (0.25 FCE)
    - Either *Cell and Molecular Biology for Physicists—Introduction* (0.25 FCE) **or** one biology-stream course module; **or** a graduate course chosen in consultation with the department that provides a foundation in biology (0.5 FCE or 1.0 FCE).
    - The balance is chosen from physics- or biology-stream course modules; or (with departmental approval) graduate courses in another department.
    - Modules are taken within courses. See the course list below.
- 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 program with an A– average and by successfully defending a research proposal during a reclassification oral examination after 21 months in the program.

Program Requirements

- All PhD students will participate in MBP 1015Y[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.

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 after 19 months entry in the program.

Biology Stream

- **Coursework.** Students must complete **3.5 full-course equivalents (FCEs)** as follows:
  - MBP 1015Y[0] *Biophysics Seminar* (1.0 FCE). Note that this is a continuous course which students must attend until their degree is completed.
  - 10 modules, consisting of two modules per course, as follows (2.5 FCEs):
    - *Biostatistics* (0.25 FCE).
    - *Scientific Exposition and Ethics* (0.25 FCE).
    - At least one biology-stream course module (0.25 FCE).
    - The balance of 1.75 FCE is chosen from physics- or biology-stream course modules; or (with departmental approval) graduate courses in another department.
    - Modules are taken within courses. See the course list below.
- Students must take a **PhD Qualifying Examination** in Year 2.
- Successful completion of a **Doctoral Final Oral Examination** of the student's research thesis.

Physics Stream

- **Coursework.** Students must complete **3.5 full-course equivalents (FCEs)** as follows:
  - MBP 1015Y[0] *Biophysics Seminar* (1.0 FCE). Note that this is a continuous course which students must attend until their degree is completed.
  - 10 modules selected as follows:
    - *Biostatistics* (0.25 FCE).
    - *Scientific Exposition and Ethics* (0.25 FCE).
    - Either *Cell and Molecular Biology for Physicists—Introduction* (0.25 FCE) or one biology-stream course module; or a graduate course chosen in consultation with the department that provides a foundation in biology (0.5 FCE or 1.0 FCE).
    - The balance is chosen from physics- or biology-stream course modules; or (with departmental approval) graduate courses in another department.
    - Modules are taken within courses. See the course list below.
- 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

MBP 1102H, MBP 1103H, MBP 1104H, and MBP 1105H each comprise two modules selected from a list of more than 30 that are offered in Medical Biophysics. Each September the department publishes a list of specific modules available to students during the following two academic years.

MBP 1015Y	Biophysics Seminar
MBP 1023H	Clinical Radiation Physics
MBP 1101H	Modules in Medical Biophysics I: Scientific Exposition and Ethics; Biostatistics
MBP 1102H	Modules in Medical Biophysics II
MBP 1103H	Modules in Medical Biophysics III
MBP 1104H	Modules in Medical Biophysics IV
MBP 1105H	Modules in Medical Biophysics V

Medical Science

Medical Science: Introduction

Faculty Affiliation

Medicine

Degree Programs

Biomedical Communications

MScBMC	*Fields:* Biomedical Media Design Biomedical Visualization Design

Medical Radiation Sciences

MHSc **(admissions have been suspended)**

Medical Science

MSc	*Fields:* Bioethics Biomedical Science Clinical Science Health Professions Education Population Health/Health Services Radiation Oncology
PhD	*Fields:* Bioethics Biomedical Science Clinical Science Health Professions Education Population Health/Health Services Radiation Oncology

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:

1. **Addiction Studies**
   - Medical Science, MSc, PhD
2. **Aging, Palliative and Supportive Care Across the Life Course**
   - Medical Science, MSc, PhD
3. **Bioethics**
   - Medical Science, MSc, PhD
4. **Biomedical Engineering**
   - Medical Science, MSc, PhD
5. **Biomedical Toxicology**
   - Medical Science, MSc, PhD
6. **Cardiovascular Sciences**
   - Medical Science, MSc, PhD
7. **Developmental Biology**
   - Medical Science, MSc, PhD
8. **Environment and Health**
   - Medical Science, MSc, PhD
9. **Genome Biology and Bioinformatics**
   - Medical Science, PhD
10. **Global Health**
    - Medical Science, PhD
11. **Health Care, Technology, and Place (admissions have closed)**
    - Medical Science, PhD
12. **Health Services and Policy Research (admissions have been suspended)**
    - Medical Science, MSc, PhD
13. **Human Development**
    - Medical Science, PhD
14. **Indigenous Health**
    - Medical Science, MSc, PhD
15. **Knowledge Media Design**
    - Medical Science, MSc, PhD
16. **Musculoskeletal Sciences**
    - Medical Science, MSc, PhD
17. **Neuroscience**
    - Medical Science, MSc, PhD
18. **Resuscitation Sciences**
    - Medical Science, MSc, PhD
19. **Women's Health**
    - Medical Science, MSc, PhD

Diploma Programs

Graduate Diploma in Health Research (Pending Final Approval)

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 Radiation Sciences Program

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Fax: (416) 971-2110

Medical Radiation Sciences Graduate Program
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Medical Science Program

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Medical Sciences Building
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Translational Research in the Health Sciences Program

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Graduate Diploma in Health Research

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Medical Science: Graduate Faculty

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Advani, Andrew - MBCHB, PhD
Agur, Anne - BSc, MSc, PhD
Al-Omran, Mohammed - MSc, MBBS
Alain, Claude - BA, MA, PhD
Alibhai, Shabbir - MD
Allard, Johane - MD
Alman, Benjamin - BSc, MD
Anagnostou, Evdokia - MD
Astell, Arlene - BSc, PhD
Badley, Elizabeth - BSc, MSc, PhD
Bagby, Michael - BA, MA, PhD, PhD
Bagli, Darius - BS, MD
Baker, Andrew - MD, MD
Bapat, Bharati - BSc, MSc, PhD
Barr, Cathy - BSc, PhD
Bassett, Anne - BSc, MD
Batt, Jane - MD, PhD
Beitchman, Joseph - BSc, MPH, MDCM
Belik, Jaques - MD
Bell, Chaim - MD
Black, Sandra - BSc, MD
Boggild, Andrea - BSc, MSc, MD
Bogoch, Earl - BA, MSc, MD
Boileau, Isabelle - PhD
Borschel, Gregory - BSc, DrMed
Boulianne, Gabrielle - BSc, PhD
Braitstein, Paula - BA, MA, MSc, PhD, DPhil
Bristow, Robert Glen - MD, PhD
Brochard, Laurent - MD
Brown, Theodore - BSc, PhD
Caniggia, Isabella - MD, PhD
Cattral, Mark - MSc, BScMed, MD
Cattran, Daniel - MD
Chapman, Kenneth - MSc, MD
Chen, Robert - MB
Cherney, David - MD, PhD
Cheung, Angela - BA, MD, PhD
Cheyne, Douglas - BSc, MA, PhD
Cochrane, Alan - BSc, PhD
Croitoru, Ken - MDCM
Cypel, Marcelo - DrMed
Daskalakis, Zafiris Jeffrey - MD
Davis, Karen - BSc, MSc, PhD
Dawson, Laura - MD
De Luca, Vincenzo - MD, PhD
de Veber, Gabrielle - MD
Doria, Andrea - MSc, MD, PhD
dos Santos, Claudia - MSc, MD

Downar, Jonathan - MD
Drake, James - BSE, MSc, MBCHB
Dror, Yigal - MD
Einstein, Gillian - AB, PhD
Esplen, Mary Jane - BScN, MSN, PhD, RN
Eubanks, James - BSc, AA, PhD
Fantus, Ivan George - BSc, MDCM
Fehlings, Michael - LMCC, MD, PhD
Feinstein, Anthony - MBCHB, PhD
Feld, Jordan - MPH, MD
Fischer, Benedikt - DPhil
Fish, Joel - BSc, MSc, MD
Fisher, Joseph - MD
Fleshner, Neil - MPH, LRCP, MD
Flint, Alastair - ChB
Frankland, Paul - MA, PhD
Gallinger, Steven - MSc, MD
George, Tony - BSc, MD
Gladman, Dafna - MD
Goldstein, Roger - MBCHB
Gordon, Karen - DPhil
Granton, John - BS, MD
Hamani, Clement - DrMed, PhD
Hamilton, Jill - BSc, MSc, MD
Harrison, Robert - PhD, DSc
Hedley, David - MD
Heon, Elise - LMCC, MD
Hodges, Brian - BA, MEd, MD
Holness, D Linn - MHSc, MD
Horner, Richard - BSc, PhD
Hudson, Christopher - BSc, PhD
Humar, Atul - MSc, MD
Husain, Mansoor - MB, MD
Inman, Robert - BA, MD
Irwin, Meredith - MD
Jadad, Alejandro - MD, DPhil
Janssen, Harry - MD, PhD
Jenkinson, Jodie - BA, MSc, PhD
Jeschke, Marc - DrMed, PhD
Jin, Tianru - PhD
Jones, Nicola - MD
Josselyn, Sheena - MA, PhD
Kaplan, Allan - AA, BA, MSc, MD
Kaplan, David - BA, PhD
Kapus, Andras - MD, PhD
Katz, Joel - MA, PhD
Katzman, Debra - MD
Kaul, Rupert - MD, PhD
Keating, Armand - BSc, MD
Kennedy, James - MD
Kennedy, Sidney - DPsych, MBCHB
Kim, Young-In - MD
Kingdom, John - DipCH, MB, MD
Kish, Stephen John - BSc, MSc, PhD
Klip, Amira - ScD
Koritzinsky, Marianne
Kucharczyk, Walter - MD
Kumar, Deepali - MSc, MD
Le Foll, Bernard - MSc, DrMed, PhD
Lee, Douglas - DrMed, PhD
Lee, Warren - MD, PhD
Leong-Poi, Howard - MD
Levinson, Wendy - BSc, MD
Levitan, Robert - MSc, MDCM
Levy, Gary - BSc, MD
Lewis, Gary - BCh, MBCHB
Li, Ren-Ke - MHSc, MSc, MD, PhD
Lindsay, Thomas - BSc, MSc, MDCM
Liu, Fang - PhD
Liu, Fei-Fei - MD
Liu, Geoffrey - BSc, MSc, MD
Liu, Mingyao - MSc, MD (**Director**)
Lobaugh, Nancy - BS, PhD
Lovett, Maureen - BSc, MSc, PhD
Lozano, Andres - BSc, LMCC, MD, BScMed, PhD
Lye, Stephen - BSc, PhD
MacDonald, Kelly - MD
Macdonald, Robert - MD, PhD
MacDonald, Russell - MD
Maki, Brian - BASc, MASc, PhD, PEng
Malkin, David - MD
Marsden, Philip - MD
Maunder, Robert - MD
McCart, Andrea - MSc, MD
McCrindle, Brian - MD
McDonald, Lynn - PhD
McIntosh, Anthony Randal - BSc, MSc, PhD
McIntyre, Roger - MD
McKee, Nancy - MD
Mckenzie, Kwame - MD
McNamara, Patrick - MB
Meyer, Jeffrey - MD
Miller, Freda - BSc, PhD
Miller, Steven - MD
Milosevic, Michael - MD
Minden, Mark - MD, PhD
Mizrahi, Romina - MD, PhD
Moe, Gordon - MD
Moody, Alan - BA, MA, MBBS
Morrison, Laurie - BSc
Morshead, Cindi - BS, PhD
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Mulsant, Benoit - MD
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Pei, York Po-Chee - MD
Perez Velazquez, Jose Luis - PhD
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Pollock, Bruce - BSc, MD, PhD
Post, Martin - PhD
Rajji, Tarek - MD
Rand, Margaret - BSc, PhD
Rao, Vivek - LMCC, MD, PhD
Ravindran, Arun - PhD
Ray, Joel - MSc, MD
Redelmeier, Donald - MS, MD
Reithmeier, Reinhart - BSc, PhD
Remington, Gary - MD, PhD
Richards, Robin - BA, MD
Rizoli, Sandro - LRCP, MD, PhD
Robinson, Lisa - MD
Rochon, Paula - MD
Rodin, Gary - BSc, MD
Rosenblum, Norman - MD
Ross, Bernard - DipIng, PhD
Ross, Heather - BSc, MD
Rotin, Daniela - BSc, MSc, PhD

Ryan, Jennifer - BS, PhD
Sadavoy, Joel - MD
Salter, Michael - MD, PhD
Sandor, Paul - BASc, MD
Schachar, Russell James - MD
Scholey, James - MD
Schweizer, Tom - BA, MSc, DPhil
Selby, Peter - MHSc, MBBS
Semple, John - BSc, MSc, MD
Sherman, Philip - MD
Shoichet, Molly - PhD
Sibille, Etienne - BSc, PhD
Silver, Ivan - BSc, MD
Silverberg, Mark - MD
Silverman, Earl - MD
Silverman, Melvin - BSc, MDCH
Siminovitch, Katherine - MD
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Snead III, Carter - BS, MD, MD
Sondheimer, Neal John - MD, PhD
Stevens, Bonnie - BSc, MSN, PhD
Strafella, Antonio - MD, PhD
Strauss, Bradley - MD
Sullivan, Frank - MD, PhD
Sun, Hong-Shuo - MSc, DrMed, DPhil
Swartz, Richard - BSc, MD, PhD
Sweezey, Neil - BSc, MD, MD
Szaszi, Katalin - MD, PhD
Tabori, Uri - MBBS
Takehara, Kaori - BSc, MSc, PhD
Tandon, Anu - BSc, MD, BScMed
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Tarlo, Susan - MBBS
Tartaglia, Carmela - BA, BSc, MDCM
Tator, Charles - MA, MD, PhD
Taylor, Margot - BA, MA, PhD
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Trope, Graham - DOMS, LMCC, MD
Tu, Jack Ven - MD, PhD
Tymianski, Michael - BA, MD, PhD
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Venkateswaran, Vasundara - BSc, MPH, MSc, PhD
(*Coordinator of Graduate Studies*)
Verhoeff, Nicolaas - MD
Vincent, John - PhD
Voineskos, Aristotle - MD, PhD
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Wedge, John - BSc, MD
Weksberg, Rosanna - MD, PhD
Westall, Carol - BSc, MSc, PhD
Wheeler, Michael - BSc, PhD
Whyne, Cari - BSc, PhD
Wittnich, Carin - MSc, DVM
Wong, Albert - MD, PhD
Wong, Chong Shun - MD
Wong, Ming F Agnes - DOMS, MD, PhD
Woo, Minna Nancy - MD
Woolridge, Nicholas - BFA, BSc, BFA, MSc
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Yeger, Herman - BSc, MScPhm, PhD
Yeung, Rae - DrMed, MD
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Yucel, Yeni - MD
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Zadeh, Gelareh - BSc, DrMed, BScMed, DPhil
Zhang, Haibo - MSc, PhD
Zhang, Li - MSc, MD, PhD
Zhang, Liang - PhD
Zimmermann, Camilla - MSc, MD

Members Emeriti

Burnham, Willets - PhD
Chan, Helen - MBBS
Daar, Abdallah Salim - MD
Rovet, Joanne - BSc, PhD
Seeman, Mary - BA, MDCH, MD
Silverman, Frances - PhD
Warsh, Jerry - MD

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Aviv, Richard - MBCHB
Bandiera, Glen - MD
Barr, Mera - AB, AM, PhD
Barua, Moumita - DrMed
Battaglia, Marco - BA, DrMed
Bayley, Mark - MD
Bernardini, Marcus - BSc, MSc, MD
Bezjak, Andrea - MS, MDCM
Bhalerao, Shree - MD
Billia, Filio - BSc, MSc, MD, PhD
Bowman, Kerry - BA, BSW, MSW, PhD
Brent, Michael - MB
Brull, Richard - BS, MD
Brydges, Ryan - BSc, MSc, PhD
Callum, Jeannie - BA, MD
Camp, Mark - BSc, MSc, MD
Campbell, Douglas - MD
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Chan, Steven - MD, PhD
Chandran, Vinod - MBBS, PhD
Chauhan, Vijay - MD
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Cheskes, Sheldon - BSc, DrMed
Cheung, Amy - BA, MSc, MD
Chow, Edward - MBBS
Cil, Tulin - BSc, MEd, DrMed
Clarke, Hance - MSc, MD
Connelly, Kim - MBBS, PhD
Corrin, Michael - BFA, BA, BSc, MSc
Court, John - MA
Crawley, Adrian - BA, PhD
Cushing, Sharon L. - BSc, MD
da Costa, Leodante - DrMed
Das, Sunit - DrMed
de Perrot, Marc - MSc, MD
Desarkar, Pushpal - MD
Dlamini, Nomazulu - MBBS
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Dueck, Andrew - BSc, MSc, DrMed
Dunkley, Benjamin - BSc, PhD
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Fan, Eddy - BSc, MD, PhD
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Farzan, Faranak - BEng, PhD
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Ferguson, Sarah - BSc, MD
Finelli, Antonio - BSc, MSc, MSc, PhD
Fischer, Corinne - MD
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Forbes, Thomas - MD
Foussias, George - BSc, MSc, DrMed, PhD
French, Leon - BSc, MSc, PhD
Friedberg, Mark - MD
Furlan, Andrea - MD, PhD
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Gagliardi, Anna - BSc, BE, MSc, MLS, PhD
Gagliese, Lucia - BSc, PhD
Gerretsen, Philip - MSW, MD, PhD
Gershon, Andrea - MSc, MD
Gerstle, Theodore - CPSO, MD
Giacca, Adria - MD
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Gonska, Tanja - MD
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Mahmud, Farid - MD
Mahmutoglu, Saadet - MD
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Mak, Susanna - MD, PhD
Mamdani, Muhammad - DP
Mandelcorn, Efrem - MD
Masellis, Mario - MSc, MD
Mathur, Sunita - BSc(PT), MSc(PT), PhD
Matsuura, Naomi - ME, PhD
Maxwell, Cynthia - AB, MD
McDonald, Michael - BSc, MD
Menon, Mahesh - PhD
Mertens, Luc - MD
Milot, Laurent - MSc, MD
Mital, Seema - MBBS
Montandon, Gaspard - MSc, PhD
Moraes, Theo - MD
Mucsi, Istvan - MD, PhD
Muise, Aleixo - MD
Muller, Matthew - MD
Narang, Indra - MBBS
Nauth, Aaron - BSc, MSc, MD
Newman, David - MD
Ng, Derek - BSc, MSc, PhD
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O'Brien, Mary Ann - DipP, BHSc(PT), MSc, PhD
O'Sullivan, Brian - MBCHB
Okrainec, Allan - MHPE, MD
Ouzounian, Maral - BSc, MDCM, PhD
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Parsons, Janet - BSc(PT), BA, MSc, PhD
Popovic, Milos - DipIng, PhD
Qadura, Mohammad - BS, MD, PhD
Ralhan, Ranju - ScD
Rector, Neil - MA, MA
Regehr, Cheryl - AB, MA, PhD
Reich, Heather - MDCM, PhD
Retnakaran, Ravi - MSc, MD
Richter, Peggy - MD
Rizvi, Sakina - BSc, MASc, PhD
Rosewall, Tara - MS
Rusjan, Pablo - PhD
Scales, Damon - MD
Schuh, Suzanne - MD
Seed, Mike - MBBS
Selzner-Malekkiani, Nazia - MSc, PhD
Selzner, Markus - MD, PhD
Serghides, Lena - BSc, PhD
Sgro, Michael - MD
Shafiee Nyestanak, Mohammad - MD
Silversides, Candice - MSc, MD
Singh, Krishna - BSc, MSc, PhD
Sockalingam, Sanjeev - MD
Spence, Erik - PhD
Stergiopoulos, Vicky - MD
Strug, Lisa - BS, BA, SM, PhD
Tam, Emily - MD
Taylor, Valerie - MD
Thavendiranathan, Paaladinesh - BSc, MSc, MD
Tobe, Sheldon - BSc, MD
Touma, Zahi - BSc, MD, PhD
Trudeau, Maureen - BSc, MA, MD
Unger, Sharon - MD, MD
Wadey, Veronica - BSc, BEd, MSc, MD

Wall, Shelley - BA, MA, MSc, PhD
Wasserman, Jonathan - MD
Wasserstein, David - BSc, MSc, MD
Wentlandt, Kirsten - BSc, MHSA, MD, PhD
Widjaja, Elysa - MSc, MPH, MBBS
Witterick, Ian - DrMed
Wong, Jean - MD
Wong, Rebecca - MBCHB
Wu, Robert - MSc, MD
Zinman, Lorne - 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 5.5 FCEs: MSC 1001Y, MSC 2001Y, MSC 2003Y, MSC 2004H, MSC 2009H, MSC 2012Y, and MSC 2020H
  - in Year 2, complete 1.0 FCE: MSC 2002H and MSC 2018H[+]
  - complete at least 1.0 FCE chosen from MSC 2006H, MSC 2008H, MSC 2015H, and MSC 2016H
  - complete 1.0 FCE chosen from MSC 2007H, MSC 2011H, MSC 2013Y, MSC 2019H, and MSC 2022H (or any other appropriate graduate course[s]).
- Students must complete MSC 2025Y **Master's Research Project for BMC**.

Program Length

6 sessions 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 5.5 FCEs: MSC 1001Y, MSC 2001Y, MSC 2003Y,

MSC 2004H, MSC 2009H, MSC 2012Y, and MSC 2020H
    - in Year 2, complete 1.0 FCE: MSC 2002H and MSC 2018H+
    - complete 1.5 FCEs: MSC 2015H, MSC 2016H, and MSC 2017H
    - complete 0.5 elective FCE chosen from MSC 2007H, MSC 2011H, MSC 2019H, and MSC 2022H (or any other appropriate graduate course[s]).

- Students must complete MSC 2025Y **Master's Research Project for BMC**.

Program Length

6 sessions 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 Faculty of Medicine each session regarding course offerings.

Required Courses

MSC 1001Y	Human Anatomy
MSC 2001Y	Visual Representation of Medical Knowledge
MSC 2002H	Sequential Medical Communication
MSC 2003Y	Biomedical Communications Technologies
MSC 2004H	Research Methods
MSC 2009H	Ethics and Professionalism in Biomedical Communications
MSC 2012Y	Neuroanatomy for Visual Communication
MSC 2018H+	Visual Representation of Processes in Human Pathology
MSC 2020H	Visual Representation of Biomolecular Structure and Function
MSC 2025Y	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.

MSC 2005H	Evolution of Medical Illustration
MSC 2006H	Advanced Media Design Technologies
MSC 2007H	Visual Synthesis of Medical/Scientific Process
MSC 2008H	Community-Centred Design Research
MSC 2011H	Special Topics in Biomedical Communications
MSC 2013Y	Master's Research Project and Paper
MSC 2014H	Fundamentals of Scripting for Health Science Communication
MSC 2015H	Interpretive Visualization: Cinematic Design and Preproduction
MSC 2016H	Visualization Methods
MSC 2017H	Visualization Technology
MSC 2019H	Information and Data Visualization in Science and Medicine
MSC 2022H	Graphic Medicine Seminar

Medical Science: Medical Radiation Sciences MHSc

Admissions to this program have been suspended.

Master of Health Science

Program Description

The MHSc in Medical Radiation Sciences is designed for expert radiation therapy clinicians who wish to expand their academic competence and contributions and advance their clinical, professional, and research skills. The program offers three pathways: a clinical pathway, a leadership pathway, and a research pathway, each comprising coursework (required and elective), experience-based immersive practica, and a master's research project. These elements are designed to provide foundational radiation medicine content, expand clinical and reasoning skills, and further develop the skills of inquiry, innovation, knowledge translation, and evidence-based practice.

Courses will run primarily online and adjacent to regular working hours—mornings and early evenings—with the exception of the practica in the final year that may require more dedicated time within the regular work week, depending on the learner's chosen pathway.

The program is delivered in either a two-year full-time or three-year extended full-time (EFT) curriculum.

MHSc Program (Two-Year 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 unit's additional admission requirements stated below.
- Hold certification in the applicant's relevant jurisdiction and provide evidence of eligibility for professional registration in Ontario where necessary.
- Have completed a recognized bachelor's degree in medical radiation sciences or in an equivalent field.
- Have obtained a minimum average grade of B+ over the final two years of full-time undergraduate studies.
- Have performed a minimum of 900 hours of professional practice within two years of application.
- Supporting documentation:
    - Three referee letters (following the process outlined on the application web page).
    - A letter of intent that outlines the applicant's intended pathway, which can be confirmed or changed at the time of acceptance into the program.
    - An updated curriculum vitae (CV).
    - Original university academic transcripts.
    - For applicants planning to complete their program at a department or institution that is not an affiliated teaching hospital of the University of Toronto: documentation providing evidence of departmental support is necessary to attest to the organization's ability and willingness to provide the necessary internal support for the practicum and master's research project (including time, expertise, and resources). Applicants must submit the Evidence of Departmental Support for Non-Affiliated Organizations form.
- English-language proficiency. 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 580 on the paper-based test and 5 on the Test of Written English (TWE); a minimum of 93 on the Internet-based test and 22 on the writing/speaking sections.
    - **Michigan English Language Assessment Battery (MELAB):** minimum score of 85.
    - **International English Language Testing System (IELTS):** minimum score of 7.0.
    - **Certificate of Proficiency in English (COPE):** minimum score of 76.
    - Academic Preparation Course, International ESL Program, School of Graduate Studies: minimum final grade of B in Level 60.

Program Requirements

Practica and research project topics will be according to the chosen pathway and guided and monitored by the faculty supervisory committee for each student. Additional details of how these courses are customized per pathway can be found in the course descriptions.

This option is for students who wish to complete the program in a two-year, six-session format.

Clinical Pathway

- Year 1: complete 4.0 full-course equivalents (FCEs) as follows:
    - MSC 1500H, MSC 1502H, MSC 1503H, MSC 1504H, MSC 1506H, MSC 1508H, MSC 1515H, and one 0.5 FCE elective.
- Year 2: complete 4.0 FCEs as follows:
    - Fall session:
        - MSC 1512H and MSC 1507H;
    - Winter and Summer sessions:
        - two practicum courses: MSC 1510Y and MSC 1511Y;
        - a major research project: MSC 1509H.

Research Pathway

- Year 1: complete 4.0 FCEs as follows:
    - MSC 1500H, MSC 1502H, MSC 1503H, MSC 1504H, MSC 1506H, MSC 1508H, MSC 1515H, and one 0.5 FCE elective.
- Year 2: complete 4.0 FCEs as follows:
    - Fall session:
        - MSC 1512H, MSC 1507H, and MSC 6000H;
    - Winter and Summer sessions:
        - two practicum courses: MSC 1510Y and MSC 1511Y;
        - a major research project: MSC 1509H.

Professional Leadership Pathway

- Year 1: complete 4.0 FCEs as follows:
    - MSC 1503H, MSC 1504H, MSC 1506H, MSC 1508H, MSC 1513H, MSC 1514H, MSC 1515H, and one 0.5 FCE elective.
- Year 2: complete 4.0 FCEs as follows:
    - MSC 1507H, MSC 1512H, and one 0.5 FCE elective;
    - two practicum courses: MSC 1510Y and MSC 1511Y;
    - a major research project: MSC 1509H.

Program Length

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

Time Limit

3 years full-time

MHSc Program (Three-Year Extended Full-Time Option)

This option is designed for working professionals who wish to complete the degree over an extended period. It covers the equivalent of the two-year, six-session program, but over a three-year or nine-session period.

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.
- Hold certification in the applicant's relevant jurisdiction and provide evidence of eligibility for professional registration in Ontario where necessary.
- Have completed a recognized bachelor's degree in medical radiation sciences or in an equivalent field.
- Have obtained a minimum average grade of B+ over the final two years of full-time undergraduate studies.
- Have performed a minimum of 900 hours of professional practice within two years of application.
- Supporting documentation:
    - Three referee letters (following the process outlined on the application web page).
    - A letter of intent that outlines the applicant's intended pathway, which can be confirmed or changed at the time of acceptance into the program. Applicants should indicate why they wish to pursue this three-year option.
    - An updated curriculum vitae (CV).
    - Original university academic transcripts.
    - For applicants planning to complete their program at a department or institution that is not an affiliated teaching hospital of the University of Toronto: documentation providing evidence of departmental support is necessary to attest to the organization's ability and willingness to provide the necessary internal support for the practicum and master's research project (including time, expertise, and resources). Applicants must submit the Evidence of Departmental Support for Non-Affiliated Organizations form.
- English-language proficiency. 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 580 on the paper-based test and 5 on the Test of Written English (TWE); a minimum of 93 on the Internet-based test and 22 on the writing/speaking sections.
    - **Michigan English Language Assessment Battery (MELAB):** minimum score of 85.
    - **International English Language Testing System (IELTS):** minimum score of 7.0.
    - **Certificate of Proficiency in English (COPE):** minimum score of 76.
    - Academic Preparation Course, International ESL Program, School of Graduate Studies: minimum final grade of B in Level 60.

Program Requirements

Practica and research project topics will be selected according to the chosen pathway and guided and monitored by the faculty supervisory committee for each student. Additional details of how these courses are customized per pathway can be found in the course descriptions.

Clinical Pathway

- Year 1: complete 3.0 full-course equivalents (FCEs) as follows:
    - MSC 1502H, MSC 1503H, MSC 1504H, MSC 1506H, MSC 1507H, and MSC 1512H.
- Year 2: complete 3.5 FCEs as follows:
    - MSC 1500H, MSC 1515H, and MSC 1508H;
    - practicum course: MSC 1510Y (extends into the Fall session);
    - two 0.5 FCE electives (1.0 FCE total).
- Year 3: complete 1.5 FCEs as follows:
    - a major research project: MSC 1509H (0.5 FCE);
    - practicum course: MSC 1511Y.

Research Pathway

- Year 1: complete 3.0 FCEs as follows:
    - MSC 1502H, MSC 1503H, MSC 1504H, MSC 1506H, MSC 1507H, and MSC 1512H.
- Year 2: complete 3.5 FCEs as follows:
    - MSC 1500H, MSC 1515H, and MSC 1508H;
    - practicum course: MSC 1510Y (extends into the Fall session);
    - one 0.5 FCE elective;
    - an independent study course: MSC 6000H.
- Year 3: complete 1.5 FCEs as follows:
    - a major research project: MSC 1509H (0.5 FCE);
    - practicum course: MSC 1511Y.

Professional Leadership Pathway

- Year 1: complete 3.5 FCEs as follows:
    - MSC 1503H, MSC 1504H, MSC 1506H, MSC 1507H, MSC 1512H, MSC 1513H, and MSC 1514H.
- Year 2: complete 3.0 FCEs as follows:
    - MSC 1515H, MSC 1508H, and two 0.5 FCE electives;
    - practicum course: MSC 1510Y (extends into the Fall session);
- Year 3: complete 1.5 FCEs as follows:

- a major research project: MSC 1509H;
- practicum course: MSC 1511Y.

Program Length

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

Time Limit

3 years

Medical Science: Medical Radiation Sciences MHSc Courses

MSC 1500H	Advanced Radiotherapy and Medical Physics
MSC 1502H	Emerging Tools for Precision Medicine in Oncology
MSC 1503H	Clinical Reasoning and Decision Making in Radiotherapy Part I
MSC 1504H	Clinical Reasoning and Decision Making in Radiotherapy Part II
MSC 1506H	Professional and Clinical Leadership I: Making the Leader
MSC 1507H	Clinical Competence and Continuous Learning
MSC 1508H	Medical Radiation Sciences Research Development
MSC 1509H	Master's Research Project
MSC 1512H	Improving Cancer Outcomes With Survivorship Research
MSC 1513H	Seminars in Cancer Care Leadership
MSC 1514H	Professional and Clinical Leadership II: Influencing the System
MSC 1515H	A Quality Health System from Micro to Macro: Perspectives for Cancer Care
MSC 6000H	Special Topics Reading Course

Internship Courses

MSC 1510Y	Practicum I
MSC 1511Y	Practicum II

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 MDs seeking training as clinician investigators, and graduates may seek positions as academics and health care professionals in universities, government, and industry. The IMS participates in the Royal College of Physicians and Surgeons Clinical Investigator Program (CIP).

Minimum Admission Requirements

- 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- 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 100/120 on the Internet-based test and 22/30 on the writing and speaking sections.
  - **Michigan English Language Assessment Battery (MELAB):** minimum score of 87.
  - **International English Language Testing System (IELTS):** minimum score of 7.5.
  - **Certificate of Proficiency in English (COPE):** minimum score of 5.

Program Requirements

- **Coursework.** Students must complete **1.0 graduate full-course equivalent (FCE)** in addition to MSC 1010Y[0] *MSc Student Seminars*.
- A **research thesis** and **oral thesis examinatio**n.

- Students are expected to be on campus and participating full-time until all program requirements are completed.

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.

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 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 an MSc degree with an MSc thesis; 2) transfer from the IMS MSc program; or 3) direct entry following completion of an appropriate BSc or MD degree.

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 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 100/120 on the Internet-based test and 22/30 on the writing and speaking sections.
  - **Michigan English Language Assessment Battery (MELAB):** minimum score of 87.
  - **International English Language Testing System (IELTS):** minimum score of 7.5.
  - **Certificate of Proficiency in English (COPE):** minimum score of 5.
- Applicants may be accepted into the PhD program after completing an MSc degree (with an MSc thesis) with at least A– standing from a recognized university.

Program Requirements

- Coursework. Students must complete a minimum of **2.0 graduate full-course equivalents (FCEs)** as follows:
  - A minimum 1.0 graduate FCE.
  - MSC 1011Y[0] *PhD Student Seminars in Translational Research* (1.0 FCE, if credit for MSC 1010Y has not been obtained previously).
  - 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 **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.
- 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. 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 **4.0 graduate full-course equivalents (FCEs)** as follows:
  - 1.0 graduate FCE with a minimum A– average.
  - MSC 1010Y[0] *MSc Student Seminars in Translational Research* (1.0 FCE).
  - 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:
    - 1.0 additional FCE
    - MSC 1011Y[0] *PhD Student Seminars* (1.0 FCE, if credit for MSC 1010Y has not been obtained prior to transfer).
- 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.
- 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. 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 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 100/120 on the Internet-based test and 22/30 on the writing and speaking sections.
  - **Michigan English Language Assessment Battery (MELAB):** minimum score of 87.
  - **International English Language Testing System (IELTS):** minimum score of 7.5.
  - **Certificate of Proficiency in English (COPE):** minimum score of 5.
- 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

- Students must pass a qualifying examination within 18 to 21 months of entry.
- Students must complete a minimum of **3.0 graduate full-course equivalents (FCEs)** as follows:
  - A minimum 2.0 graduate FCEs.
  - MSC 1011Y[0] *PhD Student Seminars in Translational Research* (1.0 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 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.
- 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. 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.

JCR 1000Y	An Interdisciplinary Approach to Global Challenges
JCV 1060H	Developmental Cardiovascular Physiology
JCV 3060H	Advanced Topics in Cardiovascular Sciences—Molecular Biology and Heart Signal Transduction
JCV 3061H	Advanced Topics in Cardiovascular Sciences—Hormones and the Cardiovascular System
JCV 3062H	Advanced Topics in Cardiovascular Sciences—Heart Function
JCV 3063H	Advanced Topics in Cardiovascular Sciences—Vascular
JCV 3065H	Advanced Topics in Cardiovascular Sciences—Systems Biology
JDB 1024Y	Topics in Developmental Biology (MSc)
JDB 1025H	Developmental Biology (PhD)
JDB 1026Y	Student Seminars in Developmental Biology (PhD)
JFK 1120H	Selected Topics in Drug Development I
JFK 1121H	Selected Topics in Drug Development II
JNP 1014Y	Interdisciplinary Toxicology
JNP 1016H	Graduate Seminar in Toxicology
JNP 1017H[+]	Current Topics in Molecular and Biochemical Toxicology
JNP 1018H[+]	Molecular and Biochemical Basis of Toxicology
JNR 1444Y	Fundamentals of Neuroscience—Cellular and Molecular
JNS 1000Y	Fundamentals of Neuroscience—Systems and Behaviour
JPM 1005Y	Behavioural Pharmacology
JTB 2010H	Proteomics and Functional Genomics
JTB 2020H	Applied Bioinformatics
MSC 1001Y	Human Anatomy
MSC 1006H	Neuroanatomy
MSC 1008Y	Advanced Human Embryology and Teratology
MSC 1010Y[0]	MSc Student Seminars in Translational Research (Credit/No Credit)
MSC 1011Y[0]	PhD Student Seminars in Translational Research (Credit/No Credit)
MSC 1040H	Physiologic Basis of Disease
MSC 1081H	Studies in Schizophrenia
MSC 1084H	Glomerular Based Diseases—Bench to Bedside
MSC 1085H	Molecular Approaches to Mental Health and Addictions
MSC 1086H	Integrative Perspectives in Consciousness and Self-Awareness
MSC 1087H	Neuroimaging Methods Using Magnetic Resonance Imaging
MSC 1088H	Brain Positron Emission Tomography
MSC 1089H	The Biopsychosocial Basis of Mental Health and Addictive Disorders
MSC 1090H	Introduction to Computational Biostatistics with R
MSC 1500H	Advanced Radiotherapy and Medical Physics
MSC 1502H	Emerging Tools for Precision Medicine in Oncology
MSC 1503H	Clinical Reasoning and Decision Making in Radiotherapy I
MSC 1504H	Clinical Reasoning and Decision Making in Radiotherapy II
MSC 1505H	Clinical Reasoning and Decision Making in Radiotherapy III
MSC 1506H	Professional and Clinical Leadership I: Making the Leader
MSC 1507H	Clinical Competence and Continuous Learning
MSC 1508H	Medical Radiation Sciences Research Development
MSC 1512H	Improving Cancer Outcomes With Survivorship Research
MSC 1513H	Seminars in Cancer Care Leadership
MSC 1514H	Professional and Clinical Leadership II: Influencing the System
MSC 2003Y	Biomedical Communications Technologies
MSC 2010Y	Molecular Medicine in Human Genetic Disease
MSC 2020H	Visual Representation of Biomolecular Structure and Function (prerequisites: MSC 1001Y, MSC 2001H, MSC 2003Y)
MSC 3001H	Foundations in Musculoskeletal Science
MSC 4001H	Foundations in Resuscitation Science Research
MSC 6000H	Special Topics Reading Course
MSC 7000Y	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. The course is graded when completed.

Medical Science: Translational Research in the Health Sciences MHSc

Master of Health Science

Program Description

The two-year, course-based MHSc program is designed for students from diverse backgrounds (such as medicine, life sciences, social sciences, engineering, design, and communications) who are strongly motivated to advance problem-solving designs in medical and health science contexts. The program combines flexible coursework; team-based, real-world translational challenges; and extensive mentorship and networking. Students gain experience, expertise, and practical insights into the design process, regulatory frameworks, and translational networks and strategies.

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 field of study with an A- average in at least three of the four years.
- Applicants with significant research experience and/or academic research master's or PhD in related areas of study are considered.
- Applicants with related research experience in professional health science or related social science are 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 June 1 (early consideration deadline is February 15). Enrolment is limited and not all applicants meeting the prerequisites are admitted. Applicants are screened for eligibility; short-listed applicants are 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:
    - MSC 1000Y *Foundations in Translational Research* (1.0 FCE, Fall and Winter)
    - MSC 4010Y[0] *Core Modules in Translational Research* (2.0 FCEs, Fall, Winter, and Summer). MSC 4010Y[0] includes selection and completion of eight shorter module courses from three research domains.
    - MSC 1002H *Overview of Methods in Practices and Contexts* (0.5 FCE; Winter)
    - MSC 1003H *Information, Media, and Communication Literacy for the Sciences* (0.5 FCE, Fall)
    - MSC 2021Y *Projects in Translational Research* (1.0 FCE, Fall and Winter)
    - MSC 4000Y[+] *Capstone Project in Translational Research* (2.0 FCEs, Summer)
  - Year 2:
    - MSC 4000Y[+] *Capstone Project in Translational Research* (Fall and Winter)
    - MSC 4010Y[0] *Core Modules in Translational Research* (Fall and Winter)
    - Plus two half-course electives from the approved list or with pre-approval from the Graduate Coordinator (1.0 FCE).

Program Length

5 sessions full-time (F/W/S/F/W)

Time Limit

3 years

[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.

Medical Science: Translational Research in the Health Sciences MHSc Courses

Required

MSC 1000Y	Foundations in Translational Research
MSC 1002H	Overview of Methods in Practices and Contexts
MSC 1003H	Information, Media, and Communication Literacy for the Sciences
MSC 2021Y	Projects in Translational Research
MSC 4000Y+	Capstone Project in Translational Research (prerequisite: MSC 2021Y)
MSC 4010Y0	Modules in Translational Research (Credit/No Credit) (exclusions: MSC 1010Y, MSC 1011Y)

+ 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.

Approved Electives

Graduate-level electives may be selected based on a student's background and individual learning plan and require pre-approval from the Academic Director or Graduate Coordinator.

Medical Science: Health Research GDipHR

Graduate Diploma in Health Research (Pending Final Approval)

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 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.

Note: No offer of admissions will be made to the program pending final approval by the Quality Council and the Ministry of Advanced Education and Skills Development.

Program Requirements

- Students must complete a total of **2.5 full-course equivalents (FCEs)** as follows:
  - Two required courses (2.0 FCEs):
    - MSC 1991Y0 *Supervised Research Project* (Credit/No Credit)
    - MSC 1992Y0 *Research Skills for the Physician-Scientist* (Credit/No Credit).
  - 0.5-FCE elective course 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 full-time (W/S/F/W/S)

Time Limit

8 sessions part-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.

Medical Science: Health Research GDipHR Courses

Core Courses

MSC 1991Y[0]	Supervised Research Project (Credit/No Credit)
MSC 1992Y[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)

HAD 5301H	Introduction to Clinical Epidemiology and Health Care Research
HAD 5744H	Introduction to Health Econometrics
HAD 6760H	Introduction to Health Services Research Theory and Methods
MHI 3000H	Independent Reading for Health Informatics

Laboratory Medicine and Pathobiology (Faculty of Medicine)

LMP 1006H	Cellular Imaging in Pathobiology
LMP 1017H	Tissue Injury, Repair, and Regeneration
LMP 1019H	Research Techniques in Molecular Biology and Pathology
LMP 1020H	Inflammation, Immunity, and Immunopathology of Atherosclerosis
LMP 1503H	Signal Transduction Pathways in Normal and Diseased Tissues
LMP 1504H	Cell and Molecular Biology of Cardiovascular Diseases
LMP 1505H	Analytical Clinical Biochemistry: Basic Principles
LMP 1510H	Molecular Biology Techniques
LMP 1525H	The Role of Genomics in the Era of Personalized Medicine
LMP 1530H	Next Generation Genomics in Clinical Medicine
LMP 1535H	Mass Spectrometry, Proteomics, and their Clinical Applications
LMP 2115H	Selected Topics in Medical Microbiology
LMP 2120H	Molecular Clinical Microbiology and Infectious Diseases
LMP 2222H	Neurodegenerative Disease—Mechanisms, Models, and Methods

Medical Science (Faculty of Medicine)

JCV 3060H	Advanced Topics in Cardiovascular Sciences—Molecular Biology and Heart Signal Transduction
JCV 3061H	Advanced Topics in Cardiovascular Sciences—Hormones and the Cardiovascular System
JCV 3062H	Advanced Topics in Cardiovascular Sciences—Heart Function
JCV 3063H	Advanced Topics in Cardiovascular Sciences—Vascular
MSC 1002H	Overview of Methods in Practices and Contexts
MSC 1003H	Information, Media, and Communication Literacy for the Sciences
MSC 1081H	Studies in Schizophrenia
MSC 1084H	Glomerular Based Diseases—Bench to Bedside
MSC 1087H	Neuroimaging Methods Using Magnetic Resonance Imaging
MSC 1088H	Brain Positron Emission Tomography
MSC 1089H	The Biopsychosocial Basis of Mental Health and Addictive Disorders
MSC 1502H	Emerging Tools for Precision Medicine in Oncology
MSC 1503H	Clinical Reasoning and Decision Making in Radiotherapy I
MSC 1504H	Clinical Reasoning and Decision Making in Radiotherapy II
MSC 1512H	Improving Cancer Outcomes with Survivorship Research

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:

1. **Ancient and Medieval Philosophy**
   - Medieval Studies, PhD
2. **Book History and Print Culture**
   - Medieval Studies, MA, PhD
3. **Editing Medieval Texts**
   - Medieval Studies, PhD
4. **Jewish Studies**
   - Medieval Studies, MA, PhD
5. **Sexual Diversity Studies**
   - Medieval Studies, MA, PhD
6. **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 500–1500). 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: http://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 (***Director***)
Andrée, U.O. Alexander - BA, PhD (***Coordinator of Graduate Studies***)
Armstrong, Lawrin - BA, MA, MA, MDiv, PhD
Bartlett, Kenneth - BA, MA, PhD
Black, Deborah - BA, MA, PhD
Bowen, William - BA, BMus, MA, PhD
Carley, James - BA, 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 (***Associate Director***)
Ewan, Elizabeth - BA, PhD
Gervers, Michael - BA, MA, PhD
Gillespie, Alexandra - BA, BSc, PhD
Goering, Joseph - BA, MA, MSL, PhD
Guenther, Sebastian - MA, PhD
Haines, John - BSc, BA, MA, PhD
Hall, Bert - BA, PhD
Harris, Jennifer - BA, MA, PhD
Herren, Michael - PhD
Holmstedt, Robert - BA, MA, PhD
Hutchison, Ann - BA, MA, PhD
Iglesias, Yolanda - BA, BA, MA, PhD
Kaczynski, Bernice - BA, MPH, 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
Meyerson, Mark - BA, PhD
Mills, Kenneth - MA, PhD
Momma, Haruko - BA, MA, MA, PhD
Mulchahey, M. Michele - BA, MA, PhD
Murray, Jacqueline - PhD
Northrup, Linda - BA, MA, 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
Schallert, Joseph - PhD
Silano, Giulio - BA, LLB, BEd, MA, PhD
Smith, Thomas Allan - MA, DTh
Stock, Markus - MA, PhD
Subtelny, Maria - BA, PhD
Sweetman, Robert - BA, MA, PhD
Terpstra, Nicholas - BA, MA, PhD
Townsend, David Robert - BA, MA, PhD
Welsh, Jarrett - BA, MA, PhD

Members Emeriti

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
Inwood, Brad - BA, MA, PhD, FRSC
Jeauneau, Edouard - BTh, PhD
Johnston, Alexandra - PhD
Klausner, David - AB, PhD
Mayer, Hartwig - PhD, PhD
McConica, James - STB, BA, MA, Dphil, FRHistS
McDonough, Christopher - BA, MA, PhD
McDougall, David - BA, MA, PhD
McDougall, Ian - BA, MA, PhD
Murray, Alexander - BA, PhD
Rigg, Arthur George - BA, MA, DPhil
Stock, Brian - AB, PhD
Taylor, Robert - PhD

Associate Members

Bolintineanu, Ioana Alexandra - BSc, MA, PhD
Diem, Albrecht - MA, PhD
Getz, Robert - BA, MA, PhD
Ghosh, Shami - BA, MA, PhD
Ginther, James - BA, MA, PhD
Lee, Daniel - BA, MA, MPH, PhD
Miles, Brent - PhD
Miller, Jeanne - BA, MA, PhD
Pakis, Valentine - BA, MA, PhD
Pelle, Stephen - BA, MA, PhD
Rasmussen, Ann Marie - BA, PhD
Sergi, Matthew - BFA, PhD
Wallis, Faith - BAMA, PhD

Medieval Studies: Medieval Studies MA

Master of Arts

Program Description

MA students may be full-time or part-time. Full-time students may be admitted to either a one-year or a two-year degree, depending on their previous training in Latin and medieval studies.

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 for the MA degree, full-time and part-time, must:
    - follow application instructions on the department's website and
    - 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 MST 1000Y (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 MST 1000Y).
- 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. MST 1000Y *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 one-year MA (typical registration sequence: F/W/S);
6 sessions full-time two-year MA (typical registration sequence: F/W/S/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 for the MA degree, full-time and part-time, must:
    - follow application instructions on the department's website and
    - 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 MST 1000Y (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. MST 1000Y 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 one-year MA (typical registration sequence: F/W/S);
6 sessions full-time two-year MA (typical registration sequence: F/W/S/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' 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 Centre for Medieval Studies' 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 centre's interdepartmental nature, some of these courses on the Middle Ages can be taken in other departments, with the approval of the PhD Coordinator. MST 1001Y 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 the PhD program, course training in Latin is given at two levels. **MST 1001Y** *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 MST 1001Y 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 MST 1001Y 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 should be submitted between the end of the Spring session of Year 2 and the beginning of the Fall session of Year 3. The proposal must be prepared according to the guidelines of the Centre for Medieval Studies. It must be signed by all members of the Advisory Committee and submitted to the centre for approval by the centre's Executive Committee at least two months prior to the Special Field Examination.
- Students must pass the **Level Two Latin examination** and the centre's **examinations in the French and German languages** before moving on to the Special Field Examination. 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 has two components: a statement paper and an oral examination. The statement paper is normally five to seven pages (approximately 1,500-2,000 words) and must be submitted to the members of the Advisory Committee and the centre two weeks before the oral examination takes place. The examination is a two-hour-long oral exam. The Special Field Examination is graded on a pass/fail basis. The Advisory Committee, in consultation with the Executive Committee of the centre, 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.
- After a successful Special Field Examination, i.e., usually during the Spring session of Year 3, students should develop and submit a **PhD dissertation proposal**. This outline of the student's proposed doctoral dissertation should be worked out by the student in close consultation with the supervisor and the Advisory Committee. The complete PhD dissertation proposal must be prepared according to the guidelines of the Centre for Medieval Studies. The proposal must be signed by all members of the student's Advisory Committee and submitted to the centre for approval by the Executive Committee. 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' 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 centre's interdepartmental nature, some of these courses on the Middle Ages

can be taken in other departments, with the approval of the PhD Coordinator. MST 1001Y 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 the PhD program, course training in Latin is given at two levels. **MST 1001Y** *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 MST 1001Y 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 MST 1001Y 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 should be submitted between the end of the Spring session of Year 3 and the beginning of the Fall session of Year 4. The proposal must be prepared according to the guidelines of the Centre for Medieval Studies. It must be signed by all members of the Advisory Committee and submitted to the centre for approval by the centre's Executive Committee at least two months prior to the Special Field Examination.
- Students must pass the **Level Two Latin examination** and the centre's **examinations in the French and German languages** before moving on to the Special Field Examination. 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 has two components: a statement paper and an oral examination. The statement paper is normally five to seven pages (approximately 1,500-2,000 words) and has to be submitted to the members of the Advisory Committee and the centre two weeks before the oral examination takes place. The examination is a two-hour-long oral exam. The Special Field Examination is graded on a pass/fail basis. The Advisory Committee, in consultation with the Executive Committee of the centre, 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.
- After a successful Special Field Examination, i.e., usually during the Spring session of Year 4, students should develop and submit a **PhD dissertation proposal**. This outline of the student's proposed doctoral dissertation should be worked out by the student in close consultation with the supervisor and the Advisory Committee. The complete PhD dissertation proposal must be prepared according to the guidelines of the Centre for Medieval Studies. The proposal must be signed by all members of the student's Advisory Committee and submitted to the centre for approval by the Executive Committee. 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's website which lists the courses the Centre for Medieval Studies will offer 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; further information may be obtained from the centre's website.

Art

FAH 1114H	Multicultural Arts of Medieval Sicily
FAH 1118H	The Medieval Treasury
FAH 1119H	Global Medieval Art in China
FAH 1121H	12th-Century Renaissance?
FAH 1123H	The Art of the Medieval Book
FAH 1125H	Medieval Pilgrimage Art and Architecture
FAH 1126H	Exceptional Cities of the Middle Ages
FAH 1127H	Early Medieval Art

Book History and Print Culture

BKS 1001H	Introduction to Book History
BKS 1002H	Book History in Practice
BKS 2000H	Advanced Seminar in Book History and Print Culture
BKS 2001H	Individual Practicum in Book History and Print Culture

Classics

CLA 5007H	Criticism of Latin Poetry
CLA 5017H	Latin Legal Texts and the History of Late Roman Institutions

Comparative Literature

COL 5021H	Body in Medieval Literature Body and Text
COL 5032H	Feminist Approaches to Medieval Literature
COL 5064H	Medieval Literary Theory
COL 5086H	Literature, Culture, and Contact in Medieval Iberia

East Asian Studies

EAS 1143Y	Civilization in Medieval China

English

ENG 1001H	Old English I
ENG 1002H	Old English II
ENG 1009H	Writing the Nation: Pre-Modern Historigraphies
ENG 1011H	Economies of Medieval Drama: East Anglia, Kent, Sussex
ENG 1013H	Women in Medieval Literature: Image and Author
ENG 1093H	Medieval Vernacular Book
ENG 1551H	The Canterbury Tales
ENG 1552H	Chaucer's Troilus and Criseyde and Other Works
ENG 1582H	Piers Plowman
ENG 1730H	Medieval Drama: The Biblical Cycles and Fragments

French Language and Literature

FRE 1164H	Initiation au français médiéval
FRE 1203H	Séminaire de littérature II : Période

Germanic Languages and Literatures

GER 1200H	Middle High German
GER 1220H	Medieval Arthurian Romance

History

HIS 1213H	Medieval Institutes of Perfection (joint graduate/undergraduate)
HIS 1215H	Social Change in Medieval England, 1154–1279
HIS 1221H	Topics in Early Modern European Social History
HIS 1222H	Ritual in Renaissance and Early Modern Europe
HIS 1223H	Humanism and the Renaissance
HIS 1283H	Crusades, Conversion, and Colonialization in the Medieval Baltic (joint graduate/undergraduate)

History and Philosophy of Science and Technology

HPS 1215H	Medieval Technology and Society
HPS 1217H	Technology and War: 1090–1918
HPS 5007H	Fundamentals of the History of Technology I

Italian Studies

ITA 1025H	Old Italian
ITA 1029H	History of Italian Religious Language
ITA 1165H	Introduction to Italian Philology
ITA 1170H	Textual Criticism and the Editing of Early Italian Texts
ITA 1200H	Dante
ITA 1202H	Dante as a Reader of Augustine's City of God: Augustinian Textual Communities at the Beginning of the 14th Century
ITA 1203H	Boccaccio
ITA 1330H	Petrarch and Petrarchism
ITA 1540H	Renaissance Italian Theatre
ITA 1545H	The Sacra Rappresentazione
ITA 1597H	The Commedia dell'Arte

Joint Courses

JIF 1000H	Romance Philology I
JIF 1001H	Romance Philology II

Medieval Studies

MST 1000Y	Medieval Latin I
MST 1001Y	Medieval Latin II
MST 1002H	Advanced Latin: Prudentius and his Influence (PR)
MST 1015H	Medieval Representation of Sexual Dissidence
MST 1020H	The Medieval Latin Epic (PR)
MST 1101H	Codicology (PR)
MST 1102H	Practical Palaeography (PR)
MST 1104H	Latin Palaeography I (PR)
MST 1105H	Latin Palaeography II (PR)
MST 1107H	Latin Textual Criticism (PR)
MST 1110H	Diplomatics and Diplomatic Editing (PR)

MST 1111H	Sources and Materials for Editing Medieval Texts (PR)
MST 1113H	Vernacular Text-Editing: A Collaborative Project
MST 1115H	English Palaeography (PR)
MST 1327H	Death, Dying, and Society in Medieval Northern Europe
MST 1370H	From Farm to Market: Social and Economic Transformation in Medieval Europe
MST 1371H	Old English Philology: Grammar (PR)
MST 1373H	English Language and Literature in Transition, 1100–1250
MST 1379H	The Blickling Homilies (PR)
MST 1381H	Homilies of the Vercelli Book (PR)
MST 1383H	Poetry and Prose of the Vercelli Book
MST 1384H	The Exeter Book of Old English Verse (PR)
MST 1398H	Alfredian Prose (prerequisite: ENG 1001H or equivalent; MA Latin)
MST 1422H	Introduction to the Study of Magic in the Middle Ages
MST 2001H	Old Saxon
MST 2005H	Medieval German Heroic Epic (PR)
MST 2006H	Wolfram von Eschenbach: Parzival (PR)
MST 2007H	Old High German
MST 2010H	Old Norse I
MST 2015H	Studies in Old Norse Texts (PR)
MST 2017H	The Sources of Norse Myths (PR)
MST 2030Y	Old and Middle Irish
MST 2032H	Medieval Irish Poetry 500–1600 (PR)
MST 2033H	Textual Studies in Medieval Irish Poetry (PR)
MST 2034H	Introduction to Early Irish Law (PR)
MST 2037H	Legendary History of Britain and Ireland from Celtic Sources
MST 2038H	Medieval Brittany (PR)
MST 2040H	Beginnings of Medieval Rhetoric and Poetics (PR)
MST 2042H	Medieval Literary Theory in the Later Middle Ages
MST 2048H	Music in Medieval Life
MST 2051H	Introduction to Middle Welsh
MST 2052H	Medieval Welsh Texts
MST 2055Y	Studies in Middle Welsh Texts (PR)
MST 3015H	Introduction to Ge'ez (Classical Ethiopic)
MST 3016H	Intermediate Ge'ez (Classical Ethiopic) (prerequisite: MST 3015H)
MST 3021H	Boethius (PR)
MST 3022H	Consolation Through the Ages: Later Medieval Approaches to Boethius's Consolation of Philosophy (PR)
MST 3035H	Medieval Representations of Death, Sickness, and Crime (1100–1500)
MST 3103H	Gender and Desire in the Spirituality of Aelred of Rievaulx (PR)
MST 3112H	Geography and Identity in Old and Middle English Literature
MST 3113H	Figures of Heroism in Old English Literature (PR)
MST 3115H	Hospitality and Hostility in Old English Literature (PR)
MST 3116H	Topics in Medieval Medicine
MST 3123H	Introduction to Medieval Medicine
MST 3124H	Medieval Studies in the Digital Age
MST 3125H	The Medieval Short Story
MST 3126H	The Apocalypse in Medieval English Literature
MST 3140Y	Medieval Catalan Language and Literature
MST 3150H	Medieval French Epic (PR)
MST 3151H	Introduction to Old French
MST 3152H	Introduction to Medieval Occitan (PR)
MST 3153H	Medieval Occitan Literature
MST 3155H	Middle French Literature
MST 3158H	The Roman de la Rose and Medieval Allegory (PR)
MST 3159H	Classical Antiquity in the French Middle Ages (PR)
MST 3160H	Introduction to Romance Philology: From Vulgar Latin to the First Literary Texts
MST 3162H	Boccaccio and Chaucer
MST 3163H	Medieval French Historiography
MST 3164H	Medieval French Romance
MST 3165H	Vernacular Religious Literature in Medieval France
MST 3203H	Topics in Medieval Economic History
MST 3205H	Violence in Medieval Society
MST 3207H	Decretists and Decretalists: Canonical Jurisprudence 1140–1300
MST 3210H	Medieval Spain (PR)
MST 3211H	High Mediaeval Papacy
MST 3225H	Jews and Christians in Medieval and Renaissance Europe
MST 3230H	The Common Law of Medieval Europe
MST 3231H	Clio's Workshop: Introduction to Historical Methods
MST 3235H	Communal Florence, 1150–1530
MST 3237H	Through the Lens of Monastic Rules and Customaries
MST 3241H	Everyday Life in Medieval Europe
MST 3242H	Carolingian Europe 750–900 CE
MST 3244H	Saints of Early Medieval Italy
MST 3245H	Pharmacy from Antiquity to the Early Middle Ages
MST 3246H	Pharmacy from Early Islam to Medieval and Renaissance Europe
MST 3251H	The Merovingians
MST 3255H	Bishops in the High Middle Ages
MST 3262H	Monastic Identities
MST 3301H	Themes in Medieval Philosophy
MST 3306H	Topics in Augustine
MST 3308H	The Philosophy of Peter Abelard
MST 3309H	Birth of the Will: Augustine and Anselm
MST 3310H	Thomas Aquinas
MST 3311H	Topics in Medieval Metaphysics (PR)
MST 3321H	Philosophy of Mind in the Middle Ages (PR)
MST 3322H	William of Ockham
MST 3327H	Free Will and Human Action in Medieval Philosophy
MST 3340H	Imagination in Medieval Philosophy
MST 3346H	Medieval Islamic Philosophy
MST 3501H	Introduction to the Medieval Christian Liturgy
MST 3601H	Medieval Spanish Sources in Context
MST 3602H	Crime and Punishment in the Middle Ages
MST 9310Y, H	Directed Reading

MST 9315Y, H	Directed Reading

Music

MUS 1040H	Topics in Medieval Music

Near and Middle Eastern Civilizations

NMC 1500Y	Archaeology, from Alexander to Muhammad
NMC 2090Y	The Prophet and the Caliphates: Early Islamic History to 1258
NMC 2119H	Readings in Medieval Arabic Documents
NMC 2221H	Persian Mirrors for Princes
NMC 2222H	Persian Mystical Poetry
NMC 2226H	Medieval Persian Historical and Diplomatics
NMC 2500H	Early Islamic Art and Architecture
NMC 2515Y	The Islamic City
NMC 2521H	The Taj Mahal and Its Origins
NMC 2526H	Text and Image: The Formation of Arabic and Persian Manuscript Illustration

Philosophy

PHL 2020H	Augustine
PHL 2030H	Aquinas
PHL 2032H	Seminar in Aquinas
PHL 2040H	Medieval Philosophy
PHL 2041H	Seminar in Medieval Philosophy
PHL 2042H	Topics in Medieval Philosophy
PHL 2045H	Late Medieval Philosophy

Religion

RLG 3232H	Sacred Space
RLG 3653H	Jewish Exegetical Traditions in Antiquity

Slavic Languages and Literatures

SLA 1104H	Introduction to Old Church Slavonic
SLA 1109H	Studies in Old Church Slavonic

Molecular Genetics

Molecular Genetics: Introduction

Faculty Affiliation

Medicine

Degree Programs

Genetic Counselling

MSc

Medical Genomics

MHSc

Molecular Genetics

MSc
PhD

Combined Degree Programs

STG, MD / PhD

Collaborative Specializations

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

1. **Developmental Biology**
   - Molecular Genetics, MSc, PhD
2. **Genome Biology and Bioinformatics**
   - 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 Science Building, the Donnelly Centre, the Hospital for Sick Children, and the Ontario Institute for Cancer Research.

Faculty members run a variety of research programs in diverse areas such as genetic models of development and disease; molecular medicine and human genetics; cellular and molecular structure and function; molecular microbiology and infectious disease; computational and systems biology; functional genomics and proteomics.

Contact and Address

Web: www.moleculargenetics.utoronto.ca
Email: graduate.coordinator@utoronto.ca
Telephone: (416) 978-8359
Fax: (416) 978-6885

Department of Molecular Genetics
University of Toronto
Medical Sciences Building
Room 4398, 1 King's College Circle
Toronto, Ontario M5S 1A8
Canada

Molecular Genetics: Graduate Faculty

Full Members

Andrews, Brenda Jean - BSc, PhD
Andrulis, Irene - BA, PhD
Aubin, Jane - BSc, PhD
Bader, Gary - BSc, PhD
Blencowe, Benjamin - BSc, PhD
Bognar, Andrew - BSc, PhD
Boone, Charlie - BSc, PhD
Boulianne, Gabrielle - BSc, PhD
Brill, Julie - PhD
Brown, Martha - BSc, MSc, PhD
Brumell, John - BSc, PhD
Campos, Eric - PhD
Caudy, Amy - PhD
Chan, Hue Sun - BSc, MA, PhD
Chen, Xin - PhD
Ciruna, Brian - BSc, PhD
Claycomb, Julie - BS, BA, PhD
Cochrane, Alan - BSc, PhD
Cohn, Ronald - MD
Collins, Richard - BSc, PhD
Cordes, Sabine - BS, PhD
Cowen, Leah - BSc, PhD (***Chair and Graduate Chair***)
Culotti, Joseph - PhD
Davidson, Alan Richard - BSc, PhD
Delgado Olguin, Paul - BSc, PhD
Dennis, James - PhD
Derry, W. Brent - BSc, MSc, PhD
Dick, John - PhD
Dirks, Peter - MD, PhD
Dowling, James - MD
Duan, Shumin - PhD
Durocher, Daniel - PhD
Edwards, Aled - BSc, PhD
Egan, Sean - PhD
Ellis, James - PhD
Emili, Andrew - DPM, 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
Hudson, Thomas J - MD
Hughes, Timothy - BSE, BMus, PhD

Hui, Chi-Chung - PhD (***Associate Chair***)
Hurd, Thomas Ryan - BSc, PhD
Joshi-Sukhwal, Sadhna - BSc, MSc, PhD, DSc
Justice, Monica - PhD
Kafri, Ran - BSc, MSc, PhD
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
Meneghini, Marc - BSc, PhD
Meyn, Michael - MD
Miller, Freda - BSc, PhD
Moffat, Jason - BSc, PhD
Moran, Michael - BSc, PhD
Morris, Quaid - BS, PhD
Muffat, Julien - PhD
Navarre, William - BSc, PhD
Okamoto, Kenichi - BS, MA, PhD
Osborne, Lucy - PhD
Pai, Emil - PhD
Park, Jeehye - PhD
Parkinson, John - BS, PhD
Pearson, Bret - BS, PhD
Pearson, Christopher - PhD
Pelletier, Laurence - BSc, MSc, PhD
Ray, Peter - PhD
Reinke, Aaron - PhD
Rini, James - BSc, PhD
Roder, John - PhD
Rommens, Johanna - BSc, PhD
Rossant, Janet - PhD
Rost, Hannes - PhD
Roth, Frederick - PhD
Roy, Peter John - BSc, PhD (***Graduate Coordinator***)
Scherer, Stephen - 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
Van Der Kooy, Derek - BSc, MA, PhD
Wilde, Andrew Rhys - BSc, PhD
Wrana, Jeff - PhD
Wu, Zhi-Ying - PhD
Yang, Xiaohang - 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

Aronson, Melyssa - BS, MS
Babul-Hirji, Riyana - BSc, MSc
Care, Melanie - BSc, MSc
Carroll, Johanna - BA, PhD
Chitayat, David - MD
Cytrynbaum, Cheryl - MSc
Druker, Harriet - MSc
Dupuis, Lucie - MSc
Gibbons, Clare - BS, MSc
Hewson, Stacy - MSc
Hill, Jessica - BSc, MSc, PhD
Hoang, Ny - MSc
Horsburgh, Sheri - BSc, MS
Kaiser, Amy - BA
Klatt, Regan - BSc, MSc
Lemmens, Trudo - LLM, DCL, Dr. William M Scholl Chair in Health Law and Policy
Liston, Eriskay - BA, MSc
Martin, Nicole - BSc, MS
McCuaig, Jeanna - MS
Mendoza, Roberto - MD
Murphy, Jillian - BSc, MSc
Myles Reid, Diane - BSc, MSc
Nanda, Sonia - BS, MSc
Quercia, Nada - BS, MSc
Semotiuk, Kara - BSc
Semotok, Jennifer - PhD
Shugar, Andrea - BSc, MS
Shuman, Cheryl - MSc
Silver, Rachel - BSc, MSc
Sroka, Hana - BS, MSc
Steele, Leslie - BSc, MSc
Steiner, Martina - PhD
Styles, Erin - BSc, PhD
Sweeney, Frederic - PhD
Szuto, Anna - MSc
Uster, Tamarah - BSc, MS
Watkins, Nicholas - MSc
Weksberg, Rosanna - MD, PhD
Yoon, Grace - MD
Zahavich, Laura - MSc

Molecular Genetics: Genetic Counselling MSc

Master of Science

Program Description

The MSc program is a full-time professional degree program that prepares students with the academic and clinical skills to provide genetic counselling. Graduates may work as part of a health-care team to gather relevant medical and family histories, to guide further investigations, and to communicate

probable or established diagnoses, mode of inheritance, natural history, risk of recurrence, and associated options. This program has been accredited by the American Board of 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.
- An appropriate bachelor's degree from a recognized university with standing equivalent to a University of Toronto B+, both cumulatively and in the final year.
- Prerequisite courses in biology, molecular biology/genetics, biochemistry, embryology/developmental biology, statistics, and psychology.
- The development of strong interpersonal skills as evidenced by extracurricular activity is sought in both the application and interview processes.
- Conditional acceptance may be granted to outstanding applicants lacking the above prerequisite courses; in such instances, the courses deemed necessary must be completed with a B+ standing prior to admission.

Program Requirements

- Students must complete **13.0 full-course equivalents (FCEs)** as follows:
  - 8.5 FCEs in coursework with a minimum B standing. Lectures, meetings, and rounds must be attended at a minimum of 85% of scheduled occurrences.
  - 0.5 FCE in labs
  - 1.0 FCE in tutorials
  - 1.0 FCE independent research project
  - 2.0 FCEs in clinical practicums
- There is no thesis requirement. The independent research project consists of a limited clinical research study, an extensive literature review from a novel viewpoint, or a new case presentation involving clinical, cytogenetic, and molecular workup. Students must present the independent research project both orally and in a written format suitable for publication.
- Students spend a minimum of 21 months over a two-year period in full-time attendance.
- Students are required to organize an intervening summer rotation in a geographic location of their choice.

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

MSC 2010Y	Molecular Medicine in Human Genetic Disease
MMG 1120Y+	Clinical Rotations I
MMG 1122Y	Issues in Genetic Counselling I
MMG 1124Y	Principles of Effective Counselling
MMG 1126Y	Clinical Issues in Pregnancy and Child Development
MMG 1128Y	Risk Calculation and Research Methodology
MMG 1130Y	Tutorial in Molecular Genetics
MMG 1132H	Laboratory Skills
MMG 1220Y	Clinical Rotations II
MMG 1222Y	Issues in Genetic Counselling II
MMG 1224Y	Advanced Principles of Effective Counselling
MMG 1226Y	Concepts in Clinical Genetics
MMG 1228Y	Independent Research Project
MMG 1230H	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, research scientists, and laboratory professionals with the theory and practical knowledge necessary to incorporate theory and practical aspects of generating and analyzing 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
  - 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 (30 minutes).

Program Requirements

Students must complete a total of **9.0 full-course equivalents (FCEs)** as follows:

- Year 1:
  - MMG 3001Y *Advanced Human Genetics* (2.0 FCEs, Fall and Winter)
  - MMG 3002H *Biological Statistics* (1.0 FCE, Fall)
  - MMG 3003Y *Genomics Methodologies* (2.0 FCEs, Winter and Summer).
- Year 2:
  - MMG 3004H *Communication of Genetic Information* (1.0 FCE, Fall)
  - MMG 3005Y*Ethical and Legal Implications of Genomics* (1.0 FCE, Fall)
  - MMG 3006Y *Future Directions in Medical Genomics* (1.0 FCE, Winter)
  - MMG 3007H *Practicum in Patient Management and Medical Genomics*, an elective for students and trainees in patient-facing medical fields (1.0 FCE, Winter)
    or
    MMG 3008H *Practicum in Modern Genomics*, an elective for students in laboratory/research science careers (1.0 FCE, Winter).

Program Length

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

Time Limit

3 years

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

- Successful completion of MMG 1010H, MMG 1012H[0] (or equivalent), and MMG 1015Y[0] (seminar course).
- A thesis on a research project.
- Defence of the thesis at an oral examination.
- 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

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

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.
- Students with a BSc degree, an MD degree, or equivalent may be accepted directly into the PhD program.
- Applicants may be admitted into the PhD program with a completed MSc degree or equivalent from the University of Toronto or another recognized university.
- Attainment of minimum admission standards does not guarantee acceptance into the PhD program.

Program Requirements

- Successful completion of MMG 1010H, MMG 1012H[0] (or equivalent), and MMG 1015Y[0] (seminar course), MMG 1016H[0] (or equivalent), and MMG 1017H[0].
- A thesis on a research project.
- Students entering the doctoral program from a master's program, either through transfer or admission, must spend a minimum of two sessions in full-time attendance. Students entering the doctoral program from a bachelor's program must spend a minimum of three sessions in full-time attendance.
- 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;
  - 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.

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

Molecular Genetics: Molecular Genetics MSc, PhD Courses

JBB 1425H	Structural Biology: Principles and Practice
JBB 2025H	Protein Crystallography
JDB 1024Y	Topics in Developmental Biology
JDB 1025H	Developmental Biology
JDB 1026Y	Student Seminars in Developmental Biology
MMG 1010H	Molecular Genetics Colloquium
MMG 1012H[0]	Topics in Molecular Genetics I (formerly MMG 1012Y[0])
MMG 1015Y[0]	Seminar
MMG 1016H[0]	Topics in Molecular Genetics II (formerly MMG 1014Y[0])
MMG 1017H[0]	Topics in Molecular Genetics III
MMG 1420H	Regulation of Gene Expression
MMG 1425H	Signal Transduction and Cell Cycle Regulation
MMG 1451H	Genetic Analysis of Development: Yeast and Worms

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

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:

1. **Aging, Palliative and Supportive Care Across the Life Course**
   - Music, MA, PhD
2. **Book History and Print Culture**
   - Music, MA, PhD
3. **Editing Medieval Texts**
   - Music, PhD
4. **Human Development (admissions have been suspended)**
   - Music, PhD
5. **Jewish Studies**
   - Music, MA, PhD
   - Music Performance, DMA
6. **Neuroscience**
   - Music, MA, PhD
7. **Sexual Diversity Studies**
   - Music, MA, PhD
8. **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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Fax: (416) 946-3353

Graduate Department of Music
University of Toronto
Edward Johnson Building
80 Queen's Park Crescent
Toronto, Ontario M5S 2C5
Canada

Music: Graduate Faculty

Full Members

Albano, Michael
Apfelstadt, Hilary - PhD
Bartel, Lee - BA, BMus, MEd, PhD
Bowen, William - BA, BMus, MA, PhD
Britton, Eliot - PhD
Clark, Caryl - BMus, MA, PhD
Degli Esposti Elisi, Enrico - DMA
Dolloff, Lori Anne - MusB, PhD
Edwards, Darryl - BEd, BMus, MMus, DMA
Elliott, Robin - BMus, MA, PhD (**Acting Associate Dean, Academic and Student Affairs**)
Foote, Gordon - DMA
Gould, Elizabeth - BM, MA, MusDoc
Haines, John - BSc, BA, MA, PhD
Hatzis, Christos - MusM, PhD
Hemmasi, Farzaneh - PhD
Horst, Sandra - BMus, MM
Huang, Yai-Yun - DMA
Johnston, Gregory - MusB, MA, PhD
Kippen, James - BA, PhD
Koga, Midori - BMus, AA, MMus, DMA (*Associate Dean, Graduate Education*)
Kruspe, John - MusBac, ARCT
Kulesha, Gary - AA, ARCT
Lee, Sherry - BMus, MMus, PhD (*Associate Dean, Research*)

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
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, Annette - BAMus, PhD
Taylor, Daniel - MM
Thaut, Michael - PhD
Vande Moortele, Steven - PhD
Walter, Cameron - BMus, MMus, EdD

Members Emeriti

Aide, William - BSc
Beach, David - BA, MusM, PhD

Associate Members

Gutsche-Miller, Sarah - PhD
Hennigar, Harcus - BMus, BA
Hetherington, David - BA, ARCT
John, Bina - BM, BE, MM, MusD
Komisaruk, Kevin - BMus, MMus, MusDoc
Mayer, Uri - MM
Murley, Mike - BFA
Nediger, Charlotte - MMus
Nielsen, Wendy - BMus, MM
Orlov, Marietta - BM
Sanborn, Chase
Sicsic, Nancy - MMus
Tan, Daphne - PhD
Watts, Camille - BMus

Music: Music MA, Ethnomusicology Field

Master of Arts

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: MUS 1000H *Introduction to Music Research I* in Year 1
  - 0.5 FCE: MUS 1002H *Fieldwork Methods and Practicum*, offered in alternate years
  - 3.5 of the 6.0 FCEs must be in the discipline; this includes MUS 1000H
  - 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. MUS 1990H *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, Music and Health Sciences Field

Master of Arts

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:
      - CHL 5201H *Biostatistics I*
      - NUR 1075H *Introductory Statistics for Health Sciences Research*
      - REH 1120H *Research Methods for Rehabilitation*
      - JOI 1287H *Introduction to Applied Statistics*
    - MUS 7412H *Elementary Improvisation Methods* (0.5 FCE)
    - MUS 7110H *Neurosciences of Music* (0.5 FCE)
    - Three of the following courses (1.5 FCEs):
      - MUS 4248H *Optimizing the Singing Mind*
      - MUS 4613H *Performance Techniques for Hospice Palliative Care*
      - MUS 7400H *Introduction to Music in Health Care*
      - MUS 7406H *Music Psychology*
      - MUS 7415H *Topics in Music and Health I*
      - MUS 7416H *Topics in Music and Health II*
  - Elective courses (1.0 FCEs) 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

Music: Music MA, Music Education Field

Master of Arts

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 MUS 2111H *Research Methods in Music Education* and MUS 2151H *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 (MUS 2990Y) 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 student 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

Music: Music MA, Musicology Field

Master of Arts

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: MUS 1000H *Introduction to Music Research I* in Year 1.
    - 3.0 of the 6.0 FCEs must be in the discipline; this includes MUS 1000H.
    - 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. MUS 1990H *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.
- **One language** other than English is required. Students must fulfil the language requirement during Year 1. The default language at the MA level is German. Students can fulfil the language requirement in one of the following three ways:
    - complete GER 300H at U of T or its equivalent from another university with a minimum grade of B+ **or**
    - complete GER 6000H **or**
    - pass a proficiency exam set by the division and department.
- Students may petition to substitute another language for German if this other language is more relevant to their research. The petition must be submitted to the divisional coordinator by the end of the first session of Year 1 and must be approved by the divisional coordinator in consultation with the relevant subdivision and the Associate Dean, Graduate Education. Once the petition has been approved, the procedure is the same as for German.
- 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, Music Theory Field

Master of Arts

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: MUS 1000H *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.
    - MUS 1990H *MA Major Paper* (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. Students must fulfil the language requirement during Year 1. The default language at the MA level is German. Students can fulfil the language requirement in one of the following three ways:
    - complete GER 300H at U of T or its equivalent from another university with a minimum grade of B+ **or**
    - complete GER 6000H **or**
    - pass a proficiency exam set by the division and department.
- Students may petition to substitute another language for German if this other language is more relevant to their research. The petition must be submitted to the divisional coordinator by the end of the first session of Year 1 and must be approved by the divisional coordinator in consultation with the relevant subdivision and the Associate Dean, Graduate Education. Once the petition has been approved, the procedure is the same as for German.
- 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, Ethnomusicology Field

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) 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: MUS 1250H *PhD Seminar*, taken in the first session
        - 0.5 FCE: MUS 1997H *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 MUS 1997H *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 MUS 1997H must then be agreed upon. The supervisor will be primarily responsible for determining the structure and content of MUS 1997H, 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

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 MUS 1250H and MUS 1997H. 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: MUS 1250H *PhD Seminar*, taken in the first session of Year 2.
        - 0.5 FCE: MUS 1997H *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 MUS 1997H must then be agreed upon. The supervisor will be primarily responsible for determining the structure and content of MUS 1997H, which will include a research paper.
- A set of **three comprehensive exams** in (1) contemporary issues, (2) history of the field, and (3) repertoire, to be taken at the beginning of Year 3.
    - Students are permitted two attempts to complete each exam. A second attempt must take place at the beginning of the second

session. If students are unsuccessful in their second attempt at the comprehensive exam, the department will make a recommendation for program termination.
- Students must prepare a **thesis** and will defend it at a Doctoral Final Oral Examination.
- The **residency** requirement for all students is three years, whereby students must be on campus full-time and consequently in geographical proximity to be able to participate fully in the University activities associated with the program.

Program Length

5 years

Time Limit

7 years

Music: Music PhD, Music and Health Sciences Field

Doctor of Philosophy

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):
    - MUS 7995Y^{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:
      - CHL 5201H *Biostatistics I*
      - NUR 1075H *Introductory Statistics for Health Sciences Research*
      - REH 1120H *Research Methods for Rehabilitation*
      - JOI 1287H *Introduction to Applied Statistics*
    - Four of the following courses (2.0 FCEs):
      - MUS 4248H *Optimizing the Singing Mind*
      - MUS 4613H *Performance Techniques for Hospice Palliative Care*
      - MUS 7110H *Neurosciences of Music*
      - MUS 7406H *Music Psychology*
      - MUS 7412H *Elementary Improvisation Methods*
      - MUS 7415H *Topics in Music and Health I*
      - MUS 7416H *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 Music Education Field

Doctor of Philosophy

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.
- Applicants must provide their results on the Miller Analogies Test.
- 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 MUS 2995Y[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.
- Applicants must provide their results on the Miller Analogies Test.
- 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 MUS 2995Y[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, Musicology Field

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) 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: MUS 1250H *PhD Seminar* is taken in the first session
        - 0.5 FCE: MUS 1999H *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 MUS 1999H, 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." One of the languages will ordinarily be German but students may petition to substitute another language if it is more relevant to their research. The goal is to have the language requirement fulfilled by the end of Year 2.
    - **"Secondary" language requirements** are the same as those at the MA level. That is, one language other than English is required. The default language at the PhD level is German. Students can fulfil the language requirement in one of the following three ways:
        - complete GER 300H at U of T or its equivalent from another university, with a minimum grade of B+; **or**
        - complete GER 6000H; **or**
        - pass a proficiency exam set by the division and department.
    - Students who have previously fulfilled the MA language requirement at U of T may count this as the secondary language, use it as a stepping stone towards the primary language, or select two new languages. It is expected that students complete the secondary portion of the language requirement by the end of Year 1.
    - **"Primary" language requirements** involve advanced reading proficiency in the chosen language. The primary language requirement is satisfied by passing an in-house exam or by taking an exam in another graduate unit by arrangement through the Graduate Department of Music. The in-house exam is normally offered three times per year (in September, December, and April) and there is no limit to the number of times it can be retaken. It is mandatory that students attempt the exam by the end of Year 2.
    - Students who wish to choose two languages not including German for the language requirement must submit a petition to the divisional coordinator by the end of Year 1. Once the petition has been approved, the procedure is the same as for German. The request must be approved by the coordinator in consultation with the relevant subdivision and the Associate Dean, Graduate Education.

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 MUS 1999H, 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: MUS 1250H *PhD Seminar*, taken in the first session of Year 2.
    - 0.5 FCE: MUS 1999H *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." One of the languages will ordinarily be German but students may petition to substitute another language if it is more relevant to their research. The goal is to have the language requirement fulfilled by the end of Year 3.
    - **"Secondary" language requirements** are the same as those at the MA level. That is, one language other than English is required. The default language at the PhD level is German. Students can fulfil the language requirement in one of the following three ways:
        - complete GER 300H at U of T or its equivalent from another university, with a minimum grade of B+ **or**
        - complete GER 6000H **or**
        - pass a proficiency exam set by the division and department.
    - Students who have previously fulfilled the MA language requirement at U of T may count this as the secondary language, use it as a stepping stone towards the primary language, or select two new languages. It is expected that students complete the secondary portion of the language requirement by the end of Year 2.
    - **"Primary" language requirements** involve advanced reading proficiency in the chosen language. The primary language requirement is satisfied by passing an in-house exam or by taking an exam in another graduate unit by arrangement through the Graduate Department of Music. The in-house exam is normally offered three times per year (in September, December, and April) and there is no limit to the number of times it can be retaken. It is mandatory that students attempt the exam by the end of Year 3.
    - Students who wish to choose two languages not including German for the language requirement must submit a petition to the divisional coordinator by the end of Year 1. Once the petition has been approved, the procedure is the same as for German. The request must be approved by the coordinator in consultation with the relevant subdivision and the Associate Dean, Graduate Education.

Program Length

5 years

Time Limit

7 years

Music: Music PhD, Music Theory Field

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) 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: MUS 1250H *PhD Seminar* (taken in the first session).
    - 0.5 FCE: MUS 3997H *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 MUS 3997H *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." One of the languages will ordinarily be German but students may petition to substitute another language if it is more relevant to their research. The goal is to have the language requirement fulfilled by the end of Year 2.
    - **"Secondary" language requirements** are the same as those at the MA level. That is, one language other than English is required. The default language at the PhD level is German. Students can fulfil the language requirement in one of the following three ways:
        - complete GER 300H at U of T or its equivalent from another university, with a minimum grade of B+; or
        - complete GER 6000H; or
        - pass a proficiency exam set by the division and department.
    - Students who have previously fulfilled the MA language requirement at U of T may count this as the secondary language, use it as a stepping stone towards the primary language, or select two new languages. It is expected that students complete the secondary portion of the language requirement by the end of Year 1.
    - **"Primary" language requirements** involve advanced reading proficiency in the chosen language. The primary language requirement is satisfied by passing an in-house exam or by taking an exam in another graduate unit by arrangement through the Graduate Department of Music. The in-house exam is normally offered three times per year (in September, December, and April) and there is no limit to the number of times it can be retaken. It is mandatory that students attempt the exam by the end of Year 2.
- Students who wish to choose two languages not including German for the language requirement must submit a petition to the divisional coordinator by the end of Year 1. Once the petition has been approved, the procedure is the same as for German. The request must be approved by the coordinator in consultation with the relevant subdivision and the Associate Dean, Graduate Education.

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 MUS 3997H *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: MUS 1250H *PhD Seminar*, taken in the first session of Year 2.
    - 0.5 FCE: MUS 3997H *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." One of the languages will ordinarily be German but students may petition to substitute another language if it is more relevant to their research. The goal is to have the language requirement fulfilled by the end of Year 3.
    - **"Secondary" language requirements** are the same as those at the MA level. That is, one language other than English is required. The default language at the PhD level is German. Students can fulfil the language requirement in one of the following three ways:
        - complete GER 300H at U of T or its equivalent from another university, with a minimum grade of B+; or
        - complete GER 6000H; or
        - pass a proficiency exam set by the division and department.
    - Students who have previously fulfilled the MA language requirement at U of T may count this as the secondary language, use it as a stepping stone towards the primary language, or select two new languages. It is expected that students complete the secondary portion of the language requirement by the end of Year 2.
    - **"Primary" language requirements** involve advanced reading proficiency in the chosen language. The primary language requirement is satisfied by passing an in-house exam or by taking an exam in another graduate unit by arrangement through the Graduate Department of Music. The in-house exam is normally offered three times per year (in September, December, and April) and there is no limit to the number of times it can be retaken. It is mandatory that students attempt the exam by the end of Year 3.
- Students who wish to choose two languages not including German for the language requirement must submit a petition to the divisional coordinator by the end of Year 2. Once the petition has been approved, the procedure is the same as for German. The request must be approved by the coordinator in consultation with the relevant subdivision and the Associate Dean, Graduate Education.

Program Length

5 years

Time Limit

7 years

Music: Music MA, PhD Courses, Ethnomusicology and Musicology Fields

Final course offerings may vary. Students should consult the departmental handbook.

MUS 1000H	Introduction to Music Research I
MUS 1001H	Approaches to Musicology
MUS 1002H	Fieldwork Methods and Practicum
MUS 1013H	Monteverdi's Madrigals
MUS 1042H	The Ballets Russes
MUS 1055H	Oratorio
MUS 1057H	Performing Politics: Individuality and the Collective in Music and Dance
MUS 1058H	Music and Politics
MUS 1059H	Ars Nova
MUS 1061H	Performance Space in Seventeenth-Century Music

MUS 1065H	Music History Pedagogy
MUS 1066H	Music and the Racial and Ethnic Imaginations
MUS 1068H	Music and Jewish Identity
MUS 1106H	Early Music in Canada
MUS 1119 H	Music and Ceremonial 1550–1700
MUS 1120 H	The Church Cantatas of J. S. Bach
MUS 1129H	Music and Gender
MUS 1134H	Music, Capital, Markets, and Industries
MUS 1140H	Romantic Musings on the Middle Ages
MUS 1142H	Sound, Music, and Everyday Life
MUS 1143H	Musitopias: Cultures of Imagination
MUS 1144H	Music in the Films of Sir Alfred Hitchcock
MUS 1149H	Jews' Sonic Worlds from Early Modernity to the Present
MUS 1202H	Music of the Mid-Eighteenth Century
MUS 1204H	Orientalism and Opera: Interdisciplinary Approaches
MUS 1223H	Virtuosity in Baroque Music
MUS 1230H	The Cultural Geography of Music and Sound
MUS 1232H	Music, Culture, and Health
MUS 1234H	Health, Aging and Popular Music
MUS 1235H	Topics in Music and the History of Medicine
MUS 1236H	Haydn
MUS 1240H	Diegetic Music in Film
MUS 1244H	Rhythm and Metre in Cross-Cultural Perspective
MUS 1246H	Music and Colonialism
MUS 1247H	Sounds and Discourses of Hybridity in Latin American and Caribbean Music
MUS 1249H	Music and Technoculture
MUS 1250H	PhD Seminar
MUS 1254H	Critical Approaches to Popular Music
MUS 1256H	Indigeneities
MUS 1260H	Music and the Enlightenment
MUS 1262H	Symphonies of Gustav Mahler
MUS 1267H	Popular Music and Identity
MUS 1269H	Advanced Research in Indian Music
MUS 1270H	Music and East Asian Modernity
MUS 1271H	Music and Circulation
MUS 1272H	19th Century Music and Discourses of Nature
MUS 1273H	Music in the Western: From Singing Cowboys to Django Unchained
MUS 1274H	Music in Paris: 1871–1914
MUS 1275H	Sound and Music in the Middle East
MUS 1276H	Music and Material Culture
MUS 1277H	Ethnomusicology and Cultural Geography
MUS 1278H	Music and Cultures of Listening in Late Modernity
MUS 1279H	Ethnomusicology without Music
MUS 1317H	Music in Canada
MUS 1327H	The Social Poetics of Music
MUS 1990H	MA Major Paper or Project
MUS 1997H	Research in Ethnomusicology
MUS 1998H	Individual Reading and Research
MUS 1999H[0]	Research in Musicology

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

Music: Music MA, PhD Courses, Music and Health Sciences Field

MUS 7110H	Neurosciences of Music: Scientific Foundations, Clinical Translations
MUS 7199H[0]	Special Research Topic in Music and Health
MUS 7400H	Introduction to Music and Health Care
MUS 7405H	Health in Music Performance
MUS 7406H	Music Psychology
MUS 7412H	Elementary Improvisation Methods
MUS 7415H	Topics in Music and Health
MUS 7416H	Topics in Music and Health II

MUS 7995Y[0]	Music and Health Doctoral Research Project
MUS 7998H[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 Courses, Music Education Field

MUS 2001H	Music in Cultural Perspective
MUS 2004H	Music in Childhood
MUS 2010H	Music and Social Movements
MUS 2111H	Introduction to Research in Music Education
MUS 2112H	Advanced Topics in Research in Music Education (prerequisite: MUS 2111H)
MUS 2113H	Musically Queer
MUS 2115H	Truth and Reconciliation
MUS 2132H	Jazz Education
MUS 2151H	Philosophy and Music Education
MUS 2160H	Contemporary Perspectives in Music Education
MUS 2167H	Curriculum Inquiry
MUS 2175H	Teacher Perspectives in Music Education
MUS 2176H	Social Psychology of Music
MUS 2180H	Seminar in Canadian Music Education
MUS 2182H	Writing in Music Education
MUS 2185H	Curriculum and Instruction in Instrumental Music
MUS 2199H[0]	Special Topics in Music Education
MUS 2203H	The Development of Wind Band
MUS 2222H	Conducting and Teaching Choral Music I
MUS 2223H	Conducting and Teaching Choral Music II
MUS 2990Y[0]	MA Major Essay (Music Education)
MUS 2995Y[0]	Music Education Doctoral Research Project
MUS 2998H	Reading in Advanced Topics in Music Education
MUS 7406H	Music Psychology
MUS 7412H	Elementary Improvisation Methods

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

Music: Music MA, PhD Courses, Music Theory Field

MUS 1250H	PhD Seminar
MUS 1990H	MA Major Paper
MUS 1998H	Individual Reading and Research
MUS 3101H	Seminar in Schenkerian Analysis I
MUS 3113H	Symphonic Modernisms, 1900–1925
MUS 3208H	The String Quartet in the Twentieth Century
MUS 3228H	Recent Approaches to Classical Form
MUS 3232H	Romantic Form
MUS 3245H	Music of Ligeti and Lutoslawski
MUS 3248H	Current Compositional Practices
MUS 3252H	The Early Music of Arnold Schoenberg
MUS 3306H	Pedagogy of Music Theory
MUS 3309H	Brahms: Symphonies and Chamber Music
MUS 3403H	Theory and Analysis of Atonal Music
MUS 3404H	Extended Tonal Techniques in Twentieth-Century Music
MUS 3405H	Topics in the History of Music Theory: 1600–1950
MUS 3412H	Theories of Rhythm and Metre
MUS 3413H	Music and Drama in Wagner's Ring des Nibelungen
MUS 3997H	Research in Music Theory

Music: Music Performance MMus, Applied Music and Health Field

Master of Music

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: MUS 4444Y *Applied Music I* (Year 1)
  - 0.5 FCE: MUS 7110H *Neurosciences of Music: Scientific Foundations, Clinical Translations* (Year 1)
  - 0.5 FCE: MUS 7400H *Introduction to Music in Health Care* (Year 1)
  - 0.5 FCE: MUS 7412H *Elementary Improvisation Methods* (Year 1)
  - 0.5 FCE: MUS 7415H *Topics in Music and Health Care I* (Year 1)
  - 0.5 FCE: MUS 7416H *Topics in Music and Health Care II* (Year 2)
  - 0.5 FCE: MUS 4115H *Principles of Clinical Performance Pedagogy* (Year 2)
  - 1.0 FCE: MUS 4112Y *Clinical Performance Practicum* (Year 2)
  - 1.0 FCE: Music electives
  - 1.0 FCE: general electives (in Music or, with permission, outside of Music)
- MUS 4166Y *Performance Project* (Credit/No Credit) (end of Year 1)
- MUS 4188Y *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

Music: Music Performance MMus, Collaborative Piano Field

Master of Music

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: MUS 4444Y *Applied Music I*
  - 1.0 FCE: MUS 4445Y *Applied Music II*
  - 1.0 FCE: MUS 4200Y *Seminar in Music Literature*, normally taken in Year 1
  - 0.5 FCE selected from
    - MUS 4600H *Performance Practices Before 1800*
    - MUS 4610H *Analysis and Performance: Music of the Eighteenth and Nineteenth Centuries*
    - MUS 4615H *Analysis and Performance Practices of Twentieth-Century Music*
  - 0.5 FCE: MUS 4210H *Introduction to Music Analysis*
  - 0.5 FCE: MUS 4213H *Advanced Repertoire for Singers and Pianists I*
  - 0.5 FCE: MUS 4214H *Advanced Repertoire for Singers and Pianists II*
  - 0.5 FCE: MUS 4502H *Collaborative Piano Techniques I*
  - 0.5 FCE: MUS 4506H *Sonata Coaching I*
  - MUS 4508H *Collaborative Piano Techniques II Instrumental* or MUS 4509H *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: MUS 4520H *Advanced Diction Studies—French* **or**
  - 0.5 FCE: MUS 4521H *Advanced Diction Studies—Italian* **or**
  - 0.5 FCE: MUS 4522H *Advanced Diction Studies—German*.
- **Two recitals**.

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, Composition Field

Master of Music

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: MUS 3100Y *MMus Advanced Composition I*
  - 1.0 FCE: MUS 3105Y *MMus Advanced Composition II*
  - 1.0 FCE: MUS 3990Y *MMus Composition Thesis.*
- 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, Conducting Field

Master of Music

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)** including:
  - 1.0 FCE: MUS 4200Y *Seminar in Music Literature*, normally taken in Year 1.
  - 0.5 FCE selected from:
    - MUS 4600H *Performance Practices Before 1800* **or** MUS 4606H *Special Topics in Performance Practice*
    - MUS 4610H *Analysis and Performance: Music of the Eighteenth and Nineteenth Centuries*
    - MUS 4615H *Analysis and Performance Practices of Twentieth-Century Music*
  - 0.5 FCE: MUS 4210H *Introduction to Music Analysis*
  - 1.0 FCE: MUS 4444Y *Applied Music I*
  - 1.0 FCE: MUS 4445Y *Applied Music II*
  - Orchestral conducting majors must also complete 3.0 FCEs as follows:
    - 0.5 FCE: MUS 4220H *Orchestral Conducting I*
    - 0.5 FCE: MUS 4221H *Orchestral Conducting II*
    - 1.0 FCE: MUS 4222Y *Advanced Orchestral Conducting*
    - 0.5 FCE: MUS 4223H *Choral Conducting I*
    - 0.5 FCE elective
  - Wind ensemble conducting majors must also complete 2.0 FCEs as follows:
    - 0.5 FCE: MUS 4226H *Wind Ensemble Conducting I*
    - 0.5 FCE: MUS 4227H *Wind Ensemble Conducting II*
    - 0.5 FCE: MUS 4228H *Advanced Wind Conducting I*
    - 0.5 FCE: MUS 4229H *Advanced Wind Conducting II.*
  - Choral conducting majors must also complete 3.0 FCEs as follows:

        - 0.5 FCE: MUS 4220H *Orchestral Conducting I*
        - 0.5 FCE: MUS 4223H *Choral Conducting I*
        - 0.5 FCE: MUS 4224H *Choral Conducting II*
        - 1.0 FCE: MUS 4225Y *Advanced Choral Conducting*
        - 1.0 FCE: MUS 4230Y *Vocal-Choral Pedagogy for Conductors*
        - 0.5 FCE: MUS 4700H *Major Ensemble I* (choral).
- **Two public performances**.

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, Historical Performance Field

Master of Music

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:
        - 2.0 FCEs: MUS 4444Y *Applied Music I* and MUS 4445Y *Applied Music II*
        - 1.0 FCE: MUS 4200Y *Seminar in Music Literature*, normally taken in Year 1
        - 0.5 FCE selected from MUS 4600H *Performance Practices Before 1800;* MUS 4606H *Special Topics in Performance Practice;* MUS 4610H *Analysis and Performance: Music of the Eighteenth and Nineteenth Centuries;* MUS 4615H *Analysis and Performance Practices of Twentieth-Century Music*
        - 0.5 FCE: MUS 4210H *Introduction to Music Analysis*
        - 1.0 FCE in large ensembles: MUS 4774H *Schola Cantorum I* and MUS 4775H *Schola Cantorum II* **or** MUS 4776H *Collegium Musicum I* and MUS 4777H *Collegium Musicum II*
    - 2.0 FCEs in electives 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.
    - MUS 6666Y *Recital I*
    - MUS 8888Y *Recital II.*

Program Length

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

Time Limit

3 years full-time

Music: Music Performance MMus, Instrumental Field

Master of Music

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: MUS 4444Y *Applied Music I* and MUS 4445Y *Applied Music II*
    - 1.0 FCE: MUS 4200Y *Seminar in Music Literature*, normally taken in Year 1
    - 1.0 FCE selected from
        - MUS 4600H *Performance Practices Before 1800* **or** MUS 4606H *Special Topics in Performance Practice*
        - MUS 4610H *Analysis and Performance: Music of the*

Eighteenth and Nineteenth Centuries
        - MUS 4615H *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.
    - 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.** Recitals may include a chamber music component with the approval of the department.

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, Jazz Field

Master of Music

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: MUS 4444Y *Applied Music I*
    - 1.0 FCE: MUS 4445Y *Applied Music II*
    - 1.0 FCE: MUS 4300Y, normally taken in Year 1
    - 0.5 FCE: MUS 4606H *Special Topics in Performance Practice* **or** MUS 4615H *Analysis and Performance Practices of Twentieth-Century Music*
    - Either MUS 4310Y *Advanced Jazz Composition and Arranging I* (1.0 FCE) **or** MUS 4311Y *Advanced Jazz Composition and Arranging II* (1.0 FCE) **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 (MUS 4740H *Small Group Jazz Performance I*, MUS 4741H *Small Group Jazz Performance II*, MUS 4742H *Small Group Jazz Performance III*, MUS 4743H *Small Group Jazz Performance IV*);
        - Jazz Orchestra (MUS 4750H *Jazz Orchestra I*, MUS 4751H *Jazz Orchestra II*, MUS 4752H *Jazz Orchestra III*, MUS 4753H *Jazz Orchestra IV*);
        - Vocal Jazz Ensemble (MUS 4760H *Vocal Jazz Ensemble I*, MUS 4761H *Vocal Jazz Ensemble II*, MUS 4762H *Vocal Jazz Ensemble III*, MUS 4763H *Vocal Jazz Ensemble IV*).
- Two **recitals**; however, students may elect to replace one recital with a significant recording project.

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, Music Technology and Digital Media Field

Master of Music

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:
    1. knowledge of computer applications in music;
    2. competency in music performance or composition (acoustic or digital);
    3. 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: MUS 3610H *Music Entrepreneurship: Music and Cities*
    - 0.5 FCE: MUS 3611H *Creative Applications of Technology I*
    - 0.5 FCE: MUS 3612H *Creative Applications of Technology II*
    - 0.5 FCE: MUS 3613H *Musical Acoustics*
    - 0.5 FCE: MUS 3614H *Sound Recording I*
    - 0.5 FCE: MUS 3615H *Sound Recording II*
    - 0.5 FCE: MUS 3618H *Studio Orchestration and Arranging*
  - Year 2 (3.5 FCEs)
    - 0.5 FCE: JDM 3619H *Digital Media Distribution*
    - 2.0 elective FCEs selected from an approved department list, or from another graduate unit, with permission.
    - 1.0 FCE: MUS 3666Y *Music Technology and Digital Media Major Project* (CR/NCR), 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

Music: Music Performance MMus, Opera Field

Master of Music

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: MUS 4444Y *Applied Music I*
  - 1.0 FCE: MUS 4445Y *Applied Music II*
  - 1.0 FCE: MUS 4200Y *Seminar in Music Literature*, taken in Year 1
  - 1.0 FCE: MUS 4513Y *Operatic Repertory*, taken in Year 2
  - 1.0 FCE chosen from a specified list approved by the department
  - 2.0 FCEs: MUS 4900Y *Operatic Studies I* and MUS 4901Y *Operatic Studies II*
- **Performance** in operatic productions will be evaluated by a committee and assigned grades under MUS 4966Y *Operatic Roles I* and MUS 4988Y *Operatic Roles II*.

Program Length

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

Time Limit

3 years full-time

Music: Music Performance MMus, Piano Pedagogy Field

Master of Music

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: MUS 4444Y *Applied Music I.*

    - 1.0 FCE: MUS 4445Y *Applied Music II*.
    - 1.0 FCE: MUS 4200Y *Seminar in Music Literature*, normally taken in Year 1.
    - 0.5 FCE selected from MUS 4600H *Performance Practices Before 1800;* MUS 4610H *Analysis and Performance: Music of the Eighteenth and Nineteenth Centuries;* MUS 4615H *Analysis and Performance Practices of Twentieth-Century Music*
    - 0.5 FCE: MUS 4210H *Introduction to Music Analysis*
    - 0.5 FCE: MUS 4270H *Piano Pedagogy: Beginning and Intermediate Levels*
    - 0.5 FCE: MUS 4271H *Practicum: Beginning and Intermediate Levels*
    - 0.5 FCE: MUS 4272H *Piano Pedagogy: Advanced and University Levels*
    - 0.5 FCE: MUS 4273H *Practicum: Advanced and University Levels*
    - 1.0 FCE in electives.
- **Two recitals.** With approval, one recital may be replaced by a pedagogy project and presentation.

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, Vocal Field

Master of Music

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: MUS 4444Y *Applied Music I*
        - 1.0 FCE: MUS 4445Y *Applied Music II*
        - 1.0 FCE: MUS 4200Y *Seminar in Music Literature*, normally taken in Year 1
        - 0.5 FCE selected from MUS 4600H *Performance Practices Before 1800* **or** MUS 4606H *Special Topics in Performance Practice*; MUS 4610H *Analysis and Performance: Music of the Eighteenth and Nineteenth Centuries*; MUS 4615H *Analysis and Performance Practices of Twentieth-Century Music*
        - 0.5 FCE: MUS 4210H *Introduction to Music Analysis*
    - 3.0 FCEs chosen from a specified list approved by the department.
- **Two recitals.** Recitals may include a chamber music component with the approval of the department.

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, Vocal Pedagogy Field

Master of Music

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: MUS 4200Y *Seminar in Music Literature*, normally taken in Year 1
    - 0.5 FCE: MUS 4210H *Introduction to Music Analysis*
    - 0.5 FCE selected from MUS 4213H *Advanced Repertoire for Singers and Pianists I*; MUS 4231H *Advanced Vocal Repertoire Study I;* MUS 4730H *Performance Studies I*

    - 1.0 FCE: MUS 4240Y *Introduction to Voice Pedagogy and Vocology*
    - 1.0 FCE: MUS 4241Y *Advanced Vocal Pedagogy and Vocology*
    - 0.5 FCE: MUS 4248H *Optimizing the Singing Mind*
    - 1.0 FCE: MUS 4444Y *Applied Music I*
    - 1.0 FCE: MUS 4445Y *Applied Music II*
    - 0.5 FCE selected from MUS 4600H *Performance Practices Before 1800*, MUS 4610H *Analysis and Performance: Music of the Eighteenth and Nineteenth Centuries*, and MUS 4615H *Analysis and Performance Practices of Twentieth-Century Music*
    - 0.5 FCE: MUS 7406H *Music Psychology*
    - 0.5 FCE chosen from a list of courses approved by the department.
- **Two recitals.**

Program Length

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

Time Limit

3 years full-time

Music: Music Performance DMA, Composition Field

Doctor of Musical Arts

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: MUS 3300Y *DMA Advanced Composition I*
    - 1.0 FCE: MUS 3305Y *DMA Advanced Composition II*
    - 1.0 FCE: MUS 3999Y^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** (MUS 3888Y^0 *DMA Recital of Works*) 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 **residence** 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

Music: Music Performance DMA, Performance Field

Doctor of Musical Arts

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: MUS 4800H *DMA Seminar,* taken in the first session
    - 0.5 FCE: MUS 4899H *Work on Research in Performance,* begun in the second session

    - 1.0 FCE: MUS 4844Y *Advanced Applied Music I*
    - 1.0 FCE: MUS 4845Y *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 MUS 4899H *Research in Performance*, which lays the groundwork for the dissertation research and leads to a field examination in the middle of Year 2, and MUS 4845Y *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**: MUS 4866Y *DMA Recital I*, MUS 4877Y *DMA Recital II*, and MUS 4888Y *DMA Recital III*. The format of these recitals will be determined in consultation with the supervisor and the supervisory committee.
- Reading knowledge of **one language** other than English is required. The required language will be determined by the department. The department may require competence in additional languages. All remaining course and language requirements, including the field exam, must be completed successfully by the end of Year 2.
- The **residence** requirement is two years, whereby students must be on campus full-time and consequently in geographical proximity to be able to participate fully in the University activities associated with the program.

Program Length

4 years full-time

Time Limit

6 years full-time

Music: Music Performance MMus, DMA Courses, Composition Field

Final course offerings may vary. Students should consult the departmental handbook.

MUS 3100Y	MMus Advanced Composition I
MUS 3101H	Seminar in Schenkerian Analysis I
MUS 3102H	Seminar in Schenkerian Analysis II
MUS 3105Y	MMus Advanced Composition II
MUS 3110H	Classical Orchestration
MUS 3112H	Bartok for Composers
MUS 3203H	Score Analysis for Composers and Conductors
MUS 3204H	Advanced Orchestration
MUS 3208H	The String Quartet in the Twentieth Century
MUS 3212H	Music and Popular Entertainments
MUS 3213H	Composing for Chamber Ensemble
MUS 3221H	Sequencing and Improvisation in Music for Electronic Media
MUS 3222H	Composing for Film
MUS 3223H	Berg
MUS 3224H	Sonata Form
MUS 3225H	Music of Gubaidulina, Coulthard, and Chen
MUS 3227H	Composing for Film 2
MUS 3228H	Recent Approaches to Classical Form
MUS 3229H	The Twentieth-Century Symphony
MUS 3230H	The Music of Messiaen, Schnittke, and Part
MUS 3232H	Romantic Form: The Orchestral Music of Berlioz, Mendelssohn, Schumann, and Wagner
MUS 3240H	Extended Techniques for the Woodwinds
MUS 3244H	Music Recording
MUS 3245H	The Music of Ligeti and Lutoslawski
MUS 3247H	Form in the Music of Debussy
MUS 3250H	Alternatives: Music Out of the Mainstream
MUS 3252H	The Early Music of Arnold Schoenberg (1893–1908)
MUS 3254H	Lessons from Beethoven
MUS 3256H	Orchestral Techniques of Contemporary Composers
MUS 3258H	Songwriting (prerequisite: MIDI Orchestration and Improvisation)
MUS 3300Y	DMA Advanced Composition I
MUS 3305Y	DMA Advanced Composition II
MUS 3306H	Pedagogy of Music Theory
MUS 3309H	Brahms: Symphonies and Chamber Music
MUS 3312H	The Present State of Music
MUS 3315H	Prokofiev
MUS 3403H	Theory and Analysis of Atonal Music
MUS 3404H	Extended Tonal Techniques in the Twentieth Century
MUS 3409H	Advanced Analysis
MUS 3410H	Advanced Analysis: 1850–1910
MUS 3412H	Theories of Rhythm and Metre
MUS 3415H	Introduction to Operatic Composition
MUS 3420H	Composing for Percussion
MUS 3512H	Research in Composition
MUS 3800H	Electroacoustic Music
MUS 3801H	Advanced Electro-acoustic Composition
MUS 3888Y[0]	DMA Recital of Works
MUS 3990Y	MMus Composition Thesis
MUS 3998H	Reading and Research in Composition
MUS 3999Y[0]	Research in Composition
MUS 4615H	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 Courses, Music Technology and Digital Media Field

MUS 3610H	Music Entrepreneurship: Music and Cities
MUS 3611H	Creative Applications of Technology I
MUS 3612H	Creative Applications of Technology II (prerequisite: MUS 3611H)
MUS 3613H	Musical Acoustics (exclusion: TMU 127H)
MUS 3614H	Sound Recording I
MUS 3615H	Sound Recording II (prerequisites: MUS 3611H and MUS 3614H)
MUS 3616H	Music Mixing and Production (prerequisites: MUS 3612H and MUS 3615H)
MUS 3617H	Production for Multi-Channel Immersive Audio (prerequisites: MUS 3612H and MUS 3616H)
MUS 3618H	Studio Orchestration and Arranging
JDM 3619H	Digital Media Distribution (Credit/No Credit)
MUS 3624H	Topics in Interactive Digital Media and Performance
MUS 3630H	Interactive Music and Sound for Video Games
MUS 3632H	Video for Intermedia Performance
MUS 3666Y	Music Technology and Digital Media Major Project (Credit/No Credit)
MUS 3806H	Computer-Assisted Sound Design and Composition (prerequisites: MUS 3611H, MUS 3612H, or equivalent)

Music: Music Performance MMus, DMA Courses, Performance Field

MUS 4200Y	Seminar in Music Literature
MUS 4210H	Introduction to Music Analysis
MUS 4213H	Advanced Repertoire for Singers and Pianists I
MUS 4214H	Advanced Repertoire for Singers and Pianists II
MUS 4219H	Perspectives on the Business of Music Performance
MUS 4220H	Orchestral Conducting I
MUS 4221H	Orchestral Conducting II
MUS 4222Y	Advanced Orchestral Conducting
MUS 4223H	Choral Conducting I
MUS 4224H	Choral Conducting II
MUS 4225Y	Advanced Choral Conducting
MUS 4226H	Wind Ensemble Conducting I
MUS 4227H	Wind Ensemble Conducting II
MUS 4228H	Advanced Wind Conducting I
MUS 4229H	Advanced Wind Conducting II (prerequisite: MUS 4228H)
MUS 4231H	Advanced Vocal Repertoire Study I
MUS 4232H	Advanced Vocal Repertoire Study II
MUS 4234H	Explorations in Performance
MUS 4240Y	Introduction to Voice Pedagogy and Vocology
MUS 4241Y	Advanced Vocal Pedagogy and Vocology
MUS 4242Y	Advanced Concepts in Singing and Vocology
MUS 4248H	Optimizing the Singing Mind
MUS 4270H	Piano Pedagogy: Beginning and Intermediate Levels
MUS 4271H	Practicum: Beginning and Intermediate Levels
MUS 4272H	Piano Pedagogy: Advanced and University Levels
MUS 4273H	Practicum: Advanced and University Levels
MUS 4295H	Music Research for Performers
MUS 4298H	Readings and Research in Performance Studies
MUS 4230Y	Vocal-Choral Pedagogy for Conductors (prerequisite: graduate standing in the choral conducting, voice performance, or music education program, and permission of instructors)
MUS 4300Y	Seminar in Jazz Studies
MUS 4302H	Advanced Ear Training and Harmony
MUS 4303H	Rhythm for Improvisation
MUS 4310Y	Advanced Jazz Composition and Arranging I
MUS 4311Y	Advanced Jazz Composition and Arranging II
MUS 4312H	Advanced Jazz Improvisation I
MUS 4313H	Advanced Jazz Composition and Arranging II (prerequisite: MUS 4310Y)
MUS 4314H	Advanced Jazz Improvisation 2
MUS 4376H	Piano Literature—Baroque and Classical
MUS 4377H	Piano Literature—Romantic and Contemporary
MUS 4420H	Fretboard Harmony: Common Practice Harmony on the Guitar
MUS 4425H	Guitar Pedagogy: Method and Practice
MUS 4435H	History and Literature of the Guitar
MUS 4444Y	Applied Music I
MUS 4445Y	Applied Music II
MUS 4502H	Collaborative Piano Techniques I
MUS 4506H	Sonata Coaching I

MUS 4507H	Sonata Coaching II
MUS 4508H	Collaborative Piano Techniques II (prerequisite: MUS 4502H Collaborative Piano Techniques I)
MUS 4509H	Collaborative Piano Techniques II Vocal (prerequisite: MUS 4502H Collaborative Piano Techniques I)
MUS 4510H	Opera Performance for Pianists
MUS 4512H	Operatic Répétiteur
MUS 4520H	Advanced Diction Studies I (French)
MUS 4521H	Advanced Diction Studies II (German)
MUS 4523H	Advanced Diction Studies (English)
MUS 4600H	Performance Practices Before 1800
MUS 4606H	Special Topics in Performance Practice
MUS 4608H	World Music Ensembles: Practical and Analytical Studies
MUS 4610H	Analysis and Performance: Music of the Eighteenth and Nineteenth Centuries
MUS 4613H	Performance Techniques for Hospice Palliative Care
MUS 4615H	Analysis and Performance Practices of Twentieth-Century Music
MUS 4620H	Analysis and Performance of Chamber Music
MUS 4700H	Major Ensemble I
MUS 4701H	Major Ensemble II
MUS 4702H	Major Ensemble III
MUS 4703H	Major Ensemble IV
MUS 4706H	Contemporary Chamber Ensemble I
MUS 4707H	Contemporary Chamber Ensemble II
MUS 4710H	Chamber Music I
MUS 4711H	Chamber Music II
MUS 4712H	Chamber Music III
MUS 4716H	Chamber Choir III
MUS 4717H	Chamber Choir IV
MUS 4720H	Opera I
MUS 4721H	Opera II
MUS 4722H	Opera III
MUS 4723H	Opera IV
MUS 4730H	Performance Studies I
MUS 4740H	Small Group Jazz Performance I
MUS 4741H	Small Group Jazz Performance II
MUS 4742H	Small Group Jazz Performance III
MUS 4743H	Small Group Jazz Performance IV
MUS 4747H	Baroque String Repertoire
MUS 4750H	Jazz Orchestra I
MUS 4751H	Jazz Orchestra II
MUS 4752H	Jazz Orchestra III
MUS 4753H	Jazz Orchestra IV
MUS 4760H	Vocal Jazz Ensemble I
MUS 4761H	Vocal Jazz Ensemble II
MUS 4762H	Vocal Jazz Ensemble III
MUS 4763H	Vocal Jazz Ensemble IV
MUS 4767H	Instrumental Performance Class Woodwinds II
MUS 4770H	Oratorio Ensemble I
MUS 4771H	Oratorio Ensemble II
MUS 4774H	Schola Cantorum I
MUS 4775H	Schola Cantorum II
MUS 4776H	Collegium Musicum I
MUS 4777H	Collegium Musicum I
MUS 4780H	World Music Ensemble I
MUS 4781H	World Music Ensemble II
MUS 4785H	Orchestral Studies I
MUS 4786H	Orchestral Studies II
MUS 4787H	Instrumental Performance Class Woodwinds
MUS 4790H	Instrumental Performance Class I
MUS 4791H	Instrumental Performance—Guitar
MUS 4792H	Instrumental Performance—Guitar II
MUS 4795H	Piano/Instrumental I
MUS 4796H	Piano/Instrumental II

MUS 4800H	DMA Seminar
MUS 4810H	Seminar in Performance Literature
MUS 4815H	Seminar in Performance Pedagogy
MUS 4816H	Researching Performance/Performing Research
MUS 4817H	Nineteenth-Century Music in Context: Beethoven to Mahler
MUS 4820H	DMA Study in Masterclass Teaching
MUS 4821H	DMA Study in Undergraduate Piano Pedagogy
MUS 4822H	DMA Study in Piano Studio Teaching
MUS 4826H	Core and Current Readings in Jazz Scholarship
MUS 4838H	Twentieth- and Twenty-First-Century Interpretive Analysis
MUS 4844Y	Advanced Applied Music I
MUS 4845Y	Advanced Applied Music II
MUS 4855Y	DMA Elective Recital
MUS 4866Y	DMA Recital I
MUS 4877Y	DMA Recital II
MUS 4888Y	DMA Recital III
MUS 4899H	Research in Performance
MUS 4900Y	Operatic Studies I
MUS 4901Y	Operatic Studies II
MUS 4966Y[0]	Operatic Roles I
MUS 4988Y[0]	Operatic Roles II
MUS 5700H	Piano Master Class I
MUS 5701H	Piano Master Class II
MUS 5702H	Piano Master Class III
MUS 5703H	Piano Master Class IV
MUS 5704H	Violin Master Class I
MUS 5705H	Violin Master Class II
MUS 5706H	Violin Master Class III
MUS 5710H	Early Music Vocal Ensemble I
MUS 6666Y[0]	Recital I
MUS 7412H	Elementary Improvisation Methods
MUS 8888Y[0]	Recital II

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

Music: Courses Recognized for MMus in Music Performance and MA Graduate Credit

Available to MA students only with the permission of the department.

MUS 1015H	Topics in Twentieth-Century Music
MUS 1025H	Topics in Classical Music
MUS 1040H	Topics in Medieval Music
MUS 1090H	Topics in Ethnomusicology

Near and Middle Eastern Civilizations

NMC: Introduction

Faculty Affiliation

Arts and Science

Degree Programs

Near and Middle Eastern Civilizations

MA
PhD

Collaborative Specializations

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

1. **Diaspora and Transnational Studies**
   - Near and Middle Eastern Civilizations, MA, PhD
2. **Jewish Studies**
   - Near and Middle Eastern Civilizations, MA, PhD
3. **Mediterranean Archaeology**
   - Near and Middle Eastern Civilizations, PhD
4. **Sexual Diversity Studies**
   - Near and Middle Eastern Civilizations, MA, PhD
5. **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

Web: http://nmc.utoronto.ca
Telephone: (416) 978-3181
Fax: (416) 978-3305

Department of Near and Middle Eastern Civilizations
University of Toronto
2nd Floor, 4 Bancroft Avenue
Toronto, Ontario M5S 1C1
Canada

NMC: Graduate Faculty

Full Members

Aksan, Virginia - BA, MA, MLS, 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 (***Coordinator of Graduate Studies; Associate Chair***)
Metso, Sarianna - MA, PhD
Miller, Jeanne - BA, MA, PhD
Mittermaier, Amira - MA, PhD
Moumtaz, Nada - PhD
Newman, Judith - PhD
Northrup, Linda - BA, MA, 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

Birnbaum, Eleazar - BA
Garshowitz, Libby - BA, MA, PhD
Golombek, Lisa - BA, MA, PhD
Keall, Edward - BA, PhD
Lutz, R.Theodore - MA
Pietersma, Albert - BA, BD, PhD
Sandler, Rivanne - BA, MA, PhD

Associate Members

Ali, Abdel-Khalig - BA, MA, PhD
Bahoora, Haytham - BA, MA, PhD
Baker, Heather - DPhil
Branting, Scott - BA, MA, MA, PhD

Brosius, Maria - BA, PhD
Emon, Anver - LLB, BA, LLM, MA, PhD, SJD, CRC
Fadel, Mohammad - BA, JD, PhD
Hojatollah Taleghani, Azita - BA, MA, MA, PhD
Mason, Robert - BA, PhD
Nizri, Yigal - BFA
Porter, Anne - BA, MA, 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:
    1. 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.
    2. 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, are required to successfully complete one of the English tests listed on the department's website.

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

NMC 1001Y	Introduction to Old Babylonian
NMC 1002Y	Selected Standard Babylonian Texts
NMC 1003Y	Akkadian Historical Texts
NMC 1004Y	Intermediate Sumerian
NMC 1005Y	The Assyrian Language
NMC 1008Y	Babylonian Archival Texts (Late Periods) (prerequisite: NMC 1001Y)
NMC 1009Y	Introduction to Sumerian
NMC 1701Y	Selected Readings in Sumerian

Ancient Egyptian Language and Literature

NMC 1201Y	Introduction to Middle Egyptian
NMC 1202Y	Middle Egyptian Texts
NMC 1203Y	Late Egyptian Texts
NMC 1204Y	Cursive Script
NMC 1209H	Old Egyptian Texts
NMC 1210H	Ancient Egyptian Historical Texts
NMC 1213H	Ancient Egyptian Religious and Funerary Literature
NMC 1215H	Ancient Egyptian Instructional Texts (prerequisites: NMC 1201Y, NMC 1202Y)

Arabic Studies

NMC 2100Y	Elementary Modern Standard Arabic
NMC 2101Y	Intermediate Standard Arabic I
NMC 2102Y	Intermediate Standard Arabic II
NMC 2103Y	Advanced Standard Arabic
NMC 2110H	Al-Jahiz and His Debate Partners
NMC 2111H	Medieval Arabic Rhetoric
NMC 2130H	Adab and Arabic Literary Prose
NMC 2131H	Premodern Arabic Poetry

Aramaic-Syriac Language and Literature

NMC 1100Y	Introduction to Aramaic
NMC 1101Y	Early Syriac Texts
NMC 1102Y	Palestinian Aramaic Texts
NMC 1104Y	Aramaic Epigraphy
NMC 1105Y	Syriac Historical Texts
NMC 1106Y	Syriac Exegetical Texts
NMC 1110H	Palestinian Targum
NMC 1111Y	Babylonian Aramaic

Archaeology

NMC 1400H	The Archaeology of the Pre- and Protohistoric Civilizations of the Near East
NMC 1401H	The Archaeology of the Civilizations of the Historic Periods of the Near East (prerequisite: NMC 1400H)
NMC 1406Y	Problems in the Archaeology of Bronze Age Syria-Palestine
NMC 1407Y	Problems in the Archaeology of Iron Age Syria-Palestine
NMC 1408Y	Seminar in the Archaeology of Syria-Palestine
NMC 1409H	Archaeology and Material Culture of Ancient Egypt I
NMC 1410H	Archaeology and Material Culture of Ancient Egypt II
NMC 1411H	Near Eastern Ceramics I
NMC 1412H	Near Eastern Ceramics II
NMC 1414H	Egyptian Artifacts
NMC 1416H	Egyptian Iconography
NMC 1418Y	Archaeology of Nubia
NMC 1419Y	Art, Archaeology and Culture of Egypt in the Age of the Pyramids
NMC 1420H	Selected Topics in Near Eastern Archaeology
NMC 1421H	Seminar in Egyptian Archaeology I
NMC 1422H	Seminar in Egyptian Archaeology II
NMC 1423H	Ancient Iraq

NMC 1424H	The Art and Archaeology of Syria
NMC 1425H	Mesopotamian Material Culture I: Art and Artifacts
NMC 1426H	Mesopotamian Material Culture II: Architecture
NMC 1427H	Archaeology of State Societies
NMC 1428H	Problems in Mesopotamian Archaeology I: Chalcolithic and Early Bronze Age Chronologies
NMC 1429Y	Polarized-Light Microscopy in Archaeology
NMC 1500Y	Archaeology, from Alexander to Muhammad

Hebrew Language and Literature

NMC 1305H	Early Hebrew Epigraphy
NMC 1306H	Scribes, Manuscripts, and Translations of the Hebrew Bible
NMC 1307H	History of Ancient Israel
NMC 1308H	Readings in Hebrew Bible
NMC 1309H	Wisdom in Ancient Israel
NMC 1310H	Readings in Second Temple Period Texts
NMC 1313H	Mishnah and Tosefta
NMC 1314H	Law in Ancient Judaism
NMC 1315H	Advanced Readings in the Dead Sea Scrolls
NMC 1316H	Modern Hebrew Poetry
NMC 1317H	Modern Hebrew Prose
NMC 1318H	Midreshei Halakha: Purity and Cultic Texts
NMC 1327H	Themes in Midreshic Literature
NMC 1328H	Intertextuality: Tannaitic and Amoaric Literature
NMC 1330H	Introduction to Modern Hebrew I
NMC 1331H	Introduction to Modern Hebrew II
NMC 1332H	Intermediate Modern Hebrew I
NMC 1333H	Intermediate Modern Hebrew II
NMC 1334H	Advanced Modern Hebrew I
NMC 1335H	Advanced Modern Hebrew II
NMC 1336H	Modern Academic Hebrew

History

NMC 1010H	Mesopotamian Society and Economy
NMC 1020H	Ancient Mesopotamia I: Sumerians and Akkadians
NMC 1021H	Ancient Mesopotamia II: Assyrians and Babylonians
NMC 1022H	The Babylonian City
NMC 1023H	The Neo-Assyrian Empire
NMC 1401H	Ancient Egyptian Cultural History I
NMC 1402H	Ancient Egyptian Cultural History II
NMC 2080H	Theory and Method in Middle Eastern Studies
NMC 2081H	Anthropology of the Middle East
NMC 2090Y	The Prophet and the Caliphates: Early Islamic History to 1258
NMC 2117H	Readings in Medieval Arabic Chronicles
NMC 2118H	Readings in Medieval Arabic Biographical Literature
NMC 2119H	Readings in Medieval Arabic Documents
NMC 2170H	Topics in Modern Arab History I
NMC 2171H	Topics in Modern Arab History II
NMC 2172H	The Politics of Archaeology in the Modern Middle East
NMC 2173H	Intellectuals of the Modern Arab World
NMC 2180H	Iranian Modernity
NMC 2225Y	Iran and Islam
NMC 2226H	Medieval Persian Historiography and Diplomatics
NMC 2229H	Persians, Greeks, and Romans: Friendly Enemies
NMC 2230H	The First World Empire: The Achaemenids
NMC 2231H	Alexander and Iran
NMC 2232H	Iran After Alexander: From the Seleucids to the Parthians
NMC 2310Y	Ottoman History to 1800
NMC 2315Y	Topics in Ottoman History
NMC 2345Y	The Steppe Frontier in Eurasian and Islamic History

Islamic Art and Material Culture

NMC 2500H	Early Islamic Art and Architecture
NMC 2501H	Persianate Art and Architecture
NMC 2515Y	The Islamic City
NMC 2521H	The Taj Mahal and Its Origins
NMC 2525H	Painting in Late Medieval and Early Modern Iran and Beyond
NMC 2526H	Text and Image: The Formation of Arabic and Persian Manuscript Illustration
NMC 2541Y	Contextualizing Medieval Middle Eastern and Islamic Pottery

Topics in Law and Religion

NMC 1605H	Special Topics in Comparative Religious Law
NMC 1607H	Life Cycle and Personal Status Issues in Jewish Law—Biomedical Ethics and Reproductive Technology
NMC 1608H	Gender Issues in Jewish Law
NMC 1609H	Gender-Related Topics in Law and Religion

Linguistics

NMC 1651H	Phoenician and Punic Epigraphy
NMC 1652H	Ugaritic
NMC 1653H	Issues in Ancient Hebrew Philology
NMC 1654H	Advanced Ancient Hebrew Grammar
NMC 1655H	Comparative Semitics

Persian Studies

NMC 2200Y	Introductory Persian
NMC 2201Y	Intermediate Persian
NMC 2202H	Modern Persian Poetry (prerequisite: NMC 2201Y)
NMC 2203H	Structural Development of Iranian Language (prerequisite: NMC 2201Y)
NMC 2204Y	Avestan
NMC 2205Y	Middle Persian (Pahlavi)
NMC 2206Y	Old Persian
NMC 2219H	Persian Literature: The Epic Tradition
NMC 2220H	Persian Literature: Ethical, Erotic, Mystical
NMC 2221H	Persian Mirrors for Princes
NMC 2222H	Persian Mystical Poetry
NMC 2224H	The Visionary Tales of Suhravardi, Master of Illuminationist Philosophy
NMC 2225Y	History of Iran: From the Sasanians to the Safavids
NMC 2227H	Zoroastrian Cosmic History: From Genesis to Universal Judgment
NMC 2228H	Zoroastrian Apocalyptic Literature: To the Netherworld and Beyond

Religion and Philosophy

NMC 1613Y	Ancient Near Eastern Religions (PhD students in Near and Middle Eastern Civilizations excluded)
NMC 1614Y	Ancient Egyptian Religion (PhD students in Near and Middle Eastern Civilizations excluded)
NMC 2045Y	Islamic Philosophical Texts
NMC 2050Y	Prayer in Islamic Thought
NMC 2052H	Islamic Religious Thought
NMC 2053Y	Images of the Prophet Muhammad
NMC 2055H	The Qur'an and Its Interpretation
NMC 2056H	Readings in Qur'an and Tafsir

Turkish and Ottoman Studies

NMC 2300Y	Introductory Turkish
NMC 2301Y	Intermediate Turkish
NMC 2330Y	Readings in Ottoman Historical Texts
NMC 2331Y	Ottoman Palaeography and Diplomatics
NMC 2340Y	Studies in Ottoman and Turkish Literature
JNE 2320H	Modern Turkey

Other Courses

NMC 2000Y	Directed Reading
NMC 2001Y	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
PhD	*Fields:* Critical Approaches to Health and Health Care Effective Care and Health Outcomes Nursing Health Systems

Diploma Programs

Post-Master's Nurse Practitioner (PMNP) Diploma	*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:

1. **Addiction Studies**
   - Nursing Science, PhD
2. **Aging, Palliative and Supportive Care Across the Life Course**
   - Nursing Science, MN, PhD
3. **Bioethics**
   - Nursing Science, MN, PhD
4. **Global Health**
   - Nursing Science, PhD
5. **Resuscitation Sciences**
   - Nursing Science, MN, PhD
6. **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, and judgment abilities; and skills required to be exemplar nurses, advanced practice nurses, leaders, scientists, scholars, and educators.

Contact and Address

Web: https://bloomberg.nursing.utoronto.ca
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Graduate Department of Nursing Science
University of Toronto
Suite 130, 155 College Street
Toronto, Ontario M5T 1P8
Canada

Nursing Science: Graduate Faculty

Full Members

Cranley, Lisa - PhD
Dale, Craig - BSc, PhD
Dennis, Cindy-Lee - PhD
Gastaldo, Denise - BSN, MA, PhD
Hillan, Edith - MPH, MSc, PhD
Howell, Doris - BNSc, MSN, PhD
Jeffs, Lianne - PhD
Johnston, Linda - BSc, PhD (*Dean*)
Mayo, Samantha - PhD
McGillis, Linda - BHA, MS, PhD
Metcalfe, Kelly - BNSc, PhD
Muntaner, Carles - MHSc, MD, PhD
Nelson, Sioban - PhD
Parry, Monica - BScN, MSc, MEd, PhD
Peter, Elizabeth - BA, BSN, MSN, PhD
Puts, Martine - PhD
Rose, Rebecca Louise - BN, MN, PhD
Stevens, Bonnie - BSc, MSN, PhD
Stremler, Robyn - PhD
Tourangeau, Ann - BScN, MN, PhD
Widger, Kimberley - PhD

Members Emeriti

Donner, Gail - PhD
Gallop, Ruth - BSN, MSN, PhD
Hodnett, Ellen - BSN, PhD
Macdonald, Geraldine - BSN, MEd, EdD

McKeever, Patricia - BN, MSA, DPhil
O'Brien-Pallas, Linda-Lee - BSN, MSN, PhD
Pringle, Dorothy - BScN, MS, PhD
Watt-Watson, Judith - BSN, MSN, PhD

Associate Members

Ballantyne, Marilyn - MHSc
Bedard, Philippe - BA, MD
Bender, Amy - BNSc, MN, PhD
Blackwood, Bronagh - PhD
Blastorah, Margaret - BScN, PhD
Chavez, Wilfrida - MHSc, PhD
Chung, Hae-Joo - BSc, MSc
Colella, Tracey JF - MSc, PhD
Fitch, Margaret - BSN, MSN, PhD
Hardie, Catherine - BSN, MSN, EdD
Hubley, Pam - MSN
Husain, Nusrat - MD
Iwase, Maki - MN, PhD
Joolaee, Soodabeh - BNSc, MSc, PhD
Keilty, Krista - BN, BSN, MN, MN, PhD
Kim, Raymond - MD
Kirenko, Willi (Wilma) - BScN, MSN
McCleary, Lynn - BSc, MSc, DPhil
Mildon, Barbara - BN, MN
Mohammed, Shan - BNSc, BSc, MN, PhD
Mosley, Jane - BScN, MSN
Richter, Solina - BNSc, BA
Rose, Donald Nelson - PhD
Spoelstra, Sandra - BN, MSN, PhD
Steele, Rose - PhD
Thomson, Nadia - BScN, MN
Thulien, Naomi - MN
Trip, Katherine - BScN, MN
Wilson, Jean - BScN, MHSc

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:
  - four foundational courses (NUR 1017H, NUR 1022H, NUR 1028H, NUR 1034H) and
  - a 1.0 FCE practicum-based course (NUR 1072Y), which should be taken alone in the final session and only after completion of all other coursework and program requirements;
  - two required clinical field of study courses (NUR 1170H and NUR 1171H) (1.0 FCE);
  - 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 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:
  - five foundational courses (NUR 1016H, NUR 1017H, NUR 1027H, NUR 1127H, NUR 1034H);
  - three field of study courses (NUR 1151H, NUR 1152H, and NUR 1161H); and
  - a 1.0 FCE practicum-based course (NUR 1072Y), 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 NUR 1151H in Year 1 and the second embedded in NUR 1072Y 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—NUR 1017H and NUR 1027H
  - Winter—NUR 1127H and NUR 1151H*
  - Summer—NUR 1152H*
- **Year 2** course sequencing:
  - Fall—NUR 1016H and NUR 1161H
  - Winter—NUR 1034H
  - Summer—NUR 1072Y*
- *NUR 1151H and NUR 1072Y both include a required on-campus, in-class learning experience. NUR 1152H and NUR 1072Y 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 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:
  - four foundational courses (NUR 1017H, NUR 1022H, NUR 1028H, NUR 1034H);
  - a combination of courses based on the student's emphasis:
    - Adult: NUR 1091Y, NUR 1101H, NUR 1115H, NUR 1215H, and NUR 1221Y **or**
    - Paediatric: NUR 1092Y, NUR 1102H, NUR 1116H and NUR 1216H, and NUR 1222Y **or**
    - Primary Health Care—Global Health: NUR 1093Y, NUR 1114H, NUR 1117H and NUR 1217H, and NUR 1223Y
    - NUR 1221Y, NUR 1222Y, and NUR 1223Y 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 both eLearning and campus-based formats.

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 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. Students study in one of three research fields: Critical Approaches to Health and Health Care; Effective Care and Health Outcomes; Nursing Health Systems.

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)
  - Field of Study Course (0.5 FCE) that includes one of the following:
    - NUR 1085H (for students in the critical perspectives in health and healthcare field of study)
    - NUR 1086H (for students in the Nursing Health Systems field of study) or
    - NUR 1087H (for students in the Effective Care and Health Outcomes field of study)
  - at least one method course (0.5 FCE) relevant to the field of study and to the dissertation plans
  - at least one course (0.5 FCE) related to the substantive area of the field of study and thesis plans
  - the fifth required 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 five 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 field 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
  - NUR 1091Y *Pathophysiology and Pharmacotherapeutics (Adult)*
  - NUR 1101H *Advanced Health Assessment and Clinical Reasoning (Adult)*
  - NUR 1115H *Advanced Health Assessment and Therapeutic Management (Adult) 1*
  - NUR 1215H *Advanced Health Assessment and Therapeutic Management (Adult) 2*
  - NUR 1221Y *Nurse Practitioners: Roles and Issues (Adult)*
- Emphasis: Paediatric
  - NUR 1092Y *Pathophysiology and Pharmacotherapeutics (Paediatric)*
  - NUR 1102H *Advanced Health Assessment and Clinical Reasoning (Paediatric)*
  - NUR 1116H *Advanced Health Assessment and Therapeutic Management (Paediatric) 1*
  - NUR 1216H *Advanced Health Assessment and Therapeutic Management (Paediatric) 2*
  - NUR 1222Y *Nurse Practitioners: Roles and Issues (Paediatric)*
- Emphasis: Primary Health Care—Global Health
  - NUR 1093Y *Pathophysiology and Pharmacotherapeutics (Primary Health Care—Global Health)*
  - NUR 1114H *Advanced Health Assessment and Clinical Reasoning (Primary Health Care—Global Health)*
  - NUR 1117H *Advanced Health Assessment and Therapeutic Management (Primary Health Care—Global Health) 1*
  - NUR 1217H *Advanced Health Assessment and Therapeutic Management (Primary Health Care—Global Health) 2*
  - NUR 1223Y *Nurse Practitioners: Roles and Issues (Primary Health Care—Global Health)*
- NUR 1221Y, NUR 1222Y, and NUR 1223Y must be taken alone in the final session and only after completion of all other coursework and program requirements.
- Three program courses require the 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, PhD, Diploma Courses

NUR 1012H	Culture and Relations
NUR 1014H	The Politics of Aboriginal Health
NUR 1016H	Health Systems, Policy, and the Profession
NUR 1017H	History of Ideas in Nursing Practice
NUR 1021H	Nursing Ethics
NUR 1022H	Research Design, Appraisal, and Utilization
NUR 1023H	Critical Issues in the Design and Conduct of Controlled Trials of Behavioural Health Care Interventions (For PhD students only. Prerequisite: Introductory graduate course in research design and biostatistics. For students planning an RCT for their thesis research.)
NUR 1024H	Foundations of Qualitative Inquiry
NUR 1025H	Doing Qualitative Research: Design and Data Collection
NUR 1027H	Integrated Approaches to Research Appraisal and Utilization Part 1
NUR 1028H	Introduction to Qualitative Research: Methodologies, Appraisal, and Knowledge Translation
NUR 1029H	Advanced Practice Nursing Care for Older Adults
NUR 1030H	Principles of Leadership and Advanced Clinical Practice in Emergency Preparedness
NUR 1032H	Group Process and Professional Practice
NUR 1034H	Program Planning and Evaluation in Nursing
NUR 1035H	Public and Population Health Perspectives
NUR 1036H	Advanced Nursing Practice in Oncology
NUR 1038H	Social Determinants of Health in a Global Context
NUR 1040H	Issues in Women's Health Care
NUR 1043H	Theories of Interpersonal Process
NUR 1045H	Theories of Pain: Impact on the Individual, Family, and Society
NUR 1046H	Persistent Illness: Theoretical, Research, and Practice Implications
NUR 1047H	Community Participation and Health
NUR 1049H	Nursing Approaches to Common Physiological and Behavioural Manifestations of Critically Ill Patients
NUR 1050H	Coping With Illness
NUR 1051H	Assessment and Management of Common Responses to Illness
NUR 1052H	Perinatal Nursing Sciences
NUR 1057H	Interventions to Enhance Health, Abilities, and Well-being
NUR 1059H	Informatics: Theory and Application in Nursing
NUR 1060H	Leadership and Management of Nursing and Health Services
NUR 1062H	Measuring Nursing Care Effectiveness: Economic and Financial Perspectives
NUR 1064H	Behaviour in Health Care Organizations
NUR 1066H	Improving Quality and Safety in Healthcare
NUR 1067H	Mental Health Topics in Advanced Practice Nursing
NUR 1072Y	Advanced Nursing Practice Scholarship
NUR 1074H	Facilitating Learning: Nursing Perspectives
NUR 1075H	Introductory Statistics for Health Sciences Research
NUR 1076H	Intermediate Statistics for Health Sciences Research
NUR 1077H	Implementation Science in Healthcare (Prerequisite: NUR 1022H, NUR 1027H, NUR 1028H, or equivalent.)
NUR 1081Y	PhD Student/Faculty Seminars
NUR 1083H	Comparative Politics of Health Policy in Globalizing World
NUR 1085H	Topics in Critical Perspectives in Health and Health Care
NUR 1086H	Nursing Health Services Research Methods
NUR 1087H	Foundations of Clinical Research
NUR 1090H	Measurement of Data Quality (Prerequisite: completion of an advanced graduate-level statistics course.)
NUR 1091Y	Pathophysiology and Pharmacotherapeutics (Adult)
NUR 1092Y	Pathophysiology and Pharmacotherapeutics (Paediatric)
NUR 1093Y	Pathophysiology and Pharmacotherapeutics (Primary Health Care—Global Health)
NUR 1101H	Advanced Health Assessment and Clinical Reasoning (Adult) (Prerequisite: NUR 1091Y)
NUR 1102H	Advanced Health Assessment and Clinical Reasoning (Paediatric) (Prerequisite: NUR 1092Y)
NUR 1114H	Advanced Health Assessment and Clinical Reasoning (Primary Health Care—Global Health) (Prerequisite: NUR 1093Y)
NUR 1115H	Advanced Health Assessment and Therapeutic Management (Adult) 1 (Prerequisites: NUR 1091Y, NUR 1101H)
NUR 1116H	Advanced Health Assessment and Therapeutic Management (Paediatric) 1 (Prerequisites: NUR 1092Y, NUR 1102H)
NUR 1117H	Advanced Health Assessment and Therapeutic Management (PHC GH) 1 (Prerequisites: NUR 1093Y, NUR 1114H)
NUR 1127H	Integrated Approaches to Research Appraisal and Utilization Part 2 (Prerequisite: NUR 1027H)
NUR 1151H	Theories and Concepts in Nursing Leadership and Administration
NUR 1152H	Leading and Managing Effective Health Care Teams
NUR 1161H	Advanced Concepts in Leadership and Administration (Prerequisites: NUR 1151H and NUR 1152H)
NUR 1170H	Introduction to Advanced Practice Nursing
NUR 1171H	Topics in Advanced Practice Nursing
NUR 1201H	Principles of Anaesthesia Care
NUR 1202H	Pain Management Across Clinical Settings: Theory, Research, and Practice
NUR 1209Y	Advanced Nursing Practice in Anaesthesia I
NUR 1210Y	Advanced Nursing Practice in Anaesthesia II
NUR 1215H	Advanced Health Assessment and Therapeutic Management (Adult) 2 (Prerequisites: NUR 1091Y, NUR 1101H, NUR 1115H)

NUR 1216H	Advanced Health Assessment and Therapeutic Management (Paediatric) 2 (Prerequisites: NUR 1092Y, NUR 1102H, NUR 1116H)
NUR 1217H	Advanced Health Assessment and Therapeutic Management (PHC GH) 2 (Prerequisites: NUR 1093Y, NUR 1114H, NUR 1117H)
NUR 1221Y	Nurse Practitioners: Roles and Issues (Adult) (Prerequisites: NUR 1091Y, NUR 1101H, NUR 1115H, NUR 1215H)
NUR 1222Y	Nurse Practitioners: Roles and Issues (Paediatric) (Prerequisites: NUR 1092Y, NUR 1102H, NUR 1116H, NUR 1216H)
NUR 1223Y	Nurse Practitioners: Roles and Issues (Primary Health Care—Global Health) (Prerequisites: NUR 1093Y, NUR 1114H, NUR 1117H, NUR 1217H)

Nutritional Sciences

Nutritional Sciences: Introduction

Faculty Affiliation

Medicine

Degree Programs

Nutritional Sciences

MSc
PhD

Combined Degree Programs

STG, MD / PhD

Collaborative Specializations

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

1. **Biomedical Toxicology**
   - Nutritional Sciences, MSc, PhD
2. **Food Studies**
   - Nutritional Sciences, MSc, PhD
3. **Human Development (admissions have been suspended)**
   - Nutritional Sciences, MSc, PhD
4. **Indigenous Health**
   - Nutritional Sciences, MSc, PhD
5. **Public Health Policy**
   - Nutritional Sciences, MSc, PhD
6. **Women's Health**
   - Nutritional Sciences, MSc, PhD

Overview

The Department of Nutritional Sciences is one of the few departments of nutrition in North America to be located within a Faculty of Medicine. This, together with its close linkages with the University of Toronto's Dalla Lana School of Public Health, allows the department to fully explore the relationships between nutrition and human health and disease, and to influence clinical practice and public health programs. It also creates unique opportunities for collaboration with the highest concentration of University-affiliated hospitals, clinicians, and health researchers in North America.

Although the department is centered in the Basic Sciences sector of the Faculty, its activities include not only basic science but also clinical and community aspects of nutrition and food and nutrition policy. These activities that range from "bench to bedside to populations" make it a model of integration within the whole of the health sciences complex at U of T, enabling a full exploration of the relationships between nutrition and human health to influence both clinical practice and public health policy.

Applicants interested in pursuing a Master of Public Health degree in Nutrition and Dietetics are advised to consult the calendar entry of the Dalla Lana School of Public Health for details.

Contact and Address

Web: http://nutrisci.med.utoronto.ca
Email: grad.nutrisci@utoronto.ca
Telephone: (416) 978-6071
Fax: (416) 978-5882

Department of Nutritional Sciences
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Room 316, 150 College Street
Toronto, Ontario M5S 3E2
Canada

Nutritional Sciences: Graduate Faculty

Full Members

Allard, Johane - MD
Anderson, Gerald - BSc, MSc, PhD
Bandsma, Robert - MD
Bazinet, Richard - BSc, PhD
Bhutta, Zulfiqar - MBBS, PhD
Boyd, Norman - MD
El-Sohemy, Ahmed - BSc, MSc, PhD
Hamilton, Jill - BSc, MSc, MD
Hanley, Anthony - BSc, MSc, PhD (*Graduate Coordinator, Admissions and Awards*)
Jenkins, David Ja - BA, MA, MD, MB, BS, PhD,
Kim, Young-In - MD
Kotsopoulos, Joanne - BSc, MSc, PhD
Kreiger, Nancy - BA, MPH, PhD
L'Abbé, Mary - BSc, MSc, PhD (*Chair and Graduate Chair*)
Laye, Sophie - BS, MSc, PhD
Leiter, Lawrence Alan - BSc, MD
Maguire, Jonathon - BSc, MSc, MSc, MD
McCrindle, Brian - MD
Narod, Steven - BSc, MD
O'Connor, Deborah - BASc, MS, PhD (**Interim Chair and Interim Graduate Chair**)
Pencharz, Paul - MD, MB, ChB
Roth, Daniel - BSc, MSc, MD
Sellen, Daniel - BA, AM, PhD
Tarasuk, Valerie - BA, BEd, BASc, MSc, PhD
Vuksan, Vladimir - BSc, MSc, PhD
Ward, Wendy - BASc, MSc, PhD
Wolever, Thomas - BA, MSc, MA, BM, BCh, PhD (*Graduate Coordinator, Student Affairs*)
Zlotkin, Stanley - BSc, MD, PhD

Members Emeriti

Archer, Michael - MA, MSc, PhD, DSc
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

Associate Members

Arcand, Jo Anne - BSc, MSc, PhD
Ball, Ronald - BSc, MSc, PhD
Birken, Catherine - MSc, MD
Boucher, Beatrice - BSc, MHSc
Courtney-Martin, Glenda - BASc, MSc
Darling, Pauline - BSc, MSc, PhD
de Souza, Russell - BASc, MSc, ScD
Fox, Ann - BAA, MHSc, PhD
Garcia-Bailo, Bibiana - BA, MS, PhD
Josse, Robert - BSc, MBBS
Keith, Mary - BASc, PhD
Levitt, Anthony - MBBS, DGO, MB
Ma, David - BSc, PhD
Martin, Lisa - BSc, MSc, DPhil
Mendelson, Rena - BA, MS, DSc
Musa-Veloso, Kathy - BSc, MSc, PhD
Power, Krista - BSc, MSc, PhD
Tomlinson, Christopher - BSc, MBCHB, PhD
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 NFS 1204Y *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:
  - NFS 1304Y *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:
  - NFS 1304Y *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.

NFS 1201H	Public Health Nutrition
NFS 1204Y[0]	Master's Seminars in Nutritional Sciences (Credit/No Credit)
NFS 1208H	Foundations of Practice I
NFS 1209Y	Foundations of Practice II
NFS 1210H	Foundations of Practice III
NFS 1211H	Community Nutrition
NFS 1212H	Regulation of Food Composition, Health Claims, and Safety
NFS 1216H	Selected Topics in Nutrition
NFS 1218H	Recent Advances in Nutritional Sciences I
NFS 1220H	Clinical Nutrition
NFS 1221H	Nutrition Programs and Strategies
NFS 1222H	Recent Advances in Nutritional Sciences II: Diet and Cardiovascular
NFS 1223H	Dietary Carbohydrate and Glycaemic Index in Health and Disease
NFS 1224H	Nutritional Epidemiology
NFS 1225H	Nutrition and Metabolism for Public Health Nutrition Professionals
NFS 1226H	Nutrition and Cancer
NFS 1301H	Directed Reading in Nutritional Sciences
NFS 1304Y[0]	Doctoral Seminars in Nutritional Sciences (Credit/No Credit)
NFS 1484H	Advanced Nutrition

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

1. **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.

Contact and Address

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Department of Occupational Science and Occupational Therapy
University of Toronto
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Canada

Occupational Science and Occupational Therapy: Graduate Faculty

Full Members

Agur, Anne - BSc, MSc, PhD
Cameron, Jill - BSc, MS, PhD
Carnahan, Heather - BPHE, MSc, PhD
Carswell, Anne - DipOT , BSc(OT), MSc, PhD
Colantonio, Angela - BA, BSc(OT), MHSc, PhD
Dawson, Deirdre - BSc, MSc, PhD
Friefeld, Sharon - BSc(OT), MA, PhD
Iwama, Michael - BSc(OT), BSc, MSc, PhD
Kirsh, Bonnie - BSc(OT), MEd, PhD
Mihailidis, Alex - BASc, MASc, PhD
Polatajko-Howell, Helene - PhD
Rappolt, Susan - BSc(OT), MSc, PhD (*Chair and Graduate Chair*)
Reid, Denise - BSc(OT), MEd, PhD
Renwick, Rebecca - DipOT, BA, PhD

Members Emeriti

Friedland, Judith - BA, MA, PhD

Associate Members

Barker, Donna - BSc(OT), MSc
Campbell, Kent - BSc, PhD
Cockburn, Lynn - BSc(OT), BCom, MEd, MPH, PhD
Colquhoun, Heather - PhD
Farrow, Susan - BSc(OT), BA
Fourt, Anne - BSc(OT), MEd
Hebert, Debbie - BSc(OT), MSc, PhD
Hitzig, Sander - PhD
Hunt, Anne - MSc
Keightley, Michelle - BSc, MA, PhD
Kingsnorth, Shauna - BS, MA, PhD
Langlois, Sylvia - BSc, MSc
Mckee, Patricia - DipOT , BSc(OT), MSc
Nalder, Emily - BOTh, PhD
Reed, Nicholas - BA, MSc, PhD
Rigby, Patty - DipOT , MHSc
Rowland, Paula - BS, BS
Ryan, Stephen - BEng, MSc, PhD
Stier, Jill - MA, BMedSc
Trentham, Barry - BSc(OT), MES, PhD
Wang, Rosalie - BSc, BSc(OT), 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:

1. 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;
2. supervise rehabilitation assistants, OT aides, or other support workers;
3. use principles of research-based practice to guide and evaluate service delivery;
4. contribute to research that will advance the knowledge base of the discipline;
5. assume management roles;
6. take leadership roles in the profession;
7. take leadership roles in health care and other sectors including social services, education, and labour;
8. fill academic-practitioner positions; and
9. pursue doctoral studies and careers in academia or clinical research.

The MScOT program is offered as a two-year full-time program and a one-year, advanced-standing part-time option.

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 (18.0-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 (typical registration sequence: F/W/S/F/W/S)

Time Limit

3 years

MScOT Program (12-Month, Advanced-Standing 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 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).
- 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 website.

Required Courses

OCT 1111Y	Occupational Science: Foundations for Occupational Therapy
OCT 1121H	Research Issues and Approaches in Occupational Therapy
OCT 1122H	Methods in Practice-Based Research
OCT 1220Y[0]	Graduate Research Project (1.5 FCEs)

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

Program Length

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

Time Limit

3 years

Occupational Science and Occupational Therapy: Occupational Therapy MScOT Courses

OCT 1100H[0]	Applied Skills and Technology: Human Factors and Design in Occupational Therapy
OCT 1111Y	Occupational Science: Foundations for Occupational Therapy
OCT 1121H	Research Issues and Approaches in Occupational Therapy
OCT 1122H	Methods in Practice-Based Research
OCT 1123H	Framing Practice-Based Research
OCT 1131H	Occupational Therapy Practice I
OCT 1132H	Occupational Therapy Practice II
OCT 1133H	Occupational Therapy Practice III
OCT 1141H	Assessment in Occupational Therapy
OCT 1152Y	Musculoskeletal Structure and Function
OCT 1162Y	Psychosocial Perspectives in Occupational Therapy
OCT 1172Y[+]	Neuro-motor/Neuro-cognitive Perspectives in Occupational Therapy
OCT 1183Y	Occupational Therapy Fieldwork I
OCT 1190Y[0]	Building Practice Through Mentorship
OCT 1220Y[0]	Graduate Research Project (1.5 FCEs)
OCT 1251H	Enabling Occupation with Children: Part I
OCT 1252H	Enabling Occupation with Children: Part II
OCT 1261H	Enabling Occupation with Adults: Part I
OCT 1262Y	Enabling Occupation with Adults: Part II
OCT 1271H	Enabling Occupation with Older Adults: Part I
OCT 1272H	Enabling Occupation with Older Adults: Part II
OCT 1281Y	Occupational Therapy Fieldwork II
OCT 1282Y	Occupational Therapy Fieldwork III
OCT 1283Y	Occupational Therapy Fieldwork IV

[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

MSc	*Fields:* Biomolecular Pharmaceutical Sciences Clinical, Social, and Administrative Pharmaceutical Sciences
PhD	*Fields:* Biomolecular Pharmaceutical Sciences Clinical, Social, and Administrative Pharmaceutical Sciences

Collaborative Specializations

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

1. **Addiction Studies**
   - Pharmaceutical Sciences, MSc, PhD
2. **Aging, Palliative and Supportive Care Across the Life Course**
   - Pharmaceutical Sciences, MSc, PhD
3. **Bioethics**
   - Pharmaceutical Sciences, MSc, PhD
4. **Biomedical Engineering**
   - Pharmaceutical Sciences, MSc, PhD
5. **Biomedical Toxicology**
   - Pharmaceutical Sciences, MSc, PhD
6. **Cardiovascular Sciences**
   - Pharmaceutical Sciences, MSc, PhD
7. **Global Health**
   - Pharmaceutical Sciences, PhD
8. **Health Care, Technology, and Place (admissions have closed)**
   - Pharmaceutical Sciences, PhD
9. **Health Services and Policy Research**
   - Pharmaceutical Sciences, MSc, PhD
10. **Neuroscience**
    - 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:

1. 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;
2. Clinical, Social, and Administrative Pharmaceutical Sciences: clinical and pharmacy practice, sociology of health, social psychology, health policy, and health economics.

Contact and Address

Web: www.pharmacy.utoronto.ca/gradprograms
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, GlaxoSmithKline Chair in Pharmaceutics and Drug Delivery
Angers, Stephane - BSc, PhD (***Associate Dean, Research***)
Austin, Zubin - BA, BScPhm, MBA, MISt, MEd, PhD (***Academic Director, Centre for Practice Excellence***)
Balneaves, Lynda - BSc, BN, MN, PhD
Bendayan, Reina - DP
Boon, Heather - PhD (*Dean*)
Cadarette, Suzanne - BSc, MSc, PhD
Chalikian, Tigran - PhD
Cummins, Carolyn - BSc, PhD
Dolovich, Lisa - MSc
Grootendorst, Paul - BA, MEc, PhD
Hampson, David - PhD
Heerklotz, Heiko - PhD
Henderson, Jeffrey - PhD

Hoch, Jeffrey - BA, MA, PhD
Ito, Shinya - MD, BM
Kelley, Shana - BA, PhD
Kohler, Jillian - BA, MA, PhD
Kotra, Lakshmi - BSc, BPhm, PhD, PhD
Krahn, Murray - BA, MSc, MD
Lee, Ping - BSChE, PhD
Macgregor, Robert - BS, PhD (***Director, Graduate Department of Pharmaceutical Sciences***)
MacKeigan, Linda - BScPhm, PhD
Pang, K Sandy - BSc, PhD
Pennefather, Peter - BSc, PhD
Piquette-Miller, Micheline - BScPhm, PhD (***Graduate Coordinator***)
Reilly, Raymond - BSc, BSc, MSc, PhD (***Director, Centre for Pharmaceutical Oncology***)
Sproule, Beth - BScPhm, DP
Taddio, Anna - BScPhm, MScPhm, PhD
Thompson, Alison - BA, MA, PhD (***Graduate Coordinator***)
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
Wu, Xiao Yu - PhD

Members Emeriti

Bowen, Barry - BScPhm, MScPhm

Associate Members

Battistella, Marisa - BScPhm, DP
Chen, Eric - BScPhm, MD, PhD
Cheng, Hai-Ling - BSc, MS, PhD
De Angelis, Carlo - DP
De Lannoy, Ines A.M. - BScPhm, PhD
Dubins, David - BSc, PhD
Dupuis, Lee - BSc, BScPhm, MPharm, PhD
Facey, Marcia - PhD
Franck, Linda - BSN, MS, PhD
Gariepy, Jean - BSc, PhD
Gladstone, Richard - BSc, MD
Gomes, Tara - BSc, MHSc
Hardy, Brian - BSc, BSP, DP
Hollis, Aidan - MA, MA, PhD
Kanfer, Isadore - BScPhm, BSc, PhD
Lexchin, Joel - BSc, MSc, MD
MacLeod, Anna - BA, BEd, MEd, PhD
Mamdani, Muhammad - DP
McCarthy, Lisa - BScPhm, MSc, DP
McMurtry, Meghan - PhD
Nulman, Irena - MD
Papadimitropoulos, Emmanuel - BSc, BSP, MScPhm, PhD
Pardee, Keith Ian - PhD
Pillai Riddell, Rebecca - BA, MA, PhD
Poole, Jennifer - BA, MSW, PhD
Rochon, Paula - MD
Routy, Jean-Pierre - MD
Seto, Winnie - BScPhm, MSc, DP
Tseng, Alice - BScPhm, DP
Wong, William Wai Lun - BSc, MCS, PhD

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 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 and achieve scores at the 50th percentile ranking or better on the Graduate Record Examination (GRE; General Test).

Program Requirements

- 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 complete a minimum of **1.0 full-course equivalent (FCE)**.
- Yearly advisory committee meetings.

- One **poster presentation** given to all faculty and graduate students at Graduate Research in Progress (GRIP).
- Annual attendance at GRIP.
- Regular attendance, with a minimum of **eight seminars**, at the graduate departmental and 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 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

***Applicants may apply to the Fall or Winter session only.*

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 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.

Program Requirements

- 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.
- **Research presentation(s)** to all faculty and graduate students at **Graduate Research in Progress (GRIP)**. Students entering the program with an MSc degree must complete one oral presentation.
- Annual attendance at GRIP.
- Regular attendance, with a minimum of **eight** Pharmaceutical Sciences **departmental seminars** in each academic year for four years (or less if all other program requirements are completed).
- 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, unless the student presents at GRIP.
- 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 months of the student's first registration in the MSc program.

Program Requirements

- **Coursework.** Students must complete a total of **3.0 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.
- **Research presentation(s)** to all faculty and graduate students at **Graduate Research in Progress (GRIP)**. Students must complete two poster presentations, one of which may be a peer-reviewed conference.
- Annual attendance at GRIP.
- Regular attendance, with a minimum of **eight** Pharmaceutical Sciences **departmental seminars** in each academic year for four years (or less if all other program requirements are completed).
- Students must give an **oral research presentation** of approximately 20 to 30 minutes every year unless the student presents at GRIP.
- 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 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.

Program Requirements

- 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 complete **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.
- **Research presentation(s)** to all faculty and graduate students at **Graduate Research in Progress (GRIP)**. Students must complete two poster presentations, one of which may be a peer-reviewed conference.
- Annual attendance at GRIP.
- Regular attendance, with a minimum of **eight** Pharmaceutical Sciences **departmental seminars** in each academic year for four years (or less if all other program requirements are completed).
- 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, unless the student presents at GRIP.
- 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

- 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 **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.
- **Research presentation(s)** to all faculty and graduate students at **Graduate Research in Progress (GRIP)**. Students must complete one poster presentation.
- Annual attendance at GRIP.

- Regular attendance, with a minimum of **eight** Pharmaceutical Sciences **departmental 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.
- 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, unless the student presents at GRIP.
- 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.

PHM 1107H	Advanced Pharmacokinetics Course I
PHM 1109H	Recent Developments in Dosage Form Design (prerequisite: PHM 224Y or equivalent)
PHM 1115H	Special Topics in Radiopharmaceuticals II
PHM 1128H	Introduction to Models and Methods of Research in Clinical, Social, and Administrative Pharmacy
PHM 1130H	Biomolecular Interactions and Thermodynamics I
PHM 1133H	Special Topics in Pharmaceutical Sciences Reading Course
PHM 1135H	Nanomedicines in Oncology
PHM 1136H	Introduction to Biostatistics
PHM 1137H	Introduction to Qualitative Research Methods in the Health Sciences
PHM 1138H	Electronics for Pharmaceutics Applications
BTC 1830H	Medical and Scientific Marketing
JFK 1120H	Selected Topics in Drug Development I
JFK 1121H	Selected Topics in Drug Development II
JFK 1122H	Drug Transport Across Biological Membranes
JNP 1014Y	Interdisciplinary Toxicology
JNP 1017H+	Current Topics in Molecular and Biochemical Toxicology
JNP 1018H+	Molecular and Biochemical Basis of Toxicology
JRH 1000H	Introduction to Pharmacoepidemiology
PAS 3700H	Multidisciplinary Aspects of Addiction Studies
PCL 1004Y	Clinical Pharmacology
PPG 2010H	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.*

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:

1. **Addiction Studies**
   - Pharmacology, MSc, PhD
2. **Biomedical Toxicology**
   - Pharmacology, MSc, PhD
3. **Cardiovascular Sciences**
   - Pharmacology, MSc, PhD
4. **Human Development (admissions have been suspended)**
   - Pharmacology, PhD
5. **Neuroscience**
   - Pharmacology, MSc, PhD
6. **Resuscitation Sciences**
   - Pharmacology, MSc, PhD
7. **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) 978-5244
Fax: (416) 978-6395

Department of Pharmacology and Toxicology
University of Toronto
Room 4207, Medical Sciences Building
Toronto, Ontario M5S 1A8
Canada

Pharmacology and Toxicology: Graduate Faculty

Full Members

Beaulieu, Martin - PhD
Brands, Bruna - PhD
Dorian, Paul - MSc, MDCH
George Bahl, Susan - MD
Goldstein, Benjamin - MD
Grant, Denis - BSc, PhD
Grupp, Larry - DSc
Hampson, David - PhD
Ito, Shinya - MD, BM
Kish, Stephen John - BSc, MSc, PhD
Lanctot, Krista - MSc, PhD
Laposa, Rebecca - 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
Mizrahi, Romina - MD, PhD
Moore, Malcolm - MD
Nobrega, Jose - PhD
Pang, K Sandy - BSc, PhD
Parker, John - BA, MD
Petronis, Arturas - MD
Pollock, Bruce - BSc, MD, PhD
Ramsey, Amy - PhD
Riddick, David - BSc, PhD
Ross, Ruth Alexandra - PhD (*Chair and Graduate Chair*)
Roy, Peter John - BSc, PhD
Salahpour, Ali - PhD (**Acting Chair and Acting Graduate Chair**)
Salmena, Leonardo - PhD
Schimmer, Bernard - BS, PhD
Sibille, Etienne - BSc, PhD
Snead III, Carter - BS, MD, MD
Tyndale, Rachel - PhD
Uetrecht, Jack - BSc, MSc, MD, PhD
Warsh, Jerry - MD
Wells, James - BSc, MSc, PhD
Wells, Peter - BScPhm, DP

Wong, Albert - MD, PhD
Young, Lionel Trevor - MSc, MD, PhD

Members Emeriti

Burnham, Willets - PhD
Endrenyi, Laszlo - PhD
Kalant, Harold - BSc, MD, PhD
Okey, Allan - BSc, MSc, PhD
Pace-Asciak, Cecil - PhD
Seeman, Philip - BSc, MSc, MDCH, PhD

Associate Members

Arnot, Michelle - PhD
Boutros, Paul - PhD
Kotsopoulos, Joanne - BSc, MSc, PhD
Mittmann, Nicole - PhD
Mueller, Daniel - MD
Nulman, Irena - MD
Schapira, Matthieu - MChem, PhD
Sun, Hong-Shuo - MSc, DrMed, DPhil
Swardfager, Walter - PhD
Vedadi, Masoud - PhD
Woodland, Cindy - PhD
Zawertailo, Laurie Anne - 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 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 PCL 1002Y *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, Applied Clinical Pharmacology Field

MSc Program (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)** and are recommended to take required courses in Year 1 and elective courses in Year 2.

- **Required courses (6.0 FCEs):**
  - PCL 1001Y *Systems Pharmacology*
  - PCL 1002Y *Graduate Pharmacology*
  - PCL 1004Y *Clinical Pharmacology*
  - PCL 1100H *Applied Skills in Clinical Pharmacology**
  - PCL 1101H *Technology, Techniques, and Translation in Pharmacology and Toxicology**
  - PCL 1402H *Pharmacology and Toxicology in Drug Development*
  - PCL 1491H *Clinical Pharmacology: Principles in Practice*
  - PCL 2200Y[0] *Major Research Project*. Students will enrol normally in the Summer of Year 1 or no later than the Fall of Year 2.

* These courses begin in May of Year 1.

Plus

- **Elective courses (2.0 FCEs)** from the following list:
  - PCL 1012H *Cognitive Neuropharmacology*
  - PCL 1300H *Selected Topics in Clinical Pharmacology*
  - PCL 2101H[0] *Practicum in Clinical Pharmacology I*
  - PCL 2102H[0] *Practicum in Clinical Pharmacology II*
  - BTC 1830H *Medical and Scientific Challenges in Marketing New Therapeutics*
  - CHL 5201H *Biostatistics I* (exclusion: LMP 1407H)
  - JNP 1014Y *Interdisciplinary Toxicology*
  - JPM 1005Y *Behavioural Pharmacology*
  - LMP 1407H *Introductory Biostatistics and Clinical Investigation* (exclusion: CHL 5201H)
  - Other graduate courses may be accepted as electives. Please consult with the Applied Clinical Pharmacology program director for approval of other elective courses not listed here.
  - Clinical practicums (either PCL 2101H or PCL 2102H [credit/no credit]), if chosen from electives, must be completed by Year 2.

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.

MSc Program (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 may be considered for advanced standing with either:
  - a bachelor's degree 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:

- PCL 1002Y *Graduate Pharmacology* (1.0 FCE)
- PCL 1004Y *Clinical Pharmacology* (1.0 FCE)
- PCL 1100H *Applied Skills in Clinical Pharmacology* (0.5 FCE)
- PCL 2200Y[0] *Major Research Project* (1.0 FCE), taken in the Fall of Year 1.

- At least one half-course elective (0.5 FCE) chosen from the following list, and upon recommendation of the program director:
    - PCL 1012H *Cognitive Neuropharmacology*
    - PCL 1300H *Selected Topics in Clinical Pharmacology and Toxicology*
    - PCL 2101H *Practicum in Clinical Pharmacology I*
    - PCL 2102Y *Practicum in Clinical Pharmacology II*
    - BTC 1830H *Medical and Scientific Challenges in Marketing New Therapeutics*
    - CHL 5201H *Biostatistics I* (exclusion: LMP 1407H)
    - JFK 1120H *Selected Topics in Drug Development I*
    - JNP 1014Y *Interdisciplinary Toxicology*
    - JPM 1005Y *Behavioural Pharmacology*
    - LMP 1407H *Introductory Biostatistics and Clinical Investigation* (exclusion: CHL 5201H).

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:
    - PCL 1002Y *Graduate Pharmacology* (primary subject)
    - PCL 1003Y[0] *Seminars in Pharmacology* (credit/no credit course)
    - 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 PCL 1003Y[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, MSc Applied Clinical Pharmacology Field, 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.

PCL 1001Y	Systems Pharmacology
PCL 1002Y	Graduate Pharmacology
PCL 1003Y[0]	Seminars in Pharmacology (Credit/No Credit)
PCL 1004Y	Clinical Pharmacology
PCL 1012H	Cognitive Neuropharmacology
PCL 1100H	Applied Skills in Clinical Pharmacology
PCL 1101H	Technology, Techniques, and Translation in Pharmacology and Toxicology
PCL 1110H	Applied Skills in Clinical Pharmacology
PCL 1300H	Selected Topics in Clinical Pharmacology and Toxicology (Credit/No Credit) (prerequisite: PCL 1100H)
PCL 1402H	Pharmacology and Toxicology in Drug Development
PCL 1491H	Clinical Pharmacology: Principles in Practice (co-requisite: PCL 1004Y or prior pharmacokinetics course)
PCL 2101H[0]	Practicum in Clinical Pharmacology I (Credit/No Credit) (prerequisite: PCL 1100H)
PCL 2102H[0]	Practicum in Clinical Pharmacology II (Credit/No Credit) (prerequisite: PCL 1100H)
PCL 2200Y[0]	Major Research Project (prerequisite or co-requisite: PCL 1100H)
PCL 2201Y[0]	Research Project Extended Study (Credit/No Credit) (prerequisite: PCL 2200Y)
CHL 5201H	Biostatistics I (exclusion: LMP 1407H)
JFK 1120H	Selected Topics in Drug Development I
JFK 1121H	Selected Topics in Drug Development II
JFK 1122H	Drug Transport Across Biological Membranes
JNP 1014Y	Interdisciplinary Toxicology
JNP 1016H	Graduate Seminar in Toxicology
JNP 1017H[+]	Current Topics in Molecular and Biochemical Toxicology
JNP 1018H[+]	Molecular and Biochemical Basis of Toxicology
JNR 1444Y	Fundamentals of Neuroscience: Cellular and Molecular
JPM 1005Y	Behavioural Pharmacology
JYG 1555H	Advanced Topics: Cellular and Molecular Neurobiology
LMP 1407H	Introductory Biostatistics and Clinical Investigation (exclusion: CHL 5201H)

[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.

Philosophy

Philosophy: Introduction

Faculty Affiliation

Arts and Science

Degree Programs

Philosophy

MA
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:

1. **Ancient and Medieval Philosophy**
   - Philosophy, PhD
2. **Bioethics**
   - Philosophy, MA, PhD
3. **Editing Medieval Texts**
   - Philosophy, PhD
4. **Jewish Studies**
   - Philosophy, MA, PhD
5. **Sexual Diversity Studies**
   - Philosophy, MA, PhD
6. **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 our 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, our historians of philosophy benefit from and contribute to ground-breaking work in systematic philosophy. This integration of historical and systematic philosophy sets us apart from other top philosophy departments where the history of philosophy is often segregated from the rest of the discipline.

Contact and Address

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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
Clark, Philip - BA, MA, PhD
Comay, Rebecca - BA, MA, PhD
Cunningham, Frank - 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
Novak, David - AB, PhD
Pickavé, Martin - MA, PhD (***Chair and Graduate Chair***)
Raffman, Diana - BA, PhD, FRSC
Rattan, Gurpreet - BSc, AM, MPH, PhD (***Graduate Director***)

Ripstein, Arthur S - BA, MA, LLM, PhD (***Acting Chair and Acting Graduate Chair***)
Rozemond, Marleen - BA, PhD
Seager, William Edward - BA, MA, PhD
Sedivy, Sonia - BA, PhD
Sepielli, Andrew - AB, JD, PhD
Shen, Vincent Tsing-song - MA, PhD
Smith, Brian Cantwell - BS, MS, PhD
Stang, Nicholas - AB, PhD
Tenenbaum, Sergio - MA, PhD
Thompson, Paul - BA, 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
Kremer, Elmar - AB, PhD
Stefanovic, Ingrid - BA, MA, PhD
Urquhart, Alasdair - MA, MA, PhD

Associate Members

Barnett, David - BA, PhD
Goetschel, Willi - PhD
Swarup, Shruta - BA, MA, PhD
Ware, Owen - BA, 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. In certain cases, an applicant whose background in philosophy is deficient may be admitted to the MA program but be required to take one or two additional courses, possibly at the undergraduate 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

- **Coursework.** Students must complete **3.5 full-course equivalents (FCEs)** in philosophy including:
  - 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.
    - 0.5 FCE taken in the first session
    - 0.5 FCE taken in the second session
  - teaching workshop PHL 2152H *Philosophy and Teaching* (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 history of philosophy courses.
        - At least 1.0 FCE which must comprise problems of philosophy courses.
        - The proseminar in philosophy (PHL 1111H) 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 required areas must be chosen from the periods in the history of philosophy specified below:
        - Ancient
        - Medieval
        - Seventeenth to eighteenth centuries
        - Nineteenth century
        - Twentieth century.
    - 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.
- **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.
- **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 history of philosophy courses.
        - At least 2.0 FCEs which must comprise problems of philosophy courses.
        - The proseminar in philosophy (PHL 1111H) 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 the periods in the history of philosophy specified below:
        - Ancient
        - Medieval
        - Seventeenth to eighteenth centuries
        - Nineteenth century
        - Twentieth century.
    - 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.
- **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.

- **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 *Graduate Bulletin,* 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 Course for PhD Students

PHL 1111H	Proseminar

Reading Courses

PHL 1000H,Y	Reading Course
PHL 1001H,Y	Reading Course
PHL 1500H,Y	Reading Course

History of Philosophy

Ancient Philosophy

PHL 2000H	Early Greek Philosophy
PHL 2002H	Plato
PHL 2003H	Aristotle
PHL 2005H	Seminar in Plato
PHL 2007H	Seminar in Aristotle
PHL 2009H	Seminar in Greek Philosophy
PHL 2010H	Late Greek Philosophy
PHL 2011H	Seminar in Hellenistic Philosophy

Eastern Philosophy

PHL 2015H	Confucianism
PHL 2016H	Taoism: Philosophy and Religion
PHL 2017H	Buddhism in China

Medieval Philosophy

PHL 2020H	Augustine
PHL 2030H	Aquinas
PHL 2032H	Seminar in Aquinas
PHL 2040H	Medieval Philosophy
PHL 2041H	Seminar in Medieval Philosophy
PHL 2042H	Topics in Medieval Philosophy
PHL 2045H	Late Medieval Philosophy

Early Modern Philosophy

PHL 2050H	Descartes
PHL 2051H	The Rationalists
PHL 2054H	Hume
PHL 2055H	The Empiricists
PHL 2057H	Seminar in Seventeenth-and Eighteenth-Century Philosophy
PHL 2062H	Kant's Critique of Pure Reason
PHL 2063H	Kant's Ethics
PHL 2064H	Seminar in Kant

Nineteenth- and Twentieth-Century Philosophy

PHL 2076H	Hegel
PHL 2078H	Kierkegaard
PHL 2079H	Marxist Philosophy
PHL 2084H	Seminar in Nineteenth-Century Continental Philosophy
PHL 2085H	Husserl
PHL 2088H	Heidegger
PHL 2089H	Seminar in Twentieth-Century Continental Philosophy
PHL 2090H	Hermeneutics
PHL 2091H	The Critical Theory of Society
PHL 2092H	Pragmatism
PHL 2093H	Frege
PHL 2094H	Russell
PHL 2095H	Wittgenstein
PHL 2096H	Seminar in Analytic Philosophy
PHL 2097H	Topics in Analytic Philosophy
PHL 2099H	Bernard Lonergan
JCY 5116H	Freud: Case Histories

Problems of Philosophy

Metaphysics and Epistemology

PHL 2100H	Metaphysics
PHL 2101H	Seminar in Metaphysics
PHL 2105H	Topics in Metaphysics
PHL 2110H	Epistemology
PHL 2111H	Seminar in Epistemology
PHL 2115H	Topics in Epistemology
PHL 2117H	Formal Epistemology
PHL 2119H	Philosophical Foundations of Multidisciplinary Studies
PHL 2171H	Philosophy of Mind
PHL 2172H	Seminar in Philosophy of Mind
PHL 2174H	Freud's Philosophy of Mind
PHL 2175H	Philosophy of Perception
PHL 2181H	Philosophy of Religion
PHL 2182H	Seminar in Philosophy of Religion

Logic and the Philosophy of Language

PHL 2120H	Introductory Mathematical Logic
PHL 2122H	Advanced Logic
PHL 2124H	Seminar in Logic
PHL 2125H	Many Valued and Modal Logics
PHL 2126H	Philosophy of Logic
PHL 2127H	Philosophy of Mathematics
PHL 2128H	Decision and Game Theory
PHL 2130H	Topics in Informal Logic
PHL 2137H	Philosophy of Action
PHL 2190H	Philosophy of Language
PHL 2191H	Seminar in the Philosophy of Language
PHL 2197H	Foundations of Computation and Information

Value Theory

PHL 2131H	Ethics
PHL 2132H	Seminar in Ethics
PHL 2133H	Topics in Ethics
PHL 2135H	Metaethics
PHL 2141H	Political Philosophy
PHL 2142H	Seminar in Political Philosophy
PHL 2143H	Social Philosophy
PHL 2144H	Seminar in Social Philosophy
PHL 2145H	Bioethics
PHL 2146Y	Topics in Bioethics
PHL 2148H	Philosophy of Law
JPL 2149H	Legal Theory
PHL 2151H	Aesthetics
PHL 2152H	Philosophy and Teaching

Feminist Philosophy

JPW 2118H	Philosophical Foundations of Women's Studies
PHL 2140H	Topics in Feminist Philosophy

Philosophy of Science

JPH 2192H	Philosophy of Science
JPH 2194H	Topics in the History of the Philosophy of Science
PHL 2195H	Philosophy of Biology
PHL 2196H	Topics in the Philosophy of Science
PHL 2199H	Seminar in the Philosophy of Science

Miscellaneous

PHL 2222H	MA Seminar
PHL 3000H	Professional Development Workshop
PHL 3101H	Intensive Special Course
PHL 4900H	Research Seminar

Physical and Environmental Sciences

Physical and Environmental Sciences: Introduction

Faculty Affiliation

University of Toronto Scarborough (UTSC)

Degree Programs

Environmental Science

MEnvSc	*Fields:* Biophysical Interactions in Terrestrial and Aquatic Systems Climate Change Impact Assessment Conservation and Biodiversity
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

Collaborative Specializations

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

1. **Development Policy and Power**
   - Environmental Science, MEnvSc
2. **Environment and Health**
   - Environmental Science, MEnvSc, PhD
3. **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
Email: MEnvSc: menvsc@utsc.utoronto.ca
PhD: epick@utsc.utoronto.ca
Telephone: MEnvSc: (416) 287-7205
PhD: (416) 208-2910
Fax: (416) 287-7204

Graduate Department of Physical and Environmental Sciences
University of Toronto Scarborough
1265 Military Trail, Environmental Science & Chemistry Building
Toronto, Ontario M1C 1A4
Canada

Physical and Environmental Sciences: Graduate Faculty

Full Members

Abbatt, Jonathan - BSc, PhD
Allen, D Grant - BASc, MASc, PhD
Andrade, Maydianne - BSc, MS, PhD
Archontitsis, Georgios - BSc, MSc, DScA (***Graduate Chair***)
Boonstra, Rudy - BSc, PhD
Cadotte, Marc W. - BS, MS, PhD
Campbell, Malcolm - DPhil
Chen, Jing - BSc, PhD
Cowling, Sharon - BSc, MSc, PhD
Desloges, Joseph - BES, MSc, PhD
Diamond, Miriam - MSc, MSc, PhD
Dittrich, Maria B. - BES, MSc, PhD
Donaldson, D. James - PhD (***Acting Chair***)
Edwards, Elizabeth - BEng, PhD
Evans, Gregory - PhD
Eyles, Nicholas - BSc, MSc, PhD, DSc
Finkelstein, Sarah - AB, MPH, PhD
Fulthorpe, Roberta - BSc, MSc, PhD
Gough, William - BSc, MSc, PhD
He, Yuhong - PhD
Hoffmann, Matthew - BSc, PhD
Howard, Kenneth - 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 (***Vice-Principal, Research***)
Kronzucker, Herbert - PhD
Lovejoy, Nathan Richard - BSc, MS, PhD
Malcolm, Jay - BSc, MSc, PhD
Miall, Andrew - BSc, PhD
Mitchell, Carl - PhD (***Acting Graduate Chair***)
Murphy, Jennifer - BCh, DChem
Peng, Hui - 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
Sullan, Ruby May - BSc, PhD

Terebiznik, Mauricio - BSc, PhD
Tsuji, Leonard - BSc, DDS, PhD
Vanlerberghe, Greg - BSc, MSc, PhD
Wania, Frank - MPH, PhD
Wells, Mathew - BS, DPhil
Wortmann, Ulrich - BSc, MSc, PhD
Zhang, Xiaoan - MS, PhD

Members Emeriti

Stefanovic, Ingrid - BA, MA, PhD

Associate Members

Arnot, Jon - BS, MES, PhD
Bergquist, Bridget - BS, PhD
Dalili, Shadi - MSc, PhD
De Silva, Amila - BSc, MSc, PhD
Dextrase, Alan - BSc, MSc, PhD
Doughty, Mike - BS, MS
Dunlop, Erin - BSc, PhD
Fenech, Adam - BA, MES
Hewer, Micah Joel - BA, MA, PhD
Hung, Hayley - BChe, MS, PhD
Jantunen, Liisa - PhD
Laidler, Gita - BA, MSc, PhD
Mandrak, Nicholas - BSc, MSc, PhD
McIelwain, Tom - BS
Meriano, Mandana - ScD
Mikhaylichenko, Svetlana - MSc, DChem
Mirza, Monirul - BSE, MEng, PhD
Ollson, Christopher A. - BSc, MSc, PhD
Rochman, Chelsea - BS, PhD
Sauer, Effiette - BS, PhD
Smith, Karen Louise - BSc, MASc, MASc, PhD
Weyl, Olaf - PhD
Wunch, Debra - BSc, MSc, PhD

Physical and Environmental Sciences: Environmental Science MEnvSc

Master of Environmental Science

Program Description

The MEnvSc is a 12-month degree program committed to the development of well-trained practitioners in environmental science in all fields, primarily to meet the needs of industry, governments, and environmental policy/education organizations.

The MEnvSc offers three enrolment options—research, internship, and part-time studies—in each of the three fields. The three designated fields of study are:

1. **Biophysical Interactions in 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.
2. **Climate Change Impact Assessment**: 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.
3. **Conservation and Biodiversity**: A major focus is the application of ecological theory and principles to real-world conservation challenges.

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 focusing on development of their job seeking, interpersonal, communication, and critical thinking skills. 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 and study modes.

Field: Biophysical Interactions in 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:
  - EES 1100H *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 (EES 1116Y) **or**

        - 3.5 FCEs in elective courses (see the course list) and 1.5 FCEs for the research paper (EES 1101Y). Students planning to complete the research paper option must complete the prerequisite EES 1114H.
- 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 placement 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 and on an assessment of a written placement project report.
- 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: Climate Change Impact Assessment

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:
    - EES 1100H *Advanced Seminar in Environmental Science* (0.5 FCE)
    - EES 1117H *Climate Change Impact Assessment* (0.5 FCE)
    - EES 1132H *Climate Data Analysis* (0.5 FCE)
    - EES 1133H *Climate Change Science and Modelling* (0.5 FCE)
    - Completion of two of the following three courses:
        - EES 1131H *Applied Climatology* (0.5 FCE)
        - EES 1134H *Climate Change Policy* (0.5 FCE)
        - EES 1136H *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 (EES 1116Y), **or**
        - 1.0 FCE in elective courses (see course list) and 1.5 FCEs for the research paper (EES 1101Y). Students planning to complete the research paper option must complete the prerequisite (EES 1114H).
- 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 placement 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 and on an assessment of a written placement project report.
- 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.

Program Requirements

- **Coursework** consists of **5.5 full-course equivalents (FCEs)** as follows:
    - EES 1100H *Advanced Seminar in Environmental Science* (0.5 FCE)
    - EES 3000H *Applied Conservation Biology* (0.5 FCE)
    - EES 3001H *Professional Scientific Literacy* (0.5 FCE)
    - EES 3002H *Conservation Policy* (0.5 FCE)
    - EES 3003H *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 (EES 1116Y) **or**
        - 1.5 FCEs in elective courses (see the course list) and 1.5 FCEs for the research paper (EES 1101Y).
- 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 placement 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 and on an assessment of a written placement project report.
- 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.

EES 1100H	Advanced Seminar in Environmental Science
EES 1101Y	Research Paper in Environmental Science
EES 1102H	Analytical Chemistry for Geoscientists
EES 1103H	Field Measurements and Sampling: The Essentials
EES 1104H	Microorganisms and the Environment
EES 1105H	Soil Contamination Chemistry
EES 1106H	Geological Evolution and Environmental History of North America
EES 1107H	Remediation Methods
EES 1108H	Environmental Science Field Camp
EES 1109H	Advanced Techniques in Geographic Information Systems
EES 1110H	Sediment and Contaminant Transport in Aquatic Systems
EES 1111H	Freshwater Ecology and Biomonitoring
EES 1112H	Boundary Layer Climates and Contaminant Fate
EES 1113H	Groundwater Hydrochemistry and Contaminant Transport
EES 1114H	Directed Readings in Environmental Science I
EES 1115H	Directed Readings in Environmental Science II
EES 1116Y	Internship
EES 1117H	Climate Change Impact Assessment
EES 1118H	Fundamentals of Ecological Modelling
EES 1119H	Quantitative Environmental Analysis
EES 1120H	Fluid Dynamics of Contaminant Transport
EES 1121H	Modelling the Fate of Organic Chemicals in the Environment
EES 1122H	Global Environmental Security and Sustainable Development

EES 1123H	Environmental Regulations
EES 1124H	Environmental Project Management
EES 1125H	Contaminated Site Remediation
EES 1126H	Hydrology and Watershed Management
EES 1127H	Biogeochemical Principles: Applications for Sustainable Ecosystem Restoration
EES 1128H	Biophysical Interactions in Managed Environments
EES 1129H	Brownfields Redevelopment
EES 1130H	Ontario BioGeospheres Field Course
EES 1131H	Applied Climatology
EES 1132H	Climate Data Analysis
EES 1133H	Climate Change Science and Modelling
EES 1134H	Climate Change Policy
EES 1135H	Environmental Change and Human Health
EES 1136H	Climate Change Adaptation
EES 1137H	Quantitative Applications for Data Analysis
EES 1701H	Environmental Legislation and Policy
EES 1704H	Environmental Risk Assessment
EES 3000H	Applied Conservation Biology
EES 3001H	Professional Scientific Literacy
EES 3002H	Conservation Policy
EES 3003H	Topics in Applied Biodiversity
EES 3111H	Conservation Genetics
EES 3113H	Topics in Population and Community Ecology
EES 3114H	Topics in Urban and Rural Ecology

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, and social sciences. Research is clustered into six major concentrations:

1. Climate Change and the Environment
2. Contaminant Flux
3. Environmental Science in Transitional Economies
4. Great Lakes Ecosystems
5. Remediation and Restoration of Degraded Environmental Systems
6. 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 (EES 2200H *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 of approximately two hours. 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 (EES 2200H *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 of approximately two hours. 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

EES 2200H	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

EES 1102H	Analytical Chemistry for Geoscientists
EES 1103H	Field Measurements and Sampling: The Essentials
EES 1104H	Microorganisms and the Environment
EES 1105H	Soil Contamination Chemistry
EES 1106H	Geological Evolution and Environmental History of North America
EES 1107H	Remediation Methods
EES 1109H	Advanced Techniques in Geographic Information Systems
EES 1110H	Sediment and Contaminant Transport in Aquatic Systems
EES 1111H	Freshwater Ecology and Biomonitoring
EES 1112H	Boundary Layer Climates and Contaminant Fate
EES 1113H	Groundwater Hydrochemistry and Contaminant Transport
EES 1117H	Climate Change Impact Assessment
EES 1118H	Fundamentals of Ecological Modelling
EES 1119H	Quantitative Environmental Analysis
EES 1120H	Fluid Dynamics of Contaminant Transport
EES 1121H	Modeling the Fate of Organic Chemicals in the Environment
EES 1122H	Global Environmental Security and Sustainable Development
EES 1126H	Hydrology and Watershed Management
EES 1127H	Biogeochemical Principles: Applications for Sustainable Ecosystem Restoration
EES 1128H	Biophysical Interactions in Managed Environments
EES 1131H	Applied Climatology
EES 1132H	Climate Data Analysis
EES 1133H	Climate Change Science and Modelling
EES 1134H	Climate Change Policy
EES 1135H	Environmental Change and Human Health
EES 1136H	Climate Change Adaptation
EES 1137H	Quantitative Applications for Data Analysis
EES 2201H	Advanced Readings in Environmental Science
EES 3000H	Applied Conservation Biology
EES 3001H	Professional Scientific Literacy
EES 3002H	Conservation Policy
EES 3003H	Topics in Applied Biodiversity
EES 3111H	Conservation Genetics
EES 3113H	Topics in Population and Community Ecology
EES 3114H	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. They are improving the health of individuals through the discovery, application, and exchange of knowledge.

Contact and Address

Web: www.physicaltherapy.utoronto.ca
Email: physther.facmed@utoronto.ca
Telephone: (416) 946-8641
Fax: (416) 946-8562

Department of Physical Therapy
University of Toronto
Room 160, 500 University Avenue
Toronto, Ontario M5G 1V7
Canada

Physical Therapy: Graduate Faculty

Full Members

Agur, Anne - BSc, MSc, PhD
Brooks, Dina - BSc(PT), MSc, PhD
Gibson, Barbara - MSc, BMR(PT), PhD
Jaglal, Susan - BSc, MSc, PhD
Mathur, Sunita - BSc(PT), MSc(PT), PhD
Nixon, Stephanie - BHSc(PT), BA, MSc, PhD
Patterson, Kara - BSc, BPT, MSc, PhD
Reid, Wendy Darlene - BMR(PT), PhD (*Chair and Graduate Chair*)
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, Mary (Molly) - DipOT , MHSc

Associate Members

Evans, Catherine - BSc, MSc, PhD (***Coordinator of Graduate Studies***)
Hunter, Judith - BPT, MSc, PhD
Mori, Brenda - BSc(PT), MSc
O'Brien, Kelly - BSc(PT), BS, PhD
Switzer-Mcintyre, Sharon - BSc, BPHE, PhD
Yeung, Euson - BSc(PT), MEd

Physical Therapy: Physical Therapy MScPT

Master of Science in Physical Therapy

Program Description

The MScPT is a 24-month professional program leading to entry to practice. The program is accredited by Physiotherapy Education Accreditation Canada. Graduates will be eligible to write the Physiotherapy Competency Examination (PCE), administered by the Canadian Alliance of Physiotherapy Regulators, which qualifies them to practice physical therapy in Canada. Graduates will be eligible to register in the Canadian Physiotherapy Association and the Colleges of Physiotherapy in all Canadian provinces.

The 12-month 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 one 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 including 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), with minimum scores of:
  - 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.
- Applicants can apply online using the Ontario Rehabilitation Sciences Programs Application Service (ORPAS). Applications are accepted starting mid-October each year, with an early January deadline. Transcripts are due by the end of January. Exact deadlines are posted on the ORPAS website, in the ORPAS Instruction Booklet and on the Physical Therapy website.
- Visit the Physical Therapy and the ORPAS websites for more information regarding application requirements and document submissions (e.g., confidential assessment forms, prerequisites, and the Computer Administered Profile exam).

Program Requirements

- **Coursework.** Students must complete **18.5 full-course equivalents (FCEs)** over two years of continuous, full-time study.
- Included within the program structure are 28 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)

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 practice 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), with minimum scores of:
  - 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.
- Applicants can apply online using the Ontario Rehabilitation Sciences Programs Application Service (ORPAS). Applications are accepted starting mid-October each year, with an early January deadline. Transcripts are due by the end of January. Exact deadlines are posted on the ORPAS website, in the ORPAS Instruction Booklet and on the Physical Therapy website.
- Visit the Physical Therapy and the ORPAS websites for more information on application requirements and document submissions (e.g., confidential assessment forms, prerequisites, and the Computer Administered Profile exam).

Program Requirements

- Students must attend unit 6 PHT 1006Y (0.75 FCE) and unit 12 PHT 1012Y (1.0 FCE) in on-campus residency periods.
- Students must complete unit 10 PHT 1010Y, a group research project, via online format (0.75 FCE).
- Students must complete PHT 1016H *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 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

PHT 1001H	Introduction to Professional Physical Therapy Practice, Evaluation and Research
PHT 1002Y	Cardiorespiratory and Exercise Physical Therapy Practice
PHT 1003Y	Musculoskeletal Physical Therapy Practice
PHT 1004Y	Clinical Internship—Cardiorespiratory (Honours/Pass/Fail)
PHT 1005Y[+]	Neurological Physical Therapy Practice
PHT 1006Y	Research and Program Evaluation for Physical Therapy Practice I
PHT 1007Y	Clinical Internship—Neuroscience (Honours/Pass/Fail)
PHT 1008Y[+]	Advanced Neuromusculoskeletal Physical Therapy Practice
PHT 1009Y	Clinical Internship—Musculoskeletal II (Honours/Pass/Fail)
PHT 1010Y	Research and Program Evaluation for Physical Therapy Practice II (Honours/Pass/Fail)
PHT 1011Y	Clinical Internship—Selective (Honours/Pass/Fail)
PHT 1012Y	Research and Program Evaluation for Physical Therapy Practice III
PHT 1014Y	Clinical Internship—Musculoskeletal (Honours/Pass/Fail)
PHT 1016H	Evidence Based Practice in Physical Therapy

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

Elective Course

PHT 1015Y	Clinical Internship—Physical Therapy Practice (Honours/Pass/Fail) (PHT 1015Y may replace any one of PHT 1004Y, PHT 1007Y, PHT 1009Y, PHT 1011Y, and PHT 1014Y.)

Physics

Physics: Introduction

Faculty Affiliation

Arts and Science

Degree Programs

Physics

MSc
PhD

Collaborative Specializations

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

1. **Biomedical Engineering**
   - Physics, MSc, PhD
2. **Earth Sciences and Physics**
   - Physics, MSc, PhD
3. **Environmental Studies**
   - Physics, MSc, PhD
4. **Optics**
   - Physics, MSc

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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Email: grad@physics.utoronto.ca
Telephone: (416) 978-2945
Fax: (416) 978-1547

Department of Physics
University of Toronto
Room 315, McLennan Physical Labs
Toronto, Ontario M5S 1A7
Canada

Physics: Graduate Faculty

Full Members

Abbatt, Jonathan - BSc, PhD
Bailey, David - BSc, PhD
Barzda, Virginijus - BS, DSc
Bond, J Richard - BSc, MS, PhD, FRSC, FRS
Curtin, David - BSc, MSc, PhD
Dhirani, Al-Amin - MSc, PhD
Donaldson, D. James - PhD
Dyer, Charles - BS, MSc, PhD
Ghent, Rebecca - BA, MSc, PhD
Goyal, Sidhartha - MS, PhD
Gradinaru, Claudiu - PhD
Grisouard, Nicolas - BSc, MS, PhD
Hilfinger, Andreas - MA, MSc, PhD
Holdom, Bob - BSc, MA, 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 (***Acting Chair and Acting Graduate Chair***)
Marjoribanks, Robin - BSc, MS, MSc, PhD
McMillen, David - BSc, MS, PhD
Milkereit, Bernd - DrRerNat
Miller, R J Dwayne - BSc, PhD
Milstein, Josh - BS, PhD
Moore, GW Kent - 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, Amanda - 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
Repka, Joseph - BSc, PhD
Ryu, William - AB, PhD
Savard, Pierre - PhD
Sinervo, Pekka - BSc, PhD
Sipe, John - BSc, MSc, PhD
Steinberg, Aephraim - BS, MA, PhD
Strong, Kimberly - PhD (***Chair and Graduate Chair***)
Tanaka, Hirohisa A. - AB, PhD
Teuscher, Richard - BSc, MSc, PhD
Thompson, Christopher - BSc, PhD
Thywissen, Joseph - AM, PhD

Trischuk, William - PhD (***Associate Chair, Graduate Studies***)
Valencia, Diana - BS, MS, ScD
Vutha, Amar C. - MSc, PhD
Walker, Kaley - BSc, PhD
Wei, John - PhD
Wells, Mathew - BS, DPhil
Wunch, Debra - BSc, MSc, PhD
Yang, Luyi - BS, MA, PhD
Zilman, Anton - BSc, MSc, PhD

Members Emeriti

Bailey, Richard - BSc, PhD
Birgeneau, Robert - BSc, PhD
Code, Richard - BSc, AM, PhD
Desai, Rashmikant - BSc, PhD
Drake, Thomas - BSc, MSc, PhD
Drummond, James - BA, MA, DPhil
Dunlop, David - MA, PhD
Edwards, Richard - BSc, PhD, ARCS
Joy, Michael - BSc, MASc, PhD
Key, Anthony - MA, DPhil
Litherland, Albert - BSc, PhD, FRS
Logan, Robert - BSc, PhD
Martin, John - PhD
May, Albert - BA, MA, PhD
Norwich, Kenneth - MSc, PhD
Perz, John - BASc, MASc, PhD
Rowe, David - BA, MA, DPhil
Van Driel, Henry - BSc, MSc, PhD
West, Gordon - BASc, MA, PhD
Wong, Samuel - BA, MS, PhD

Associate Members

Deyirmenjian, Vatche Berj - PhD
Lee, Christopher - BA, PhD
Smith, Kendrick - 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 PHY 3400Y (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 PHY 3400Y (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

PHY 1460H	Nonlinear Physics
PHY 1483H	Relativity Theory I
PHY 1484H	Relativity Theory II
PHY 1485H	Laser Physics
PHY 1487H	Quantum Theory of Solids I
PHY 1489H	Introduction to High Energy Physics
PHY 1491H	Current Interpretations of Quantum Mechanics
PHY 1492H	Physics of the Earth
PHY 1495H	Geophysical Research Methods
PHY 1498H	Introduction to Atmospheric Physics

General Courses

PHY 1500H	Statistical Mechanics
PHY 1510H	Electromagnetism
PHY 1520H	Quantum Mechanics
PHY 1530H	Fluid Mechanics
PHY 1540H	Mathematical Methods in Physics
PHY 1600H	Effective Communication for Physicists
PHY 1610H	Scientific Computing for Physicists

Specialized Courses

PHY 2108H	Special Topics in Physics I
PHY 2109H	Special Topics in Physics II
PHY 2202H	Atomic and Molecular Physics
PHY 2203H	Quantum Optics I
PHY 2204H	Quantum Optics II
PHY 2205H	Special Topics in Quantum Optics I
PHY 2206H	Special Topics in Quantum Optics II
PHY 2208H	Nonlinear Optics
PHY 2211H	Quantum Information Theory
PHY 2212H	Entanglement Physics
PHY 2303H	Quantum Theory of Solids II
PHY 2313H	Special Topics in Condensed Matter Physics I
PHY 2314H	Special Topics in Condensed Matter Physics II
PHY 2315H	Advanced Statistical Mechanics
PHY 2321H	Many Body Physics I
PHY 2322H	Many Body Physics II
PHY 2401H	Cosmology and Black Holes
PHY 2403H	Quantum Field Theory I
PHY 2404H	Quantum Field Theory II
PHY 2405H	Experimental High Energy Physics
PHY 2406H	Special Topics in Particle Physics I
PHY 2407H	Special Topics in Particle Physics II
PHY 2408H	Phenomenology of the Standard Model
PHY 2502H	Climate System Dynamics
PHY 2504H	Advanced Atmospheric Dynamics
PHY 2505H	Atmospheric Radiative Transfer and Remote Sounding
PHY 2506H	Data Assimilation and Retrieval Theory
PHY 2509H	Special Topics in Atmospheric Physics I
PHY 2510H	Special Topics in Atmospheric Physics II
PHY 2603H	Inverse Theory
PHY 2604H	Planetary Dynamo Theory
PHY 2605H	Exploration Seismology
PHY 2609H	Planetary Physics
PHY 2706H	Special Topics in Biological Physics
PHY 2707H	Cellular and Molecular Biophysics I
PHY 2708H	Cellular and Molecular Biophysics II
PHY 2709H	Quantitative Biology of Systems, Organisms, and Populations
PHY 2710H	Computational Methods in Biophysics
PHY 2711H	Biophysical Techniques
JGP 4170H	Geotectonics

Report Course for MSc Students

PHY 3400Y+	Selected Topics in Physics

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

Seminar Courses

PHY 7001Y+	Atmospheric Physics Seminar
PHY 7002Y+	Biophysics Seminar
PHY 7003Y+	Condensed Matter Physics Seminar
PHY 7004Y+	Geophysics Seminar
PHY 7005Y+	Quantum Optics Seminar
PHY 7007Y+	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

PHY 6011Y	Research in Atmospheric Physics
PHY 6021Y	Research in Biophysics
PHY 6031Y	Research in Condensed Matter Physics
PHY 6041Y	Research in Geophysics
PHY 6051Y	Research in Quantum Optics
PHY 6071Y	Research in Subatomic Physics and Astrophysics

Physiology

Physiology: Introduction

Faculty Affiliation

Medicine

Degree Programs

Physiology

MSc
PhD

Combined Degree Programs

STG, MD / PhD

Collaborative Specializations

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

1. **Biomedical Engineering**
   - Physiology, MSc, PhD
2. **Cardiovascular Sciences**
   - Physiology, MSc, PhD
3. **Developmental Biology**
   - Physiology, MSc, PhD
4. **Human Development (admissions have been suspended)**
   - Physiology, PhD
5. **Neuroscience**
   - Physiology, MSc, PhD
6. **Resuscitation Sciences**
   - 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

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, Gerald - BSc, MSc, PhD
Bagli, Darius - BS, MD
Barr, Cathy - BSc, PhD
Bear, Christine - BSc, MSc, PhD
Belik, Jaques - MD
Belsham, Denise - PhD
Bolz, Steffen-Sebastian - MD, DrMed
Boonstra, Rudy - BSc, PhD
Brown, Theodore - BSc, PhD
Brubaker, Patricia - BSc, PhD
Caniggia, Isabella - MD, PhD
Carlen, Peter - MD
Casper, Robert - MD
Collingridge, Graham - BSc, PhD (***Chair and Graduate Chair***)
Cox, Brian - BSc, MSc, PhD
dos Santos, Claudia - MSc, MD
Duffin, James - BASc, MASc, PhD
Eubanks, James - BSc, AA, PhD
Fantus, Ivan George - BSc, MDCM
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
Hare, Gregory - MD, PhD
Harrison, Robert - PhD, DSc
Heximer, Scott - PhD (***Vice Chair, Research***)
Horner, Richard - BSc, PhD
Husain, Mansoor - MB, MD
Hutchison, William - BSc, MSc, PhD
Jia, Zhengping - PhD
Jin, Tianru - PhD
Jones, Nicola - MD
Josselyn, Sheena - MA, PhD
Jurisicova, Andrea - PhD
Kavanagh, Brian - BSc, BSc, MBCHB, MBCHB
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
Li, Ren-Ke - MHSc, MSc, MD, PhD
Librach, Clifford - MD
Liu, Fang - PhD
Liu, Mingyao - MSc, MD
Liu, Peter - MD
Lye, Stephen - BSc, PhD
Macdonald, Robert - MD, PhD
Matthews, Stephen - BSc, DPhil

McGahan, Anita - BA, MA, MBA, PhD
McGowan, Patrick - BSc, MA, PhD
McNamara, Patrick - MB
Miller, Freda - BSc, PhD
Monnier, Philippe - MBA, PhD
Mount, Howard - BSc, PhD
Ng, Dominic - MD
Nostro, Cristina - MSc, PhD
Orser, Beverley - MD
Palmert, Mark - MD
Pausova, Zdenka - MD
Peever, John - MSc, PhD
Post, Martin - PhD
Prescott, Steven - BSc, MSc, MD, PhD
Rocheleau, Jonathan - BSc, PhD
Rogers, Ian - MSc, PhD
Rosenblum, Norman - MD
Salter, Michael - MD, PhD
Schlichter, Lyanne - BSc, MSc, PhD
Scholey, James - MD
Seltzer, Ze'ev - DMD, BMedSc
Sessle, Barry - BS, MDS, BDS, PhD
Skinner, Frances - PhD
Sole, Michael - BSc, MD
Stanley, Elise - PhD
Sugita, Shuzo - PhD
Sun, Hong-Shuo - MSc, DrMed, DPhil
Sweezey, Neil - BSc, MD, MD
Thomas, Scott - BSc, MSc, PhD
Trimble, William - BSc, PhD
Tweed, Douglas - MD, PhD, PhD (***Graduate Coordinator, Academic Affairs***)
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, PhD, DSc, DSc, FRSC
Backx, Peter - DrMedVet, PhD, PhD
Bocking, Alan - 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
Roder, John - PhD
Tanswell, Alan - BS, MBBS, MBBS
Wojtowicz, J. Martin - BSc, PhD

Associate Members

Billia, Filio - BSc, MSc, MD, PhD
Cherney, David - MD, PhD
Connelly, Kim - MBBS, PhD
Isaac, John - BSc, PhD
Laffey, John - BSc, MA, DrMed, MB
Mazer, Cyril David - MD
Min, Jinrong - PhD
Ni, Heyu - MSc, MD, PhD
O'Brien, Catherine - BSc, MSc, DrMed, PhD
Pierro, Agostino - MD
Ramsey, Amy - PhD
Seed, Mike - MBBS
Shynlova, Oksana - MSc, PhD
Subbarao, Padmaj - MD
Wheeler, Anne - BSc, PhD

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.

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 PSL 1000H[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

** *Students may begin in Fall, Winter, or Summer.*

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.

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 PSL 2000H[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 PSL 1066H[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

*** Students may begin in Fall, Winter, or Summer.*

[0] Course that may continue over a program. The course is graded when 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 PSL 2000H[0] *PhD Seminars in Physiology* (Credit/No Credit), mandatory for all graduate students in Physiology
    - 0.5 FCE in PSL 1066H[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 of 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

** *Students may transfer in Fall, Winter, or Summer.*

[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 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 PSL 2000H[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 PSL 1066H[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

** Students may begin in Fall, Winter, or Summer.

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

Physiology: Physiology MSc, PhD Courses

Not all courses are offered each year. Check the departmental website for course availability and course requirements.

JCV 1060H	Developmental Cardiovascular Physiology
JCV 3060H	Advanced Topics in Cardiovascular Sciences—Molecular Biology and Heart Signal Transduction
JCV 3061H	Advanced Topics in Cardiovascular Sciences—Hormones
JCV 3062H	Advanced Research in Cardiovascular Sciences—Heart Function
JCV 3063H	Advanced Research in Cardiovascular Sciences—Vascular
JCV 3064H	Advanced Research in Cardiovascular Sciences—Microvascular Medicine
JCV 3065H	Advanced Topics in Cardiovascular Sciences—Systems Biology
JYG 1555H	Advanced Topics: Cellular and Molecular Neurobiology
PSL 1000H[0]	MSc Seminars in Physiology (Credit/No Credit)
PSL 1014H	Advanced Topics: the Gastrointestinal Epithelium
PSL 1020H	Current Topics in Reproductive Endocrinology and Infertility
PSL 1024H	Advanced Topics: Neuroendocrinology
PSL 1026H	Advanced Topics: Experimental Cell Physiology
PSL 1034H	Advanced Topics: Metabolic Disorders
PSL 1036H	Advanced Topics: Respiration
PSL 1040H	Advanced Topics: Systems Biology in Physiology
PSL 1047H	Advanced Topics: Somatosensory and Pain Neuroscience
PSL 1048H	Translational Physiology: From Molecules to Model Systems to the Clinic
PSL 1050H	Advanced Topics: The Hippocampus from Cell to Behaviour
PSL 1053H	Advanced Topics: Critical Assessment of Ion Channel Function
PSL 1066H[0]	Research Grant Proposal (Credit/No Credit)
PSL 1067H	Advanced Topics: Advances and Techniques in Developmental Physiology
PSL 1068H	Advanced Topics: Molecular Basis of Behaviour
PSL 1069H	Advanced Topics: Respiratory Physiology
PSL 1070H	Advanced Topics: Hormone Action
PSL 1071H	Advanced Topics: Computational Neuroscience
PSL 1072H	Advanced Topics in the Neural Basis for Sensation
PSL 1075H	Biology in Time
PSL 1080H[+]	Advanced Topics: Investigative Developmental Physiology
PSL 1086H	Comparative Systems Approach to Diving Physiology
PSL 2000H[0]	PhD Seminars in Physiology (Credit/No Credit)
PSL 4050H	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

JNR 1444Y	Fundamentals of Neuroscience: Cellular and Molecular
JNS 1000Y	Fundamentals of Neuroscience: Systems and Behaviour
PSL 1374H	Advanced Physiology Laboratory
PSL 1421H	Pregnancy and Birth: From Implantation to Newborn Life
PSL 1425H	Integrative Metabolism and Its Endocrine Regulation
PSL 1432H	Theoretical Physiology
PSL 1441H	Systems Level Neuroplasticity
PSL 1445H	Mechanistic Molecular and Cellular Neuroscience
PSL 1446H	Molecular and Cellular Aspects of Neural Disorders
PSL 1452H	Fundamentals of Ion Channel Function
PSL 1462H	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:

1. **Contemporary East and Southeast Asian Studies**
   - Political Science, MA
2. **Development Policy and Power**
   - Political Science, MA
3. **Diaspora and Transnational Studies**
   - Political Science, MA, PhD
4. **Environmental Studies**
   - Political Science, MA, PhD
5. **Ethnic and Pluralism Studies**
   - Political Science, MA, PhD
6. **Global Health**
   - Political Science, PhD
7. **Jewish Studies**
   - Political Science, MA, PhD
8. **Sexual Diversity Studies**
   - Political Science, MA, PhD
9. **South Asian Studies**
   - Political Science, PhD
10. **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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Toronto, Ontario M5S 3G3
Canada

Political Science: Graduate Faculty

Full Members

Adler, Emanuel - MA, PhD, FRSC
Andersen, Robert - BA, MA, PhD
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
Carens, Joseph - AB, MPH, MPH, PhD
Chambers, Simone - BA, MPH, MA, PhD
Cochrane, Christopher Brian - BA, MA, PhD

Cook, David - BA, MA, PhD
Day, Richard - BA, MA, PhD
Deber, Raisa - BS, MS, PhD
Deibert, Ronald - BA, MA, PhD
Eyoh, Dickson - MA, 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
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
Loewen, Peter - PhD
Magocsi, Paul - BA, MA, MA, PhD, FRSC
Marshall, Ruth - BA, MA, DPhil
McCarney, Patricia - BA, MCP, 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
Schatz, Edward - PhD
Schneiderman, David - BA, LLB, LLM
Shachar, Ayelet - LLB, BA, LLM, SJD
Skogstad, Grace - DrRerPol
Stein, Janice - BA, MA, PhD, OC, FRSC
Teichman, Judith Ann - BA, MA, PhD
Triadafilopoulos, Phil (Triadafilos) - BA, MA, 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
Wiseman, Nelson - BA, MA, 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
Fletcher, Joseph - BA, MA, PhD
Griffiths, Franklyn Jc - 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
Sandbrook, Richard - BA, MA, DPhil, FRSC
Solomon, Peter - BA, MA, PhD
Solomon, Susan - BA, MA, PhD
Stren, Richard - BA, MA, PhD
Tuohy, Carolyn - BA, MA, PhD, FRSC
Watkins, Melville - BCom

Associate Members

Abele, Frances - PhD
Abrahamsen, Rita - PhD
Ahmad, Aisha - BA, MA, PhD
Ariga, Kenichi - MA, MCP, PhD
Borins, Sandford - BA, PhD
Carolan, Michael - PhD
Catherine, LeGrand - PhD
Choudhry, Sujit - LLB, LLM
Craft, Jonathan - MA, PhD
de Miguel Moyer, Carolina - BA, MA, PhD
Donnelly, Michael - BA, MSS, DrRerPol
Enright, Theresa - BA, PhD
Fu, Diana Xuan - BA, MPH, PhD
Gilady, Lilach - BA, MPH, MA, PhD
Graben, Sari - PhD
Guzzini, Stefano - PhD
Hughes, Sara - BSc, MSc, PhD
Indart, Gustavo - BA, MA, PhD
Klenk, Nicole - BS, MSc, PhD
Moreau, Julie - PhD
Murali, Kanta - BA, PhD
Nacol, Emily Catherine - BA, MA, MPH, PhD
Neville, Kathryn - PhD, PhD
Panagia, Davide - PhD
Renckens, Stefan - BS, MPH, PhD
Rheault, Ludovic - PhD
Schertzer, Robert Stephen - BS, MSc, ScD
Shanks, Torrey - BA, PhD
Shesterinina, Anastasia - PhD
Spirling, Arthur - PhD
Stark, Andrew - BA, MSc, AM, PhD
Tolley, Erin - PhD
Von Lieres, Bettina - BS, MS, DrRerPol
Wright, Joseph - 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:
  - POL 2408H *Political Economy of International Development* (0.5 FCE)
  - either POL 2345H *Politics of Growth in Developing Countries* or POL 2400H *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*, POL 2810Y *MA Research Seminar I* or POL 2811Y *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 POL 2040H *Horizons of Political Reflection* or any other theory course
  - At least 0.5 FCE in statistics or research design. POL 2503H *Thinking Through Research Design* and POL 2504H *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*, POL 2810Y *MA Research Seminar I* or POL 2811Y *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:

1. **With an MA**: excellent students who have completed an MA degree in political science (or its equivalent) by the time of enrolment.
2. **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.
3. **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 core course.
  - **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 core course.
- 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 POL 2812Y *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 full-course equivalents (FCEs), including a core course.
  - **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 core course.
- 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 POL 2812Y *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 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 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.

Political Theory

POL 2000Y	Comparative Studies in the History of Political Thought (core course)
POL 2001H	Contemporary Political Thought
POL 2006H	Studies in Modern Political Theory*
POL 2007H	Twentieth-Century Political Thought*
POL 2011Y	Problems in the Political Thought of the Socratic School
POL 2019Y	Moral Reason and Economic History
POL 2021Y	Comparative Studies in Jewish and Non-Jewish Political Thought
POL 2025H	Enlightenment and its Critics
POL 2025Y	Enlightenment and its Critics
POL 2026H, Y	Topics in Political Thought I
POL 2027H, Y	Topics in Political Thought II
POL 2028H	Approaches to Political Theory
JPJ 2029H	Religion and the Liberal State: the Case of Islam
POL 2032H	Judgement in Law and Politics
POL 2038H	Studies in Comparative Political Theory
POL 2040H	Horizons of Political Reflection
JPR 2051H	Fanaticism: A Political History
POL 2057Y	Markets, Justice, and the Human Good
JPR 2058H	Postsecular Political Thought: Religion, Radicalism, and the Limits of Liberalism
POL 2061H	Studies in Civic Republicanism
POL 2075Y	Post-Modern and Contemporary Thought
POL 2212H	Human Rights Politics and International Relations
POL 2226H	Ethics and International Relations
JHP 2351Y	The People From Nowhere
POL 2371H	Urban Revolution: Contemporary Constellations of Spatial Politics
RLG 3622H	Maimonides and His Modern Interpreters

Canadian Politics

POL 2100Y	Government of Canada (core course)
POL 2102H	Topics in Canadian Politics I
POL 2103H	Topics in Canadian Politics II
POL 2128H	Federalism and Diversity in Canada (and Beyond)
POL 2139H	The Canadian Welfare State in Comparative Perspective
POL 2167H	The Politics of Immigration and Multiculturalism in Canada
POL 2173H	Environmental Politics and Policy in Canada
POL 2190Y	Topics in Canadian Politics I
POL 2191Y	Topics in Canadian Politics II
POL 2313H	Parties and Party Systems: A Canadian Perspective
POL 2314H	Public, Private, and the Liberal State
POL 2316H	Women and Politics
POL 2317H	Politics and Policy Analysis
POL 2345H	Politics of Growth in Developing Countries
HAD 5011H	Canada's Health Care System and Health Policy
HAD 5765H	Case Studies in Health Policy

International Relations

POL 2200Y	International Politics (core course)
JBP 2230H	Topics in International Politics
JPJ 2037H	International Trade Regulation
JPJ 2046H	Law, Institutions, and Development
JPJ 2048H	International Human Rights Law
JPJ 2049H	Women's Rights in International Law
POL 2205H, Y	Topics in International Politics I
POL 2206H, Y	Topics in International Politics II
POL 2207H	Topics in International Politics III
POL 2211H	International Political Economy of Finance
POL 2212H	Human Rights Politics and International Relations
POL 2213H	Global Environmental Politics
POL 2216Y	The Military Instrument of Foreign Policy
POL 2226H	Ethics and International Relations
POL 2240H	Geopolitics of Cyberspace
POL 2256Y	The G8, G20, and Global Governance
POL 2268H	International Relations of Ethnic Conflict
POL 2335H	Business and Politics: Power in a Global World

Comparative Politics

POL 2700Y	Comparative Politics (core course)
JHP 1289Y	Twentieth-Century Ukraine
POL 2139H	The Canadian Welfare State in Comparative Perspective
POL 2234H	Globalization, Internationalization, and Public Policy
POL 2268H	International Relations of Ethnic Conflict
POL 2301H	Political Parties in Comparative Perspective
POL 2302H	Topics in United States Government and Politics
POL 2307H	Political Economy of Technology: from the Auto-Industrial to the Information Age
JPA 2320H	Asia and the New Global Economy
POL 2317H	Politics and Policy Analysis
POL 2318Y	Comparative Public Policies: Selected Areas (core course)
JRA 2321H	Topics in Comparative Politics
POL 2321H, Y	Topics in Comparative Politics I
POL 2322H, Y	Topics in Comparative Politics II
POL 2325H	The Politics of Federalism in Comparative Perspective
POL 2326H	Democracy and Dictatorship

POL 2335H	Business and Politics: Power in a Global World
JRA 2337H	Government Law and Politics in Russia
POL 2338H	Innovation and Governance
POL 2345H	Politics of Growth in Developing Countries
POL 2351H	Contentious Politics
POL 2361Y	Globalization and Indigenous Politics
POL 2364H	Urban Policy and Policymaking
POL 2372H	The Comparative Political Economy of Industrial Societies
JRA 2391H	Topics in Comparative Politics
POL 2391H, Y	Topics in Comparative Politics III
POL 2392H, Y	Topics in Comparative Politics IV
POL 2394H	Innovation and Knowledge Transfer in City Regions
POL 2411H	Topics in Asian Politics
POL 2429H	Democracy and Ethnic Conflict
JPF 2430Y	Cities

Development Studies

POL 2400H	Theories and Issues—The Politics of Development (core course)
POL 2322H	Topics in Comparative Politics II
POL 2325H	The Politics of Federalism in Comparative Perspective
POL 2326H	Democracy and Dictatorship
POL 2345H	Politics of Growth in Developing Countries
POL 2391H, Y	Topics in Comparative Politics III
POL 2392H, Y	Topics in Comparative Politics IV
POL 2403H, Y	Topics in African Politics I
POL 2404H, Y	Topics in African Politics II
POL 2405H	Topics in Latin American Politics
POL 2408H	Political Economy of International Development
JGP 2408Y	Political Economy of International Development
POL 2411H	Topics in Asian Politics
POL 2416Y	Politics and Society in Contemporary China
POL 2418H	Topics in Middle East Politics
POL 2420H	Globalization, Gender, and Development
JPF 2430Y	Cities
POL 2482H	The Politics of Disease and Epidemic

Public Policy

POL 2318H	Comparative Public Policy Theory (core course)
POL 2139H	The Canadian Welfare State in Comparative Perspective
POL 2167H	The Politics of Immigration and Multiculturalism in Canada
POL 2173H	Environmental Politics and Policy in Canada
POL 2213H	Global Environmental Politics
POL 2234H	Globalization, Internationalization, and Public Policy
POL 2307H	Political Economy of Technology: From the Auto-Industrial to the Information Age
POL 2335H	Business and Politics: Power in a Global World
POL 2338H	Innovation and Governance
POL 2364H	Urban Policy and Policymaking
POL 2376H, Y	Topics in Public Policy
POL 2482H	The Politics of Disease and Epidemic
HAD 5011H	Canada's Health Care System and Health Policy
HAD 5765H	Case Studies in Health Policy

Methods and Research Seminars

POL 2519H	Quantitative Methods and Data Analysis
POL 2503H	Thinking Through Research Design
POL 2504H	Statistics for Political Scientists
POL 2505H	Qualitative Methods in Political Research
POL 2578H	Topics in Methods
POL 2810Y	MA Research Seminar I
POL 2811Y	MA Research Seminar II
POL 2812Y	PhD Dissertation Proposal Seminar (Credit/No Credit)

Independent Study and Special Topics

POL 2800H	Special Topics I
POL 2801H	Special Topics II
POL 2893H	Topics in Politics I
POL 2894H	Topics in Politics II
POL 2904Y	Reading course in an approved special field
POL 2905H	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:

1. **Aboriginal Health**
   - Counselling and Clinical Psychology (OISE), MA, PhD
2. **Addiction Studies**
   - Counselling and Clinical Psychology (OISE), MA, PhD
3. **Aging, Palliative and Supportive Care Across the Life Course**
   - Counselling and Clinical Psychology (OISE), MA, PhD
4. **Community Development**
   - Counselling and Clinical Psychology (OISE), MA, PhD
5. **Environmental Studies**
   - Counselling and Clinical Psychology (OISE), MA, PhD
6. **Sexual Diversity Studies**
   - Counselling and Clinical Psychology (OISE), MA, PhD
7. **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) 208-4867

Graduate Department of Psychological Clinical Science
University of Toronto Scarborough (UTSC)
Science Wing, Room SW427D
1265 Military Trail
Toronto, Ontario M1C 1A4
Canada

Psychological Clinical Science: Graduate Faculty

Full Members

Bagby, Michael - BA, MA, PhD, PhD (*Graduate Chair*)
Goghari, Vina - BA, MA, PhD
Ruocco, Anthony Charles - BS, MSc, PhD (*Program Coordinator*)
Segal, Zindel - BA, MA, PhD (*Director of Clinical Training*)
Uliaszek, Amanda Ann - BA, MA, PhD
Zakzanis, Konstantine - BA, MA, PhD

Associate Members

Black, Sandra - BSc, MD
Bury, Alison - PhD
Carlson, Erika Nicole - BS, MA, MA, PhD
Cooper, Andrew Astley - BSc, MA, PhD
Daskalakis, Zafiris Jeffrey - MD
Dere, Jessica - BA, MPsy, PhD
Farb, Norman - BA, MA, PhD
Ferguson, Donna - BA, MA, PhD
Fitzgerald, Nicola - BASc, AM, PhD
Fournier, Marc - BA, PhD
Foussias, George - BSc, MSc, DrMed, PhD
Goldstein, Benjamin - MD
Hawley, Lance - AB, BASc, PhD
Hendershot, Christian - PhD
Hutcherson, Cendri Anne Claire - BA, PhD
Inzlicht, Michael - BSc, MSc, PhD
Ito Lee, Rutsuko - BA, PhD
Kidd, Sean - PhD
Lee, Andy CH - BA, PhD
Mabbott, Donald - PhD
Mizrahi, Romina - MD, PhD
Ng, Longena - BS, MA, PhD
Penney, Stephanie - BA, MA, DPhil
Rashid, Tayyab - DPhil
Rector, Neil - MA, MA
Remington, Gary - MD, PhD
Schmuckler, Mark - BA, PhD
Yuen, Sandra - DPhil

Psychological Clinical Science: Counselling and Clinical Psychology MA, Clinical Psychology Field

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. Housed within the Graduate Department of Psychological Clinical Science, 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 neuropsychology and neurosciences; personality and psychological assessment; and mindfulness- and acceptance-based psychotherapies.

A unifying theme of faculty research in Clinical Psychology at UTSC is to advance the assessment and treatment of mental disorders, especially depressive and bipolar disorders, anxiety disorders, schizophrenia-spectrum disorders, borderline personality disorder, and neurocognitive disorders, such as dementia due to Alzheimer's or Parkinson's disease.

The full-time, two-year 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 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.
- An appropriate 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).
- Two academic letters of reference.
- A personal statement.
- A curriculum vitae.
- Completion of the Psychological Clinical Science MA, PhD 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: CPS 1601H *Psychopathology* (0.5 FCE); CPS 1701H *Psychological Assessment I* (0.5 FCE); CPS 1702H *Psychological Assessment II* (0.5 FCE); CPS 1801H *Psychotherapy* (0.5 FCE); and CPS 1901H *Ethics* (0.5 FCE).
    - Year 2: CPS 1101H *Clinical Research Design* (0.5 FCE); CPS 1102H *Statistical Techniques I* (0.5 FCE); CPS 1802H *Applied Interventions in Clinical Psychology* (0.5 FCE); CPS 1803H *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 (CPS 2999H *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, Clinical Psychology Field

Doctor of Philosophy

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. Housed within the Graduate Department of Psychological Clinical Science, 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.

A unifying theme of faculty research in Clinical Psychology at UTSC is to advance the assessment and treatment of mental disorders, especially depressive and bipolar disorders, anxiety disorders, schizophrenia-spectrum disorders, borderline personality disorder, and neurocognitive disorders, such as dementia due to Alzheimer's or Parkinson's disease.

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 careers as psychological clinical scientists in university and academic medical settings. The PhD program has research strengths in **clinical neuropsychology and neurosciences; personality and psychological assessment; and mindfulness- and acceptance-based psychotherapies**.

It 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).
- Two academic letters of reference.
- A personal statement.
- A curriculum vitae.
- 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 **6.0 full-course equivalents (FCEs)** including coursework, three clinical placements, plus a comprehensive examination, thesis proposal, thesis, and thesis defence:
  - 4.0 FCEs in coursework, normally completed by the end of Year 3 (CPS 1103H, CPS 1201H, CPS 1301H, CPS 1401H, CPS 1501H, CPS 1809H, CPS 3801H, CPS 3901H).
  - Completion of two one-day courses (CPS 2901H and CPS 2902H) assessed as Credit/No Credit (0.0 FCE).
  - 2.0 FCEs in clinical work:
    - 1.0 FCE in two separate part-time clinical placements during Years 1 and 2 (CPS 3999H and CPS 4999H).
    - 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 (CPS 5999Y). 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:
  1. An oral examination focused on clinical expertise (normally completed in the Summer session of Year 1); and
  2. A research-focused paper (normally completed in the Summer 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 research paper 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: CPS 6999H and CPS 7999H. 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 Courses, Clinical Psychology Field

CPS 1101H	Clinical Research Design (exclusion: APD 1263H Seminar in Research Methods for MA Students)
CPS 1102H	Statistical Techniques I (exclusion: JOI 1287H Introduction to Applied Statistics)
CPS 1103H	Statistical Techniques II (exclusion: JOI 1288H Intermediate Statistics and Research Design)
CPS 1201H	Neurobiological Bases of Behaviour
CPS 1301H	Cognitive-Affective Bases of Behaviour
CPS 1401H	Social and Interpersonal Bases of Behaviour
CPS 1501H	Personality
CPS 1601H	Psychopathology (exclusion: APD 3260H Psychodiagnostic Systems)
CPS 1701H	Psychological Assessment I (exclusion: APD 3224H Individual Cognitive and Personality Assessment)
CPS 1702H	Psychological Assessment II
CPS 1801H	Psychotherapy (exclusion: APD 1202Y Theories and Techniques of Counselling and Psychotehrapy)
CPS 1802H	Applied Interventions in Clinical Psychology (exclusion: APD 1203Y+ Practicum I: Interventions in Counselling Psychology)
CPS 1803H	Practicum in Psychological Interventions (exclusion: APD 1203Y+ Practicum I: Interventions in Counselling Psychology)
CPS 1809H	Clinical Psychopharmacology
CPS 1810H	Advanced Psychotherapy
CPS 1901H	Ethics (exclusion: APD 1219H Ethical Issues in Professional Practice in Psychology and Psychotherapy)
CPS 2901H	Clinical Supervision (Credit/No Credit)
CPS 2902H	Consultation and Program Development and Evaluation (Credit/No Credit)
CPS 2999H	Summer Practicum
CPS 3801H	Multi-Person Therapies (exclusions: APD 1228H Individual and Group Psychotherapy: Family and Couples Counselling, APD 1260H Family Therapy, APD 1261H Group Work in Counselling)
CPS 3901H	The Historical and Scientific Foundations of Psychology (exclusion: APD 3204H Contemporary History and Systems in Human Development in Applied Psychology)
CPS 3999H	Clinical Placement I
CPS 4999H	Clinical Placement II
CPS 5001H	Directed Readings
CPS 5002H	Directed Readings
CPS 5999Y	Internship (exclusion: APD 3268Y PhD Internship)
CPS 6999H	Clinical Placement III
CPS 7999H	Clinical Placement IV

APHD: Counselling and Clinical Psychology MA, Clinical and Counselling Psychology Field

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:

1. Clinical and Counselling Psychology, offered primarily by OISE;
2. 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 program will be required to complete one year of full-time study to fulfil their degree requirements.

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).
- Scores on General and Subject tests of the Graduate Record Examination (GRE).
- A standing equivalent to a University of Toronto A– or better in the final year.

Program Requirements

- **Coursework.** The MA consists of **4.5 FCEs** of total coursework:
  - APD 1203Y *Practicum I: Interventions in Counselling Psychology and Psychotherapy* (1.0 FCE).
  - APD 1204H *Personality Theories* (0.5 FCE) **or** APD 1265H *Advanced Topics in Social and Personality Development* (0.5 FCE).
  - APD 1208Y[+] *Individual Cognitive and Personality Assessment and Practicum* (1.0 FCE).
  - APD 1219H *Ethical Issues in Professional Practice in Psychology and Psychotherapy* (0.5 FCE).
  - APD 1228H *Individual and Group Psychotherapy: Families and Couples Counselling* (0.5 FCE) **or** APD 1261H *Group Work in Counselling and Psychotherapy* (0.5 FCE) (or an equivalent course).
  - APD 1263H *Research Methods for Clinical and Counselling Psychology* (0.5 FCE) (RM).
  - APD 1288H *Intermediate Statistics and Research Design* (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 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);
9 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, Clinical and Counselling Psychology Field

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:

1. Clinical and Counselling Psychology, offered primarily by OISE;
2. 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 pre-existing program in Counselling Psychology at OISE was re-accredited by the Canadian Psychological Association (CPA) in 2010-2011 for a five-year term. Currently, the program is being reviewed for re-accreditation in Clinical and Counselling Psychology.

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 should demonstrate that they are active professionals engaged in activities relevant to their proposed program of study.

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 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 **5.0 FCEs** as follows:
  - 2.5 FCEs in Counselling and Psychotherapy:
    - APD 3215H *Advanced Psychotherapy Seminar*;
    - APD 3217Y *Advanced Practicum in Clinical and Counselling Psychology* (600-hour practicum); and
    - APD 3268Y *Internship in Clinical and Counselling Psychology* (1,600-hour internship)—arrangements must be made in consultation with the Coordinator of Internship and Counselling Services).
  - 1.0 FCE in Psychology Measurement/Assessment and Diagnosis:
    - APD 3225H *Assessment and Diagnosis of Personality and Psychopathology*; and
    - APD 3260H *Psychodiagnostic Systems*.
  - 1.0 FCE in Advanced Research Methods:
    - APD 3202H *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:
    - APD 3204H *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

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.
- 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), 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 **5.0 FCEs** as follows:
  - 2.5 FCEs in Counselling and Psychotherapy:
    - APD 3215H *Advanced Psychotherapy Seminar*;
    - APD 3217Y *Advanced Practicum in Clinical and Counselling Psychology* (600-hour practicum); and
    - APD 3268Y *Internship in Clinical and Counselling Psychology* (1,600-hour internship)—arrangements must be made in consultation with the Coordinator of Internship and Counselling Services).
  - 1.0 FCE in Psychology Measurement/Assessment and Diagnosis:
    - APD 3225H *Assessment and Diagnosis of Personality and Psychopathology*; and
    - APD 3260H *Psychodiagnostic Systems*.
  - 1.0 FCE in Advanced Research Methods:
    - APD 3202H *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:
    - APD 3204H *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

APHD: Counselling and Clinical Psychology MA, PhD Courses, Clinical and Counselling Psychology Field

APD 1202Y	Theories and Techniques of Counselling and Psychotherapy
APD 1203Y	Practicum I: Interventions in Counselling Psychology and Psychotherapy
APD 1204H	Personality Theories
APD 1208Y+	Individual Cognitive and Personality Assessment and Practicum
APD 1219H	Ethical Issues in Professional Practice in Psychology and Psychotherapy
APD 1228H	Individual and Group Psychotherapy: Families and Couples Counselling
APD 1260H	Family Therapy (exclusion: APD 1261H)
APD 1261H	Group Work in Counselling and Psychotherapy
APD 1263H	Research Methods for Clinical and Counselling Psychology (RM)
APD 1265H	Advanced Topics in Social and Personality Development
APD 3202H	A Foundation of Program Evaluation in Social Sciences (RM)
APD 3204H	Contemporary History and Systems in Human Development and Applied Psychology
APD 3215H	Advanced Psychotherapy Seminar
APD 3217Y	Advanced Practicum in Clinical and Counselling Psychology
APD 3218H	Research Seminar in Counselling
APD 3225H	Assessment and Diagnosis of Personality and Psychopathology
APD 3260H	Psychodiagnostic Systems
APD 3268Y	Internship in Clinical and Counselling Psychology
APD 5000H	Special Topics in Applied Psychology and Human Development: Master's Level
JOI 1287H	Introduction to Applied Statistics (RM)
JOI 1288H	Intermediate Statistics and Research Design (RM)
JOI 3048H	Intermediate Statistics in Educational Research: Multiple Regression Analysis (RM)

+ *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
PhD

Collaborative Specializations

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

1. **Addiction Studies**
   - Psychology, MA, PhD
2. **Aging, Palliative and Supportive Care Across the Life Course**
   - Psychology, MA, PhD
3. **Human Development (admissions have been suspended)**
   - Psychology, PhD
4. **Neuroscience**
   - Psychology, MA, PhD
5. **Psychology and Engineering**
   - Psychology, MA, PhD
6. **Sexual Diversity Studies**
   - Psychology, MA, PhD
7. **Women's Health**
   - Psychology, MA, PhD

Overview

Graduate training in psychology stresses training in general experimental psychology. Areas of specialization include the following:

- Biology and behaviour
- Perception, cognition, and cognitive neuroscience
- Development
- Social, personality, and abnormal psychology.

Contact and Address

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Email: grad@psych.utoronto.ca
Telephone: (416) 978-3404
Fax: (416) 978-4811

Department of Psychology Graduate Studies
University of Toronto
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Toronto, Ontario M5S 3G3
Canada

Psychology: Graduate Faculty

Full Members

Alain, Claude - BA, MA, PhD
Andersen, Judith - BSc, MA, PhD
Anderson, Nicole - BA, MA, PhD
Armstrong, Blair - BASc, MA, PhD
Arruda Carvalho, Maithe - BSc, MSc, PhD
Bagby, Michael - BA, MA, PhD, PhD
Barense, Morgan - BA, PhD, CRC
Bernhardt-Walther, Dirk - BSc, MPH, PhD
Buchsbaum, Bradley - BSc, PhD
Buchsbaum, Daphna - AB, MA, MSc, PhD
Campos, Jennifer - BA, PhD
Cant, Jonathan S. - BA, MS, MedScD
Carlson, Erika Nicole - BS, MA, MA, PhD
Chambers, Craig - BA, MA, MA, PhD
Chasteen, Alison - BA, PhD
Cohn, Melanie - BA, MA, PhD
Corbit, Laura - PhD
Cree, George Scott - BA, MA, PhD
Cunningham, John - BSc, MA, PhD
Cunningham, William - BA, MPH, MS, MA, PhD
Cupchik, Gerald Chaim - BA, MA, PhD
Daneman, Meredyth - BA, MA, PhD
Dion, Karen - BA, PhD
Duncan, Katherine - BS, PhD
Einstein, Gillian - AB, PhD
Erb, Suzanne - BSc, MA, PhD (*Graduate Director*)
Farb, Norman - BA, MA, PhD
Ferber, Susanne - MPsy, PhD
Finn, Amy - BA, PhD
Fletcher, Paul - BSc, DPhil
Ford, Brett Quaid - MA, PhD
Fournier, Marc - BA, PhD
Frankland, Paul - MA, PhD
Fukuda, Keisuke - BS, MS, PhD
Gerlai, Robert - MSc, PhD
Gilboa, Asaf - BA, MA, PhD
Goghari, Vina - BA, MA, PhD
Grady, Cheryl - BA, MA, PhD
Haley, David - BA, MA, PhD
Helwig, Charles - BA, PhD
Hendershot, Christian - PhD
Holmes, Melissa - BA, MA, PhD
Hutcherson, Cendri Anne Claire - BA, PhD
Impett, Emily - BS, MS, PhD
Inbar, Yoel - PhD
Inzlicht, Michael - BSc, MSc, PhD
Ito Lee, Rutsuko - BA, PhD
Jenkins, Jennifer - BA, MA, PhD
Johnson, Elizabeth - BA, MA, PhD
Joordens, Steve - BA, MA, PhD
Josselyn, Sheena - MA, PhD
Latham, Gary - BA, MS, PhD
Lee, Andy CH - BA, PhD
Levine, Brian - BA, MA, PhD
Lockwood, Penelope - BA, MA, PhD
Mabbott, Donald - PhD
MacDonald, Geoffrey - BA, PhD (*Associate Graduate Director*)

Mack, Margaret - BA, PhD
Mack, Michael - BCS, MSc, PhD
Malti, Tina - MA, MA, PhD, PhD
Martin, Loren - BSc, MSc, PhD
McAndrews, Mary Patricia - BSc, MA, PhD
McGowan, Patrick - BSc, MA, PhD
McIntosh, Anthony Randal - BSc, MSc, PhD
Meltzer, Jed - BSc, PhD
Monks, Ashley - BSc, MA, PhD
Moscovitch, Morris - BSc, MA, PhD, Dr. Max and Gianna Glassman Chair in Neuropsychology
Murphy, Kelly - BSc, MA, PhD
Nestor, Adrian R. - BPhil, MSc, ScD
Niemeier, Matthias - MA, PhD
Nobrega, Jose - PhD
Olsen, Rosanna - BS, PhD
Page-Gould, Elizabeth - BS, PhD, CRC
Paus, Tomas - MD, PhD
Peterson, Jordan - BA, BA, PhD
Pichora-Fuller, Margaret Kathleen - AB, MS, DPhil
Plaks, Jason - BA, MA, MPH, PhD
Pratt, Jay - BA, MS, PhD
Ralph, Martin - BSc, PhD
Rule, Nicholas - AB, MS, PhD, CRC
Ruocco, Anthony Charles - BS, MSc, PhD
Ryan, Jennifer - BS, PhD
Schellenberg, Glenn - BSc, PhD
Schertz, Jessamyn Leigh - BA, MS, PhD
Schimmack, Ulrich - BA, MA, DPhil
Schmuckler, Mark - BA, PhD
Schneider, Bruce - BA, PhD
Sekuler, Allison - BA, PhD
Smith, Marylou - BSc, MSc, PhD
Starmans, Christina - BA, MPH, MSc, PhD
Stellar, Jennifer - BA, PhD
Stuss, Donald - BPhil, BA, MA, PhD
Tafarodi, Romin - BA, PhD
Takehara, Kaori - BSc, MSc, PhD
Taylor, Margot - BA, MA, PhD
Troyer, Angela - BA, MA, PhD
Uliaszek, Amanda Ann - BA, MA, PhD
VanderLaan, Doug - BA, MSc, PhD
Vartanian, Oshin - BSc, PhD
Welsh, Timothy - BPHE, MSc, PhD
Winocur, Gordon - BA, MA, PhD
Zakzanis, Konstantine - BA, MA, PhD
Zovkic, Iva - BA, MA, PhD

Members Emeriti

Bors, Douglas - BA, MA, PhD
Craik, Fergus - BSc, 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
Kraemer, Gary - BA, BS, MS, PhD
Lockhart, Robert - BA, MA, PhD
Oatley, Keith - BA, PhD
Petit, Ted - BS, MA, PhD
Polivy, Janet - BS, MA, PhD
Reingold, Eyal - BA, MA, PhD
Rovet, Joanne - BSc, PhD
Shettleworth, Sara - BA, MA, PhD
Smith, Marilyn - BA, PhD
Smyth, Ronald - BA, 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
Lee, Wing Sing (Spike) - MS, PhD
Widjaja, Elysa - MSc, MPH, MBBS

Psychology: Psychology MA

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.

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 some laboratory experience.
- It is assumed that all students entering the master's program intend to continue in the PhD program.

Program Requirements

- Courses and individual research training leading to a thesis.
- In the MA year, students must complete **2.0 FCEs** as follows:
  - PSY 1000H *Directed Studies* to prepare for the MA thesis research (0.5 FCE)
  - PSY 2001H *Design of Experiments I*, experimental design and statistics (0.5 FCE)
  - two half-course 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 normally 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.

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

- Minimum of two years of **residence** beyond the master's degree, but usually takes at least three years. Applicants with a master's degree from another university may be required to enrol in a three-year residence program, 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.
- Individual programs of study are planned and include continuing research training with staff members. There is no language requirement.
- PSY 3000H[0] *Research Project in Psychology*, usually taken in PhD 1. This is a research project course supervised by a faculty member other than the student's PhD supervisor. It is a one-session course spread over PhD 1.
- PSY 3001H *Scientific and Professional Psychology*, usually taken in PhD 1.
- An advanced statistics course chosen from a list provided by the department.
- Two half courses.
- PSY 4000H[0] thesis proposal and oral exam (examination in the student's area of research).
- **PhD thesis.**
- Students may take other courses as they wish, but it is expected that the requirements will be completed in the first two years of the PhD program. Students admitted with an MA from another university will normally be required to fulfil the PhD 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.

Psychology: Psychology MA, PhD Courses

Not all courses are offered each year. For current offerings, consult with the Coordinator of Graduate Studies.

PSY 1000H	Directed Studies
PSY 1200H	Selected Topics in Psychology
PSY 1500H	Conceptual Bases of Psychology
PSY 2001H	Design of Experiments I
PSY 2002H	Design of Experiments II

Biology and Behaviour Core Courses

PSY 5101H	Mechanisms of Behaviour
PSY 5102H	Motivational Processes
PSY 5103H	Learning and Plasticity
PSY 5104H	Neuropsychology Advanced Courses
PSY 5110H	Advanced Topics in Behavioural Neuroscience I
PSY 5111H	Advanced Topics in Behavioural Neuroscience II
PSY 5112H	Advanced Topics in Behavioural Neuroscience III
PSY 5120H	Advanced Topics in Animal Behaviour and Motivation I
PSY 5121H	Advanced Topics in Animal Behaviour and Motivation II
PSY 5130H	Advanced Topics in Neuropsychology I
PSY 5132H	Advanced Topics in Neuropsychology II

Perception/Cognition/Cognitive Neuroscience Core Courses

PSY 5201H	Audition
PSY 5202H	Vision
PSY 5203H	Higher Cognition
PSY 5204H	Attention
PSY 5205H	Memory Advanced Courses
PSY 5210H	Advanced Topics in Perception I
PSY 5211H	Advanced Topics in Perception II
PSY 5212H	Advanced Topics in Perception III
PSY 5220H	Advanced Topics in Cognition I
PSY 5221H	Advanced Topics in Cognition II
PSY 5222H	Advanced Topics in Cognition III

Developmental Psychology Core Courses

PSY 5300H	History, Theory, and Methods of Developmental Psychology
PSY 5301H	Biological Development
PSY 5302H	Perceptual Development
PSY 5303H	Cognitive Development
PSY 5304H	Language Development
PSY 5305H	Social Development Advanced Courses
PSY 5310H	Advanced Topics in Development I
PSY 5311H	Advanced Topics in Development II

Social/Personality/Abnormal Psychology Core Courses

PSY 5401H	Abnormal
PSY 5402H	Personality
PSY 5403H	Social Cognition
PSY 5404H	Interpersonal and Group Behaviour Advanced Courses
PSY 5410H	Advanced Topics in Abnormal I
PSY 5411H	Advanced Topics in Abnormal II
PSY 5412H	Advanced Topics in Abnormal III
PSY 5420H	Advanced Topics in Personality I
PSY 5421H	Advanced Topics in Personality II
PSY 5430H	Advanced Topics in Social Psychology I
PSY 5431H	Advanced Topics in Social Psychology II
PSY 5432H	Advanced Topics in Social Psychology III
PSY 5433H	Advanced Topics in Social Psychology IV
PSY 3000H[0]	Research Project in Psychology
PSY 3001H	Professional Psychology (Credit/No Credit)
PSY 4000H[0]	Specialization Study (Credit/No Credit)
PSY 4700H	Psychology Testing and Assessment I
PSY 4701H	Psychology Testing and Assessment II
PSY 4705H	Psychological Assessment of Children
PSY 4706H	Human Brain Neuroanatomy
PSY 4710H	Practicum in Testing and Assessment (Credit/No Credit)
PSY 4711H	Practicum in Applied Psychology (Credit/No Credit)
PSY 4712H	Practicum in Psychology: Special Topics (Credit/No Credit)
PSY 4720Y[+]	Internship in Applied Psychology (Credit/No Credit)

[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.

Cross-Listed Courses

CSC 2535H	Computation in Neural Networks
JLP 2450H	Psycholinguistics
JNS 1000Y	Fundamentals of Neuroscience: Systems and Behaviour
JPM 1005Y	Behavioural Pharmacology
JPX 1001Y	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 Occupational and Environmental Health Social and Behavioural Health Sciences *Emphasis:* Global Public Health *(admissions have closed)*
MSc	*Field:* Biostatistics *Emphasis:* Global Public Health *(admissions have closed)*
PhD	*Fields:* Biostatistics Epidemiology 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 *Emphasis:* Global Public Health *(admissions have closed)*

Collaborative Specializations

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

1. **Addiction Studies**
   - Public Health Sciences, MPH, MSc, PhD
2. **Aging, Palliative and Supportive Care Across the Life Course**
   - Public Health Sciences, MPH, MSc, PhD
3. **Bioethics**
   - Public Health Sciences, MPH, MSc, PhD
4. **Development Policy and Power**
   - Public Health Sciences, MPH
5. **Community Development**
   - Public Health Sciences, MPH
6. **Environment and Health**
   - Community Health, MScCH
   - Public Health Sciences, MPH, PhD
7. **Food Studies**
   - Public Health Sciences, PhD
8. **Global Health**
   - Public Health Sciences, MPH, MSc (thesis only), MScCH, PhD
9. **Health Care, Technology, and Place (admissions have closed)**
   - Public Health Sciences, PhD
10. **Health Services and Policy Research (admissions have been suspended)**
    - Public Health Sciences, PhD
11. **Human Development**
    - Public Health Sciences, PhD
12. **Indigenous Health**
    - Public Health Sciences, MPH, PhD
13. **Neuroscience**
    - Bioethics, MHSc
    - Community Health, MScCH
    - Public Health Sciences, MPH, MSc, PhD
14. **Public Health Policy**
    - Public Health Sciences, MPH, MSc, PhD
15. **Resuscitation Sciences**
    - Community Health, MScCH
    - Public Health Sciences, MPH, MSc, PhD
16. **Sexual Diversity Studies**
    - Public Health Sciences, MPH, MSc, PhD
17. **Women and Gender Studies**
    - Public Health Sciences, MPH, PhD
18. **Women's Health**
    - Public Health Sciences, MPH, PhD

Overview

The Graduate Department of Public Health Sciences in the Dalla Lana School of Public Health enrols more than 400 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

Web: www.dlsph.utoronto.ca
Email: grad.dlsph@utoronto.ca
Telephone: (416) 978-2058
Fax: (416) 978-1883

Dalla Lana School of Public Health
Graduate Department of Public Health Sciences
University of Toronto
Room 620, 155 College Street
Toronto, Ontario M5T 3M7
Canada

Bioethics Program

Web: http://jcb.utoronto.ca/education/mhsc.shtml
Email: jcb.ea@utoronto.ca
Telephone: (416) 978-1906
Fax: (416) 978-1911

Joint Centre for Bioethics (JCB)
University of Toronto
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Toronto, Ontario M5T 1P8
Canada

Public Health Sciences: Graduate Faculty

Full Members

Baxter, Nancy - DrMed, PhD
Bhutta, Zulfiqar - MBBS, PhD
Bondy, Susan - BA, MSc, PhD
Boydell, Katherine Mary - BA, MHSc, PhD
Braitstein, Paula - BA, MA, MSc, PhD, DPhil
Briollais, Laurent - BSc, MSc, PhD
Burchell, Ann - BSc, MSc, PhD
Cadarette, Suzanne - BSc, MSc, PhD
Cassidy, David - BSc, MSc, PhD
Colantonio, Angela - BA, BSc(OT), MHSc, PhD
Cole, Donald - MSc, MD
Côté, Pierre - MSc, PhD
Deber, Raisa - BS, MS, PhD
Du Mont, Janice Arlene - BA, MEd, EdD
Einstein, Gillian - AB, PhD
Escobar, Michael - BS, 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
Gignac, Monique - BSc, MA, PhD
Glazier, Richard - MPH, MD
Guttmann, Astrid - BA, AB, MSc, MSc, MDCM
Hanley, Anthony - BSc, MSc, PhD
Harris, Shelley - BSc, MSc, PhD
Holness, D Linn - MHSc, MD
Hu, Howard - BSc, MPH, MS, MD, ScD
Hwang, Stephen - MPH, MD
Jadad, Alejandro - MD, DPhil
Jha, Prabhat - DrMed, MD, PhD
Kotsopoulos, Joanne - BSc, MSc, PhD
Kreiger, Nancy - BA, MPH, PhD
Kwong, Jeff - BSc, MSc, MD
Lavery, James - BA, BS, PhD
Liu, Geoffrey - BSc, MSc, MD
Lou, Wen-Yi Wendy - DPhil
MacNeill, Margaret - BPHE, MA, PhD
Marrett, Loraine - BMath, PhD
McDonough, Peggy - BSN, BSc, MSc, PhD
McLaughlin, John Ross - BSc, MSc, PhD
Muntaner, Carles - MHSc, MD, PhD
Mustard, Cameron - AB, ScD
Naylor, C. David - MD, PhD
Noyek, Arnold - MD
O'Campo, Patricia - BSc, PhD
Poland, Blake - BA, PhD
Pole, Jason - BSc, MSc, PhD
Pullenayegum, Eleanor - BM, PhD
Renwick, Rebecca - DipOT , BA, PhD
Rosella, Laura Christina Antonia - BSc, MHSc, MHSc, PhD, DPhil
Sass-Kortsak, Andrea - BSc, MHSc, PhD
Scott, James - BSc, PhD
Selby, Peter - MHSc, MBBS
Sellen, Daniel - BA, AM, PhD (***Associate Dean, Research***)
Siddiqi, Arjumand - ScD
Siegel, Jeffrey Alexander - BS, MS, PhD
Stafford, James - BS, MS, PhD
Stewart, Suzanne - BA, MA, PhD
Strike, Carol - BA, MSc, PhD, PhD
Strug, Lisa - BS, BA, SM, PhD
Sullivan, Frank - MD, PhD
Sun, Lei - BS, PhD
Tarasuk, Valerie - BA, BEd, BASc, MSc, PhD
Thompson, Alison - BA, MA, PhD
To, Teresa - BSc, MSc, PhD
Tricco, Andrea - MSc, PhD
Tritchler, David - BA, MS, ScD
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Members Emeriti

Andrews, David - BSc, MSc, PhD
Ashley, Mary Jane - DPH, MSc, MD
Badley, Elizabeth - BSc, MSc, PhD
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Jackson, Suzanne - BSc, MSc, PhD
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Marshall, Victor - BA, MA, PhD
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Osborn, Richard - AB, PhD
Purdham, James - BSc, PhD
Robertson, Ann - BSc, MSc, PhD
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Associate Members

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Alleyne, Julia - MD
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Kirkham, Tracy - BMLS, MSc, DPhil
Kone Pefoyo, Anna - MSc, PhD
Kosny, Agnieszka - BA, MA, PhD
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McLaughlin, Janet - BA, MA, PhD
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Mitsakakis, Nicholas - BS, MS, MMath, DPH
Moineddin, Rahim - BSc, MSc, MSc, PhD
Moola, Fiona - BPHE, MSc, PhD
Morisano, Dominique - PhD
Mosby, Ian - BA, MA, PhD
Mulligan, Kathleen - BASc, MA, PhD
Murphy, John H - BSc, MHSc, PhD
Murti, Michelle - BASc, MPH, MD
Neill, Deborah - BA, MA, PhD
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Norman, Cameron - BA, MA, PhD
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Ratnapalan, Savithiri - MEd, MBBS

Reading, Jeff - BA, MSc, PhD
Redditt, Vanessa - MD
Rezmovitz, Jeremy - BSc, MHK, MSc, MD
Richardson, Denyse - MEd, MD
Rusen, I.D. - MSc, MD
Saarela, Olli Samuli - MSS, DPhil
Sanches, Marcos Rogerio - MA
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Sapag, Jaime - MPH, MD, BM
Schwartz, Kevin - MSc, MD
Scott-Marshall, Heather - BSc, MSc, PhD
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Wickens, Christine - BSc, MA, PhD
Wong, Andy Kin On - BS, PhD
Yu, Catherine - MHSc, MD
Yuan, Lilian - MSc, MD, DHA
Zakus, David - BSc, MES, MSc, PhD

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.
- The Graduate Record Examination (GRE) General Test.
- Relevant work or volunteer experience.

Program Requirements

- Completion of **10.0 full-course equivalents (FCEs)** as follows.
    - 0.5 FCE core course: CHL 5004H *Introduction to Public Health Sciences*
    - 1.0 FCE in research methods: CHL 5401H and CHL 5402H
    - 1.0 FCE in biostatistics: CHL 5201H and CHL 5202H
    - 1.5 FCEs in epidemiology: CHL 5405H *Health Trends and Surveillance*, CHL 5418H *Scientific Overview in Epidemiology*, CHL 5426H *Population Perspectives for Epidemiology*
    - 0.5 FCE in public health policy: CHL 5300H
    - minimum 1.0 FCE: practicum placement
    - elective courses.
- 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: CHL 5004H *Introduction to Public Health Sciences*
    - 0.5 FCE: HAD 5622H *Patient-Related Health Care and Public Policy in Canada*
    - 0.5 FCE: CHL 5601H *Appraising and Applying Evidence to Assist Clinical Decision-Making*
    - 1.0 FCE: CHL 5603Y *Social, Political, and Scientific Issues in Family Medicine*
    - 1.0 FCE: CHL 5607H and CHL 5608H *Teaching and Learning by the Health Professions*
    - 0.5 FCE: CHL 5613H *Leading Improvement in the Quality of Health Care for Community Populations*
    - 0.5 FCE: CHL 5605H *Research Issues in Family Medicine/Primary Care* or an equivalent research course, subject to approval
    - minimum 1.0 FCE: practicum placement
    - elective courses.
- 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: 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: CHL 5004H *Introduction to Public Health Sciences*
    - 0.5 FCE: CHL 5300H *Public Health Policy*
    - 1.0 FCE in research methods: CHL 5220H and CHL 5221H or approved equivalents
    - 0.5 FCE: CHL 5520H *Indigenous Health*
    - 0.5 FCE: CHL 5521H *Indigenous Practicum Preparation*
    - 0.5 FCE: CHL 5522H *Indigenous Food Systems, Environment, and Health*
    - 0.5 FCE: CHL 5523H *Indigenous Health and Social Policy*
    - 0.5 FCE: CHL 5130H: *Advanced Methods in Indigenous Health Research*
    - 0.5 FCE: CHL 5801H *Health Promotion 1* or CHL 5105H *Social Determinants of Health*
    - minimum 1.0 FCE: practicum placement
    - elective courses.
- 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: CHL 5004H *Introduction to Public Health Sciences*
    - 2.0 FCEs: CHL 5650H *Foundations of Practice I*, CHL 5651Y *Foundations of*

Practice II, and CHL 5652H *Foundations of Practice III*
    - 0.5 FCE: CHL 5653H *Community Nutrition*
    - 0.5 FCE: NFS 1484H *Advanced Nutrition*
    - 0.5 FCE: NFS 1201H *Public Health Nutrition*
    - 0.5 FCE: CHL 5654H *Nutrition Programs and Strategies*
    - 1.0 FCE in research methods: CHL 5220H and CHL 5221H
    - 0.5 FCE: CHL 5300H *Public Health Policy*
    - minimum 1.0 FCE: practicum placement
    - elective courses.
- 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: CHL 5300H *Public Health Policy*
    - 0.5 FCE: NFS 1201H *Public Health Nutrition*
    - 0.5 FCE: CHL 5653H *Community Nutrition*
    - 0.5 FCE: CHL 5654H *Nutrition Programs and Strategies*
    - 0.5 FCE: CHL 5655H *Nutrition and Metabolism for Public Health Nutrition Professionals*
    - 1.0 FCE in research methods: CHL5220H and CHL 5221H
    - 0.5 FCE to 1.0 FCE practicum placement
    - elective courses.

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

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: CHL 5004H *Introduction to Public Health Sciences*
    - 0.5 FCE: CHL 5904H *Perspectives in Occupational Health and Safety—Legal and Social Context*
    - 0.5 FCE: CHL 5912H *Industrial Toxicology*
    - 0.5 FCE in either CHL 5220H *Community Health Appraisal Methods I* or CHL 5201H *Biostatistics I*
    - up to 4.5 FCEs in approved courses related to the student's area of study
    - minimum 1.0 FCE in a practicum placement
    - elective courses.
- 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

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: CHL 5004H *Introduction to Public Health Sciences*
  - 1.0 FCE: CHL 5801H and CHL 5803H *Health Promotion*
  - 0.5 FCE: CHL 5105H *Social Determinants of Health*
  - 0.5 FCE: CHL 5110H *Theory and Practice of Program Evaluation*
  - 0.5 FCE: CHL 5300H *Public Health Policy*
  - 1.5 FCEs in research methods: CHL 5220H and CHL 5221H or approved equivalents, plus one additional course from an approved list of choices
  - minimum 1.0 FCE: practicum placement
  - elective courses.
- 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:
  - CHL 5004H, CHL 5207Y, CHL 5209H, CHL 5210H, and CHL 5250H;
  - CHL 5226H or STA 2112H (*Mathematical Statistics I*); and
  - CHL 5223H or STA 2212H (*Mathematical Statistics II).*
- 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:
- CHL 5004H, CHL 5207Y, CHL 5209H, CHL 5210H, and CHL 5250H;
  - CHL 5226H or STA 2112H (*Mathematical Statistics I*);
  - CHL 5223H or STA 2212H (*Mathematical Statistics II)*; and
  - 1.0 FCE in electives from an approved list of courses.

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 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: CHL 5005H *Introduction to Public Health Research*
  - 1.0 FCE: CHL 5208Y *Advanced Laboratory in Statistical Design and Analysis*
  - 0.5 FCE: CHL 5209H *Survival Analysis I*
  - 0.5 FCE: CHL 5210H *Categorical Data Analysis*
  - 0.5 FCE: CHL 5250H^{+} *Special Topics in Biostatistics* (seminar)
  - 0.5 FCE: CHL 5260H^{o} *Doctoral Seminar Series in Biostatistics*
  - 1.0 FCE: STA 2112H and STA 2212H *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.
- 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: CHL 5005H *Introduction to Public Health Research*
  - 1.0 FCE: CHL 5404H and CHL 5408H *Research Methods*
  - 1.0 FCE: CHL 5406H and CHL 5424H *Quantitative Methods*
  - 0.5 FCE: CHL 5423H^0 *Doctoral Seminar in Epidemiology*
  - 0.5 FCE: CHL 5428H *Epidemiological Methods for Causal Mediation Analyses*
  - 0.5 FCE: elective courses that relate to the student's area of study.
- 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

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: CHL 5005H *Introduction to 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.
- 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: CHL 5005H *Introduction to Public Health Research*
  - 0.5 FCE: CHL 5101H *Social Theory and Health*
  - 0.5 FCE: either CHL 5804H *Theories for Health Promotion and Public Health Intervention* or CHL 5102H *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.
- 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 **9.0 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

- CHL 3001Y *Core Topics in Bioethics*
- CHL 3003Y *Empirical Approaches in Bioethics*
- CHL 3005H *Legal Approaches to Bioethics*
- HAD 5771H *Resource Allocation Ethics*
- PHL 2146Y *Topics in Bioethics*

Year 2

- CHL 3002Y *Teaching Bioethics*
- CHL 3004Y *Ethics and Health Institutions*
- CHL 3006Y *Writing in Bioethics*
- CHL 3008Y[0] *Applied Learning in Bioethics* (practicum)
- CHL 3051H *Research Ethics*
- CHL 3052H *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, and
  - 1.0 to 1.5 FCEs in elective courses.
- 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, Community Health MScCH, Global Public Health Emphasis

Admissions have closed.

Students must successfully complete within existing program requirements:

- CHL 5700H *Global Public Health* (0.5 full-course equivalent [FCE]);
- At least one elective course in global health (0.5 FCE);
- One practicum placement, or equivalent, with a global health focus.

Public Health Sciences: Public Health Sciences MPH, MSc, PhD, Community Health MScCH Courses

Core Courses

CHL 5004H	Introduction to Public Health Sciences
CHL 5005H	Introduction to Public Health Research (Credit/No Credit)

Biostatistics

CHL 5201H	Biostatistics I
CHL 5202H	Biostatistics II
CHL 5203H	Survey Design and Social Research Methods in Public Health
CHL 5204H	Survey Methods in Health Sciences II
CHL 5207Y	Laboratory in Statistical Design and Analysis
CHL 5208Y	Advanced Laboratory in Statistical Design and Analysis
CHL 5209H	Survival Analysis I
CHL 5210H	Categorical Data Analysis
CHL 5220H	Introduction to Quantitative Research
CHL 5221H	Introduction to Qualitative Research
CHL 5222H	Analysis of Correlated Data
CHL 5223H	Applied Bayesian Methods
CHL 5224H	Modern Statistical Genetics
CHL 5225H	Advanced Statistical Methods for Clinical Trials
CHL 5226H	Mathematical Foundations of Biostatistics
CHL 5227H	Introduction to Statistical Methods for Clinical Trials
CHL 5228H	Statistical Methods for Genetics and Genomics Research Seminar (Credit/No Credit)
CHL 5250H[+]	Special Topics in Biostatistics
CHL 5260H[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.

Epidemiology

CHL 5401H	Epidemiologic Methods I
CHL 5402H	Epidemiologic Methods II
CHL 5403H	Epidemiology of Non-Communicable Diseases
CHL 5404H	Research Methods I
CHL 5405H	Health Trends and Surveillance
CHL 5406H	Quantitative Methods for Biomedical Research
CHL 5407H	Categorical Data Analysis for Epidemiologic Studies
CHL 5408H	Research Methods II
CHL 5409H	Cancer Epidemiology
CHL 5410H	Occupational Epidemiology
CHL 5411H	International Health
CHL 5412H	Communicable Disease Epidemiology, Prevention, and Control
CHL 5413H	Public Health Sanitation
CHL 5415H	Communicable Disease Epidemiology II: Practice
CHL 5416H	Environmental Epidemiology
CHL 5417H	Tobacco and Health: From Cells to Society
CHL 5418H	Scientific Overview in Epidemiology
CHL 5419H	Empirical Perspectives on Social Organization and Health
CHL 5420H	Global Health Research
CHL 5423H[0]	Doctoral Seminar in Epidemiology
CHL 5424H	Advanced Quantitative Methods in Epidemiology
CHL 5425H	Mathematical Epidemiology of Communicable Diseases: An Introduction
CHL 5426H	Population Perspectives for Epidemiology
CHL 5428H	Epidemiological Methods for Causal Mediation Analyses
CHL 5430H	Fundamentals of Genetic Epidemiology
CHL 5431H	Spatial Epidemiology: Introductory Methods and Applications
JRH 1000H	Introduction to Pharmacoepidemiology

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

Family and Community Medicine

CHL 5601H	Appraising and Applying Evidence to Assist Clinical Decision-Making
CHL 5602H	Working with Families in Family Medicine
CHL 5603Y[0]	Social, Political, and Scientific Issues in Family Medicine
CHL 5604H	Human Development Issues for Family Medicine
CHL 5605H	Research Issues in Family Medicine/Primary Care
CHL 5606H	Research in Family Medicine/Primary Care Methodological Applications
CHL 5607H	Teaching and Learning by the Health Professions: Principles and Theories
CHL 5608H	Teaching and Learning by the Health Professions: Practical Issues and Approaches
CHL 5609H	Continuing Education in the Health Professions
CHL 5610H	Theory and Practice of Behaviour Change in Health Professional Settings
CHL 5611H	Continuing Education Planning, Management and Evaluation in the Health Professions
CHL 5612H	The Theory and Application of Interprofessional Education for Collaborative Patient-Centred Practice
CHL 5613H	Leading Improvement in the Quality of Health Care for Community Populations
CHL 5614H	Curriculum Foundations in Health Practitioner Field-Based Education
CHL 5615H	Assessment and Evaluation Issues in Health Practitioner Field-Based Education
CHL 5616H	Applied Survey Methods for Health Care Professionals

CHL 5617H	Educational Technology for Health Practitioner Education
CHL 5618H	Family Medicine and Primary Care in the Global Health Context
CHL 5622H	Patient-Related Health Care and Public Policy in Canada
CHL 5623H	Practical Management Concepts and Cases in Leading Small Health Organizations
CHL 5630Y	Wound Prevention and Care
CHL 5631H	Tuberculosis Control and Public Health Foundations

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

Global Health

CHL 5700H	Global Health
CHL 5701H[0]	Doctoral Seminar, Collaborative Specialization in Global Health
CHL 5702H	History of International Health
CHL 5703H	Urban Epidemics
CHL 5704H	International Human Rights Law and Global Health: The Right to Health in Theory and Practice
CHL 5706H	Women and Women's Health in Countries in Conflict
CHL 5707H	Health: An Engine for the Journey to Peace

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

Health Promotion

CHL 5801H	Health Promotion 1
CHL 5803H	Health Promotion 2
CHL 5804H	Theories for Health Promotion and Public Health Intervention
CHL 5805H	Critical Issues in Health Promotion Practice
CHL 5806H[+]	Health Promotion Field Research
JXP 5807H	Health Communications
CHL 5808H	Health-in-All-Policies: Approaches to Achieve a Healthier City
CHL 5809H	Ecological Public Health

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

Indigenous Health

CHL 5520H	Indigenous Health
CHL 5521H	Indigenous Practicum Preparation
CHL 5522H	Indigenous Food Systems, Environment, and Health
CHL 5523H	Indigenous Health and Social Policy

Nutrition and Dietetics

CHL 5650H	Foundations of Practice I
CHL 5651Y	Foundations of Practice II
CHL 5652H	Foundations of Practice III
CHL 5653H	Community Nutrition
CHL 5654H	Nutrition Programs and Strategies
CHL 5655H	Nutrition Metabolism for Public Health Nutrition Professionals
NFS 1201H	Public Health Nutrition
NFS 1484H	Advanced Nutrition

Occupational and Environmental Health

CHL 5902H	Advanced Occupational Hygiene
CHL 5903H	Environmental Health
CHL 5904H	Perspectives in Occupational Health and Safety—Legal and Social Context
CHL 5905H	Clinical Studies in Occupational Health
CHL 5907H	Radiological Health
CHL 5910H	Occupational and Environmental Hygiene I
CHL 5911H	Occupational and Environmental Hygiene II
CHL 5912H	Industrial Toxicology
CHL 5914H	Physical Agents I—Noise
CHL 5915H	Control of Occupational Hazards
CHL 5917H	Concepts in Safety Management
CHL 5918H	Biological Hazards in the Workplace and Community
CHL 5919H	Public Health Mycology

Public Health Policy

CHL 5300H	Public Health Policy
CHL 5308H	Tools and Approaches for Public Health Policy Analysis and Evaluation
CHL 5309H	Advanced Analysis of Topical Issues in Public Health Policy

Public Health Sciences

JRH 5124H	Public Health Ethics

Social and Behavioural Health Sciences

CHL 5101H	Social Theory and Health
CHL 5102H	Social and Political Forces in Health
CHL 5105H	Social Determinants of Health
CHL 5109H	Gender and Health
CHL 5110H	Theory and Practice of Program Evaluation
CHL 5111H	Qualitative Research Methods
CHL 5112H	Community Development in Health
CHL 5113H	Migration and Health
CHL 5115H	Qualitative Analysis and Interpretation
CHL 5117H	A Global Perspective on the Health of Women and Children

CHL 5118H	International Health, Human Rights, and Peace-Building
CHL 5120H	Population Health Perspectives on Mental Health and Addictions
CHL 5121H	Genomics, Bioethics, and Public Policy
CHL 5122H	Advanced Qualitative Research: Framing, Writing, Beyond (Credit/No Credit)
CHL 5123H	Issues in the Transdisciplinary Research and the Health of Marginalized Population
CHL 5126H	Building Community Resilience
CHL 5127H	Social Epidemiology
CHL 5128H	Intersectionality, Inequity, and Public Health
CHL 5129H	Introduction to Mixed Methods Research for Public Health
CHL 5130H	Advanced Methods in Applied Indigenous Health Research
CHL 5131H	Theoretical Foundations of Qualitative Health Research
CHL 5150H	Data Collection Methods for Research and Evaluation Projects

Practica and Related Courses

CHL 5521H	Indigenous Practicum Preparation
CHL 5620Y[0]	Practicum in Family Community Medicine (Credit/No Credit)
CHL 5621H[+]	Extension to Practicum in Family Community Medicine (Credit/No Credit)
CHL 5690H[0]	MScCH Required Practicum (Credit/No Credit)
CHL 5691H[0]	MScCH Optional Practicum (Credit/No Credit)
CHL 6010Y[+]	Required MPH Practicum (Credit/No Credit)
CHL 6011H[+]	Required Practicum Extension (Credit/No Credit)
CHL 6012Y[+]	Long Extension to Required Practicum (Credit/No Credit)
CHL 6020Y[+]	Optional MPH Practicum (Credit/No Credit)
CHL 6021H[+]	Optional Practicum Extension (Credit/No Credit)
CHL 6022Y[+]	Long Extension to Optional Practicum (Credit/No Credit)

[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.

Reading Courses and Research Projects

CHL 7001H	Directed Reading
CHL 7002H	Directed Research

Special Topics Courses

CHL 8001H	Selected Topics in Public Health Issues
CHL 8002H	Selected Topics in Public Health: Methods and Approaches to Research and Practice

Collaborative Specialization Courses

Addiction Studies

PAS 3700H	Multidisciplinary Aspects of Addiction Studies
PAS 3701H	Advanced Research Issues in Addictions

Community Development

UCS 1000H	Community Development

Rehabilitation Sciences

Rehabilitation Sciences: Introduction

Faculty Affiliation

Medicine

Degree Programs

Rehabilitation Science

MSc	*Fields:* Movement Science Occupational Science Practice Science Rehabilitation Health Services Studies Rehabilitation Technology Sciences Social and Cognitive Rehabilitation Sciences
PhD	*Fields:* Movement Science Occupational Science Practice Science Rehabilitation Health Services Studies Rehabilitation Technology Sciences Social and Cognitive Rehabilitation Sciences

Speech-Language Pathology

MSc
PhD

Collaborative Specializations

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

1. **Aging, Palliative and Supportive Care Across the Life Course**
   - Rehabilitation Science, MSc, PhD
   - Speech-Language Pathology, MSc, PhD
2. **Bioethics**
   - Rehabilitation Science, MSc, PhD
3. **Biomedical Engineering**
   - Rehabilitation Science, MSc, PhD
4. **Cardiovascular Sciences**
   - Rehabilitation Science, MSc, PhD
5. **Global Health**
   - Rehabilitation Science, PhD
6. **Health Care, Technology, and Place (admissions have closed)**
   - Rehabilitation Science, PhD
7. **Health Services and Policy Research**
   - Rehabilitation Science, MSc
8. **Musculoskeletal Sciences**
   - Rehabilitation Science, MSc, PhD
9. **Neuroscience**
   - Rehabilitation Science, MSc, PhD
   - Speech-Language Pathology, MSc, PhD
10. **Resuscitation Sciences**
    - Rehabilitation Science, MSc, PhD
11. **Women's Health**
    - Rehabilitation Science, MSc, PhD
12. **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 Sciences: Graduate Faculty

Full Members

Agur, Anne - BSc, MSc, PhD
Bartel, Lee - BA, BMus, MEd, PhD
Beal, Deryk - BA, MHSc, PhD
Bressmann, Tim - MPH, PhD
Brooks, Dina - BSc(PT), MSc, PhD (***Coordinator of Graduate Studies***)
Cameron, Jill - BSc, MS, PhD
Carnahan, Heather - BPHE, MSc, PhD
Chau, Tom - PhD
Colantonio, Angela - BA, BSc(OT), MHSc, PhD (***Director***)
Davis, Aileen - BSc(PT), MSc, PhD
Dawson, Deirdre - BSc, MSc, PhD
De Nil, Luc - MSc, PhD
Eriks-Brophy, Alice - BEd, BA, MSc, PhD
Fernie, Geoffrey - BSc, PhD
Gibson, Barbara - MSc, BMR(PT), PhD
Green, Robin - PhD
Jaglal, Susan - BSc, MSc, PhD
Kennedy, Sidney - DPsych, MBCHB
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
McIlroy, William - BSc, PhD
Mihailidis, Alex - BASc, MASc, PhD
Molnar, Monika - PhD
Morshead, Cindi - BS, PhD
Musselman, Kristin - MSc(PT), PhD
Mustard, Cameron - AB, ScD
Nixon, Stephanie - BHSc(PT), BA, MSc, PhD
Parsons, Janet - BSc(PT), BA, MSc, PhD
Patterson, Kara - BSc, BPT, MSc, PhD
Polatajko-Howell, Helene - PhD
Popovic, Milos - DipIng, PhD
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Renwick, Rebecca - DipOT , BA, PhD
Rochon, Elizabeth - BA, MSc, PhD
Roy, Eric - BSc, MPE, PhD
Ryan, Stephen - BEng, MSc, PhD
Salbach, Nancy - BSc(PT), BS, MSc, PhD
Steele, Catriona - BA, MHSc, PhD
Thomas, Scott - BSc, MSc, PhD
van Lieshout, Pascal - MA, MA, PhD
Woods, Nicole - BA, 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
Friedland, Judith - BA, MA, PhD
Reid, Denise - BSc(OT), MEd, PhD
Verrier, Mary (Molly) - DipOT, MHSc

Associate Members

Berbrayer, David - MD, BScMed
Colella, Tracey JF - MSc, PhD
Colquhoun, Heather - PhD
Cullen, Nora - MD
Fehlings, Darcy - MD
Goldstein, Roger - MBCHB
Hitzig, Sander - PhD
Hunt, Anne - MSc
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Rowland, Paula - BS, BS
Rudzicz, Frank - PhD
Scratch, Shannon Elizabeth - PhD
Switzer-Mcintyre, Sharon - BSc, BPHE, PhD
Thaut, Michael - PhD
Wang, Rosalie - BSc, BSc(OT), PhD
Wong, Andy Kin On - BS, PhD

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.
- Evidence of written and verbal proficiency in English is required for applicants whose first language is not English and must be demonstrated 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.
    - **Michigan English Language Assessment Battery (MELAB):** minimum score of 87.
    - **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:
    - REH 1100H *Theory and Research in Rehabilitation Science* (0.5 FCE).
    - REH 2001Y^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 program. Requirements are the same as for the full-time MSc program 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

Field: Practice 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.
- 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.
- Evidence of written and verbal proficiency in English is required for applicants whose first language is not

English and must be demonstrated 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.
  - **Michigan English Language Assessment Battery (MELAB):** minimum score of 87.
  - **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:
  - REH 1100H *Theory and Research in Rehabilitation Science* (0.5 FCE).
  - REH 2001Y^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.
  - REH 3301H *Knowledge Translation in Rehabilitation: Foundational Knowledge and Innovative Applications* (0.5 FCE).
  - REH 3302H *Determinants of Rehabilitation Practice* (0.5 FCE).
  - REH 3303H *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

Rehabilitation Sciences: Rehabilitation Science PhD

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:
Movement Science
Occupational Science
Rehabilitation Health Services Studies
Rehabilitation Technology Sciences
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 whose first language is not English must provide evidence of written and verbal proficiency in English by completing 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.
    - **Michigan English Language Assessment Battery (MELAB):** minimum score of 87.
    - **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:
    - REH 3100H *Advanced Rehabilitation Research Issues* or equivalent (0.5 FCE) if an equivalent was not taken at the master's level.
    - REH 3001Y^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

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 whose first language is not English must provide evidence of written and verbal proficiency in English by completing 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.
    - **Michigan English Language Assessment Battery (MELAB):** minimum score of 87.
    - **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:
  - REH 3100H *Advanced Rehabilitation Research Issues* or equivalent (0.5 FCE).
  - REH 3001Y[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.
  - REH 1100H *Theory and Research in Rehabilitation Science* (0.5 FCE).
  - REH 1130H *Theory and Research in Occupational Science* **or** REH 1140H *Theory and Research in Physical Therapy* (0.5 FCE).
  - REH 1120H *Research Methods for Rehabilitation Science* (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

Field: Practice Science

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 whose first language is not English must provide evidence of written and verbal proficiency in English by completing 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.
  - **Michigan English Language Assessment Battery (MELAB):** minimum score of 87.
  - **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:
  - REH 3100H *Advanced Rehabilitation Research Issues* or equivalent (0.5 FCE) if an equivalent was not taken at the master's level.
  - REH 3001Y[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.
  - REH 3301H *Knowledge Translation in Rehabilitation: Foundational Knowledge and Innovative Applications* (0.5 FCE).
  - REH 3302H *Determinants of Rehabilitation Practice* (0.5 FCE).

    - REH 3303H *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

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 whose first language is not English must provide evidence of written and verbal proficiency in English by completing 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.
    - **Michigan English Language Assessment Battery (MELAB):** minimum score of 87.
    - **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:
    - REH 3100H *Advanced Rehabilitation Research Issues* or equivalent (0.5 FCE) if an equivalent was not taken at the master's level.
    - REH 3001Y^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.
    - REH 3301H *Knowledge Translation in Rehabilitation: Foundational Knowledge and Innovative Applications* (0.5 FCE).
    - REH 3302H *Determinants of Rehabilitation Practice* (0.5 FCE).
    - REH 3303H *Rehabilitation Clinical Practicum* (0.5 FCE).
    - REH 1100H *Theory and Research in Rehabilitation Science* (0.5 FCE).
    - REH 1130H *Theory and Research in Occupational Science* **or** REH 1140H *Theory and Research in Physical Therapy* (0.5 FCE).
    - REH 1120H *Research Methods for Rehabilitation Science* (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

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.

REH 1100H	Theory and Research in Rehabilitation Science
REH 1120H	Research Methods for Rehabilitation Science
REH 1130H	Theory and Research in Occupational Science
REH 1140H	Theory and Research in Physical Therapy
REH 1510H	Disordered and Restorative Motor Control
REH 2000H	Individual Reading and Research Course
REH 2001Y[0]	Rehabilitation Presentations and Proceedings (Credit/No Credit)
REH 3001Y[0]	Advanced Rehabilitation Presentation and Proceedings (Credit/No Credit)
REH 3100H	Advanced Rehabilitation Research Issues
REH 3120H	International Issues in Disability and Rehabilitation
REH 3140H	Disability, Embodiment, and Voice in the Rehabilitation Science Context
REH 3301H	Knowledge Translation in Rehabilitation: Foundational Knowledge and Innovative Applications
REH 3302H	Determinants of Rehabilitation Practice
REH 3303H	Rehabilitation Clinical Practicum
REH 3400H	Therapeutic Exercise in Rehabilitation: Emerging Trends and Research Approaches
REH 3500H	Gender, Work, and Health
REH 5100H	Introduction to Cognitive Rehabilitation Neuroscience I: Basic Science to Clinical Applications
REH 5102H	Cognitive Rehabilitation Neuroscience II
REH 3600H	Synthesis Toolkit: Approaches and Methodologies
JRP 1000H	Theory and Method for Qualitative Researchers: An Introduction

[0] Course that may continue over a program. The course is credited when 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 was not English, must demonstrate proficiency in the English language through the successful completion of one of the English proficiency tests listed in this calendar. 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 was not English, must demonstrate proficiency in the English language through the successful completion of one of the English proficiency tests listed in this calendar. Students who graduated from a university outside North America are strongly encouraged to contact the Coordinator of Graduate Studies before applying. See General Regulations, section 4.3 English-Language Proficiency.
- 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:
  - REH 3100H *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

SLP 3001H	Theoretical Foundations of Communication Sciences
SLP 3002H	Research Methodologies in Communication Sciences
SLP 3003H[0]	Reading Seminar 1
SLP 3004H,Y	Reading Seminar 2
SLP 4000H[0]	Reading Seminar 1
SLP 4001H	Philosophical and Theoretical Foundations of Communication Sciences
SLP 4007H,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
PhD

Collaborative Specializations

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

1. **Bioethics**
   - Religion, MA, PhD
2. **Book History and Print Culture**
   - Religion, MA, PhD
3. **Diaspora and Transnational Studies**
   - Religion, MA, PhD
4. **Editing Medieval Texts**
   - Religion, PhD
5. **Environmental Studies**
   - Religion, MA, PhD
6. **Ethnic and Pluralism Studies**
   - Religion, MA, PhD
7. **Jewish Studies**
   - Religion, MA, PhD
8. **Knowledge Media Design**
   - Religion, MA, PhD
9. **Mediterranean Archeology**
   - Religion, PhD
10. **Sexual Diversity Studies**
    - Religion, MA, PhD
11. **South Asian Studies**
    - Religion, MA, PhD
12. **Women and Gender Studies**
    - Religion, MA, PhD
13. **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, we are 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: http://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
Bashir, Shahzad - MA, PhD
Bendlin, Andreas - PhD
Bergen, Doris - MA, PhD
Black, Deborah - BA, MA, PhD
Boddy, Janice - BA, MA, PhD
Bryant, Joseph - BA, MA, PhD
Cobb, Michael - BA, MA, AM, PhD
Cochelin, Isabelle - DipdESup, BA, MA, PhD
Coleman, Simon - BA, PhD
Cunningham, Hilary - BA, MA, PhD
Dhand, Arti - BA, MA, PhD
DiCenso, James - BA, MA, PhD
Donaldson, Terence - BSc, MTh, DTh
Eisenbichler, Konrad - BA, MA, PhD
Emmrich, Christoph - PhD
Emon, Anver - LLB, BA, LLM, MA, PhD, SJD, CRC
Everett, Nicholas - BA, MA, PhD
Fadel, Mohammad - BA, JD, PhD
Fox, Harry - BSc, BA, MS, MA, PhD
Franks, Paul - AB, MA, PhD
Garrett, Frances - BA, MA, PhD
Gibbs, Robert - BA, MA, PhD
Goering, Joseph - BA, MA, MSL, PhD
Goetschel, Willi - PhD
Gooch, Paul William - BA, MA, PhD

Goodman, Amanda - BA, MA, PhD
Green, Kenneth - BA, MA, PhD
Hackworth, Jason - BA, MA, MCP, PhD
Hanneder, Juergen - PhD
Harrak, Amir - MA, LTh, PhD
Harris, Jennifer - BA, MA, PhD (***Director of Graduate Studies***)
Hewitt, Marsha - BA, MA, PhD
Jervis, Leslie - DTh
Kasturi, Malavika - DPhil
Kingwell, Mark - BA, MA, MPH, DFA, PhD
Kivimae, Juri - AM, PhD
Klassen, Pamela - BA, MA, PhD
Kloppenborg, John - BA, MA, PhD (*Chair*)
Kortenaar, Neil ten - BA, MA, PhD
Lambek, Michael - BA, MA, PhD
Locklin, Reid - AB, MTh, PhD
Magee, John - BA, MA, PhD
Marshall, John - BA, MA, PhD
Marshall, Ruth - BA, MA, DPhil
McGowan, Mark - BA, MA, PhD
Meacham, Tirzah - BA, MA, PhD
Metso, Sarianna - MA, PhD
Meyerson, Mark - BA, PhD
Mittermaier, Amira - MA, PhD
Most, Andrea - BA, MA, PhD
Moumtaz, Nada - PhD
Mullin, Amy - BA, PhD
Napolitano, Valentina - BSc, MPH, PhD
Newman, Judith - PhD
Northrup, Linda - BA, MA, PhD
Novak, David - AB, PhD
O'Neill, Kevin - BA, MA, PhD
Raman, Srilata - BA, MPH, PhD
Rao, Ajay - PhD
Ross, Jill - BA, MA, PhD
Ruffle, Karen - PhD
Saleh, Walid - BA, MA, PhD
Sandahl, Stella - MA, MA, PhD
Scharper, Stephen - BA, MA, PhD
Scott, Joshua Barton - BA, MA, PhD
Shantz, Colleen - BA, MDiv, PhD
Shen, Vincent Tsing-song - 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
Taylor, Glen - BA, MPH, MTh, PhD
Terpstra, Nicholas - BA, MA, PhD
Vaage, Leif - BA, PhD
Virani, Shafique - PhD

Members Emeriti

Callahan, William - AB, MA, PhD
Davies, Alan - BA, BD, STM, PhD
McIntire, C. Thomas - MA, PhD
O'Toole, Roger - DipEd, BA, MA, PhD
Richardson, G Peter - BAR, BD, PhD
Schmidt, Lawrence - BA, MA, PhD
Stefanovic, Ingrid - BA, MA, PhD
Stock, Brian - AB, PhD
Vertin, Joseph Michael - BA, PhD

Associate Members

Chartrand-Burke, Anthony - PhD
Derry, Kenneth - PhD
Fehige, Yiftach - BSc, MTh, MPH, PhD, DTh
Luehrmann, Sonja - PhD
Nizri, Yigal - BFA
Obrock, Luther James - BA, MA, PhD
Raffaelli, Enrico - PhD
Turner, Alicia - 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 additional 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 B+ 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:
  - RLG 2000Y *Major Research Paper* (1.0 FCE)
  - RLG 1200H *MA Method and Theory Workshop* (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 additional 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:
  - RLG 1000Y *Method and Theory in the Study of Religion* (1.0 FCE)
  - at least 0.5 FCE outside the area of specialization.
  - 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 modern scholarship and necessary source languages provided that at least one shall be a language of modern scholarship, as approved by the Director of Graduate Studies. The language requirements must be fulfilled before writing the general examinations.
- **Professionalization seminar.** Doctoral students must complete SRD 4444Y *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

RLG 1000Y	Method and Theory in the Study of Religion
RLG 1200H	The MA Method and Theory Workshop
RLG 1501H	Directed Reading
RLG 1502H	Directed Reading
RLG 2000Y	Major Research Paper
RLG 2008H	Sex, Gender, and the Body in Religious Perspective
RLG 2010H	Religion and Liberalism
RLG 2011H	Natural Law in Judaism and Christianity I
RLG 2012H	Natural Law in Judaism and Christianity II
RLG 2015H	Comparing Religion
RLG 2016H	Radical Evil: Religious, Philosophical, and Psychological Response
RLG 2017H	Religion, Secularism, and the Public Sphere
RLG 2020H	Early Christianity, Ancient Judaism, Ancient "Magic"
RLG 2021H	Mystical Poetics and the Study of Religious Aesthetics
RLG 2022H	Religion and Trauma: Psychoanalytic Narratives of Transmission and Transformation
RLG 2023H	Religion, Media, and Culture
RLG 2025H	Critical Theory of Religion
RLG 2027H	Law and Religion: Critical Conversations
RLG 2028H	Enemies of God: Religion and Violence in a (Post) Modern Time
RLG 2030H	Historiography of Religion
RLG 2042H	Re-Enchanting Nature: Spirituality and the New Nature Writing
RLG 2043H	Buddhism as Translation
RLG 2060H	Religion and Philosophy in the European Enlightenment
RLG 2061H	Why Philosophy Matters to Religious Studies
RLG 2062H	Modern Hermeneutics and Religion
RLG 2063H	Hermeneutics and Critical Theory
RLG 2064H	Constructing Religion
RLG 2067H	Philosophical Topics in the Study of Religion
RLG 2072H	Kant's Theory of Religion
RLG 2073H	Que(e)rying Religion
RLG 2084H	Social Science Approaches to Early Christianity: Topical Investigations
RLG 2085H	Genealogies of Christianity
RLG 2086H	Fieldwork in Religious Studies
RLG 3114H	Christianity and Judaism in Colonial Context
RLG 3143H	Hebraica
RLG 3144H	Isaiah and Prophecy in the Early Judaism and Christianity
RLG 3190H	Pseudepigraphy in Ancient Mediterranean Religion
RLG 3200H	The Politics of Bible Translation
RLG 3201H	Topics in Christian Origins I
RLG 3212H	Martyrdom and Christian Identity
RLG 3216H	Christianity in the Ancient Near East
RLG 3217H	Social Networks and Elective Cults in Antiquity
RLG 3228H	Social History of the Early Jesus Movement
RLG 3232H	Sacred Space
RLG 3237H	Religion and Social Reform in Canada
RLG 3241H	Galatians
RLG 3242H	Christian Asceticism in Late Antiquity
RLG 3243H	The Synoptic Problem
RLG 3249H	Studies in the Synoptic Gospels
RLG 3250H	Heresy and Deviance in Early Christianity
RLG 3252H	The Letter of James and Early Christian Wisdom
RLG 3272H	Jews and Judaism in Christian Traditions
RLG 3280H	Christianities of South Asia
RLG 3290H	Words and Worship in Christian Cultures
RLG 3401H	Reading Buddhist Texts I
RLG 3402H	Reading Buddhist Texts II
RLG 3413H	Burmese Religions
RLG 3414H	The Vessantarajataka
RLG 3415H	Theravada Practice
RLG 3454H	Readings in Tibetan Buddhism I
RLG 3455H	Readings in Tibetan Buddhism II
RLG 3458H	Rhetoric and Discipline in Buddhist Studies
RLG 3460H	Sanskrit Readings
RLG 3461H	Sanskrit Readings II
RLG 3464H	History and Historiography of Buddhism
RLG 3468H	The Buddhist Canon
RLG 3470H	Buddhist Tantra
RLG 3480H	Religion and Magic in Asia
RLG 3490H	Buddhist Auto/biography
RLG 3501H	Special Topics in Islamic Studies
RLG 3505H	Topics in Islamic Religious Literature
RLG 3514H	Ismaili History and Thought: The Persian Tradition
RLG 3515H	Law, Ethics and Society in the Islamic Tradition
RLG 3516H	Islamic Law and Society
RLG 3517H	Shiʿi Studies: The State of the Field
RLG 3518H	Foundations in Shi'I Studies
RLG 3527H	The Anthropology of Islam
RLG 3528H	Tools of the Craft: Research Fluency in Islamic Studies
RLG 3544H	Islamicate Material Cultures
RLG 3590H	Islam and Sexuality
RLG 3601H	Philo: The First Jewish Philosopher
RLG 3610H	Wisdom in Second Temple Judaism
RLG 3611H	Hebrew Literature and Religion: Midrash Aggadah
RLG 3621H	Modern Jewish Thought
RLG 3622H	Maimonides and His Modern Interpreters
RLG 3634H	Worship and Scripture at Qumran
RLG 3645H	The Jewish Legal Tradition
RLG 3647H	Early Rabbinic Judaism
RLG 3653H	Jewish Exegetical Traditions in Antiquity
RLG 3655H	Readings in Jewish Literature (200 BCE–200 CE)
RLG 3700H	Debates in Ancient Indian Religion and History
RLG 3701H	Vaishnavism

RLG 3702H	Debates in Classical South Asian Religion and History
RLG 3703H	Indo-Islamic Civilization: The Sultanate and Mughal Periods
RLG 3704H	Readings in Sanskrit Literature
RLG 3710H	Newar Religion
RLG 3714H	Sacred Biography in South Asia
RLG 3715H	Readings in Hindu Tantra
RLG 3717H	Renunciation and Erotica in Sanskrit Poetry
RLG 3720H	Sex, Body, and Gender in South Asian Religious Traditions
RLG 3730H	Fasting and Feeding in Hindu Traditions
RLG 3740H	The Mahaparinirvanasutra
RLG 3741H	The Guru—East and West
RLG 3744H	Hindu Epics
RLG 3750H	Topics in South Asian Religions
RLG 3760H	Vedanta Through the Ages
RLG 3762H	Religion and Aesthetics in South Asia
RLG 3931H	Topics in North American Religions
RLG 4001H	Directed Reading: TST Seminar
RLG 4004H	Colloquium Presentation
SRD 4444Y	Doctoral Seminar Series—Compulsory Attendance (CR/NCR)

Joint Courses

JAR 6510H	From Theory to Ethnography: Anthropological Approaches to Religion
JPR 2057H	Democracy and the Secular
JRG 2050H	Religion, Culture, and Global Politics
JRP 2000H	Religion and Public Policy
JPR 2051H	Fanaticism: A Political History
JPR 2058H	Postsecular Political Thought

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
- East Asian Studies
- English
- Ethnic and Pluralism Studies
- German
- 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:

1. **Diaspora and Transnational Studies**
   - Slavic Languages and Literatures, MA, PhD
2. **Jewish 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: http://sites.utoronto.ca/slavic/graduate/grad_index.html
Email: slavic@chass.utoronto.ca
Telephone: (416) 926-2075
Fax: (416) 926-2076

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

Ambros, Veronika - MA, PhD
Holland, Kate - MA, PhD
Koznarsky, Taras - MA, PhD (***Graduate Coordinator***)
Kramer, Christina - BA, MA, PhD
Livak, Leonid - BA, AM, PhD
Obradovic, Dragana - MA, PhD
Orwin, Donna - PhD (*Chair*)
Schallert, Joseph - PhD
Tarnawsky, Maxim - BA, PhD
Trojanowska, Tamara - MA, PhD

Members Emeriti

Barnes, Christopher - BA, MA, PhD
Bedford, Charles - MA, PhD
Bogert, Ralph - BA, MA, PhD
Dolezel, Lubomir - BA, PhD, FRSC
Iribarne, Louis - BA, MA, PhD
Lantz, Kenneth - BA, MA, PhD
Lindheim, Ralph - BA, MA
Pavliuc, Nicolae - PhD
Ponomareff, Constantin - BA, MA, PhD
Thomson, Roger - BA, MA, DPhil

Associate Members

Mikhailova, Julia - AB, AM, AM, DPhil
Wodzynski, Lukasz - 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:
  - SLA 1104H *Introduction to Old Church Slavonic* (0.5 FCE)
  - SLA 1040H *Methods of Teaching Slavic Languages* (0.5 FCE)
  - Students who provide evidence of satisfactory completion of equivalent courses to SLA 1104H and 1040H may be exempted from these courses.
  - Students who intend to complete the Slavic linguistics field must complete SLA 1109H *Studies in Old Church Slavonic* (0.5 FCE).
- **Language.** Proficiency in language of major field of study must be demonstrated during 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:
  - SLA 1104H *Introduction to Old Church Slavonic* (0.5 FCE)
  - SLA 1040H *Methods of Teaching Slavic Languages* (0.5 FCE).
  - Students who provide evidence of satisfactory completion of equivalent courses to SLA 1104H and 1040H may be exempted from these courses.
  - Students who intend to complete the Slavic linguistics field must complete SLA 1109H *Studies in Old Church Slavonic* (0.5 FCE).
- **Language.** Proficiency in language of major field of study must be demonstrated during 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:
  - SLA 1104H *Introduction to Old Church Slavonic* (0.5 FCE)
  - SLA 1040H *Methods of Teaching Slavic Languages* (0.5 FCE)
  - Students who provide evidence of satisfactory completion of equivalent courses to SLA 1104H and 1040H may be exempted from these courses.
  - Students who intend to complete the Slavic linguistics field must complete SLA 1109H *Studies in Old Church Slavonic* (0.5 FCE);
- **Language.** Level of proficiency in language of major field of study must be established no later than the first week of the first session in the program to determine 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 first week of session. 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 first week of session. 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 SLA 1010H *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.
- **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

SLA 1010H	Slavic Proseminar
SLA 1037H	Theatre and Cinema in Extremis: Staging Twentieth Century Aesthetics and Politics
SLA 1039H	Kyiv-Kiev-Kijow: A City and the Text
SLA 1040H	Methods of Teaching Slavic Languages
SLA 1050H	Theatricality and Spectacle in the History of Russian Culture. From Jesters to Meyerhold.
SLA 1207H	The Imaginary Jew
SLA 1310H	Theatre in the Twentieth Century
SLA 1320H	Postcommunism—Postcolonialism—Postdependence: Central and Eastern European Perspectives
SLA 1330H	Literature and Science
SLA 1421H	Women in East European Fiction
SLA 1521H	Post-Modernity and the Mythopoetic Legacy of Mitteleuropa
SLA 2000Y	Reading and Research
SLA 2001H	One Term Reading and Research
COL 5012Y	Readings in Czech/Russian Literary Theory
COL 5037H	Magic Prague: Question of Literary Cityscapes
JLV 5134H	Theories of the Novel
JLV 5135H	1968: The Year of Revolution and Protest

Croatian and Serbian Literatures

SLA 1507H	Modern Croatian Bards in Performance
SLA 1517H	Modern Serbian Bards
SLA 1547H	South Slavic Folklore

Czech and Slovak Literature

SLA 1600Y	Introduction to Czech and Slovak Literatures
SLA 1602Y	Czech Style and Syntax
SLA 1604Y	History of Czech Verbal Art from the Early Stages to Baroque
SLA 1606H	Public Places and Private Spaces in Czech Short Story
SLA 1608H	On the Wave of the Avant-garde
SLA 1609H	Karel Capek
SLA 1610H	V. Havel: Thinker, Politician, Writer

Polish Literature

SLA 1304H	Staging God, Man, and History: Polish Drama
SLA 1308H	Critical Paradigms in Polish Culture
SLA 1312Y	Modernism and Post-Modernism in Polish Literature
SLA 1315H	Intellectual Traditions, Culture, and Literature: Trajectories in Poland

Russian Literature

SLA 1202H	Gulag Literature
SLA 1203H	The Self and Other in Russian Prose
SLA 1204H	Contemporary Russian Literature
SLA 1207H	The Imaginary Jew
SLA 1210H	Studies in Medieval Russian Literature
SLA 1211Y	Studies in the Russian Drama: Eighteenth to Twentieth Century
SLA 1215H	Studies in Russian Literature and Criticism in the Eighteenth Century
SLA 1216H	From English to Russian Literature and Back
SLA 1218H	Pushkin
SLA 1220H	Nineteenth Century Russian Thinkers
SLA 1222Y	Russian Poetry and Poetics
SLA 1226H	Dostoevsky in Literary Theory and Criticism
SLA 1228H	Themes in Russian Realism
SLA 1229H	Russian Literature Between Tradition and Modernity (exclusion: SLA 1228H)
SLA 1231H	Russian Modernism
SLA 1233H	Studies in Modern Russian Poets
SLA 1234H	Dostoevsky
SLA 1238H	Chekhov
SLA 1239H	Vladimir Nabokov
SLA 1240H	Tolstoy
SLA 1241H	Narrative and History
SLA 1410H	Gogol
SLA 1411H	Synthesis of Arts in the Late Russian Empire–Early Soviet Union

SLA 1900H	Russian Nineteenth-Century Poetry (mandatory for MA students)

Slavic Linguistics

SLA 1040H	Methods of Teaching Slavic Languages
SLA 1041Y	Advanced Training in Slavic Languages I
SLA 1042Y	Advanced Training in Slavic Languages II
SLA 1043H	Advanced Training in Slavic Languages I
SLA 1044H	Advanced Training in Slavic Languages II
SLA 1102Y	Advanced Russian Language Skills
SLA 1104H	Introduction to Old Church Slavonic
SLA 1105H	Russian Phonetics, Phonology, and Derivational Morphology
SLA 1109H	Studies in Old Church Slavonic
SLA 1114H	Russian Inflectional Morphology, Stress, Lexicon, Aspect
SLA 1141H	History of the Ukrainian Language
SLA 1142H	Style and Structure of Ukrainian
SLA 1150H	Russian Since the Revolution

Russian Language

SLA 1101Y	History of the Russian Language
SLA 1102Y	Advanced Russian Language Skills

Ukrainian Literature/Language

SLA 1141H	History of Ukrainian Language
SLA 1142H	Style and Structure of Ukrainian
SLA 1402Y	Studies in Ukrainian Modernism
SLA 1403Y	Contemporary Ukrainian Literature
SLA 1404Y	Studies in Ukrainian Poets
SLA 1406Y	Studies in Ukrainian Literary Criticism
SLA 1407H	Aspects of Literary Translation of Ukrainian
SLA 1412Y	Literature of the Ukrainian Diaspora

Social Justice Education

Social Justice Education: Introduction

Faculty Affiliation

Ontario Institute for Studies in Education (OISE)

Degree Programs

Social Justice Education

MA
MEd
EdD
PhD

Collaborative Specializations

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

1. **Comparative, International and Development Education**
   - Social Justice Education, MA, MEd, EdD, PhD
2. **Development Policy and Power**
   - Social Justice Education, MA, MEd
3. **Diaspora and Transnational Studies**
   - Social Justice Education, MA, MEd, EdD, PhD
4. **Education, Francophonies and Diversity**
   - Social Justice Education, MA, MEd, EdD, PhD
5. **Educational Policy**
   - Social Justice Education, MA, MEd, EdD, PhD
6. **Environmental Studies**
   - Social Justice Education, MA, MEd, EdD, PhD
7. **Ethnic and Pluralism Studies**
   - Social Justice Education, MA, MEd, EdD, PhD
8. **Indigenous Health**
   - Social Justice Education, MA, MEd, EdD, PhD
9. **Sexual Diversity Studies**
   - Social Justice Education, MA, MEd, EdD, PhD
10. **South Asian Studies**
    - Social Justice Education, MA, MEd, EdD, PhD
11. **Women and Gender Studies**
    - Social Justice Education, MA, MEd, EdD, PhD
12. **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.

This graduate program is 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

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
Bisaillon, Laura - BA, MA, PhD
Boler, Megan - BA, PhD
Cannon, Martin - MA, PhD
Chun, Jennifer J. - BA, AM, PhD
Coloma, Roland Sintos - TD, BA, MA, MA, PhD
Dei, George JS - BA, MA, PhD
Farmer, Diane - BA, MSS, PhD
Gaztambide-Fernandez, Ruben - BM, MEd, EdD
Georgis, Dina - PhD
Heller, Monica - BA, MA, PhD
Magnusson, Jamie-Lynn - BA, MA, PhD
McCready, Lance - BA, MA, PhD
Mirchandani, Kiran - BA, MPH, PhD
Mojab, Shahrzad - BA, MEd, EdD
O'Sullivan, Julia - BA, MA, PhD
Portelli, John - MEd, PhD
Sawchuk, Peter - BSc, BEd, PhD
Song, Jesook - BA, PhD
Titchkosky, Tanya - BA, MA, PhD
Todorova, Miglena - BA, MA, PhD
Trifonas, Peter Pericles - BE, BA, PhD
Tsang, Ka Tat - BSc, PhD
Tuck, Jessica - BA, PhD
Walcott, Rinaldo - BA, MA, PhD
Wane, Njoki - BE, MSc, MEd, PhD (**Chair and Graduate Chair**)

Members Emeriti

Dehli, Kari - BA, MA, PhD
Eichler, Margrit - MA, PhD, LLD
Gamlin, Peter - BA, MA, PhD
Livingstone, David - BA, PhD
Misgeld, Dieter - BA, PhD
Razack, Sherene - BA, MA, PhD
Smith, Dorothy - BSc, PhD, LLD

Associate Members

Desbiens, Brian - AB, MA, PhD
Di Paolantonio, Mario - AM, PhD, PhD
Dion, Susan - PhD
Fung, Richard - BA, MEd
Gorman, Rachel - BA, MA, PhD
Hellman, Judith Adler - BA, MPH, PhD
Heron, Barbara - BA, MSW, PhD
Kellogg, Paul - BA, MA, DrRerPol
Kempadoo, Roshini - BA, MA, MPH, PhD
Kumsa, Martha - BA, BSW, MSW, PhD
Matsuoka, Atsuko Karin - BA, MA, PhD
Trotz, Alissa - AB, MPH, PhD
Von Lieres, Bettina - BS, MS, DrRerPol
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.

Program Requirements

- **Coursework.** Students must complete **3.0 full-course equivalents (FCEs)** as follows:
    - Subject to consultation with a faculty advisor, SJE 1903H *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:

- Option II: coursework plus a Major Research Paper (MRP)
- Option III: coursework plus a thesis
- Option IV: coursework

Students who are accepted into the MEd program are automatically assigned to Option IV (courses only). They can transfer to another option (II or III) after they begin their program and have secured an SJE faculty supervisor for the MRP or thesis.

MEd Program (Option II: Coursework Plus a Major Research Paper)

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.

Program Requirements

- **Coursework.** Students must complete **4.0 full-course equivalents (FCES)** including:
    - Subject to consultation with a faculty advisor, SJE 1903H *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)**: SJE 2001Y^{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

MEd Program (Option III: Coursework Plus a Thesis)

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.

Program Requirements

- **Coursework.** Students must complete **3.0 full-course equivalents (FCES)** including:
    - Subject to consultation with a faculty advisor, SJE 1903H *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

MEd Program (Option IV: Coursework)

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.

Program Requirements

- **Coursework.** Students must complete **5.0 full-course equivalents (FCES)** including:
    - Subject to consultation with a faculty advisor, SJE 1903H *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

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

SJE 1900H	Introduction à la sociologie de l'éducation
SJE 1900H	Introduction to Sociology in Education
SJE 1902H	Introductory Sociological Research Methods in Education
SJE 1903H	Major Concepts and Issues in Social Justice Education
SJE 1905H	Qualitative Approaches to Sociological Research in Education
SJE 1906H	Integrating Research and Practice in Social Justice Education
SJE 1909H	Environmental Sustainability and Social Justice 1
SJE 1911H	Sociologie de l'éducation inclusive
SJE 1912H	Foucault and Research in Education and Culture: Discourse, Power, and the Subject
SJE 1915H	Education and Popular Culture
SJE 1919H	Environmental Sustainability and Social Justice 2
SJE 1921Y	The Principles of Anti-Racism Education
SJE 1922H	Sociology of Race and Ethnicity
SJE 1923H	Racism, Violence, and the Law: Issues for Researchers and Educators
SJE 1924H	Modernization, Development, and Education in African Contexts
SJE 1925H	Indigenous Knowledge and Decolonization: Pedagogical Implications
SJE 1925H	Savoir indigène et décolonization
SJE 1926H	Race, Space, and Citizenship: Research Methods
SJE 1927H	Migration and Globalization
SJE 1929H	Theorizing Asian Canada
SJE 1930H	Race, Indigeneity, and the Colonial Politics of Recognition
SJE 1931H	Centering Indigenous-Settler Solidarity in Theory and Research
SJE 1951H	L'École, la participation parentale et la communauté
SJE 1951H	The School and the Community
SJE 1954H	Marginality and the Politics of Resistance
SJE 1956H	Social Relations of Cultural Production in Education
SJE 1957H	Disability Studies: An Introduction
SJE 1958H	The Cultural Production of the Self as a Problem in Education
SJE 1959H	Theoretical Frameworks in Culture, Communications, and Education
SJE 1961H	Spirituality and Schooling
SJE 1970H	Applied Ethics in Higher Education
SJE 1971H	Identity and Education
SJE 1972H	Contemporary Ethical Issues in Schooling and Education
SJE 1973H	Liberalism and its Critics
SJE 1974H	Truth Commissions Reconciliation and Indian Residential Schools
SJE 1975H	Indigenous Settler Relations Issues for Teachers
SJE 1976H	Critical Media Literacy Education
SJE 1977H	Sociology of Indigenous and Alternative Approaches to Health and Healing Practices: Implications for Education
SJE 1982H	Women, Diversity, and the Educational System
SJE 1989H	Black Feminist Thought
SJE 1992H	Feminism and Poststructuralism in Education
SJE 1993H	Militarism and Sustainability: Concepts of Nature, State, and Society
SJE 2001Y[0]	Major Research Paper
SJE 2910H	Changes in Families and Policy Consequences for Government and Education
SJE 2941H	Bourdieu: Theory of Practice in Social Sciences
SJE 2942H	Education and Work
SJE 2996H	Special Topics in Social Justice Research in Education
SJE 2998H	Individual Reading and Research in Social Justice Education: Master's
SJE 5000H	Special Topics in Social Justice Research in Education: Master's Level
JHS 1916H	The Graduate Student Experience
JTE 1952H	Language, Culture, and Education
JTE 1952H	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.

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.

Program Requirements

- **Coursework.** Students must complete **4.0 full-course equivalents (FCEs)** as follows:
    - Required half course (0.5 FCE): SJE 3997H *Practicum in Social Justice Education* (72 hours).
    - Subject to consultation with a faculty advisor, SJE 3905H *Interdisciplinary Approaches to Humanities and Social Sciences: Theory and Praxis* (0.5 FCE) is recommended.
    - Students who have completed the recommended course SJE 3905H 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.
- Students cannot normally transfer between the EdD and PhD programs.

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.

Program Requirements

- **Coursework.** Students must complete **3.0 full-course equivalents (FCEs)** including:
    - Subject to consultation with a faculty advisor, SJE 3905H *Interdisciplinary Approaches to Humanities and Social Sciences: 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 normally 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.
- Applicants should demonstrate that they are active professionals engaged in activities relevant 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, SJE 3905H *Interdisciplinary Approaches to Humanities and Social Sciences: 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 normally 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

SJE 3903H	SJE Learning to Succeed in Graduate School
SJE 3904H	Introduction to Advanced Sociological Theory in Education
SJE 3905H	Interdisciplinary Approaches to Humanities Social Science: Theory and Praxis
SJE 3910H	Advanced Seminar on Race and Anti-Racism Research Methodology in Education
SJE 3911H	Cultural Knowledges, Representation, and Colonial Education
SJE 3912H	Race and Knowledge Production: Research Methods
SJE 3914H	Anti-Colonial Thought and Pedagogical Challenges
SJE 3915H	Franz Fanon and Education
SJE 3916H	Women in Leadership Positions: Intersectionalities and Leadership Practices; Sociological Implications in Education
SJE 3929H	Advanced Disability Studies: Interpretive Methods, Interpreted Bodies—Research Methods
SJE 3933H	Globalisation and Transnationality: Feminist Perspectives
SJE 3996H	Special Topics in Advanced Social Justice Research in Education
SJE 3997H	Practicum in Social Justice Education
SJE 3998H	Individual Reading and Research in Sociology Justice Education
SJE 6000H	Special Topics in Social Justice Research in Education: Doctoral Level
JSA 5147H	Language, Nationalism, and Post-Nationalism

The following courses are accepted for credit in the SJE program and will satisfy that program's specialization requirements:

SJE 1419H	Historiography and the History of Education
SJE 1433H	Freedom and Authority in Education
SJE 1436H	Modernity and Postmodernity in Social Thought and Education
SJE 1438H	Democratic Approaches to Pedagogy

SJE 1440H	An Introduction to Philosophy of Education
SJE 1441H	Philosophical Dimensions of Moral Education
SJE 1443H	Troubling Knowledges in Education: the Politics of Claiming Truths
SJE 1447H	Technology in Education: Philosophical Issues
SJE 1452H	Individual Reading and Research in the History of Education: Master's Level
SJE 1453H	Individual Reading and Research in the Philosophy of Education: Master's Level
SJE 1461H	Special Topics in History of Education
SJE 1465H	Special Topics in Philosophy of Education
SJE 1471H	Critical Issues in Education: Philosophical Perspectives
SJE 1472H	Philosophical Questions about the Teaching of Philosophy
SJE 3417H	Research Seminar in Feminist Criticism, Aesthetics, and Pedagogy
SJE 3436H	Aesthetics and Education
SJE 3452H	Individual Reading and Research in the History of Education: Doctoral Level
SJE 3453H	Individual Reading and Research in the Philosophy of Education: Doctoral Level
SJE 3480H	EdD Seminar in the Philosophy of Education I
SJE 3481H	EdD Seminar in the Philosophy of Education
SJE 3490H	EdD Seminar in the History of Education I
SJE 3491H	EdD Seminar in the History of Education II

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
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:

1. **Addiction Studies**
   - Social Work, MSW, PhD
2. **Aging, Palliative and Supportive Care Across the Life Course**
   - Social Work, MSW, PhD
3. **Bioethics**
   - Social Work, PhD
4. **Community Development**
   - Social Work, MSW
5. **Contemporary East and Southeast Asian Studies**
   - Social Work, MSW
6. **Ethnic and Pluralism Studies**
   - Social Work, MSW, PhD
7. **Health Care, Technology, and Place (admissions have closed)**
   - Social Work, PhD
8. **Health Services and Policy Research**
   - Social Work, PhD
9. **Human Development (admissions have been suspended)**
   - Social Work, PhD
10. **Public Health Policy**
    - Social Work, MSW, PhD
11. **Sexual Diversity Studies**
    - Social Work, MSW, PhD
12. **Women and Gender Studies**
    - Social Work, MSW, PhD
13. **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 a **Master of Social Work (MSW), a post-master's Advanced Diploma in Social Service Administration**, and a **Doctor of Philosophy (PhD)** degree.

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:

1. Educating and developing professionals who have the capacity to engage in and influence our changing world through social work practice, policy, and research.
2. Advancing research, practice, and policy that shapes the future of a profession that crosses national boundaries.
3. Providing leadership by mobilizing knowledge that incorporates the range of expertise existing within the broader social work communities that exist internationally.
4. Collaborating with our diverse partners to address social inequities at local, national, and global levels.

Contact and Address

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Canada

Social Work: Graduate Faculty

Full Members

Alaggia, Ramona - BA, MSW, PhD
Bhuyan, Rupaleem - BA, MA, PhD
Bogo, Marion - BA, MSW

Brennan, David - BA, MSW, PhD
Craig, Shelley - BS, MSW, PhD (***Associate Dean, Academic and Graduate Coordinator***)
Fallon, Barbara - BA, MSW, PhD (***Associate Dean, Research***)
Fang, Lin - BA, MSW, PhD (***Director, PhD Program***)
Fuller-Thomson, Esme - BA, MSW, PhD
Hulchanski, J David - BA, MSc, PhD
Lee, Eunjung - BSW, MSW, PhD
MacFadden, Robert - BA, MSW, PhD
McDonald, Lynn - PhD
Mishna, Faye - BA, PhD (*Dean*)
Newman, Peter - BA, MA, MSW, PhD
Neysmith, Sheila - BSc, MSW, DSW
Regehr, Cheryl - AB, MA, PhD
Saini, Michael - BSW, BA, BA, MSW, PhD
Sakamoto, Izumi - DSW
Stern, Susan - DSW
Trocme, Nicolas - PhD
Tsang, Ka Tat - BSc, PhD
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
Lightman, Ernie - BA, MA, PhD
Marziali, Elsa - BA, MSW, DSW
Meeks, Donald - BA, MSW, DSW, Associate in Commerce
Power, Roxanne - BA, BSW, MSW
Schlesinger, Benjamin - BA, MSW, PhD
Shapiro, Ben - BA, BSW, MSW, DSW
Wells, Lilian - BA, BSW, BA, MSW

Associate Members

Adam, Barry - PhD
Adamson, Keith - MSW, PhD
Anthony, Samantha - PhD
Ashcroft, Rachelle - MSW, PhD
Bauer, Greta - PhD
Begun, Stephanie - MSW, PhD
Blackstock, Cindy - PhD
Bledsoe, Sarah - PhD
Burnes, David - MSW, PhD
Carpenter, John S. W. - DSc
Crowder, Rachael - PhD
Daley, Andrea - PhD
Dimitropoulos, Gina - BA, MSW, PhD
Fleischer, Les - BA, MSW, DSW
Fluke, John - PhD
Gharabaghi, Kiaras - PhD
Herie, Marilyn - BA, MSW, PhD
Ickowicz, Abel - MD
Jeffery, Donna - PhD
Jenney, Angelique - BA, MSW, PhD
Jennissen, Therese - MSW, PhD
Katz, Ellen - BA, MSW, PhD, PhD
King, Bryn - MSW, PhD
Kourgiantakis, Toula - MSW, PhD
Litvack, Andrea - BSW, MSW
Maiter, Sarah - MSW, DPhil
McNeill, Ted - BA, MSc, DPhil
Middelton Moz, Jane - MSW
Moscovitch, Allan - BA, MA
Parada, Henry - PhD
Pepler, Debra - BA, BEd, MSc
Schmidt, Fred - BA, MA, PhD
Scott-Marshall, Heather - BSc, MSc, PhD
Seto, Michael - BSc, MA, PhD
Shier, Micheal - MSW, PhD
Sieppert, Jackie - PhD
Stewart, Shannon - PhD
Taylor, Lisa - PhD
Timoshkina, Natalya - PhD
Zhou, Yanqiu - PhD
Zlotnik Shaul, Randi - 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, Children and Their Families Field of Specialization

Master of Social Work

The program 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 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. 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 of specialization must complete eight half courses (4.0 FCEs) and the Year 1 practicum (0.5 FCE) from the list of required courses below.

SWK 4102H	Social Policy and Social Welfare in the Canadian Context
SWK 4103H	Elements of Social Work Practice
SWK 4105H	Social Work Practice Laboratory
SWK 4107H	Foundations of Social Work: Knowledge, Theory, and Values that Inform Practice
SWK 4510H	Research for Evidence-Based Social Work Practice (SWK 4510H must be completed before taking any of the research courses in the field of specialization)
SWK 4602H	Social Work Practice with Groups
SWK 4605H	Social Work Practice with Individuals and Families
SWK 4654H	Social Work Practice in Organizations and Communities
SWK 4701H+	Social Work Practicum I (prerequisite: SWK 4105H 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 of specialization by mid-February of Year 1. See below for information by field of specialization.
- 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 of specialization 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 of specialization.
- Thesis: Students complete a total of **8.5 FCEs**, including core MSW coursework (4.0 FCEs), required field of specialization 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 of specialization.
- 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

SWK 4514H	Research for Practice with Children and their Families
SWK 4608H	Social Work Practice with Families
SWK 4620H	Social Work Practice with Children and Adolescents
SWK 4625H	The Intersection of Policy and Practice with Children and their Families
SWK 4702Y	Social Work Practicum II (full credit)

- **Students in the advanced-standing option** must complete the above courses plus a compulsory course: SWK 4510H *Research for Evidence-Based Social Work Practice* (SWK 4510H must be completed before taking any of the research courses in the field of specialization).

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, Gerontology Field of Specialization

Master of Social Work

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 of specialization 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 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. 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 of specialization 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 of specialization should consult the specific course requirements listed separately in this entry.

SWK 4102H	Social Policy and Social Welfare in the Canadian Context
SWK 4103H	Elements of Social Work Practice
SWK 4105H	Social Work Practice Laboratory
SWK 4107H	Foundations of Social Work: Knowledge, Theory, and Values that Inform Practice
SWK 4510H	Research for Evidence-Based Social Work Practice (SWK 4510H must be completed before taking any of the research courses in the field of specialization)
SWK 4602H	Social Work Practice with Groups
SWK 4605H	Social Work Practice with Individuals and Families
SWK 4654H	Social Work Practice in Organizations and Communities
SWK 4701H+	Social Work Practicum I (prerequisite: SWK 4105H 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 of specialization 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 of specialization coursework (2.5 FCEs), elective coursework (1.0 FCE), and practica (1.5 FCEs) in the student's field of specialization.
- Thesis: Students in the two-year MSW program complete a total of **9.0 FCEs**, including core MSW coursework (4.0 FCEs), required field of specialization 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

AGE 2000H	Principles of Aging
SWK 4513H	Knowledge Building in Social Work
SWK 4612Y	Social Work and Aging: Integrated Policy and Practice (full credit)
SWK 4618H	Special Issues in Gerontological Social Work
SWK 4702Y	Social Work Practicum II (full credit)

- **Students in the MSW advanced-standing option** must complete the above courses plus a compulsory course: SWK 4510H *Research for Evidence-Based Social Work Practice* (SWK 4510H must be completed before taking any of the research courses in the field of specialization).

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, Health and Mental Health Field of Specialization

Master of Social Work

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 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. 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

SWK 4102H	Social Policy and Social Welfare in the Canadian Context
SWK 4103H	Elements of Social Work Practice
SWK 4105H	Social Work Practice Laboratory
SWK 4107H	Foundations of Social Work: Knowledge, Theory, and Values that Inform Practice
SWK 4510H	Research for Evidence-Based Social Work Practice (SWK 4510H must be completed before taking any of the research courses in the field of specialization)
SWK 4602H	Social Work Practice with Groups
SWK 4605H	Social Work Practice with Individuals and Families
SWK 4654H	Social Work Practice in Organizations and Communities
SWK 4701H+	Social Work Practicum I (prerequisite: SWK 4105H 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 of specialization 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 of specialization 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 of specialization.
- Thesis: Students in the MSW two-year program complete a total of **8.5 FCEs**, including core MSW coursework (4.0 FCEs), required field of specialization 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 of specialization.
- 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

SWK 4412H	The Context of Mental Health and Health Practice
SWK 4511H	Practice-Based Research in Mental Health and Health
SWK 4702Y	Social Work Practicum II (full credit)

Plus students can then elect to take **one** of three choices:

SWK 4622H *Social Work Practice in Health* and SWK 4604H *Social Work Practice in Mental Health*
SWK 4622H *Social Work Practice in Health* followed by SWK 4632H *Advanced Social Work Practice in Health* (prerequisite: SWK 4622H)
SWK 4604H *Social Work Practice in Mental Health* followed by SWK 4631H *Advanced Social Work Practice in Mental Health* (prerequisite: SWK 4604H)

- **Students in the MSW advanced-standing option** must complete the above courses plus a compulsory course: SWK 4510H *Research for Evidence-Based Social Work Practice* (SWK 4510H must be completed before taking any of the research courses in the field of specialization).

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, Human Services Management and Leadership Field of Specialization

Master of Social Work

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 of specialization 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 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. 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 of specialization must complete eight half courses (4.0 FCEs) and the Year 1 practicum (0.5 FCE) from the list of required courses below.

SWK 4102H	Social Policy and Social Welfare in the Canadian Context
SWK 4103H	Elements of Social Work Practice
SWK 4105H	Social Work Practice Laboratory
SWK 4107H	Foundations of Social Work: Knowledge, Theory, and Values that Inform Practice
SWK 4510H	Research for Evidence-Based Social Work Practice (SWK 4510H must be completed before taking any of the research courses in the field of specialization)
SWK 4602H	Social Work Practice with Groups
SWK 4605H	Social Work Practice with Individuals and Families
SWK 4654H	Social Work Practice in Organizations and Communities
SWK 4701H+	Social Work Practicum I (prerequisite: SWK 4105H 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 of specialization 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 of specialization 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 of specialization.
- Students in the Human Services Management and Leadership field of specialization 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 of specialization.

Compulsory Courses—Year 2

SWK 4425H	Human Services Management and Leadership
SWK 4426H	Financial Management and Leadership in Human Service Organizations
SWK 4427H	Human Resource Management in Human Service Organizations
SWK 4515H	Research and Quality Improvement in Human Service Organizations
SWK 4702Y	Social Work Practicum II (full credit)

- **Students in the MSW advanced-standing option** must complete the above courses plus a compulsory course: SWK 4510H *Research for Evidence-Based Social Work Practice* (SWK 4510H must be completed before taking any of the research courses in the field of specialization.)

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, Indigenous Trauma and Resiliency Field of Specialization

Master of Social Work

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 of specialization 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 of specialization.
- 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 SWK 4102H and SWK 4516H [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

SWK 4101H	Understanding Historical and Multigenerational Trauma
SWK 4102H	Social Policy and Social Welfare in the Canadian Context
SWK 4106H	Social Work Ethics and Indigenous Communities
SWK 4108H	Sexual Abuse, Sexual Assault, and the Family
SWK 4109H	Trauma and Human Development
SWK 4110H	Trauma and Addiction
SWK 4111H	Trauma-Informed Organizational and Community Intervention
SWK 4510H	Research for Evidence-Based Social Work Practice
SWK 4516H	Indigenous Trauma and Resiliency Practicum

Year 2 Courses

SWK 4517H	Indigenous and Participatory Research Methods
SWK 4703Y	MSW ITR Practicum II
SWK 4901H	Facilitating Training in Indigenous Communities
SWK 4902H	Indigenous Perspectives on Grief, Loss, and Unattended Sorrow
SWK 4903H	Program Development and Healthy Leadership—The Importance of Ceremony and Ritual
SWK 4904H	Working with Couples and Families in Indigenous Context
SWK 4905H	Seeing the Need, Creating the Solution in Indigenous Communities

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, Social Justice and Diversity Field of Specialization

Master of Social Work

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 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. 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.

SWK 4102H	Social Policy and Social Welfare in the Canadian Context
SWK 4103H	Elements of Social Work Practice
SWK 4105H	Social Work Practice Laboratory
SWK 4107H	Foundations of Social Work: Knowledge, Theory, and Values that Inform Practice
SWK 4510H	Research for Evidence-Based Social Work Practice (SWK 4510H must be completed before taking any of the research courses in the field of specialization)
SWK 4602H	Social Work Practice with Groups
SWK 4605H	Social Work Practice with Individuals and Families
SWK 4654H	Social Work Practice in Organizations and Communities
SWK 4701H+	Social Work Practicum I (prerequisite: SWK 4105H 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 of specialization 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 of specialization 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 of specialization.
- Thesis: Students complete a total of **8.5 FCEs**, including core MSW coursework (4.0 FCEs), required field of specialization 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 of specialization.
- 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

SWK 4304H	Globalization and Transnationalism: Intersections of Policy and Community Practice Locally and Globally
SWK 4306H	Theoretical Approaches to Defining Social Injustice and Engaging in Social Change
SWK 4512H	Research Knowledge for Social Justice
SWK 4606H	Diversity, Access, and Equity in Social Work Practice
SWK 4702Y	Social Work Practicum II (full credit)

- **Students in the MSW advanced-standing option** must complete the above courses plus a compulsory course: SWK 4510H *Research for Evidence-Based Social Work Practice* (SWK 4510H must be completed before taking any of the research courses in the field of specialization).

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.

AGE 2000H	Principles of Aging
JPW 2118H	Philosophical Foundations of Women's Studies
JPX 1001H	Parenting: Multidisciplinary Perspectives
JTH 3000H	Coordinating Seminar in Ethnic and Pluralism Studies
PAS 3700H	Multidisciplinary Aspects of Addiction Studies
SWK 4210H	Promoting Empowerment: Working at the Margins
SWK 4417H	Adolescence: Social Work Challenges and the Role of Social Work
SWK 4420H	Human Rights and Social Justice
SWK 4422H	Social Housing and Homelessness
SWK 4506H	Applied Quantitative Data Analysis
SWK 4516H	Indigenous Trauma and Resiliency Practicum
SWK 4603H	Advanced Social Work Practice with Groups (prerequisite: SWK 4602H or equivalent)
SWK 4609H	Sexuality, Sexual Diversity and Social Work Practice
SWK 4610H	Advanced Social Work Practice with Couples
SWK 4613H	Social Work Practice in Mental Health: Older Populations
SWK 4614H	Social Work Practice in Palliative Care
SWK 4615H	Cognitive Behavioural Theories and Clinical Social Work Practice
SWK 4616H	Drug Dependencies: Interventive Approaches
SWK 4617H	Cross Cultural Social Work Practice
SWK 4619H	Family Mediation: Theory and Practice
SWK 4621H	Integrative Child and Adolescent Therapy: Theory and Practice
SWK 4623H	Violence in Families: Multilevel Intervention in Interdisciplinary Practice
SWK 4624H	Feminist Social Work Practice
SWK 4629H	Social Work Practice and Aboriginal Peoples
SWK 4630H	Intersecting Narratives: Self, Culture, Institutions
SWK 4633H	Advanced Clinical Practice with Families of Children and Adolescents
SWK 4634H	Family Practice Across the Life Cycle
SWK 4635H	Evidence-Based Practices in Social Work
SWK 4636H	Special Topics in Mental Health Social Work
SWK 4637H	Special Topics in Health Social Work
SWK 4638H	Social Work Practice in Children's Mental Health
SWK 4639H	Special Topics in Child and Family Social Work
SWK 4640H	Special Topics in Mental Health Social Work II
SWK 4641H	Special Topics in Social Work in Gerontology
SWK 4642H	Special Topics in Human Services Management and Leadership
SWK 4643H	Special Topics in Social Justice and Diversity
SWK 4644H	Special Topics in Social Work in Gerontology II
SWK 4645H	Special Topics in Children and their Families II
SWK 4646H	Special Topics in Human Services Management and Leadership II (modular course)
SWK 4658H	Social Work with Immigrants and Refugees
SWK 4667H	Information Technology in Professional Social Work Practice
SWK 4668H	Welfare of Children
SWK 4669H	Psychodynamic Theories and Clinical Social Work Practice
SWK 4670H	Cybercounselling and Social Work Practice
SWK 4671H	Neuroscience and Social Work Practice
SWK 4672H	Children and Families Living with Disabilities
SWK 4673H	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.

SWK 4801H	Special Studies I
SWK 4802H	Special Studies II
SWK 4803H	Special Studies III
SWK 4804H	Special Studies IV

Social Work: Social Work PhD

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.

Doctor of Philosophy

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:
    - SWK 6301H *Intermediate Statistics and Data Analysis* (0.5 FCE)
    - SWK 6302H *Epistemology and Social Work Research* (0.5 FCE)
    - SWK 6307H *Designing and Implementing Qualitative Social Work Research* (0.5 FCE)
    - SWK 6308H *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: SWK 4506H (0.5 FCE) is a prerequisite for SWK 6301H, 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).
  - SWK 7000H *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 SWK 8000H *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 SWK 8000H *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 SWK 8000H *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

SWK 6301H	Intermediate Statistics and Data Analysis (prerequisite: SWK 4506H or pass a competency exam)
SWK 6302H	Epistemology and Social Work Research
SWK 6307H	Designing and Implementing Qualitative Social Work Research
SWK 6308H	Designing and Implementing Quantitative Social Work Research
SWK 7000H	Doctoral Thesis Seminar (Credit/No Credit)
SWK 8000H	Comprehensive Exam (Credit/No Credit)

Recommended Course

SWK 4506H	Applied Quantitative Data Analysis (prerequisite for SWK 6301H; students who pass a competency exam will be exempted from taking SWK 4506H)

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.

SWK 6006H	Theory and Practice of Teaching Social Work
SWK 6007H	Advanced Qualitative Research Methods in Social Work
SWK 6101H	Critical Evaluation of Social Work Practice Theories
SWK 6106H	Family Mediation: Research and Practice
SWK 6203H	Comparative Social Welfare Systems
SWK 6205H	Social Planning in Social Welfare
SWK 6401H	Sociocultural Issues in Social Work
SWK 6406H	Housing Theory and Research Methods

These courses are designed to provide seminars or tutorials according to the particular interests of students enrolled:

SWK 6501H	Special Studies 1
SWK 6502H	Special Studies 2
SWK 6503H	Special Studies 3
SWK 6504H	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

SWK 4425H	Leadership Skills in Social Service Organizations
SWK 4426H	Financial Management of Social Service Organizations
SWK 4427H	Human Resource Management in Social Service Organizations
SWK 4515H	Research and Quality Improvement in Human Service Organizations

Elective Courses

1.0 elective 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
PhD

Collaborative Specializations

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

1. **Addiction Studies**
   - Sociology, MA, PhD
2. **Aging, Palliative and Supportive Care Across the Life Course**
   - Sociology, MA, PhD
3. **Contemporary East and Southeast Asian Studies**
   - Sociology, MA
4. **Development Policy and Power**
   - Sociology, MA
5. **Diaspora and Transnational Studies**
   - Sociology, MA, PhD
6. **Environmental Studies**
   - Sociology, MA, PhD
7. **Ethnic and Pluralism Studies**
   - Sociology, MA, PhD
8. **Food Studies**
   - Sociology, MA, PhD
9. **Jewish Studies**
   - Sociology, MA, PhD
10. **Sexual Diversity Studies**
    - Sociology, MA, PhD
11. **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

Andersen, Robert - BA, MA, PhD
Baber, Zaheer - PhD
Baumann, Shyon - BA, MA, PhD
Berry, Brent - BS, PhD
Boyd, Monica - BA, MA, PhD
Brownfield, David - PhD
Bryant, Joseph - BA, MA, PhD
Brym, Robert - BA, MA, PhD
Chun, Jennifer J. - BA, AM, PhD
Cranford, Cynthia - MA, PhD
Dinovitzer, Ronit - BA, MA, PhD
Erickson, Bonnie - BA, MA, PhD
Erickson, Patricia - BA, MA, PhD
Fong, Eric - PhD
Fox, Bonnie - AB, PhD
Friedmann, Harriet - AB, MA, PhD
Gartner, Rosemary - BA, AA, MS, 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
Jones, Charles - BA, 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
Magee, William - PhD
Maurutto, Paula - DPhil
Milkie, Melissa - BA, MA, PhD (*Graduate Chair*)
Mullen, Ann Louise - BA, MA, PhD
Peng, Ito - BSW, BSc, MA, PhD
Reitz, Jeffrey - 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
Campbell, Douglas - BA, MA, 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
Magill, Dennis - BA, MA, PhD
Michelson, William - AB, AM, PhD
Silva, Edward - BA, MA, PhD
Simpson, John - BA, BD, MTh, PhD
Spencer, Metta - AB, MA, PhD
Zeitlin, Irving - BA, MA, PhD

Associate Members

Baker, Jayne - MA
Berrey, Ellen - AB, PhD
Boeckmann, Irene - PhD
Caron, Christian - BA, MA, PhD
Childress, Christopher Clayton - BA, MA, PhD
Contreras, Randol - BA, MA, PhD
Dokshin, Fedor - BA, DPhil
Elcioglu, Emine Fidan - BA, MA, PhD
Farah Schwartzman, Luisa - PhD
Flores, Jerry - BA, MA, MA, PhD
Hoffman, Steven - BA, PhD
Liddle, Kathleen - BA, AM, PhD
Liu, Sida - LLB, PhD
Marin, Alexandra - BA, MA, PhD
Miles, Andrew - BA, MA, PhD
Owusu-Bempah, Akwasi - BA, MA, PhD
Pernell-Gallagher, Kimberly - MA, PhD
Plys, Kristin Victoria - BA, MPH, MA, PhD
Rault, Jasmine - BA, MA, PhD
Rubin, Ashley - BA, PhD
Salem, Rania Hatem - BSc, MSS, PhD
Super, Gail Jennifer - BCL, BA, MSc, PhD

Sociology: Sociology MA

Master of Arts

Program Description

The MA program helps students develop their theoretical perspectives and research skills. It provides solid basic training in honing research skills for the public and private sectors. It also provides 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, 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:
        - SOC 6001H *Classical Sociological Theory I*
        - SOC 6302H *Statistics for Sociologists*
        - SOC 6712H *Qualitative Methods I.*
- **Coursework Plus Research Paper Option**
    - 3.0 FCEs or six half courses including:
        - SOC 6001H *Classical Sociological Theory I*

        - SOC 6302H *Statistics for Sociologists*
        - SOC 6712H *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.
- 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 prepares students for careers in teaching and research. The program trains students to conduct theoretically informed and methodologically sophisticated state-of-the-art sociological research. Graduates will be able to conduct independent research and to communicate their research in a variety of contexts. Therefore, the program is designed to provide both a broad knowledge of the discipline and training in basic research.

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:
    - SOC 6101H *Contemporary Sociological Theory*
    - SOC 6707H *Intermediate Data Analysis*
    - SOC 6511H *Professional Development Seminar I*
    - SOC 6611H *Professional Development Seminar II*
    - SOC 6711Y *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.
- 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 SOC 6511H and SOC 6611H **Professional Seminar Series** (CR/NCR). These seminars consist of a series of workshops designed to guide students in their graduate school career and beyond. SOC 6511H *Professional Development Seminar I* must be completed in the Fall session of Year 1. SOC 6611H *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:
    - SOC 6001H *Classical Sociological Theory I*
    - SOC 6101H *Contemporary Sociological Theory*
    - SOC 6302H *Statistics for Sociologists*
    - SOC 6511H *Professional Development Seminar I*
    - SOC 6611H *Professional Development Seminar II*
    - SOC 6707H *Intermediate Data Analysis*
    - SOC 6711Y *Research Practicum*
    - SOC 6712H *Qualitative Methods I.*
- 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 SOC 6511H and SOC 6611H **Professional Seminar Series** (CR/NCR). These seminars consist of a series of workshops designed to guide students in their graduate school career and beyond. SOC 6511H *Professional Development Seminar I* must be completed in the Fall session of Year 1. SOC 6611H *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

SOC 6001H	Sociological Theory I
SOC 6101H	Sociological Theory II
SOC 6201H	Sociological Theory III
SOC 6301H	Sociological Theory IV
SOC 6302H	Statistics for Sociologists
SOC 6303H	Ethnography
SOC 6401H	Special Topics in Sociological Theory
SOC 6502H	The Sociology Curriculum
SOC 6707H	Intermediate Data Analysis
SOC 6708H	Advanced Data Analysis
SOC 6710H	The Logic of Social Inquiry
SOC 6711Y+	Research Practicum
SOC 6712H	Qualitative Methods I
SOC 6713H	Qualitative Methods II
SOC 6714H	Historical Methods Using Census Data
SOC 6715H	Historical Sociology
SOC 6716H	Survey Methods II—Design-Based Data Analysis

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

Areas of Specialization

Gender and Family

SOC 6017H	Sociology of Families I
SOC 6117H	Sociology of Families II
SOC 6019H	Gender Relations I
SOC 6119H	Gender Relations II
SOC 6219H	Gender Relations III

Health and Mental Health

SOC 6022H	Sociology of Health
SOC 6023H	Sociology of Mental Health I
SOC 6024H	Special Topics in Health
SOC 6122H	Sociology of Mental Health II
SOC 6123H	Sociology of Addiction
SOC 6126H	The Social Ecology of Health

Immigration, Ethnicity, and Race

SOC 6002H	Immigration I
SOC 6003H	Immigration II
SOC 6009H	Ethnicity I
SOC 6109H	Ethnicity II
SOC 6209H	Ethnicity III

Networks and Community

SOC 6008H	Network Analysis I
SOC 6108H	Network Analysis II
SOC 6214H	Sociology of Urbanization
SOC 6314H	Community
SOC 6414H	Urban Organization

Political Sociology

SOC 6005H	Social Change and Development I
SOC 6010H	Political Sociology I
SOC 6110H	Political Sociology II
SOC 6210H	Political Sociology III
SOC 6014H	Environmental Sociology I
SOC 6125H	Theories of Social Change

Sociology of Crime and Law

CRI 3140H	Special Topics in Criminology and Sociolegal Studies
SOC 6006H	Sociology of Crime and Law I: Criminology
SOC 6106H	Sociology of Crime and Law II: Sociology of Law
SOC 6206H	Sociology of Crime and Law III: Punishment
SOC 6306H	Advanced Topics in Sociology of Crime and Law I
SOC 6406H	Advanced Topics in Sociology of Crime and Law II
SOC 6506H	Advanced Topics in Sociology of Crime and Law III

Sociology of Culture

SOC 6516H	Sociology of Culture
SOC 6517H	Culture and Cognition
SOC 6518H	Culture Industries
SOC 6519H	Sociology of Food
SOC 6520H	Special Topics in Sociology of Culture

Work, Stratification, and Markets

SOC 6012H	Work, Stratification, and Markets I
SOC 6013H	Social Inequality I
SOC 6112H	Work, Stratification, and Markets II
SOC 6113H	Social Inequality II
SOC 6212H	Work, Stratification, and Markets III
SOC 6312H	Work, Stratification, and Markets IV

Other Courses

SOC 6016H	Social Demography
SOC 6021Y	Sociology and the Policy Process in Canada
SOC 6118H	Sociology of Religion II
SOC 6511H	Professional Development Seminar I (Credit/No Credit)
SOC 6611H	Professional Development Seminar II (Credit/No Credit)
SOC 6811H	Seminar in Teaching

Special Reading Courses

SOC 6015H	A reading course or individual research in an approved field I
SOC 6115H	A reading course or individual research in an approved field II

MA Research Paper

SOC 6215Y	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:

1. **Book History and Print Culture**
   - Spanish, MA, PhD
2. **Diaspora and Transnational Studies**
   - Spanish, MA, PhD
3. **Editing Medieval Texts**
   - Spanish, PhD
4. **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
Colantoni, Laura - MA, PhD (*Chair and Graduate Chair*)
Cuervo, Maria Cristina - PhD
Davidson, Robert - 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
Rodriguez, Nestor - BA, PhD
Rupp, Stephen - BA, MA, MPH, MA, PhD
Sarabia, Rosa - BA, PhD

Members Emeriti

Burke, James - BA, MA, PhD
Ellis, Keith Aa - 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
Sternberg, Ricardo - BA, MA, PhD
Valdes, Mario - BA, MA, PhD
Webster, Jill - BA, MA, PhD

Associate Members

Alves dos Santos Rato, Anabela - PhD
Nagy, Naomi - BA, PhD
Oliveira de Lima, Suzi - PhD
Ramirez-Salazar, Manuel - BA, MA, PhD
Steele, Jeffrey - BA, MA, PhD
van Lieshout, Pascal - MA, MA, PhD

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
    - a sample of written work in Spanish (10 to 12 pages)
    - two letters of recommendation (one of the letters must comment on the applicant's fluency in Spanish).

Program Requirements

- 4.0 full-course equivalents (FCEs) at the graduate level.
- MA students specialize in one of two fields:
    1. Hispanic Linguistics
    2. Hispanic Literatures and Cultures.
- 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. Specific requirements by field are available on the department's website.
- With departmental approval, courses may be taken in a cognate discipline (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 Hispanic Linguistics must have completed an introductory course in linguistics (LIN 100Y or an equivalent course). Students who have not completed LIN 100Y 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, nor does it allow MA students to transfer to the PhD program before the coursework for the MA is completed.

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
    - a sample of written work in Spanish (10 to 12 pages)
    - two letters of recommendation (one of the letters must comment on the applicant's fluency in Spanish).

Program Requirements

- PhD students specialize in one of two fields:
    1. Hispanic Linguistics
    2. Hispanic Literatures and Cultures.
- **Coursework.** Students must complete **4.0 full-course equivalents (FCEs)**. 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; details are on the department's website.

- By March 15 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.
- The **field examination** centres on two subfields of **Hispanic Literature** or **Linguistics**: 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 the 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 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, 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 which must be answered in Spanish, and will be written in the last two weeks of January. The oral examination will follow in the first two weeks of February; 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 **dissertation proposal** on the research questions and methodology of his/her proposed research (20 to 25 pages double spaced, plus a bibliography) to the Graduate Coordinator by April 25 of Year 2 of enrolment in the program. 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 his/her dissertation proposal in a two-hour 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 his/her area of research. These language requirements may be satisfied by passing the appropriate reading knowledge examinations offered by the various departments of language and literature at the University of Toronto.
- Significant prior training in a language (such as an undergraduate major or minor) will also be accepted as demonstration of reading knowledge.
- Years 3 and 4 are devoted to researching and writing the **doctoral dissertation**. The Supervisory Committee must normally approve 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, approximately half 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.

SPA 1053H	History of the Spanish Language
SPA 1080H	Descriptive Grammar of Spanish
SPA 1081H	The Structure of Spanish
SPA 1082H	Sociolinguistics of Spanish
SPA 1083H	Microvariation in Spanish
SPA 1088H	Spanish Syntax
SPA 1089H	Spanish Morphosyntax
SPA 1090H	Second Language Speech Learning
SPA 1092H	Portuguese and Spanish Semantics
SPA 1093H	Introduction to Hispanic Linguistics
SPA 1094H	Spanish Bilinguilism
SPA 1097H	Second-Language Teaching and Methodology

SPA 1101H	Topics in the Acquisition of Spanish
SPA 1104H	Experimental Approaches to Sound Variation and Change
SPA 1105H	Spanish Intonation
SPA 1150H	Directed Research in Hispanic Linguistics
SPA 2016H	Medieval Spanish Narrative
SPA 2018H	Poetics of Early Drama
SPA 2050H	Adaptations of *La Celestina*
SPA 2052H	Graphic Legacy of *Celestina*: Visual Culture and Social Studies
SPA 2060H	Literature and Society of Castile in the Late Middle Ages and Early Renaissance
SPA 2121H	Psychoanalysis and the Passions in Early Modern Literature
SPA 2135H	Aspects of Picaresque in 16th and 17th Century Spanish Prose
SPA 2150H	Defining Journeys in the Spanish Empire
SPA 2187H	Comedy and the Comedia in Early Modern Spain
SPA 2284H	Narrative and Political Transition in Spain
SPA 2291H	The Urban Experience in Spain
SPA 2292H	New Ruralism and Spain
SPA 2304H	Latin American Cinema
SPA 2305H	Auteurism in Spanish Cinema
SPA 2352H	Modern Spanish Drama and its Traditions
SPA 2404H	The Latin American Novel
SPA 2410H	Latin American Fiction and the Interfaces of Literature and Science
SPA 2415H	Disability and Latin American Cultural Production
SPA 2424H	Spanish American Poetry and Poetics
SPA 2425H	21st Century Latin American Art and Culture
SPA 2432H	Text and Image in Latin American Culture
SPA 2802H	The Politics of Errantry in the Hispanic Caribbean
SPA 2805H	Representations of Women in Latin American Culture
SPA 2850H	Nineteenth-Century Latin American Literature
SPA 2900H	Issues in Literary Theory and Hispanic Texts
SPA 2905H	Latin American Cultural Theories
SPA 2912H	Passions of the Soul and 15th Century Spanish Fiction
SPA 2929H	Early Modern Spanish Pastoral and Beyond
SPA 2940H	Pursuing the Post-Revolution: Literature and Philosophy of *Mexicanidad*
SPA 2947H	Transparency and Politics in Contemporary Mexican Literature
SPA 3000H	Directed Research in Hispanic Literatures

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: www.slp.utoronto.ca
Email: slp.admissions@utoronto.ca
Telephone: (416) 978-1794
Fax: (416) 978-1596

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
Eriks-Brophy, Alice - BEd, BA, MSc, PhD
Girolametto, Luigi - BA, MSc, PhD
Helms-Park, Rena - BA, MA, AM, DPhil
Johnson, Carla - PhD
Mainela-Arnold, Elina - MA, PhD
Martino, Rosemary - BS, MA, PhD
Molnar, Monika - 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
Graham, Naida - BSc, MA, PhD
Jacobson, Marlene - BA, PhD
Kagan, Aura - BAA, BA, MA, PhD
Kroll, Robert - BSc, MSc, PhD
Leonard, Carol - BA, MASc, PhD
Ng, Stella - BA, MA, PhD
Parnes, Pauline - 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 courses with grades of at least a B+ in child development, elementary statistics, general linguistics, human physiology, phonetics, and research methods.
- 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.
- 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 one of the following:
    - Michigan English Language Assessment Battery (MELAB) with a minimum score of 85
    - 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 departmental website for a listing of courses offered during each academic year.

Year 1 of the program for students will consist of:

SLP 1500Y[+]	Internship (Credit/No Credit)
SLP 1502Y	Anatomy and Embryology
SLP 1503Y	Articulation and Related Disorders
SLP 1505Y	Child Language I
SLP 1506H	Child Language II
SLP 1507H	Clinical Laboratory in Speech-Language Pathology
SLP 1514Y	Applied Audiology
SLP 1516H	Aural Rehabilitation
SLP 1520H[+]	Principles of Clinical Practice
SLP 1521H	Augmentative Communication
SLP 1522Y	Speech Physiology and Acoustics
SLP 1529H	Fluency Disorders
SLP 1530H	Voice Disorders
SLP 1532H[0]	Clinical Laboratory in Hearing Disorders (Credit/No Credit)
SLP 1539H[0]	Capstone Portfolio

[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.

Year 2 of the program for students will consist of:

SLP 1508Y	Advanced Clinical Laboratory in Speech-Language Pathology
SLP 1525H	Structurally Related Disorders
SLP 1527H+	Clinical Analysis of Communication and Swallowing Disorders
SLP 1528H+	Research in Speech-Language Pathology
SLP 1533Y	Aphasia
SLP 1534H	Motor Speech Disorders
SLP 1535H+	Advanced Principles of Clinical Practice
SLP 1536H	Swallowing Disorders
SLP 1538H	Neurocognitive Communication Disorders
SLP 2500Y	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.

Contact and Address

MFI Program

Web: www.mfi.utoronto.ca
Email: mfi-info@utstat.utoronto.ca
Telephone: (416) 978-7420

Department of Statistical Sciences
Faculty of Arts & Science, University of Toronto
Stewart Building, Room 410C, 149 College Street
Toronto, Ontario M5T 1P5
Canada

MSc and PhD Programs

Web: www.utstat.utoronto.ca
Email: grad-info@utstat.utoronto.ca
Telephone: (416) 978-5136
Fax: (416) 978-5133

Department of Statistical Sciences
Faculty of Arts & Science, University of Toronto
Sidney Smith Hall, Room 6022, 100 St. George Street
Toronto, Ontario M5S 3G3
Canada

Statistical Sciences: Graduate Faculty

Full Members

Badescu, Andrei - BSc, MSc, DPhil
Brenner, David - BSc, MSc, PhD
Briollais, Laurent - BSc, MSc, PhD
Broverman, Samuel - BSc, MSc, PhD
Brunner, Lawrence - BA, MA, PhD, DPhil
Craiu, Virgil Radu - BSc, MSc, PhD (*Chair and Graduate Chair*)
Duvenaud, David - PhD
Escobar, Michael - BS, PhD
Evans, Michael - BSc, MSc, PhD
Feuerverger, Andrey - BSc, PhD
Fortin, Marie-Josee - MSc, PhD
Grosse, Roger - PhD
Jackson, Kenneth - BSc, MSc, PhD
Jaimungal, Sebastian - BSc, MSc, PhD
Knight, Keith - BSc, MS, PhD
Kong, Dehan - BS, MS, PhD
Lin, Xiaodong - BSc, MSc, MMath, PhD
Lou, Wen-Yi Wendy - DPhil
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
Sun, Qiang - BSc, PhD
Urtasun, Raquel - PhD
Virag, Balint - BA, MA, PhD
Volgushev, Stanislav - MA, PhD
Yao, Fang - BSc, MSc, DPhil
Zhou, Zhou - MSc, DPhil

Members Emeriti

Andrews, David - BSc, MSc, PhD
Corey, Paul - BSc, MA, PhD
Fraser, Donald AS - BA, MA, PhD, FRSC
Guttman, Irwin - BSc, MA, PhD
Neal, Radford - BSc, MSc, PhD
Srivastava, Muni - MSc, PhD

Associate Members

Banjevic, Dragan - BS, MS, PhD
Benn, Alfred - BSc, MSc, PhD
Chevalier, Fanny - PhD
Gibbs, Alison - BSc, MSc, PhD
Saarela, Olli Samuli - MSS, DPhil
Taback, Nathan - BSc, MSc, PhD
Tyrrell, Pascal - BSc, MSc, PhD
White, Bethany - DSc, DSc, DSc, DSc
Willmot, Gordon - BMath, MMath, PhD

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.
- 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:
  - Nine required half courses (4.5 FCEs).
  - STA 2560Y *Industrial Internship*, a 3.5-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

MMF 2021H	Numerical Methods for Finance
STA 2503H	Applied Probability for Mathematical Finance
STA 2530H	Applied Time-Series Analysis
STA 2535H	Life Insurance Mathematics
STA 2550H[+]	Financial Insurance Seminar Series (Credit/No Credit)

Winter Session

ECO 2506H	Economics of Risk Management
STA 2540H	Insurance Risk Management
STA 2551H	Financial Insurance Case Studies
STA 2536H	Data Science for Risk Modelling
STA 2550H[+]	Financial Insurance Seminar Series (Credit/No Credit)

Summer Session

STA 2560Y	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 (a) Statistical Theory and Applications or (b) 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:
Statistical Theory and Applications
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:
    - STA 2101H *Methods of Applied Statistics I*.
    - STA 2201H *Methods of Applied Statistics II*
    - STA 2111H *Probability Theory I*
    - STA 2211H *Probability Theory II*
    - STA 2112H *Mathematical Statistics I*
    - STA 2212H *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 (a) Statistical Theory and Applications or (b) Probability or (c) 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.

Fields:
Statistical Theory and Applications
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):
  - STA 2111H *Probability Theory I*
  - STA 2211H *Probability Theory II*
  - STA 2101H *Methods of Applied Statistics I*
  - STA 2201H *Methods of Applied Statistics II*
  - STA 3000Y *Advanced Theory of Statistics.*

Comprehensive Examination Requirements

- At the end of Year 1, students must attempt the following comprehensive examinations:
  - Probability
  - Theoretical Statistics
  - Applied Statistics.

  All three examinations must be passed by the end of Year 2.

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):
  - STA 2111H *Probability Theory I*
  - STA 2211H *Probability Theory II*
  - STA 2101H *Methods of Applied Statistics I*
  - STA 2201H *Methods of Applied Statistics II*
  - STA 3000Y *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

- At the end of Year 1, students must attempt the following comprehensive examinations:
  - Probability
  - Theoretical Statistics
  - Applied Statistics.

  All three examinations must be passed by the end of Year 2.

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):
  1. All of:
     - STA 2111H *Probability Theory I*,
     - STA 2211H *Probability Theory II*, and
     - STA 2503H *Applied Probability for Mathematical Finance*
  2. One of:
     - STA 4246H *Research Topics in Mathematical Finance* **or**
     - STA 2501H *Mathematical Risk Theory*
  3. Either:
     - STA 3000Y *Advanced Theory of Statistics* **or**
     - STA 2101H *Methods of Applied Statistics I* **and**
     - STA 2201H *Methods of Applied Statistics II.*

Comprehensive Examination Requirements

- At the end of Year 1, students must attempt the following comprehensive examinations:
  - Probability
  - Actuarial Science and Mathematical Finance
  - Theoretical Statistics or Applied Statistics.

  All three examinations must be passed by the end of Year 2.

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

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. Visit the department's website for courses offered in the current academic year.

STA 1001H	Applied Regression Analysis
STA 1002H	Methods of Data Analysis
STA 1003H	Sample Survey Theory and its Application
STA 1007H	Statistics for Life and Social Scientists
STA 1008H	Applications of Statistics
STA 2004H	Design of Experiments
STA 2005H	Applied Multivariate Analysis
STA 2006H	Applied Stochastic Processes
STA 2047H	Stochastic Calculus
STA 2080H	Fundamentals of Statistical Genetics
STA 2100H	Mathematical Methods for Statistics
STA 2101H	Methods of Applied Statistics I
STA 2102H	Computational Techniques in Statistics
STA 2104H	Statistical Methods for Machine Learning and Data Mining
STA 2105H	Nonparametric Methods of Statistics
STA 2111H	Probability Theory I
STA 2112H	Mathematical Statistics I
STA 2162H	Statistical Inference I
STA 2201H	Methods of Applied Statistics II
STA 2202H	Time Series Analysis
STA 2209H	Lifetime Date Modelling and Analysis
STA 2211H	Probability Theory II
STA 2212H	Mathematical Statistics II
STA 2342H	Multivariate Analysis I
STA 2453H	Statistical Consulting
STA 2500H	Loss Models
STA 2501H	Mathematical Risk Theory
STA 2502H	Stochastic Models in Investments
STA 2503H	Applied Probability for Mathematical Finance
STA 2505H	Credibility Theory and Simulation Methods
STA 2542H	Linear Models
STA 2530H	Applied Time-Series Analysis
STA 2535H	Life Insurance Mathematics
STA 2536H	Data Science for Risk Modelling
STA 2540H	Insurance Risk Management
STA 2550H[+]	Financial Insurance Seminar Series (Credit/No Credit)
STA 2551H	Financial Insurance Case Studies
STA 2555H	Information Visualization
STA 2560Y	Industrial Internship
STA 2600H	Teaching and Learning of Statistics in Higher Education
STA 3000Y	Advanced Theory of Statistics
STA 3431H	Monte Carlo Methods
STA 4000H, Y	Supervised Reading Project I
STA 4001H, Y	Supervised Reading Project II
STA 4002H	Supervised Reading Project for an Advanced Special Topic
STA 4246H	Research Topics in Mathematical Finance
STA 4247H	Point Processes, Noise, and Stochastic Analysis
STA 4273H	Research Topics in Statistical Machine Learning
STA 4315H	Computational Methods in Statistical Genetics
STA 4364H	Conditional Inference: Sample Space Analysis
STA 4412H	Topics in Theoretical Statistics Modular Courses

Note: The following **modular** courses are each worth 0.25 full-course equivalents (FCEs).

STA 4500H	Statistical Dependence: Copula Models and Beyond
STA 4501H	Functional Data Analysis and Related Topics
STA 4502H	Topics in Stochastic Processes
STA 4503H	Advanced Monte Carlo Methods and Applications
STA 4504H	An Introduction to Bootstrap Methods
STA 4505H	Applied Stochastic Control: High Frequency and Algorithmic Trading
STA 4506H	Non-stationary Time Series Analysis
STA 4507H	Extreme Value Theory and Applications
STA 4508H	Topics in Likelihood Inference
STA 4509H	Insurance Risk Models I
STA 4510H	Insurance Risk Models II
STA 4511H	Statistical Issues in Number Theory
STA 4512H	Logical Foundations of Statistical Inference
STA 4513H	Statistical Models of Networks, Graphs, and Other Relational Structures
STA 4514H	Modelling and Analysis of Spatially Correlated Data
STA 4515H	Multiple Hypothesis Testing and its Applications
STA 4516H	Topics in Probabilistic Programming
STA 4520H	Computational Inference and Graphical Models
STA 4522H	The Measurement of Statistical Evidence
STA 4523H	Bayesian Computation with Massive Data and Intractable Likelihoods
STA 4524H	Advanced Topics in Statistical Genetics

[+] *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 (**Interim Director**)
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
PhD

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:

1. gender, sexuality and queer studies;
2. political economy and critical development studies;
3. feminist studies of technology, science, environment and biomedicine; and
4. 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.

Collaborative Specializations

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

1. **Aging, Palliative and Supportive Care Across the Life Course**
   - Women and Gender Studies, MA
2. **Bioethics**
   - Women and Gender Studies, MA
3. **Contemporary East and Southeast Asian Studies**
   - Women and Gender Studies, MA
4. **Diaspora and Transnational Studies**
   - Women and Gender Studies, MA, PhD
5. **Environment and Health**
   - Women and Gender Studies, MA, PhD
6. **Environmental Studies**
   - Women and Gender Studies, MA, PhD
7. **Ethnic and Pluralism Studies**
   - Women and Gender Studies, MA, PhD
8. **Jewish Studies**
   - Women and Gender Studies, MA
9. **Sexual Diversity Studies**
   - Women and Gender Studies, MA, PhD
10. **South Asian Studies**
    - Women and Gender Studies, MA, PhD
11. **Women's Health**
    - Women and Gender Studies, MA, PhD
12. **Workplace Learning and Social Change**
    - Women and Gender Studies, MA

Contact and Address

Web: www.wgsi.utoronto.ca/graduate
Email: grad.womenstudies@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
Cobb, Michael - BA, MA, AM, PhD
Coloma, Roland Sintos - TD, BA, MA, MA, PhD
Columpar, Corinn - BA, PhD
Cossman, Brenda - LLB, LLM
Cowen, Deborah - BA, MCP, PhD
Dave, Prakruti - BA, MA, PhD
Dehli, Kari - BA, MA, PhD
Fox, Bonnie - AB, PhD
Georgis, Dina - PhD
Keith, Alison - BA, MA, PhD, FRSC

Klassen, Pamela - BA, MA, PhD
Kuokkanen, Rauna - MA, MA, PhD
Larkin, June - PhD
Larson, Katherine - BMus, AB, MPH, PhD
Lo, Marieme - BA, MA, MSc, 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
Rittich, Kerry - BAMus, LLB, SJD
Ruddick, Susan - PhD
Salih, Sara - BA, DPhil
Silvey, Rachel - BA, MA, PhD
Song, Jesook - BA, PhD
Sykes, Heather - BSc, PhD
Taylor, Judith - BA, PhD
Titchkosky, Tanya - BA, MA, PhD
Trotz, Alissa - AB, MPH, PhD
Tuck, Jessica - BA, PhD
Valverde, Mariana - BA, MA, PhD, FRSC
Walcott, Rinaldo - BA, MA, PhD (*Director*)
Wane, Njoki - BE, MSc, MEd, PhD
Yoneyama, Lisa - BA, MA, PhD

Members Emeriti

Armatage, Kay - BA, MA, PhD
Morgan, Kathryn - BA, MA, MEd, PhD

Associate Members

Diaz, Robert - PhD (*Graduate Coordinator*)
Goldstein, Tara - BA, PhD
Johnson, William Christopher - PhD
Todorova, Miglena - BA, MA, PhD
Ye, Shana (Shan) - BA, MA, 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 (WGS 5000H).
  - 1.0 elective FCE in women and gender studies; either a special topics seminar (please see course list of special topics seminars), an independent research/reading course (WGS 1007H), or a practicum extending over both the Fall and Winter sessions (WGS 1006H[0]).
  - 1.0 FCE *MA Research Paper* (WGS 1005Y).
  - 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

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

Women and Gender Studies: Women and Gender Studies PhD

Doctor of Philosophy

Program Description

The PhD program in Women and Gender Studies has four emphases:

1. gender, sexuality, and queer studies
2. feminist cultural studies
3. feminist studies of technology, science, environment, and biomedicine; and
4. 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

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 (WGS 5000H and WGS 5001H). 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 WGS 2000H (0.0 FCE), a credit/non-credit course, requiring participation in the **WGS Research Seminar Series**. Normally, students enrol in WGS 2000H 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 June 30 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 June 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 (WGS 5000H and WGS 5001H).
  - 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 WGS 2000H (0.0 FCE), a credit/non-credit course, requiring participation in the **WGS Research Seminar Series**. Normally, students will enrol in WGS 2000H 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 June 30 of Year 3.
  - 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 June 30 of Year 3.
- 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

WGS 1003H	Special Topcs in Feminist Studies
WGS 1004H	Special Topics in Feminist Theory
WGS 1005Y	MA Research Paper
WGS 1006H[0]	Practicum in Women and Gender Studies
WGS 1007H	Directed Research/Reading
WGS 1009H	Special Topics in Feminist Studies 1
WGS 1010H	Special Topics in Feminist Studies 2
WGS 1011H	Special Topics in Feminist Studies 3
WGS 1013H	Special Topics in Feminist Theory 1
WGS 1014H	Special Topics in Feminist Theory 2
WGS 1015Y	Special Topics in Feminist Theory 3
WGS 1016H	Migration, Mobility, and Displacement in Contemporary Africa
WGS 1017H	Special Topics in Feminist Studies
WGS 1018H	Special Topics in Feminist Studies
WGS 1019H	Special Topics in Feminist Studies
WGS 1020H	Gender and Globalization: Transnational Perspectives
WGS 1021H	Black Diasporic Feminisms: Modernity, Freedom, Belonging
WGS 1022H	Special Topics in Feminist Studies
WGS 1023H	Studies in Aesthetic Expression and Radical Hope
WGS 1024H	Special Topics in Feminist Studies
WGS 1025H	Indigenous Aesthetics: Hip Hop, Media, and Futurities
WGS 1026H	Special Topics in Race and Feminism
WGS 1027H	Special Topics in Queer Studies and Feminism

WGS 1028H	Queer of Colour Critique
WGS 5000H	Feminist Theories, Histories, Movements I
WGS 5001H	Feminist Theories, Histories, Movements II

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

Combined Degree Programs

The University of Toronto offers approximately 80 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: Intro

Overview

The **Combined Degree Program (CDP): UTM, Honours Bachelor of Science, Specialist in Astronomical Sciences / Master of Teaching** 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.

Students earn a bachelor's degree from the University of Toronto Mississauga (UTM) and an accredited professional Master of Teaching (MT) 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
Department of Chemical and Physical Sciences, University of Toronto Mississauga
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) 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 (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.
- Complete the requirements of their HBSc program.
- Be conferred with the HBSc degree.
- 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:
    - At least 6.0 FCEs in their first teaching subject and at least 3.0 FCEs in their second teaching subject. Some secondary teaching subjects require more than 3.0 FCEs regardless of whether they are selected as the first or second teaching subject. Visit the Master of Teaching website for more information.
    - At least 3.0 FCEs in their first teaching subject and at least 1.5 FCE in their second teaching subject by the time they are conditionally admitted to the MT program.
    - Completion of the specialist in Astronomical Sciences fulfils the 6.0 FCEs required for Science-Physics as a first teaching subject. Students may need to complete additional courses to fulfil the minimum 3.0 FCEs for their second teaching subject. Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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.	• 20.0 FCEs in undergraduate courses. This includes o a minimum of 6.0 FCEs as part of the Astronomical Sciences specialist requirements, which will also qualify as prerequisite courses in the first teaching subject; and o a minimum of 3.0 FCEs in the second teaching subject.[1] • By the end of Year 3, complete at least half of the teaching subjects' prerequisite courses (i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject). • In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc degree (20.0 FCEs) and MT degree (10.0 FCEs).
5	• Remaining courses from Year 1 of the MT program.	• 4.5 FCEs of Year 1 MT program requirements.

6	• Remaining courses from Year 2 of the MT program.	• 4.5 FCEs of Year 2 MT program requirements.
[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** is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Students earn an honours bachelor's degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching (MT) 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: www.utsc.utoronto.ca/physsci/
Email: mdefreitas@utsc.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

- Applicants must be admitted to the HBSc degree program and the Biochemistry major program.
- Applicants must meet the admission requirements of the School of Graduate Studies and the MT 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]).
- To be given full, unconditional admission to the MT program, applicants must:

  - 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;
  - Complete the requirements of their HBSc program;
  - Be conferred with the HBSc degree;
  - Provide at least two letters of reference;
  - 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:
    - At least 6.0 FCEs in their first teaching subject and at least 3.0 FCEs in their second teaching subject. Some secondary teaching subjects require more than 3.0 FCEs regardless of whether they are selected as the first or second teaching subject. Visit the Master of Teaching website for more information.
    - At least 3.0 FCEs in their first teaching subject and at least 1.5 FCE in their second teaching subject by the time they are conditionally admitted to the MT program.
    - The major in Biochemistry fulfils the 6.0 FCEs required for Science-Biology as a first teaching subject. Students may need to complete additional courses to fulfil the minimum 3.0 FCEs for their second teaching subject. Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP.
- 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.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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.	• Students must complete all HBSc program requirements and degree requirements. o This includes a minimum of 6.0 FCEs in the first teaching subject and a minimum of 3.0 FCEs in the second teaching subject.[1] • Students are expected to carry a full course load of 5.0 FCEs over the three academic sessions (Fall, Winter, Summer) of each year. • In Year 3, qualified students may apply to the MT program and the CDP and may be offered conditional admission. • 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 degree (20.0 FCEs) and MT degree (10.0 FCEs). • By the end of Year 4, fulfil both the undergraduate program requirements and the undergraduate degree requirements.
5	• Remaining courses from Year 1 of the MT program.	• 4.5 FCEs of Year 1 MT program requirements.
6	• Remaining courses from Year 2 of the MT program.	• 4.5 FCEs of Year 2 MT program requirements.

[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** is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Students earn an honours bachelor's degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching (MT) 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: www.utsc.utoronto.ca/physsci/
Email: mdefreitas@utsc.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

- Applicants must be admitted to the HBSc degree program and the Biochemistry major co-op program.
- Applicants must meet the admission requirements of the School of Graduate Studies and the MT 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]).
- To be given full, unconditional admission to the MT program, applicants must:

  - 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;
  - Complete the requirements of their HBSc program;
  - Be conferred with the HBSc degree;
  - Provide at least two letters of reference;
  - 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:
    - At least 6.0 FCEs in their first teaching subject and at least 3.0 FCEs in their second teaching subject. Some secondary teaching subjects require more than 3.0 FCEs regardless of whether they are selected as the first or second teaching subject. Visit the Master of Teaching website for more information.
    - At least 3.0 FCEs in their first teaching subject and at least 1.5 FCE in their second teaching subject by the time they are conditionally admitted to the MT program.
    - Completion of the major co-op in Biochemistry fulfils the 6.0 FCEs required for Science-Biology as a first teaching subject. Students may need to complete additional courses to fulfil the minimum 3.0 FCEs for their second teaching subject. Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP.
- 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.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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.	• Students must complete all HBSc program requirements and degree requirements. o This includes a minimum of 6.0 FCEs in the first teaching subject and a minimum of 3.0 FCEs in the second teaching subject.[1] • Students are expected to carry a full course load of 5.0 FCEs over the three academic sessions (Fall, Winter, Summer) of each year. • In Year 3, qualified students may apply to the MT program and the CDP and may be offered conditional admission. • 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 degree (20.0 FCEs) and MT degree (10.0 FCEs). • By the end of Year 4, fulfil both the undergraduate program requirements and the undergraduate degree requirements.
5	• Remaining courses from Year 1 of the MT program.	• 4.5 FCEs of Year 1 MT program requirements.
6	• Remaining courses from Year 2 of the MT program.	• 4.5 FCEs of Year 2 MT program requirements.

[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** 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.

Students earn a bachelor's degree from the University of Toronto Mississauga (UTM) and an accredited professional Master of Teaching (MT) 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
Department of Chemical and Physical Sciences, University of Toronto Mississauga
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]).
- 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 (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.
- Complete the requirements of their HBSc program.
- Be conferred with the HBSc degree.
- 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:
    - At least 6.0 FCEs in their first teaching subject and at least 3.0 FCEs in their second teaching subject. Some secondary teaching subjects require more than 3.0 FCEs regardless of whether they are selected as the first or second teaching subject. Visit the Master of Teaching website for more information.
    - At least 3.0 FCEs in their first teaching subject and at least 1.5 FCE in their second teaching subject by the time they are conditionally admitted to the MT program.
    - Completion of the specialist in Biological Chemistry fulfils the 6.0 FCEs required for Science-Biology, Science-Chemistry, or Science-General as a first teaching subject. Students may need to complete additional courses to fulfil the minimum 3.0 FCEs for their second teaching subject. Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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.	• 20.0 FCEs in undergraduate courses. This includes: o a minimum of 6.0 FCEs as part of the Biological Chemistry specialist requirements, which will also qualify as prerequisite courses in the first teaching subject; and o a minimum of 3.0 FCEs in the second teaching subject.[1] • By the end of Year 3, complete at least half of the teaching subjects' prerequisite courses (i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject). • In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc degree (20.0 FCEs) and MT degree (10.0 FCEs).
5	• Remaining courses from Year 1 of the MT program.	• 4.5 FCEs of Year 1 MT program requirements.

6	• Remaining courses from Year 2 of the MT program.	• 4.5 FCEs of Year 2 MT program requirements.
[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** is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Students earn an honours bachelor's degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching (MT) 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: www.utsc.utoronto.ca/physsci
Email: mdefreitas@utsc.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

- Applicants must be admitted to the HBSc degree program and the Biological Chemistry specialist program.
- Applicants must meet the admission requirements of the School of Graduate Studies and the MT 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]).
- To be given full, unconditional admission to the MT program, applicants must:

    - 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;
    - Complete the requirements of their HBSc program;
    - Be conferred with the HBSc degree;
    - Provide at least two letters of reference;
    - 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:
        - At least 6.0 FCEs in their first teaching subject and at least 3.0 FCEs in their second teaching subject. Some secondary teaching subjects require more than 3.0 FCEs regardless of whether they are selected as the first or second teaching subject. Visit the Master of Teaching website for more information.
        - At least 3.0 FCEs in their first teaching subject and at least 1.5 FCE in their second teaching subject by the time they are conditionally admitted to the MT program.
        - Completion of the specialist in Biological Chemistry fulfils the 6.0 FCEs required for Science-Biology, Science-Chemistry, or Science-General as a first teaching subject. Students may need to complete additional courses to fulfil the minimum 3.0 FCEs for their second teaching subject. Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP.
- 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.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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.	• Students must complete all HBSc program requirements and degree requirements. o This includes a minimum of 6.0 FCEs in the first teaching subject and a minimum of 3.0 FCEs in the second teaching subject.[1] • Students are expected to carry a full course load of 5.0 FCEs over the three academic sessions (Fall, Winter, Summer) of each year. • In Year 3, qualified students may apply to the MT program and the CDP and may be offered conditional admission. • 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 degree (20.0 FCEs) and MT degree (10.0 FCEs). • By the end of Year 4, fulfil both the undergraduate program requirements and the undergraduate degree requirements.
5	• Remaining courses from Year 1 of the MT program.	• 4.5 FCEs of Year 1 MT program requirements.
6	• Remaining courses from Year 2 of the MT program.	• 4.5 FCEs of Year 2 MT program requirements.
[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** is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Students earn an honours bachelor's degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching (MT) 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: www.utsc.utoronto.ca/physsci
Email: mdefreitas@utsc.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

- Applicants must be admitted to the HBSc degree program and the Biological Chemistry specialist co-op program.
- Applicants must meet the admission requirements of the School of Graduate Studies and the MT 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]).
- To be given full, unconditional admission to the MT program, applicants must:

    - 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;
    - Complete the requirements of their HBSc program;
    - Be conferred with the HBSc degree;
    - Provide at least two letters of reference;
    - 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:
        - At least 6.0 FCEs in their first teaching subject and at least 3.0 FCEs in their second teaching subject. Some secondary teaching subjects require more than 3.0 FCEs regardless of whether they are selected as the first or second teaching subject. Visit the Master of Teaching website for more information.
        - At least 3.0 FCEs in their first teaching subject and at least 1.5 FCE in their second teaching subject by the time they are conditionally admitted to the MT program.
        - Completion of the specialist co-op in Biological Chemistry fulfils the 6.0 FCEs required for Science-Biology, Science-Chemistry, or Science-General as a first teaching subject. Students may need to complete additional courses to fulfil the minimum 3.0 FCEs for their second teaching subject. Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP.
- 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.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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.	• Students must complete all HBSc program requirements and degree requirements. o This includes a minimum of 6.0 FCEs in the first teaching subject and a minimum of 3.0 FCEs in the second teaching subject.[1] • Students are expected to carry a full course load of 5.0 FCEs over the three academic sessions (Fall, Winter, Summer) of each year. • In Year 3, qualified students may apply to the MT program and the CDP and may be offered conditional admission. • 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 degree (20.0 FCEs) and MT degree (10.0 FCEs). • By the end of Year 4, fulfil both the undergraduate program requirements and the undergraduate degree requirements.
5	• Remaining courses from Year 1 of the MT program.	• 4.5 FCEs of Year 1 MT program requirements.
6	• Remaining courses from Year 2 of the MT program.	• 4.5 FCEs of Year 2 MT program requirements.

[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** 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.

Students earn a bachelor's degree from the University of Toronto Mississauga (UTM) and an accredited professional Master of Teaching (MT) 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
Department of Biology, University of Toronto Mississauga
Web: www.utm.utoronto.ca/biology/
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 (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) 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 (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.
- Complete the requirements of their HBSc program.
- Be conferred with the HBSc degree.
- 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:
    - At least 6.0 FCEs in their first teaching subject and at least 3.0 FCEs in their second teaching subject. Some secondary teaching subjects require more than 3.0 FCEs regardless of whether they are selected as the first or second teaching subject. Visit the Master of Teaching website for more information.
    - At least 3.0 FCEs in their first teaching subject and at least 1.5 FCE in their second teaching subject by the time they are conditionally admitted to the MT program.
    - The specialist in Biology fulfils the 6.0 FCEs required for Science-Biology as a first teaching subject. Students may need to complete additional courses to fulfil the minimum 3.0 FCEs for their second teaching subject. Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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.	• 20.0 FCEs in undergraduate courses. This includes: o a minimum of 6.0 FCEs as part of the Biology specialist requirements, which will also qualify as prerequisite courses in the first teaching subject; and o a minimum of 3.0 FCEs in the second teaching subject.[1] • By the end of Year 3, complete at least half of the teaching subjects' prerequisite courses (i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject). • In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc degree (20.0 FCEs) and MT degree (10.0 FCEs).
5	• Remaining courses from Year 1 of the MT program.	• 4.5 FCEs of Year 1 MT program requirements.
6	• Remaining courses from Year 2 of the MT program.	• 4.5 FCEs of Year 2 MT program requirements.
[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** 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.

Students earn a bachelor's degree from the University of Toronto Mississauga (UTM) and an accredited professional Master of Teaching (MT) 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
Department of Biology, University of Toronto Mississauga
Web: www.utm.utoronto.ca/biology/
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 (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) 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 (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.
- Complete the requirements of their HBSc program.
- Be conferred with the HBSc degree.
- 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:
    - At least 6.0 FCEs in their first teaching subject and at least 3.0 FCEs in their second teaching subject. Some secondary teaching subjects require more than 3.0 FCEs regardless of whether they are selected as the first or second teaching subject. Visit the Master of Teaching website for more information.
    - At least 3.0 FCEs in their first teaching subject and at least 1.5 FCE in their second teaching subject by the time they are conditionally admitted to the MT program.
    - Completion of the major in Biology fulfils the 6.0 FCEs required for Science-Biology as a first teaching subject. Students may need to complete additional courses to fulfil the minimum 3.0 FCEs for their second teaching subject. Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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.	• 20.0 FCEs in undergraduate courses. This includes: o a minimum of 6.0 FCEs as part of the Biology major requirements, which will also qualify as prerequisite courses in the first teaching subject; and o a minimum of 3.0 FCEs in the second teaching subject.[1] • By the end of Year 3, complete at least half of the teaching subjects' prerequisite courses (i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject). • In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc degree (20.0 FCEs) and MT degree (10.0 FCEs).
5	• Remaining courses from Year 1 of the MT program.	• 4.5 FCEs of Year 1 MT program requirements.

6	• Remaining courses from Year 2 of the MT program.	• 4.5 FCEs of Year 2 MT program requirements.
[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** 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.

Students earn a bachelor's degree from the University of Toronto Mississauga (UTM) and an accredited professional Master of Teaching (MT) 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
Department of Biology, University of Toronto Mississauga
Web: www.utm.utoronto.ca/biology/
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 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) 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 (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.
- Complete the requirements of their HBSc program.
- Be conferred with the HBSc degree.
- 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:
    - At least 6.0 FCEs in their first teaching subject and at least 3.0 FCEs in their second teaching subject. Some secondary teaching subjects require more than 3.0 FCEs regardless of whether they are selected as the first or second teaching subject. Visit the Master of Teaching website for more information.
    - At least 3.0 FCEs in their first teaching subject and at least 1.5 FCE in their second teaching subject by the time they are conditionally admitted to the MT program.
    - Completion of the major in Biology for Health Sciences fulfils the 6.0 FCEs required for Science-Biology as a first teaching subject. Students may need to complete additional courses to fulfil the minimum 3.0 FCEs for their second teaching subject. Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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.	• 20.0 FCEs in undergraduate courses. This includes: o a minimum of 6.0 FCEs as part of the Biology for Health Sciences major requirements, which will also qualify as prerequisite courses in the first teaching subject; and o a minimum of 3.0 FCEs in the second teaching subject.[1] • By the end of Year 3, complete at least half of the teaching subjects' prerequisite courses (i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject). • In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc degree (20.0 FCEs) and MT degree (10.0 FCEs).
5	• Remaining courses from Year 1 of the MT program.	• 4.5 FCEs of Year 1 MT program requirements.

6	• Remaining courses from Year 2 of the MT program.	• 4.5 FCEs of Year 2 MT program requirements.
[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** 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.

Students earn a bachelor's degree from the University of Toronto Mississauga (UTM) and an accredited professional Master of Teaching (MT) 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
Department of Chemical and Physical Sciences, University of Toronto Mississauga
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) 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 (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;
- Complete the requirements of their HBSc program;
- Be conferred with the HBSc degree;
- 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:
    - At least 6.0 FCEs in their first teaching subject and at least 3.0 FCEs in their second teaching subject. Some secondary teaching subjects require more than 3.0 FCEs regardless of whether they are selected as the first or second teaching subject. Visit the Master of Teaching website for more information.
    - At least 3.0 FCEs in their first teaching subject and at least 1.5 FCE in their second teaching subject by the time they are conditionally admitted to the MT program.
    - Completion of the specialist in Chemistry fulfils the 6.0 FCEs required for Science-Chemistry as a first teaching subject. Students may need to complete additional courses to fulfil the minimum 3.0 FCEs for their second teaching subject. Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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.	• 20.0 FCEs in undergraduate courses. This includes: o a minimum of 6.0 FCEs as part of the Chemistry specialist requirements, which will also qualify as prerequisite courses in the first teaching subject; and o a minimum of 3.0 FCEs in the second teaching subject.[1] • By the end of Year 3, complete at least half of the teaching subjects' prerequisite courses (i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject). • In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc degree (20.0 FCEs) and MT degree (10.0 FCEs).
5	• Remaining courses from Year 1 of the MT program.	• 4.5 FCEs of Year 1 MT program requirements.

6	• Remaining courses from Year 2 of the MT program.	• 4.5 FCEs of Year 2 MT program requirements.
[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** is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Students earn an honours bachelor's degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching (MT) 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: www.utsc.utoronto.ca/physsci
Email: mdefreitas@utsc.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

- Applicants must be admitted to the HBSc degree program and the Chemistry specialist program.
- Applicants must meet the admission requirements of the School of Graduate Studies and the MT 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]).
- To be given full, unconditional admission to the MT program, applicants must:

  - 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;
  - Complete the requirements of their HBSc program;
  - Be conferred with the HBSc degree;
  - Provide at least two letters of reference;
  - 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:
    - At least 6.0 FCEs in their first teaching subject and at least 3.0 FCEs in their second teaching subject. Some secondary teaching subjects require more than 3.0 FCEs regardless of whether they are selected as the first or second teaching subject. Visit the Master of Teaching website for more information.
    - At least 3.0 FCEs in their first teaching subject and at least 1.5 FCE in their second teaching subject by the time they are conditionally admitted to the MT program.
    - Completion of the specialist in Chemistry fulfils the 6.0 FCEs required for Science-Chemistry as a first teaching subject. Students may need to complete additional courses to fulfil the minimum 3.0 FCEs for their second teaching subject. Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP.
- 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.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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.	• Students must complete all HBSc program requirements and degree requirements. o This includes a minimum of 6.0 FCEs in the first teaching subject and a minimum of 3.0 FCEs in the second teaching subject.[1] • Students are expected to carry a full course load of 5.0 FCEs over the three academic sessions (Fall, Winter, Summer) of each year. • In Year 3, qualified students may apply to the MT program and the CDP and may be offered conditional admission. • 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 degree (20.0 FCEs) and MT degree (10.0 FCEs). • By the end of Year 4, fulfil both the undergraduate program requirements and the undergraduate degree requirements.
5	• Remaining courses from Year 1 of the MT program.	• 4.5 FCEs of Year 1 MT program requirements.
6	• Remaining courses from Year 2 of the MT program.	• 4.5 FCEs of Year 2 MT program requirements.

[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** is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Students earn an honours bachelor's degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching (MT) 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: www.utsc.utoronto.ca/physsci
Email: mdefreitas@utsc.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

- Applicants must be admitted to the HBSc degree program and the Chemistry specialist co-op program.
- Applicants must meet the admission requirements of the School of Graduate Studies and the MT 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]).
- To be given full, unconditional admission to the MT program, applicants must:

  - 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;
  - Complete the requirements of their HBSc program;
  - Be conferred with the HBSc degree;
  - Provide at least two letters of reference;
  - 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:
    - At least 6.0 FCEs in their first teaching subject and at least 3.0 FCEs in their second teaching subject. Some secondary teaching subjects require more than 3.0 FCEs regardless of whether they are selected as the first or second teaching subject. Visit the Master of Teaching website for more information.
    - At least 3.0 FCEs in their first teaching subject and at least 1.5 FCE in their second teaching subject by the time they are conditionally admitted to the MT program.
    - Completion of the specialist co-op in Chemistry fulfils the 6.0 FCEs required for Science-Chemistry as a first teaching subject. Students may need to complete additional courses to fulfil the minimum 3.0 FCEs for their second teaching subject. Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP.
- 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.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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.	• Students must complete all HBSc program requirements and degree requirements. o This includes a minimum of 6.0 FCEs in the first teaching subject and a minimum of 3.0 FCEs in the second teaching subject.[1] • Students are expected to carry a full course load of 5.0 FCEs over the three academic sessions (Fall, Winter, Summer) of each year. • In Year 3, qualified students may apply to the MT program and the CDP and may be offered conditional admission. • 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 degree (20.0 FCEs) and MT degree (10.0 FCEs). • By the end of Year 4, fulfil both the undergraduate program requirements and the undergraduate degree requirements.
5	• Remaining courses from Year 1 of the MT program.	• 4.5 FCEs of Year 1 MT program requirements.
6	• Remaining courses from Year 2 of the MT program.	• 4.5 FCEs of Year 2 MT program requirements.

[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** 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.

Students earn a bachelor's degree from the University of Toronto Mississauga (UTM) and an accredited professional Master of Teaching (MT) 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
Department of Chemical and Physical Sciences, University of Toronto Mississauga
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:
    - 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) 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 (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.
- Complete the requirements of their HBSc degree.
- Be conferred with the HBSc degree.
- 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:
    - At least 6.0 FCEs in their first teaching subject and at least 3.0 FCEs in their second teaching subject. Some secondary teaching subjects require more than 3.0 FCEs regardless of whether they are selected as the first or second teaching subject. Visit the Master of Teaching website for more information.
    - At least 3.0 FCEs in their first teaching subject and at least 1.5 FCE in their second teaching subject by the time they are conditionally admitted to the MT program.
    - Completion of the major in Chemistry fulfils the 6.0 FCEs required for Science-Chemistry as a first teaching subject. Students may need to complete additional courses to fulfil the minimum 3.0 FCEs for their second teaching subject. Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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.	• 20.0 FCEs in undergraduate courses. This includes: o a minimum of 6.0 FCEs as part of the Chemistry major requirements, which will also qualify as prerequisite courses in the first teaching subject; and o a minimum of 3.0 FCEs in the second teaching subject.[1] • By the end of Year 3, complete at least half of the teaching subjects' prerequisite courses (i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject). • In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc degree (20.0 FCEs) and MT degree (10.0 FCEs).
5	• Remaining courses from Year 1 of the MT program.	• 4.5 FCEs of Year 1 MT program requirements.

6	• Remaining courses from Year 2 of the MT program.	• 4.5 FCEs of Year 2 MT program requirements.
[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** is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Students earn an honours bachelor's degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching (MT) 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: www.utsc.utoronto.ca/physsci
Email: mdefreitas@utsc.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

- Applicants must be admitted to the HBSc degree program and the Chemistry major program.
- Applicants must meet the admission requirements of the School of Graduate Studies and the MT 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]).
- To be given full, unconditional admission to the MT program, applicants must:

  - 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;
  - Complete the requirements of their HBSc program;
  - Be conferred with the HBSc degree;
  - Provide at least two letters of reference;
  - 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:
    - At least 6.0 FCEs in their first teaching subject and at least 3.0 FCEs in their second teaching subject. Some secondary teaching subjects require more than 3.0 FCEs regardless of whether they are selected as the first or second teaching subject. Visit the Master of Teaching website for more information.
    - At least 3.0 FCEs in their first teaching subject and at least 1.5 FCE in their second teaching subject by the time they are conditionally admitted to the MT program.
    - Completion of the major in Chemistry fulfils the 6.0 FCEs required for Science-Chemistry as a first teaching subject. Students may need to complete additional courses to fulfil the minimum 3.0 FCEs for their second teaching subject. Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP.
- 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.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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.	• Students must complete all HBSc program requirements and degree requirements. o This includes a minimum of 6.0 FCEs in the first teaching subject and a minimum of 3.0 FCEs in the second teaching subject.[1] • Students are expected to carry a full course load of 5.0 FCEs over the three academic sessions (Fall, Winter, Summer) of each year. • In Year 3, qualified students may apply to the MT program and the CDP and may be offered conditional admission. • 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 degree (20.0 FCEs) and MT degree (10.0 FCEs). • By the end of Year 4, fulfil both the undergraduate program requirements and the undergraduate degree requirements.
5	• Remaining courses from Year 1 of the MT program.	• 4.5 FCEs of Year 1 MT program requirements.
6	• Remaining courses from Year 2 of the MT program.	• 4.5 FCEs of Year 2 MT program requirements.

[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** is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Students earn an honours bachelor's degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching (MT) 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: www.utsc.utoronto.ca/physsci
Email: mdefreitas@utsc.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

- Applicants must be admitted to the HBSc degree program and the Chemistry major co-op program.
- Applicants must meet the admission requirements of the School of Graduate Studies and the MT 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]).
- To be given full, unconditional admission to the MT program, applicants must:

  - 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;
  - Complete the requirements of their HBSc program;
  - Be conferred with the HBSc degree;
  - Provide at least two letters of reference;
  - 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:
    - At least 6.0 FCEs in their first teaching subject and at least 3.0 FCEs in their second teaching subject. Some secondary teaching subjects require more than 3.0 FCEs regardless of whether they are selected as the first or second teaching subject. Visit the Master of Teaching website for more information.
    - At least 3.0 FCEs in their first teaching subject and at least 1.5 FCE in their second teaching subject by the time they are conditionally admitted to the MT program.
    - Completion of the major co-op in Chemistry fulfils the 6.0 FCEs required for Science-Chemistry as a first teaching subject. Students may need to complete additional courses to fulfil the minimum 3.0 FCEs for their second teaching subject. Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP.
- 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.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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.	• Students must complete all HBSc program requirements and degree requirements. o This includes a minimum of 6.0 FCEs in the first teaching subject and a minimum of 3.0 FCEs in the second teaching subject.[1] • Students are expected to carry a full course load of 5.0 FCEs over the three academic sessions (Fall, Winter, Summer) of each year. • In Year 3, qualified students may apply to the MT program and the CDP and may be offered conditional admission. • 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 degree (20.0 FCEs) and MT degree (10.0 FCEs). • By the end of Year 4, fulfil both the undergraduate program requirements and the undergraduate degree requirements.
5	• Remaining courses from Year 1 of the MT program.	• 4.5 FCEs of Year 1 MT program requirements.
6	• Remaining courses from Year 2 of the MT program.	• 4.5 FCEs of Year 2 MT program requirements.

[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, Communication, Culture, Information and Technology (Major), Honours Bachelor of Arts / Master of Information

UTM CCIT (Maj) HBA / MI: Introduction

Overview

The **Combined Degree Program (CDP): UTM, Honours Bachelor of Arts, Major in Communication, Culture, Information and Technology / Master of Information** allows students to complete both degrees in 5.5 years rather than the 6 years it would take to acquire them independently.

Applicants must select one of the following concentrations when they apply to the MI program: Critical Information Policy Studies; Culture and Technology; Information Systems and Design; Knowledge Management and Information Management; and User Experience Design. Visit the program website for more details on the concentrations.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Communication, Culture, Information and Technology (Major) Program
Institute of Communication, Culture, Information and Technology
Web: www.utm.utoronto.ca/iccit/programs/programs-offered/ccit-major
Email: iccit.utm@utoronto.ca

Master of Information Program
Faculty of Information
Web: http://ischool.utoronto.ca/future-students/apply/mi-apply/
Email: inquire@ischool.utoronto.ca

UTM CCIT (Maj) HBA / MI: Application Process

- Applicants must apply to the Honours Bachelor of Arts (HBA) program, the MI program, and the CDP.
- Applicants must gain independent admission to both the HBA and MI programs before they may be considered for admission to the CDP.
- Qualified students in Year 3 of the HBA program may apply to the MI program; those accepted will receive a conditional offer to start the MI program when the HBA program requirements have been completed.

UTM CCIT (Maj) HBA / MI: Requirements

Minimum Admission Requirements

- Applicants must meet the admission requirements of the HBA program, the School of Graduate Studies, and the MI program.
- Students must be enrolled full-time in the HBA program and be in good standing in the HBA program with a cumulative grade point average (CGPA) of no less than 3.7 in Year 2. Students are expected to carry a full course load of 5.0 full-course equivalents (FCEs) each year.
- For admission to the MI program, students must:
    - maintain an A- average (CGPA 3.7) or higher in Year 3 and Year 4 of the HBA program,
    - complete the HBA program requirements, and
    - demonstrate HBA degree conferral.
- Please see the contact information to find details on each program's admission requirements.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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	• Complete 5.0 full-course equivalents (FCEs) each year towards the HBA degree. • In Year 4, complete 2.0 FCEs in Information courses, which count towards the HBA program requirements.	• In Years 1 to 3, complete all 5.0 FCEs each year towards the HBA program requirements. • In Year 3 of the HBA program, receive a conditional offer of admission to the MI program. • In Years 3 and 4, complete any remaining HBA program requirements, with 2.0 FCEs taken from the MI program counting towards the overall HBA program requirements. Complete the 2.0 FCEs from the MI program as follows: INF 1005H and INF 1006H (0.25 FCE each), and 1.5 FCEs from one of the MI concentrations. For details on the concentrations, see the Information calendar entry or visit the Faculty of Information website.
5 and 6	• Complete 6.0 FCEs in MI program requirements.	• In Years 5 and 6, complete the remaining 6.0 FCEs required for the selected MI concentration. Please see the Information calendar entry for full course requirements.

UTM, Comparative Physiology (Specialist), Honours Bachelor of Arts / 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** 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.

Students earn a bachelor's degree from the University of Toronto Mississauga (UTM) and an accredited professional Master of Teaching (MT) 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
Department of Biology, University of Toronto Mississauga
Web: www.utm.utoronto.ca/biology/
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 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) 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 (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.
- Complete the requirements of their HBSc program.
- Be conferred with the HBSc degree.
- 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:
    - At least 6.0 FCEs in their first teaching subject and at least 3.0 FCEs in their second teaching subject. Some secondary teaching subjects require more than 3.0 FCEs regardless of whether they are selected as the first or second teaching subject. Visit the Master of Teaching website for more information.
    - At least 3.0 FCEs in their first teaching subject and at least 1.5 FCE in their second teaching subject by the time they are conditionally admitted to the MT program.
    - Completion of the specialist in Comparative Physiology fulfils the 6.0 FCEs required for Science-Biology as a first teaching subject. Students may need to complete additional courses to fulfil the minimum 3.0 FCEs for their second teaching subject. Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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.	• 20.0 FCEs in undergraduate courses. This includes: o a minimum of 6.0 FCEs as part of the Comparative Physiology specialist requirements, which will also qualify as prerequisite courses in the first teaching subject; and o a minimum of 3.0 FCEs in the second teaching subject.[1] • By the end of Year 3, complete at least half of the teaching subjects' prerequisite courses (i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject). • In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc degree (20.0 FCEs) and MT degree (10.0 FCEs).
5	• Remaining courses from Year 1 of the MT program.	• 4.5 FCEs of Year 1 MT program requirements.

6	• Remaining courses from Year 2 of the MT program.	• 4.5 FCEs of Year 2 MT program requirements.
[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, Digital Enterprise Management (Specialist), Honours Bachelor of Arts / Master of Information

UTM DEM (Spec) HBA / MI: Introduction

Overview

The **Combined Degree Program (CDP): UTM, Honours Bachelor of Arts, Specialist in Digital Enterprise Management / Master of Information** allows students to complete both degrees in 5.5 years rather than the 6 years it would take to acquire them independently.

Applicants must select one of the following concentrations when they apply to the MI program: Critical Information Policy Studies; Culture and Technology; Information Systems and Design; Knowledge Management and Information Management; and User Experience Design. Visit the program website for more details on the concentrations.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

UTM, Honours Bachelor of Arts, Specialist in Digital Enterprise Management / Master of Information

Digital Enterprise Management Program
Institute of Communication, Culture, Information and Technology
Web: www.utm.utoronto.ca/iccit/programs/programs-offered/digital-enterprise-management-dem
Email: iccit.utm@utoronto.ca

Master of Information Program
Faculty of Information
Web: http://ischool.utoronto.ca/future-students/apply/mi-apply/
Email: inquire@ischool.utoronto.ca

UTM DEM (Spec) HBA / MI: Application Process

- Applicants must apply to the Honours Bachelor of Arts (HBA) program, the MI program, and the CDP.
- Applicants must gain independent admission to both the HBA and MI programs before they may be considered for admission to the CDP.
- Qualified students in Year 3 of the HBA program may apply to the MI program; those accepted will receive a conditional offer to commence the MI program when the HBA program requirements have been completed.

UTM DEM (Spec) HBA / MI: Requirements

Minimum Admission Requirements

- Applicants must meet the admission requirements of the HBA program, the School of Graduate Studies, and the MI program.
- Students must be enrolled full-time in the HBA program and be in good standing in the HBA program with a cumulative grade point average (CGPA) of no less than 3.7 in Year 2. Students are expected to carry a full course load of 5.0 full-course equivalents (FCEs) each year.
- For admission to the MI program, students must:
    - maintain an A- average (CGPA 3.7) or higher in Year 3 and Year 4 of the HBA program,
    - complete HBA program requirements, and
    - demonstrate HBA degree conferral.
- Please see the contact information to find details on each program's admission requirements.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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	• Complete 5.0 full-course equivalents (FCEs) each year towards the HBA degree. • In Year 4, complete 2.0 FCEs in Information courses, which count towards the HBA program requirements.	• In Years 1 to 3, complete all 5.0 FCEs each year towards the HBA program requirements. • In Year 3 of the HBA program, receive a conditional offer of admission to the MI program. • In Years 3 and 4, complete any remaining HBA program requirements, with 2.0 FCEs taken from the MI program counting towards the overall HBA program requirements. Complete the 2.0 FCEs from the MI program as follows: INF 1005H and INF 1006H (0.25 FCE each), and 1.5 FCEs from one of the MI concentrations. For details on the concentrations, see the Information calendar entry or visit the Faculty of Information website.
5 and 6	• Complete 6.0 FCEs in MI program requirements.	• In Years 5 and 6, complete the remaining 6.0 FCEs required for the selected MI concentration. Please see the Information calendar entry for full course requirements.

UTM, Ecology and Evolution (Specialist), Honours Bachelor of Arts / 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** 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.

Students earn a bachelor's degree from the University of Toronto Mississauga (UTM) and an accredited professional Master of Teaching (MT) 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
Department of Biology, University of Toronto Mississauga
Web: www.utm.utoronto.ca/biology/
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 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]).

- 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 (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.
- Complete the requirements of their HBSc program.
- Be conferred with the HBSc degree.
- 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:
    - At least 6.0 FCEs in their first teaching subject and at least 3.0 FCEs in their second teaching subject. Some secondary teaching subjects require more than 3.0 FCEs regardless of whether they are selected as the first or second teaching subject. Visit the Master of Teaching website for more information.
    - At least 3.0 FCEs in their first teaching subject and at least 1.5 FCE in their second teaching subject by the time they are conditionally admitted to the MT program.
    - Completion of the specialist in Ecology and Evolution fulfils the 6.0 FCEs required for Science-Biology as a first teaching subject. Students may need to complete additional courses to fulfil the minimum 3.0 FCEs for their second teaching subject. Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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.	• 20.0 FCEs in undergraduate courses. This includes: o a minimum of 6.0 FCEs as part of the Ecology and Evolution specialist requirements, which will also qualify as prerequisite courses in the first teaching subject; and o a minimum of 3.0 FCEs in the second teaching subject.[1] • By the end of Year 3, complete at least half of the teaching subjects' prerequisite courses (i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject). • In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc degree (20.0 FCEs) and MT degree (10.0 FCEs).
5	• Remaining courses from Year 1 of the MT program.	• 4.5 FCEs of Year 1 MT program requirements.

6	• Remaining courses from Year 2 of the MT program.	• 4.5 FCEs of Year 2 MT program requirements.
[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 / 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
http://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: ally.morrow@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.
- 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.
- see the contact information to find details on each program’s admission requirements.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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. Students may opt to complete the PEY after Year 2.
6 and 7	• In Year 6, register for Fall, Winter, and Summer sessions. • In Year 7, register for Fall and Winter sessions. • Complete the MBA program requirements.	• Complete 10.0 FCEs in MBA courses.

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** is designed for students interested in studying the intersections of English and education, coupled with professional teacher preparation.

Students earn a bachelor's degree from the Faculty of Arts and Science and an accredited professional Master of Teaching (MT) 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

Honours Bachelor of Arts, Major in English / Master of Teaching
www.vic.utoronto.ca/students/academics/combinedprogram.htm

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 enrolled in the HBA degree program.
- Meet the admission requirements of the School of Graduate Studies and the MT program.
- Have completed or be on course to complete the Education and Society minor program (Victoria College).

- Be registered in Year 3 of the HBA program, in the English major 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 1.5 FCEs in the second teaching subject) 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.

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.
- Have completed the required courses to meet the first and second teaching subjects.
- Be conferred with the HBA degree.
- Regardless of the division to which applicants are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), they will have completed a minimum of 6.0 FCEs as part of the English major requirements in the first teaching subject and a minimum of 3.0 FCEs in the second teaching subject, from a recognized university. 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. Please visit the MT program website for more information.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

<table>
<tr><th>Year</th><th>Progression</th><th>Specific Requirements*</th></tr>
<tr><td>1 to 4</td><td>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.</td><td>20.0 FCEs in undergraduate courses. This includes:
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).
In Year 4, complete any two of the elective half courses recommended for CDP students, which are double counted towards the program requirements for the HBA (20.0 FCEs) degree and MT (10.0 FCEs) degree.</td></tr>
<tr><td>5</td><td>Remaining courses from Year 1 of the MT program.</td><td rowspan="2">In Years 5 and 6: 9.0 FCEs of MT program requirements.</td></tr>
<tr><td>6</td><td>Remaining courses from Year 2 of the MT program.</td></tr>
<tr><td colspan="3">[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.</td></tr>
<tr><td colspan="3">* 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.</td></tr>
</table>

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
Email: mmeriano@utsc.utoronto.ca

Environmental Biology Program
University of Toronto Scarborough
Web: https://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: www.chem-eng.utoronto.ca/graduate-studies/why-cheme-u-of-t
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

- Applicants must meet the admission requirements of the HBSc program, the School of Graduate Studies, and the MEng 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 MEng 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.
- Please see the contact information to find details on each program's admission requirements.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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 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. These courses can be counted towards the completion of the HBSc degree requirements and the MEng program and degree requirements. • By the end of Year 4, fulfil both the undergraduate program requirements and the undergraduate 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
Email: mmeriano@utsc.utoronto.ca

Environmental Biology Program
University of Toronto Scarborough
Web: https://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: www.chem-eng.utoronto.ca/graduate-studies/why-cheme-u-of-t
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

- Applicants must meet the admission requirements of the HBSc program, the School of Graduate Studies, and the MEng 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 MEng 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.
- Please see the contact information to find details on each program's admission requirements.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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 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. These courses can be counted towards the completion of the HBSc degree requirements and the MEng program and degree requirements. • By the end of Year 4, fulfil both the undergraduate program requirements and the undergraduate 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
Email: mmeriano@utsc.utoronto.ca

Environmental Biology Program
University of Toronto Scarborough
Web: https://utsc.calendar.utoronto.ca/specialist-program-environmental-biology-science
Email: mmeriano@utsc.utoronto.ca

Civil Engineering Program
Faculty of Applied Science and Engineering
Web: http://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

- Applicants must meet the admission requirements of the HBSc program, the School of Graduate Studies, and the MEng 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 MEng 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.
- Please see the contact information to find details on each program's admission requirements.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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 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. These courses can be counted towards the completion of the HBSc degree requirements and the MEng program and degree requirements. • By the end of Year 4, fulfil both the undergraduate program requirements and the undergraduate 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
Email: mmeriano@utsc.utoronto.ca

Environmental Biology Program
University of Toronto Scarborough
Web: https://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: http://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

- Applicants must meet the admission requirements of the HBSc program, the School of Graduate Studies, and the MEng 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 MEng 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.
- Please see the contact information to find details on each program's admission requirements.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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 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. These courses can be counted towards the completion of the HBSc degree requirements and the MEng program and degree requirements. • By the end of Year 4, fulfil both the undergraduate program requirements and the undergraduate 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 / 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
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Environmental Chemistry Program
University of Toronto Scarborough
Web: https://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: www.chem-eng.utoronto.ca/graduate-studies/why-cheme-u-of-t/
Email: admissgrad.chemeng@utoronto.ca

UTSC Env Chm (Spec) HBSc / Chem MEng: Application Process

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

- Applicants must meet the admission requirements of the HBSc program, the School of Graduate Studies, and the MEng 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 FCEs each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
- Applicants to the MEng 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.

- Please see the contact information to find details on each program's admission requirements.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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 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 (master's) engineering courses offered by the Chemical Engineering and Applied Chemistry Department. These courses can be counted towards the completion of the MEng program and degree requirements. • By the end of Year 4, fulfil both the undergraduate program requirements and the undergraduate 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
Email: mmeriano@utsc.utoronto.ca

Environmental Chemistry Program
University of Toronto Scarborough
Web: https://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: www.chem-eng.utoronto.ca/graduate-studies/why-cheme-u-of-t
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

- Applicants must meet the admission requirements of the HBSc program, the School of Graduate Studies, and the MEng 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 MEng 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.
- Please see the contact information to find details on each program's admission requirements.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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 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 (master's) engineering courses offered by the Chemical Engineering and Applied Chemistry Department. These courses can be counted towards the completion of the MEng program and degree requirements. • By the end of Year 4, fulfil both the undergraduate program requirements and the undergraduate 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
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Environmental Chemistry Program
University of Toronto Scarborough
Web: https://utsc.calendar.utoronto.ca/specialist-program-environmental-chemistry-science
Email: mmeriano@utsc.utoronto.ca

Civil Engineering Program
Faculty of Applied Science and Engineering
Web: http://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

- Applicants must meet the admission requirements of the HBSc program, the School of Graduate Studies, and the MEng 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 MEng 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.
- Please see the contact information to find details on each program's admission requirements.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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 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. These courses can be counted towards the completion of the HBSc degree requirements and the MEng program and degree requirements. • By the end of Year 4, fulfil both the undergraduate program requirements and the undergraduate degree requirements.
5	• Remaining MEng program requirements.	• Conditions of admission are removed. • Complete 5.0 FCEs in MEng courses. Students who have completed up to 1.0 credit in MEng courses in Year 4 may subtract those courses from the total 5.0 FCEs required.

UTSC, Environmental Chemistry (Specialist Co-op), Honours Bachelor of Science / Civil Engineering, Master of Engineering

UTSC Env Chm (Spec Co-op) HBSc / Civ MEng: Introduction

Overview

The **Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Specialist Co-op in Environmental Chemistry / Civil Engineering, Master of Engineering** is a five-year program. For a general description of CDPs, see General Regulations section 1.4.3.

Contact

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Environmental Chemistry Program
University of Toronto Scarborough
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Email: mmeriano@utsc.utoronto.ca

Civil Engineering Program
Faculty of Applied Science and Engineering
Web: http://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

- Applicants must meet the admission requirements of the HBSc program, the School of Graduate Studies, and the MEng 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 MEng 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.
- Please see the contact information to find details on each program's admission requirements.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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 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. These courses can be counted towards the completion of the HBSc degree requirements and the MEng program and degree requirements. • By the end of Year 4, fulfil both the undergraduate program requirements and the undergraduate 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 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** is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Students earn an honours bachelor's degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching (MT) 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: www.utsc.utoronto.ca/physsci
Email: mdefreitas@utsc.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

- Applicants must be admitted to the HBSc degree program and the Environmental Chemistry specialist program.
- Applicants must meet the admission requirements of the School of Graduate Studies and the MT 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]).
- To be given full, unconditional admission to the MT program, applicants must:

  - 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;
  - Complete the requirements of their HBSc program;
  - Be conferred with the HBSc degree;
  - Provide at least two letters of reference;
  - 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:
    - At least 6.0 FCEs in their first teaching subject and at least 3.0 FCEs in their second teaching subject. Some secondary teaching subjects require more than 3.0 FCEs regardless of whether they are selected as the first or second teaching subject. Visit the Master of Teaching website for more information.
    - At least 3.0 FCEs in their first teaching subject and at least 1.5 FCE in their second teaching subject by the time they are conditionally admitted to the MT program.
    - Completion of the specialist in Environmental Chemistry fulfils the 6.0 FCEs required for Science-Chemistry as a first teaching subject. Students may need to complete additional courses to fulfil the minimum 3.0 FCEs for their second teaching subject. Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP.
- 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.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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.	• Students must complete all HBSc program requirements and degree requirements. o This includes a minimum of 6.0 FCEs in the first teaching subject and a minimum of 3.0 FCEs in the second teaching subject.[1] • Students are expected to carry a full course load of 5.0 FCEs over the three academic sessions (Fall, Winter, Summer) of each year. • In Year 3, qualified students may apply to the MT program and the CDP and may be offered conditional admission. • 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 degree (20.0 FCEs) and MT degree (10.0 FCEs). • By the end of Year 4, fulfil both the undergraduate program requirements and the undergraduate degree requirements.
5	• Remaining courses from Year 1 of the MT program.	• 4.5 FCEs of Year 1 MT program requirements.
6	• Remaining courses from Year 2 of the MT program.	• 4.5 FCEs of Year 2 MT program requirements.

[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** is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Students earn an honours bachelor's degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching (MT) 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: www.utsc.utoronto.ca/physsci
Email: mdefreitas@utsc.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

- Applicants must be admitted to the HBSc degree program and the Environmental Chemistry specialist co-op program.
- Applicants must meet the admission requirements of the School of Graduate Studies and the MT 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]).
- To be given full, unconditional admission to the MT program, applicants must:

    - 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;
    - Complete the requirements of their HBSc program;
    - Be conferred with the HBSc degree;
    - Provide at least two letters of reference;
    - 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:
        - At least 6.0 FCEs in their first teaching subject and at least 3.0 FCEs in their second teaching subject. Some secondary teaching subjects require more than 3.0 FCEs regardless of whether they are selected as the first or second teaching subject. Visit the Master of Teaching website for more information.
        - At least 3.0 FCEs in their first teaching subject and at least 1.5 FCE in their second teaching subject by the time they are conditionally admitted to the MT program.
        - Completion of the specialist co-op in Environmental Chemistry fulfils the 6.0 FCEs required for Science-Chemistry as a first teaching subject. Students may need to complete additional courses to fulfil the minimum 3.0 FCEs for their second teaching subject. Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP.
- 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.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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.	• Students must complete all HBSc program requirements and degree requirements. o This includes a minimum of 6.0 FCEs in the first teaching subject and a minimum of 3.0 FCEs in the second teaching subject.[1] • Students are expected to carry a full course load of 5.0 FCEs over the three academic sessions (Fall, Winter, Summer) of each year. • In Year 3, qualified students may apply to the MT program and the CDP and may be offered conditional admission. • 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 degree (20.0 FCEs) and MT degree (10.0 FCEs). • By the end of Year 4, fulfil both the undergraduate program requirements and the undergraduate degree requirements.
5	• Remaining courses from Year 1 of the MT program.	• 4.5 FCEs of Year 1 MT program requirements.
6	• Remaining courses from Year 2 of the MT program.	• 4.5 FCEs of Year 2 MT program requirements.

[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
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Environmental Geoscience Program
University of Toronto Scarborough
Web: https://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: www.chem-eng.utoronto.ca/graduate-studies/why-cheme-u-of-t
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

- Applicants must meet the admission requirements of the HBSc program, the School of Graduate Studies, and the MEng 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 FCEs each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
- Applicants to the MEng 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.
- Please see the contact information to find details on each program's admission requirements.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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 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. These courses can be counted towards the completion of the HBSc degree requirements and the MEng program and degree requirements. • By the end of Year 4, fulfil both the undergraduate program requirements and the undergraduate 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

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Email: mmeriano@utsc.utoronto.ca

Environmental Geoscience Program
University of Toronto Scarborough
Web: https://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: www.chem-eng.utoronto.ca/graduate-studies/why-cheme-u-of-t
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

- Applicants must meet the admission requirements of the HBSc program, the School of Graduate Studies, and the MEng 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 MEng 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.
- Please see the contact information to find details on each program's admission requirements.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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 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. These courses can be counted towards the completion of the HBSc degree requirements and the MEng program and degree requirements. • By the end of Year 4, fulfil both the undergraduate program requirements and the undergraduate 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

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Environmental Geoscience Program
University of Toronto Scarborough
Web: https://utsc.calendar.utoronto.ca/specialist-program-environmental-geoscience-science
Email: mmeriano@utsc.utoronto.ca

Civil Engineering Program
Faculty of Applied Science and Engineering
Web: http://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

- Applicants must meet the admission requirements of the HBSc program, the School of Graduate Studies, and the MEng 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 MEng 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.
- Please see the contact information below to find details on each program's admission requirements.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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 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. These courses can be counted towards the completion of the HBSc degree requirements and the MEng program and degree requirements. • By the end of Year 4, fulfil both the undergraduate program requirements and the undergraduate 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

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Civil Engineering Program
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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

- Applicants must meet the admission requirements of the HBSc program, the School of Graduate Studies, and the MEng 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 MEng 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.
- Please see the contact information to find details on each program's admission requirements.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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 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. These courses can be counted towards the completion of the HBSc degree requirements and the MEng program and degree requirements. • By the end of Year 4, fulfil both the undergraduate program requirements and the undergraduate 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.

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 (after 15.0 credits have been completed).
- Applicants apply and interview for early conditional admission to the MScSM program with the requirement they must maintain a minimum annual grade point average (AGPA) of 3.7 in their final 5.0 credits of study and provide proof of the conferral of their HBA degree.

UTM Env Mgt (Spec) HBA / MScSM: Requirements

Minimum Admission Requirements

- Applicants must meet the admission requirements of the HBA program, the School of Graduate Studies, and the MScSM 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	• Normally, 5.0 full-course equivalents (FCEs) towards the HBA program requirements.	• Students must complete a minimum of **3.0 FCEs** in core courses: o Introduction: ENV100Y5 (1.0 FCE). o Economics: ECO100Y5 (1.0 FCE). o Foundation: 1.0 FCE chosen from ANT102H5, GGR111H5, PHL105Y5, POL112H5, POL113H5, POL114H5, SOC100H5.
2	• Normally, 5.0 FCEs towards the HBA program requirements.	• Students must complete a minimum of **4.0 FCEs** in core courses: o Environmental Management: ENV201H5 (0.5 FCE). o Social Science/Humanities: 1.5 FCEs chosen from ANT204Y5, ANT241Y5, ECO200Y5, ENG259H5, ENV250Y5, GGR202H5, GGR207H5, GGR208H5, GGR209H5, GGR210H5, GGR267H5, GGR269H5, GGR287H5, GGR288H5, MAT102H5, MAT133Y5, MAT134Y5, MAT135Y5, PHL273H5. o Science: 1.0 FCE chosen from BIO201H5, BIO205H5, ERS201H5, ERS202H5, ERS203H5, GGR201H5, GGR214H5, GGR217H5, GGR227H5, PHY237H5. o Statistics: 0.5 FCE chosen from GGR276H5, STA220H5, or other 200/300-level statistics course with the program advisor's permission. o Analytical and Research Methods: 0.5 FCE chosen from GGR277H5, GGR278H5, STA221H5, or another program-relevant 200/300-level research methods course, with the program advisor's permission.
3 and 4	• Normally, 5.0 FCEs each year towards the HBA program requirements. • 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: o Environmental Management Perspectives: 1.5 FCEs chosen from ANT357H5, ENV310H5, ENV393H5, HIS308H5, HIS319H5. o Social, Economic, and Policy Perspectives: 2.0 FCEs chosen from ANT357H5, ANT368H5, ANT380H5, ECO373Y5, ENV320H5, ENV345H5, ENV351H5, ENV420H5, ENV425H5, ENV452H5, GGR318H5, GGR321H1, GGR329H5, GGR333H5, GGR348H5, GGR349H5, GGR361H5, GGR365H5, GGR370H5, GGR418H5, GGR419H5, GGR426H5, GGR493HS, JGE378H5, JUG320H1, MGT395H5, PHL373H1, POL343Y5, SOC339H5, SOC349H5, SOC356H5, WR1375H5. o Scientific Perspectives: 0.5 FCE chosen from BIO333H5, BIO464H5, ENV495H5, ENV496H5, ERS313H5, ERS315H5, ERS321H5, GGR305H5, GGR307H5, GGR309H5, GGR311H5, GGR317H5, GGR337H5, GGR374H5, GGR377H5, GGR384H5, GGR484H5, JGE378H5, SCI395H5, SCI396H5. o Field, Project-Based, and Research Perspectives: 1.0 FCE chosen from ENV299Y5, ENV331H5, ENV332H5, ENV399Y5, ENV497H5, ENV498Y5, GGR379H5, GGR389H5, JEG400Y5, JEG401Y5, SCI498H5, SCI499H5, or another program-relevant field, experiential, or research course, with the program advisor's permission. • 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 ECO 2908H, EES 1107H, EES 1124H, EES 1125H, ENV 1002H, ENV 1704H, ENV 1707H, JPG 1407H, JPG 1408H, SSM 1010Y, SSM 1020H, SSM 1030H, SSM 1040H, SSM 1050H, SSM 1060H, SSM 1070H, SSM 1080H, SSM 2010H, SSM 2020H, 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	• 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:** SSM 1010Y, SSM 1020H, SSM 1030H, SSM 1040H, SSM 1050H, SSM 1060H, SSM 1070H, SSM 1080H, SSM 1090H, SSM 1100Y, SSM 1110H. • **2.0 to 3.0 FCEs in elective courses**; examples include:

	standing of 1.0 FCE granted. • Students complete an additional 8.0 FCEs towards the MScSM program requirements.	○ science electives: EES 1107H, EES 1117H, EES 1125H, ENV 1002H, ENV 1704H, JPG 1407H, JPG 1408H; ○ management electives: ECO 2908H, EES 1124H, ENV 1707H, MGT 2918H, RSM 2216H, SSM 2010H, SSM 2020H. • The internship placement (SSM 1110H) will range from 2 to 4 months in length.

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 (after 15.0 credits have been completed).
- Applicants apply and interview for early conditional admission to the MScSM program with the requirement they must maintain a minimum annual grade point average (AGPA) of 3.7 in their final 5.0 credits of study and provide proof of the conferral of their HBA degree.

UTM Env Mgt (Maj) HBA / MScSM: Requirements

Minimum Admission Requirements

- Applicants must meet the admission requirements of the HBA program, the School of Graduate Studies, and the MScSM program.
- Please see the contact information below to find details on each program's admission requirements.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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: o Introduction: ENV100Y5 (1.0 FCE). o 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: o Environmental Management: ENV201H5 (0.5 FCE). o Social Science/Humanities: 1.0 FCE chosen from ANT204Y5, ANT241Y5, ENG259H5, ENV250Y5, GGR202H5, GGR207H5, GGR208H5, GGR209H5, GGR210H5, GGR267H5, GGR269H5, GGR278H5, GGR288H5, PHL273H5. o Science: 0.5 FCE chosen from BIO205H5, ERS201H5, GGR201H5, GGR214H5, GGR217H5, GGR227H5, PHY237H5. o Analytical and Research Methods: 0.5 FCE chosen from GGR 276H5, 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: o Environmental Management Perspectives: 1.0 FCE chosen from ANT357H5, ENV310H5, ENV393H5, HIS318H5, HIS319H5. o Social, Economic, and Policy Perspectives: 1.5 FCEs chosen from ANT357H5, ANT368H5, ANT 370H5, 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. o Scientific Perspectives: 0.5 FCE chosen from BIO333H5, BIO464H5, ENV495H5, ENV496H5, ERS313H5, ERS315H5, ERS321H5, GGR305H5, GGR307H5, GGR309H5, GGR311H5, GGR317H5, GGR337H5, GGR374H5, GGR377H5, GGR384H5, GGR484H5; JGE378H5, SCI395H5, SCI396H5. o Field, Project-Based, and Research Perspectives: 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 ECO 2908H, EES 1107H, EES 1124H, EES 1125H, ENV 1002H, ENV 1704H, ENV 1707H, JPG 1407H, JPG 1408H, SSM 1010Y, SSM 1020H, SSM 1030H, SSM 1040H, SSM 1050H, SSM 1060H, SSM 1070H, SSM 1080H, SSM 2010H, SSM 2020H, 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	• Conditions of admission to the MScSM program are removed. • Exact courses will vary based on the 1.0 FCE completed in Year 4.

	standing of 1.0 FCE granted. • Students complete an additional 8.0 FCEs towards the MScSM program requirements.	• **5.0 to 6.0 FCEs in core courses:** SSM 1010Y, SSM 1020H, SSM 1030H, SSM 1040H, SSM 1050H, SSM 1060H, SSM 1070H, SSM 1080H, SSM 1090H, SSM 1100Y, SSM 1110H. • **2.0 to 3.0 FCEs in elective courses;** examples include: o science electives: EES 1107H, EES 1117H, EES 1125H, ENV 1002H, ENV 1704H, JPG 1407H, JPG 1408H; o management electives: ECO 2908H, EES 1124H, ENV 1707H, MGT 2918H, RSM 2216H, SSM 2010H, SSM 2020H. • The **internship placement** (SSM 1110H) 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

Mandy Meriano
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Chemical Engineering and Applied Chemistry Program
Faculty of Applied Science and Engineering
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UTSC Env Phy (Spec) HBSc / Chem MEng: Application Process

- UTSC students in Year 3 of the Honours Bachelor of Science (HBSc) program in Environmental Physics (Specialist) who are interested in the CDP must contact Professor M. Meriano before the end of the Fall session.
- Qualified UTSC students will be able to apply to the CDP.
- UTSC students who are accepted to the CDP will receive a conditional offer to start the Master of Engineering (MEng) program upon completion of their HBSc program requirements.

UTSC Env Phy (Spec) HBSc / Chem MEng: Requirements

Minimum Admission Requirements

- Applicants must meet the admission requirements of the HBSc program, the School of Graduate Studies, and the MEng 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 MEng 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.
- Please see the contact information to find details on each program's admission requirements.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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 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. These courses can be counted towards the completion of the HBSc degree requirements and the MEng program and degree requirements. • By the end of Year 4, fulfil both the undergraduate program requirements and the undergraduate 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
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Environmental Physics Program
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Chemical Engineering and Applied Chemistry Program
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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

- Applicants must meet the admission requirements of the HBSc program, the School of Graduate Studies, and the MEng 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 MEng 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.
- Please see the contact information to find details on each program's admission requirements.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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 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. These courses can be counted towards the completion of the HBSc degree requirements and the MEng program and degree requirements. • By the end of Year 4, fulfil both the undergraduate program requirements and the undergraduate 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
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Environmental Physics Program
University of Toronto Scarborough
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Email: mmeriano@utsc.utoronto.ca

Civil Engineering Program
Faculty of Applied Science and Engineering
Web: http://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

- Applicants must meet the admission requirements of the HBSc program, the School of Graduate Studies, and the MEng 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 MEng 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.
- Please see the contact information to find details on each program's admission requirements.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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 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. These courses can be counted towards the completion of the HBSc degree requirements and the MEng program and degree requirements. • By the end of Year 4, fulfil both the undergraduate program requirements and the undergraduate 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
University of Toronto Scarborough
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Civil Engineering Program
Faculty of Applied Science and Engineering
Web: http://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

- Applicants must meet the admission requirements of the HBSc program, the School of Graduate Studies, and the MEng 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 MEng 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.
- Please see the contact information to find details on each program's admission requirements.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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 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. These courses can be counted towards the completion of the HBSc degree requirements and the MEng program and degree requirements. • By the end of Year 4, fulfil both the undergraduate program requirements and the undergraduate 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 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** is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Students earn an honours bachelor's degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching (MT) 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: www.utsc.utoronto.ca/physsci
Email: mdefreitas@utsc.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

- Applicants must be admitted to the HBSc degree program and the Environmental Physics specialist program.
- Applicants must meet the admission requirements of the School of Graduate Studies and the MT 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]).
- To be given full, unconditional admission to the MT program, applicants must:

    - 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;
    - Complete the requirements of their HBSc program;
    - Be conferred with the HBSc degree;
    - Provide at least two letters of reference;
    - 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:
        - At least 6.0 FCEs in their first teaching subject and at least 3.0 FCEs in their second teaching subject. Some secondary teaching subjects require more than 3.0 FCEs regardless of whether they are selected as the first or second teaching subject. Visit the Master of Teaching website for more information.
        - At least 3.0 FCEs in their first teaching subject and at least 1.5 FCE in their second teaching subject by the time they are conditionally admitted to the MT program.
        - Completion of the specialist in Environmental Physics fulfils the 6.0 FCEs required for Science-Physics as a first teaching subject. Students may need to complete additional courses to fulfil the minimum 3.0 FCEs for their second teaching subject. Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP.
- 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.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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.	• Students must complete all HBSc program requirements and degree requirements. o This includes a minimum of 6.0 FCEs in the first teaching subject and a minimum of 3.0 FCEs in the second teaching subject.[1] • Students are expected to carry a full course load of 5.0 FCEs over the three academic sessions (Fall, Winter, Summer) of each year. • In Year 3, qualified students may apply to the MT program and the CDP and may be offered conditional admission. • 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 degree (20.0 FCEs) and MT degree (10.0 FCEs). • By the end of Year 4, fulfil both the undergraduate program requirements and the undergraduate degree requirements.
5	• Remaining courses from Year 1 of the MT program.	• 4.5 FCEs of Year 1 MT program requirements.
6	• Remaining courses from Year 2 of the MT program.	• 4.5 FCEs of Year 2 MT program requirements.

[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** is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Students earn an honours bachelor's degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching (MT) 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: www.utsc.utoronto.ca/physsci
Email: mdefreitas@utsc.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

- Applicants must be admitted to the HBSc degree program and the Environmental Physics specialist co-op program.
- Applicants must meet the admission requirements of the School of Graduate Studies and the MT 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]).
- To be given full, unconditional admission to the MT program, applicants must:

    - 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;
    - Complete the requirements of their HBSc program;
    - Be conferred with the HBSc degree;
    - Provide at least two letters of reference;
    - 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:
        - At least 6.0 FCEs in their first teaching subject and at least 3.0 FCEs in their second teaching subject. Some secondary teaching subjects require more than 3.0 FCEs regardless of whether they are selected as the first or second teaching subject. Visit the Master of Teaching website for more information.
        - At least 3.0 FCEs in their first teaching subject and at least 1.5 FCE in their second teaching subject by the time they are conditionally admitted to the MT program.
        - Completion of the specialist co-op in Environmental Physics fulfils the 6.0 FCEs required for Science-Physics as a first teaching subject. Students may need to complete additional courses to fulfil the minimum 3.0 FCEs for their second teaching subject. Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP.
- 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.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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.	• Students must complete all HBSc program requirements and degree requirements. o This includes a minimum of 6.0 FCEs in the first teaching subject and a minimum of 3.0 FCEs in the second teaching subject.[1] • Students are expected to carry a full course load of 5.0 FCEs over the three academic sessions (Fall, Winter, Summer) of each year. • In Year 3, qualified students may apply to the MT program and the CDP and may be offered conditional admission. • 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 degree (20.0 FCEs) and MT degree (10.0 FCEs). • By the end of Year 4, fulfil both the undergraduate program requirements and the undergraduate degree requirements.
5	• Remaining courses from Year 1 of the MT program.	• 4.5 FCEs of Year 1 MT program requirements.
6	• Remaining courses from Year 2 of the MT program.	• 4.5 FCEs of Year 2 MT program requirements.
[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 (Specialist), Honours Bachelor of Arts / 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** 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

Sabrina Ferrari, Undergraduate Academic Counsellor
UTM, Honours Bachelor of Science, Specialist in Environmental Science / Master of Science in Sustainability Management
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Environmental Science Program
University of Toronto Mississauga
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Email: sabrina.ferrari@utoronto.ca

Rose Mary Craig, Program Coordinator
Master of Science in Sustainability Management Program
Institute for Management and Innovation
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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 (after 15.0 credits have been completed).
- Applicants apply and interview for early conditional admission to the MScSM program with the requirement they must maintain a minimum annual grade point average (AGPA) of 3.7 in their final 5.0 credits of study and provide proof of the conferral of their HBSc degree.

UTM Env Sci (Spec) HBSc / MScSM: Requirements

Minimum Admission Requirements

- Applicants must meet the admission requirements of the HBSc program, the School of Graduate Studies and the MScSM program.
- Please see the contact information to find details on each program's admission requirements.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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: o Introduction: ENV100Y5 (1.0 FCE). o 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: 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 Earth Science Perspectives: ERS201H5 (0.5 FCE). o Physical and Chemical Perspectives: 1.0 FCE chosen from CHM231H5, CHM242H5, ERS202H5, ERS203H5, JCP221H5, PHY237H5. o Analytical and Research Methods: 0.5 FCE chosen from BIO360H5, BIO361H5, CHM211H5, GGR276H5, STA220H5, STA221H5. o 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: o Environmental Science: ENV330H5 (0.5 FCE). o 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. o 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. o 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. o 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 ECO 2908H, EES 1107H, EES 1124H, EES 1125H, ENV 1002H, ENV 1704H, ENV 1707H, JPG 1407H, JPG 1408H, SSM 1010Y, SSM 1020H, SSM 1030H, SSM 1040H, SSM 1050H, SSM 1060H, SSM 1070H, SSM 1080H, SSM 2010H, SSM 2020H 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**: SSM 1010Y, SSM 1020H, SSM 1030H, SSM 1040H, SSM 1050H, SSM 1060H, SSM 1070H, SSM 1080H, SSM 1090H, SSM 1100Y, SSM 1110H. • **2.0 to 3.0 FCEs in elective courses**; examples include: o science electives: EES 1107H, EES 1117H, EES 1125H, ENV 1002H, ENV 1704H, JPG 1407H, JPG 1408H; o management electives: ECO 2908H, EES 1124H, ENV 1707H, MGT 2918H, RSM 2216H, SSM 2010H, SSM 2020H. • The internship placement (SSM 1110H) will range from 2 to 4 months in length.

UTM, Environmental Science (Major), Honours Bachelor of Arts / 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** 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.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Sabrina Ferrari, Undergraduate Academic Counsellor
UTM, Honours Bachelor of Science, Major in Environmental Science / Master of Science in Sustainability Management
Web: https://student.utm.utoronto.ca/calendar/program_group.pl?Group_Id=24
Email: sabrina.ferrari@utoronto.ca

Environmental Science Program
University of Toronto Mississauga
Web: https://student.utm.utoronto.ca/calendar/program_group.pl?Group_Id=24
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 (after 15.0 credits have been completed).
- Applicants apply and interview for early conditional admission to the MScSM program with the requirement they must maintain a minimum annual grade point average (AGPA) of 3.7 in their final 5.0 credits of study and provide proof of the conferral of their HBSc degree.

UTM Env Sci (Maj) HBSc / MScSM: Requirements

Minimum Admission Requirements

- Applicants must meet the admission requirements of the HBSc program, the School of Graduate Studies, and the MScSM program.
- Please see the contact information to find details on each program's admission requirements.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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 ECO 2908H, EES 1107H, EES 1124H, EES 1125H, ENV 1002H, ENV 1704H, ENV 1707H, JPG 1407H, JPG 1408H, SSM 1010Y, SSM 1020H, SSM 1030H, SSM 1040H, SSM 1050H, SSM 1060H, SSM 1070H, SSM 1080H, SSM 2010H, SSM 2020H, 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**: SSM 1010Y, SSM 1020H, SSM 1030H, SSM 1040H, SSM 1050H, SSM 1060H, SSM 1070H, SSM 1080H, SSM 1090H, SSM 1100Y, SSM 1110H. • **2.0 to 3.0 FCEs in elective courses**; examples include: o science electives: EES 1107H, EES 1117H, EES 1125H, ENV 1002H, ENV 1704H, JPG 1407H, JPG 1408H; o management electives: ECO 2908H, EES 1124H, ENV 1707H, MGT 2918H, RSM 2216H, SSM 2010H, SSM 2020H. • The internship placement (SSM 1110H) will range from two to four months in length.

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 Program
Department of Psychology, University of Toronto Mississauga
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/aphd/Prospective_Students/Programs/Child_Study_Education/
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 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.
- Please see the contact information to find details on each program's admission requirements.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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 (APHD) and, in some cases, other departments. Elective courses that are especially recommended for Child Study and Education students are listed in the APHD program guidelines. Students without an undergraduate course in child development must take APD 1201H *Child and Adolescent Development* as an elective. • Upon degree conferral, students apply to the MA program in order to lift conditions of admission.
5	• Graduate courses in accordance with the U of T regulations for the MA program.	• 5.0 FCEs in MA Year 1 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 the spring and summer of Year 3 and Year 4 of the HBSc program.
6	• Graduate courses in accordance with the U of T regulations for the MA program.	• 4.0 FCEs in MA program requirements. • Note that students will have previously completed the 1.0 FCE in electives in the spring and summer 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** 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.

Students earn a bachelor's degree from the University of Toronto Mississauga (UTM) and an accredited professional Master of Teaching (MT) 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
Department of Biology, University of Toronto Mississauga
Web: www.utm.utoronto.ca/biology
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 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) 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 (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.
- Complete the requirements of their HBSc program.
- Be conferred with the HBSc degree.
- 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:
    - At least 6.0 FCEs in their first teaching subject and at least 3.0 FCEs in their second teaching subject. Some secondary teaching subjects require more than 3.0 FCEs regardless of whether they are selected as the first or second teaching subject. Visit the Master of Teaching website for more information.
    - At least 3.0 FCEs in their first teaching subject and at least 1.5 FCE in their second teaching subject by the time they are conditionally admitted to the MT program.
    - Completion of the specialist in Forensic Biology fulfils the 6.0 FCEs required for Science-Biology or Science-General as a first teaching subject. Students may need to complete additional courses to fulfil the minimum 3.0 FCEs for their second teaching subject. Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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.	• 20.0 FCEs in undergraduate courses. This includes: o a minimum of 6.0 FCEs as part of the Forensic Biology specialist requirements, which will also qualify as prerequisite courses in the first teaching subject; and o a minimum of 3.0 FCEs in the second teaching subject.[1] • By the end of Year 3, complete at least half of the teaching subjects' prerequisite courses (i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject). • In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc degree (20.0 FCEs) and MT degree (10.0 FCEs).
5	• Remaining courses from Year 1 of the MT program.	• 4.5 FCEs of Year 1 MT program requirements.

6	• Remaining courses from Year 2 of the MT program.	• 4.5 FCEs of Year 2 MT program requirements.
[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** 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.

Students earn a bachelor's degree from the University of Toronto Mississauga (UTM) and an accredited professional Master of Teaching (MT) 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
Department of Chemical and Physical Sciences, University of Toronto Mississauga
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 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) 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 (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.
- Complete the requirements of their HBSc program.
- Be conferred with the HBSc degree.
- 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:
    - At least 6.0 FCEs in their first teaching subject and at least 3.0 FCEs in their second teaching subject. Some secondary teaching subjects require more than 3.0 FCEs regardless of whether they are selected as the first or second teaching subject. Visit the Master of Teaching website for more information.
    - At least 3.0 FCEs in their first teaching subject and at least 1.5 FCE in their second teaching subject by the time they are conditionally admitted to the MT program.
    - Completion of the specialist in Forensic Chemistry fulfils the 6.0 FCEs required for Science-Chemistry as a first teaching subject. Students may need to complete additional courses to fulfil the minimum 3.0 FCEs for their second teaching subject. Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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.	• 20.0 FCEs in undergraduate courses. This includes: o a minimum of 6.0 FCEs as part of the Forensic Chemistry specialist requirements, which will also qualify as prerequisite courses in the first teaching subject; and o a minimum of 3.0 FCEs in the second teaching subject.[1] • By the end of Year 3, complete at least half of the teaching subjects' prerequisite courses (i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject). • In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc degree (20.0 FCEs) and MT degree (10.0 FCEs).
5	• Remaining courses from Year 1 of the MT program.	• 4.5 FCEs of Year 1 MT program requirements.

6	• Remaining courses from Year 2 of the MT program.	• 4.5 FCEs of Year 2 MT program requirements.
[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 (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** is designed for students interested in studying the intersections of French and education, coupled with professional teacher preparation.

Students earn an honours bachelor's degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching (MT) 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: mdefreitas@utsc.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

- Applicants must be admitted to the HBA degree program and the French specialist program.
- Applicants must meet the admission requirements of the School of Graduate Studies and the MT program.
- Applicants to the HBA 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]).
- To be given full, unconditional admission to the MT program, applicants must:

  - 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;
  - Complete the requirements of their HBA program;
  - Be conferred with the HBA degree;
  - Provide at least two letters of reference;
  - 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:
    - At least 6.0 FCEs in their first teaching subject and at least 3.0 FCEs in their second teaching subject. Some secondary teaching subjects require more than 3.0 FCEs regardless of whether they are selected as the first or second teaching subject. Visit the Master of Teaching website for more information.
    - At least 3.0 FCEs in their first teaching subject and at least 1.5 FCE in their second teaching subject by the time they are conditionally admitted to the MT program.
    - Completion of the specialist in French fulfils the 6.0 FCEs required for French (Second Language) as a first teaching subject. Students may need to complete additional courses to fulfil the minimum 3.0 FCEs for their second teaching subject. Students should consult often with their HBA academic program supervisor to ensure they fulfil all the requirements of the CDP.
- 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.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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.	• Students must complete all HBA program requirements and degree requirements. o This includes a minimum of 6.0 FCEs in the first teaching subject and a minimum of 3.0 FCEs in the second teaching subject.[1] • Students are expected to carry a full course load of 5.0 FCEs over the three academic sessions (Fall, Winter, Summer) of each year. • In Year 3, qualified students may apply to the MT program and the CDP and may be offered conditional admission. • 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 HBA degree (20.0 FCEs) and MT degree (10.0 FCEs).
5	• Remaining courses from Year 1 of the MT program.	• 4.5 FCEs of Year 1 MT program requirements.
6	• Remaining courses from Year 2 of the MT program.	• 4.5 FCEs of Year 2 MT program requirements.

[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** is designed for students interested in studying the intersections of French and education, coupled with professional teacher preparation.

Students earn an honours bachelor's degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching (MT) 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: mdefreitas@utsc.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

- Applicants must be admitted to the HBA degree program and the French specialist co-op program.
- Applicants must meet the admission requirements of the School of Graduate Studies and the MT program.
- Applicants to the HBA 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]).
- To be given full, unconditional admission to the MT program, applicants must:

    - 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;
    - Complete the requirements of their HBA program;
    - Be conferred with the HBA degree;
    - Provide at least two letters of reference;
    - 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:
        - At least 6.0 FCEs in their first teaching subject and at least 3.0 FCEs in their second teaching subject. Some secondary teaching subjects require more than 3.0 FCEs regardless of whether they are selected as the first or second teaching subject. Visit the Master of Teaching website for more information.
        - At least 3.0 FCEs in their first teaching subject and at least 1.5 FCE in their second teaching subject by the time they are conditionally admitted to the MT program.
        - Completion of the specialist co-op in French fulfils the 6.0 FCEs required for French (Second Language) as a first teaching subject. Students may need to complete additional courses to fulfil the minimum 3.0 FCEs for their second teaching subject. Students should consult often with their HBA academic program supervisor to ensure they fulfil all the requirements of the CDP.
- 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.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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.	• Students must complete all HBA program requirements and degree requirements. o This includes a minimum of 6.0 FCEs in the first teaching subject and a minimum of 3.0 FCEs in the second teaching subject.[1] • Students are expected to carry a full course load of 5.0 FCEs over the three academic sessions (Fall, Winter, Summer) of each year. • In Year 3, qualified students may apply to the MT program and the CDP and may be offered conditional admission. • 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 HBA degree (20.0 FCEs) and MT degree (10.0 FCEs).
5	• Remaining courses from Year 1 of the MT program.	• 4.5 FCEs of Year 1 MT program requirements.
6	• Remaining courses from Year 2 of the MT program.	• 4.5 FCEs of Year 2 MT program requirements.

[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), 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** is designed for students interested in studying the intersections of French and education, coupled with professional teacher preparation.

Students earn an honours bachelor's degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching (MT) 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

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Email: mdefreitas@utsc.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

- Applicants must be admitted to the HBA degree program and the French major program.
- Applicants must meet the admission requirements of the School of Graduate Studies and the MT program.
- Applicants to the HBA 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]).
- To be given full, unconditional admission to the MT program, applicants must:

  - 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;
  - Complete the requirements of their HBA program;
  - Be conferred with the HBA degree;
  - Provide at least two letters of reference;
  - 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:
    - At least 6.0 FCEs in their first teaching subject and at least 3.0 FCEs in their second teaching subject. Some secondary teaching subjects require more than 3.0 FCEs regardless of whether they are selected as the first or second teaching subject. Visit the Master of Teaching website for more information.
    - At least 3.0 FCEs in their first teaching subject and at least 1.5 FCE in their second teaching subject by the time they are conditionally admitted to the MT program.
    - Completion of the major in French fulfils the 6.0 FCEs required for French (Second Language) as a first teaching subject. Students may need to complete additional courses to fulfil the minimum 3.0 FCEs for their second teaching subject. Students should consult often with their HBA academic program supervisor to ensure they fulfil all the requirements of the CDP.
- 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.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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.	• Students must complete all HBA program requirements and degree requirements. o This includes a minimum of 6.0 FCEs in the first teaching subject and a minimum of 3.0 FCEs in the second teaching subject.[1] • Students are expected to carry a full course load of 5.0 FCEs over the three academic sessions (Fall, Winter, Summer) of each year. • In Year 3, qualified students may apply to the MT program and the CDP and may be offered conditional admission. • 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 HBA degree (20.0 FCEs) and MT degree (10.0 FCEs).
5	• Remaining courses from Year 1 of the MT program.	• 4.5 FCEs of Year 1 MT program requirements.
6	• Remaining courses from Year 2 of the MT program.	• 4.5 FCEs of Year 2 MT program requirements.

[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** is designed for students interested in studying the intersections of French and education, coupled with professional teacher preparation.

Students earn an honours bachelor's degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching (MT) 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: mdefreitas@utsc.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

- Applicants must be admitted to the HBA degree program and the French major co-op program.
- Applicants must meet the admission requirements of the School of Graduate Studies and the MT program.
- Applicants to the HBA 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]).
- To be given full, unconditional admission to the MT program, applicants must:

    - 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;
    - Complete the requirements of their HBA program;
    - Be conferred with the HBA degree;
    - Provide at least two letters of reference;
    - 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:
        - At least 6.0 FCEs in their first teaching subject and at least 3.0 FCEs in their second teaching subject. Some secondary teaching subjects require more than 3.0 FCEs regardless of whether they are selected as the first or second teaching subject. Visit the Master of Teaching website for more information.
        - At least 3.0 FCEs in their first teaching subject and at least 1.5 FCE in their second teaching subject by the time they are conditionally admitted to the MT program.
        - Completion of the major co-op in French fulfils the 6.0 FCEs required for French (Second Language) as a first teaching subject. Students may need to complete additional courses to fulfil the minimum 3.0 FCEs for their second teaching subject. Students should consult often with their HBA academic program supervisor to ensure they fulfil all the requirements of the CDP.
- 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.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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.	• Students must complete all HBA program requirements and degree requirements. o This includes a minimum of 6.0 FCEs in the first teaching subject and a minimum of 3.0 FCEs in the second teaching subject.[1] • Students are expected to carry a full course load of 5.0 FCEs over the three academic sessions (Fall, Winter, Summer) of each year. • In Year 3, qualified students may apply to the MT program and the CDP and may be offered conditional admission. • 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 HBA degree (20.0 FCEs) and MT degree (10.0 FCEs).
5	• Remaining courses from Year 1 of the MT program.	• 4.5 FCEs of Year 1 MT program requirements.
6	• Remaining courses from Year 2 of the MT program.	• 4.5 FCEs of Year 2 MT program requirements.

[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** 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.

Students earn a bachelor's degree from the University of Toronto Mississauga (UTM) and an accredited professional Master of Teaching (MT) 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

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Email: katherine.rehner@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) 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 (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.
- Complete the requirements of their HBA program.
- Be conferred with the HBA degree.
- 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:
    - At least 6.0 FCEs in their first teaching subject and at least 3.0 FCEs in their second teaching subject. Some secondary teaching subjects require more than 3.0 FCEs regardless of whether they are selected as the first or second teaching subject. Visit the Master of Teaching website for more information.
    - At least 3.0 FCEs in their first teaching subject and at least 1.5 FCE in their second teaching subject by the time they are conditionally admitted to the MT program.
    - Completion of the specialist in French Studies fulfils the 6.0 FCEs required for French (Second Language) as a first teaching subject. Students may need to complete additional courses to fulfil the minimum 3.0 FCEs for their second teaching subject. Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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.	• 20.0 FCEs in undergraduate courses. This includes: o a minimum of 6.0 FCEs as part of the French Studies specialist requirements, which will also qualify as prerequisite courses in the first teaching subject; and o a minimum of 3.0 FCEs in the second teaching subject.[1] • By the end of Year 3, complete at least half of the teaching subjects' prerequisite courses (i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject). • In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBA degree (20.0 FCEs) and MT degree (10.0 FCEs).
5	• Remaining courses from Year 1 of the MT program.	• 4.5 FCEs of Year 1 MT program requirements.

6	• Remaining courses from Year 2 of the MT program.	• 4.5 FCEs of Year 2 MT program requirements.
[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** 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.

Students earn a bachelor's degree from the University of Toronto Mississauga (UTM) and an accredited professional Master of Teaching (MT) 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
Department of Language Studies, University of Toronto Mississauga
Web: www.utm.utoronto.ca/language-studies/programs/french
Email: katherine.rehner@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 FCEs 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:

- 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.
- Complete the requirements of their HBA program.
- Be conferred with the HBA degree.
- 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:
    - At least 6.0 FCEs in their first teaching subject and at least 3.0 FCEs in their second teaching subject. Some secondary teaching subjects require more than 3.0 FCEs regardless of whether they are selected as the first or second teaching subject. Visit the Master of Teaching website for more information.
    - At least 3.0 FCEs in their first teaching subject and at least 1.5 FCE in their second teaching subject by the time they are conditionally admitted to the MT program.
    - Completion of the major in French Studies fulfils the 6.0 FCEs required for French (Second Language) as a first teaching subject. Students may need to complete additional courses to fulfil the minimum 3.0 FCEs for their second teaching subject. Students should consult often with their HBA academic program supervisor to ensure they fulfil all the requirements of the CDP.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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.	• 20.0 FCEs in undergraduate courses. This includes: o a minimum of 6.0 FCEs as part of the French Studies major requirements, which will also qualify as prerequisite courses in the first teaching subject; and o a minimum of 3.0 FCEs in the second teaching subject.[1] • By the end of Year 3, complete at least half of the teaching subjects' prerequisite courses (i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject). • In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBA degree (20.0 FCEs) and MT degree (10.0 FCEs).
5	• Remaining courses from Year 1 of the MT program.	• 4.5 FCEs of Year 1 MT program requirements.

6	• Remaining courses from Year 2 of the MT program.	• 4.5 FCEs of Year 2 MT program requirements.
[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

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

Health Administration, Master of Health Science / Master of Social Work
http://ihpme.utoronto.ca/academics/pp/mhsc-msw/
http://socialwork.utoronto.ca/programs/msw-programs/msw-combined-programs/

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.
- Please see the contact information to find details on each program's admission requirements.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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. • Students entering with a BSW are exempt from the 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 (SWK 4701H).
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 (SWK 4702Y). • 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** is designed for students interested in studying the intersections of history and education, coupled with professional teacher preparation.

Students earn a bachelor's degree from the Faculty of Arts and Science and an accredited professional Master of Teaching (MT) 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

Honours Bachelor of Arts, Major in History / Master of Teaching
www.vic.utoronto.ca/students/academics/combinedprogram.htm

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 enrolled in the HBA degree program.
- Meet the admission requirements of the School of Graduate Studies and the MT program.
- Have completed or be on course to complete the Education and Society minor program (Victoria College).
- Be registered in Year 3 of the HBA program, in the History major 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 1.5 FCEs in the second teaching subject) 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.

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.
- Have completed the required courses to meet the first and second teaching subjects.
- Be conferred with the HBA degree.
- Regardless of the division to which applicants are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), they will have completed a minimum of 6.0 FCEs as part of the History major requirements in the first teaching subject and a minimum of 3.0 FCEs in the second teaching subject, from a recognized university. 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. Please visit the MT program website for more information.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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.	• 20.0 FCEs in undergraduate courses. This includes: 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 o 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). • In Year 4, complete any two of the elective half courses recommended for CDP students, which are double counted towards the program requirements for the HBA (20.0 FCEs) degree and MT (10.0 FCEs) degree.
5	• Remaining courses from Year 1 of the MT program.	• In Years 5 and 6: 9.0 FCEs of MT program requirements.
6	• Remaining courses from 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.

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
https://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 FCEs as follows: INF 1001H, INF 1003H, INF 1005H, INF 1006H, and INF 1240H • 3.0 FCEs in electives. Concentration Pathway: • 0.5 FCE as follows: INF 1005H and INF 1006H • 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 FCEs as follows: MSL 1150H, MSL 1230H, MSL 2231H, and MSL 2370H • 0.5 FCE: MSL 2350H or INF 2040H • MSL 4000Y (1.0 FCE) • 1.0 FCE in electives. Concentration Pathway: • 2.0 FCEs as follows: MSL 1150H, MSL 1230H, MSL 2231H, and MSL 2370H • 0.5 FCE: MSL 2350H or INF 2040H • MSL 4000Y (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.

UTM, Interactive Digital Media (Specialist), Honours Bachelor of Arts / Master of Information

UTM IDM (Spec) HBA / MI: Introduction

Overview

The **Combined Degree Program (CDP): UTM, Honours Bachelor of Arts, Specialist in Interactive Digital Media / Master of Information** allows students to complete both degrees in 5.5 years rather than the 6 years it would take to acquire them independently.

Applicants must select one of the following concentrations when they apply to the MI program: Critical Information Policy Studies; Culture and Technology; Information Systems and Design; Knowledge Management and Information Management; User Experience Design. Visit the program website for more details on the concentrations.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

UTM, Honours Bachelor of Arts, Specialist in Interactive Digital Media / Master of Information

Interactive Digital Media Program
Institute of Communication, Culture, Information and Technology
Web: www.utm.utoronto.ca/iccit/institute-communication-culture-information-and-technology
Email: iccit.utm@utoronto.ca

Master of Information Program
Faculty of Information
Web: http://ischool.utoronto.ca/future-students/apply/mi-apply/
Email: inquire@ischool.utoronto.ca

UTM IDM (Spec) HBA / MI: Application Process

- Applicants must apply to the Honours Bachelor of Arts (HBA) program, the MI program, and the CDP.
- Applicants must gain independent admission to both the HBA and MI programs before they may be considered for admission to the CDP.
- Qualified students in Year 3 of the HBA program may apply to the MI program; those accepted will receive a conditional offer to start the MI program when the HBA program requirements have been completed.

UTM IDM (Spec) HBA / MI: Requirements

Minimum Admission Requirements

- Applicants must meet the admission requirements of the HBA program, the School of Graduate Studies, and the MI program.
- Students must be enrolled full-time in the HBA program and be in good standing in the HBA program with a cumulative grade point average (CGPA) of no less than 3.7 in Year 2. Students are expected to carry a full course load of 5.0 full-course equivalents (FCEs) each year.
- For admission to the MI program, students must:
    - maintain an A- average (CGPA 3.7) or higher in Year 3 and Year 4 of the HBA program,
    - complete HBA program requirements, and
    - demonstrate HBA degree conferral.
- Please see the contact information to find details on each program's admission requirements.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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	• Complete 5.0 full-course equivalents (FCEs) each year towards the HBA degree.	• In Years 1 to 3, complete all 5.0 FCEs each year towards the HBA program requirements. • In Year 3 of the HBA program, receive a conditional offer of admission to the MI program. • In Years 3 and 4, complete any remaining HBA program requirements, with 2.0 FCEs taken from the MI program counting towards the overall HBA program requirements. Complete the 2.0 FCEs from the MI program as follows: INF 1005H and INF 1006H (0.25 FCE each), and 1.5 FCEs from one of the MI concentrations. For details on the concentrations, see the Information calendar entry or visit the Faculty of Information website.
5 and 6	• Students complete 6.0 FCEs in MI program requirements.	• In Years 5 and 6, complete the remaining 6.0 FCEs required for the selected MI concentration. Please see the Information calendar entry for full course requirements.

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** is designed for students interested in studying the intersections of kinesiology and education, coupled with professional teacher preparation.

Students earn a Bachelor of Kinesiology (BKin) degree from the Faculty of Kinesiology and Physical Education and an accredited professional Master of Teaching (MT) 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

https://kpe.utoronto.ca/academics-research/bachelor-kinesiology-bkin/combined-master-teaching-degree-program

Bachelor of Kinesiology Program
Faculty of Kinesiology and Physical Education
Web: https://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 enrolled in the BKin program.
- Meet the admission requirements of the School of Graduate Studies and the MT program.
- Have an average grade of at least B+ (3.3), 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 1.0 FCE in the second teaching subject) 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.

To be given **full, unconditional admission to the MT program**, applicants must meet the following admission requirements:

- Maintain at least a B+ average (cumulative grade point average [CGPA] of 3.3) 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.
- Successfully complete the requirements for the BKin program.
- Be conferred with the BKin degree.
- Have successfully completed 6.0 FCEs in the first teaching subject (i.e., health and physical education) and a minimum of 3.0 FCEs in the second teaching subject. 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. Visit the Master of Teaching website for more information.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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.	• Complete all program requirements and degree requirements for the BKin degree. • In Year 3, students apply for admission to the MT program and the CDP. • 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 are double counted towards the program requirements for the BKin and MT programs.
5	• Remaining courses from Year 1 of the MT program.	• Conditions of admission are removed. • 4.5 FCEs of Year 1 MT program requirements.
6	• Remaining courses from Year 2 of the MT program.	• 4.5 FCEs of Year 2 MT program requirements.
*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 (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** 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.

Students earn a bachelor's degree from the University of Toronto Mississauga (UTM) and an accredited professional Master of Teaching (MT) 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
Department of Language Studies, University of Toronto Mississauga
Web: www.utm.utoronto.ca/language-studies/programs/language-teaching-and-learning
Email: katherine.rehner@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) 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 (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.
- Completed the requirements of their HBA program.
- Be conferred with the HBA degree.
- 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:
    - At least 6.0 FCEs in their first teaching subject and at least 3.0 FCEs in their second teaching subject. Some secondary teaching subjects require more than 3.0 FCEs regardless of whether they are selected as the first or second teaching subject. Visit the Master of Teaching website for more information.
    - At least 3.0 FCEs in their first teaching subject and at least 1.5 FCE in their second teaching subject by the time they are conditionally admitted to the MT program.
    - Completion of the major in Language Teaching and Learning: French fulfils the 6.0 FCEs required for French (Second Language) as a first teaching subject. Students may need to complete additional courses to fulfil the minimum 3.0 FCEs for their second teaching subject. Students should consult often with their HBA academic program supervisor to ensure they fulfil all the requirements of the CDP.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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.	• 20.0 FCEs in undergraduate courses. This includes: o a minimum of 6.0 FCEs as part of the Language Teaching and Learning: French major requirements, which will also qualify as prerequisite courses in the first teaching subject; and o a minimum of 3.0 FCEs in the second teaching subject.[1] • By the end of Year 3, complete at least half of the teaching subjects' prerequisite courses (i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject). • In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBA degree (20.0 FCEs) and MT degree (10.0 FCEs).
5	• Remaining courses from Year 1 of the MT program.	• 4.5 FCEs of Year 1 MT program requirements.

6	• Remaining courses from Year 2 of the MT program.	• 4.5 FCEs of Year 2 MT program requirements.
[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, 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** 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.

Students earn a bachelor's degree from the University of Toronto Mississauga (UTM) and an accredited professional Master of Teaching (MT) 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
Department of Language Studies, University of Toronto Mississauga
Web: www.utm.utoronto.ca/language-studies/programs/language-teaching-and-learning
Email: katherine.rehner@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) 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:

- 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.
- Completed the requirements of their HBA program.
- Be conferred with the HBA degree.
- 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:
    - At least 6.0 FCEs in their first teaching subject and at least 3.0 FCEs in their second teaching subject. Some secondary teaching subjects require more than 3.0 FCEs regardless of whether they are selected as the first or second teaching subject. Visit the Master of Teaching website for more information.
    - At least 3.0 FCEs in their first teaching subject and at least 1.5 FCE in their second teaching subject by the time they are conditionally admitted to the MT program.
    - Completion of the specialist in Language Teaching and Learning: French and Italian fulfils the 6.0 FCEs required for French (Second Language) as a first teaching subject. Students may need to complete additional courses to fulfil the minimum 3.0 FCEs for their second teaching subject. Students should consult often with their HBA academic program supervisor to ensure they fulfil all the requirements of the CDP.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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.	• 20.0 FCEs in undergraduate courses. This includes: o a minimum of 6.0 FCEs as part of the Language Teaching and Learning: French and Italian specialist requirements, which will also qualify as prerequisite courses in the first teaching subject; and o a minimum of 3.0 FCEs in the second teaching subject.[1] • By the end of Year 3, complete at least half of the teaching subjects' prerequisite courses (i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject). • In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBA degree (20.0 FCEs) and MT degree (10.0 FCEs).

5	• Remaining courses from Year 1 of the MT program.	• 4.5 FCEs of Year 1 MT program requirements.
6	• Remaining courses from Year 2 of the MT program.	• 4.5 FCEs of Year 2 MT program requirements.
[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, 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
http://criminology.utoronto.ca/programs/graduate/collaborative-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 MA program, and the CDP.
- Applicants must gain independent admission to both the JD and MA programs before they may be considered for admission to the CDP. Applicants may also apply to the CDP before they enter the JD program or while they are in Year 1 of the JD program.

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.
- Please see the contact information to find details on each program's admission requirements.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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 CRI 2010H (0.5 FCE) and a course in theory or research methods. Students may choose to complete the continuous course CRI 3360Y *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 JD program, the PhD program, and the CDP.
- Applicants must gain independent admission to the JD program and the PhD program in Economics before they may be considered for admission 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.
- Please see the contact information to find details on each program's admission requirements.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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 ECO 1011H (0.5 full-course equivalent [FCE]) plus 3.0 FCEs as follows: ECO 2020H and ECO 2030H, macroeconomics (ECO 2021H and ECO 2031H), and econometrics (ECO 2400H and ECO 2401H). • 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 ECO 4060Y *Graduate Research Seminar*. • 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 JD program, the MA general-stream program, and the CDP.
- Applicants must apply to each program separately but indicate on their applications that they wish to be considered for the CDP. They will be considered for the CDP after they have secured independent admission to both the JD and MA programs.

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.
- Please see the contact information to find details on each program's admission requirements.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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 ECO 1010H *Mathematics and Statistics for MA General Students* (0.5 full-course equivalent [FCE]) plus 3.0 FCEs toward the MA program requirements including ECO 2060H, ECO 2061H, ECO 2408H, and ECO 3501H. • In Year 2, complete a minimum of 2.5 FCEs in economics, including ECO 1010H (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 MA program, and the CDP.
- Students are considered for the CDP after they have secured independent admission to the JD and MA programs.

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.
- Please see the contact information to find details on each program's admission requirements.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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 ENG 6999Y, 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

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: ceres.admin@utoronto.ca

STG JD / ERA MA: Application Process

- Applicants must apply to the Juris Doctor (JD) program, the MA (European and Russian Affairs) program, and the CDP.
- Applicants must gain independent admission to the JD and MA (European and Russian Affairs) programs before they may be considered for admission to the CDP. Applicants may also apply to the CDP while they are in Year 1 of the JD program or Year 1 of the MA (European and Russian Affairs) program.

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.
- Please see the contact information to find details on each program's admission requirements.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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 ERE 2000Y and ERE 2001Y. • 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 ERE 2000Y. • Students choose to complete an additional: o 1.0 FCE MA courses or o 6 JD credits or o 0.5 FCE MA course and 3 JD credits.

Program Length

4 years

Time Limit

5 years

STG, Law, Juris Doctor / 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 / 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.aspx

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 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.
- Please see the contact information to find details on each program's admission requirements.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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 the required Year 1 courses of the MBA program.
3 and 4	• 2000-level MBA courses. • JD program requirements.	• Complete 3.0 full-course equivalents (FCEs) in 2000-level MBA courses. • 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
http://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
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 must gain independent admission to the JD and MGA programs before they may be considered for admission to the CDP. Applicants may also apply to the CDP while they are in Year 1 of the JD program or Year 1 of the MGA program.

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.
- Please see the contact information to find details on each program's admission requirements.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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 MGA program requirements.	• Complete required Year 1 MGA courses as follows: GLA 1001H, GLA 1003H, GLA 1004H, GLA 1005H, GLA 1010H, GLA 1011H, GLA1012H, GLA 1014H.

	• Required law course.	• Complete LAW 252H1 (0.5 full-course equivalent [FCE]) which will count towards the MGA program requirements. This course is graded on the graduate scale. • In the Summer session between Years 2 and 3, complete GLA 1007H *Global Internship*.
3 and 4	• MGA courses. • JD credits.	• Complete 2.5 FCEs in 2000-level elective MGA courses. • Complete the required Year 2 courses GLA 2000H (0.5 FCE) and GLA 1009H (0.5 FCE). • 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: inquire@ischool.utoronto.ca

STG JD / MI: Admission Requirements

- Applicants must apply to both degree programs as specified in the admission requirements.
- Applicants must be admitted to both the Faculty of Law and the Faculty of Information; therefore, applicants must satisfy the admission requirements of both Faculties independently, and all applicants must complete the Law School Admissions Test (LSAT) and all admission requirements of the Faculty of Information. Please obtain application information from each Faculty.
- Students who have completed the first year of either the Juris Doctor or the Master of Information program may apply for admission to the CDP by meeting the normal application and admission requirements of the other Faculty and notifying their Faculty Registrar.

STG JD / MI: Program Requirements

- Students complete the program requirements of the JD and the MI.
- At the completion of the four-year integrated program, the successful student is awarded both the Juris Doctor and the Master of Information degrees, which, if taken separately, would require a minimum of five years of study.

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
http://publicpolicy.utoronto.ca/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 must gain independent admission to both the JD and MPP programs before they may be considered for admission to the CDP. Applicants may also apply to the MPP program during Year 1 of the JD program.

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.
- Please see the contact information to find details on each program's admission requirements.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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 PPG 1008H.	• Complete Year 1 courses of the MPP program as follows: PPG 1000H, PPG 1001H, PPG 1002H, PPG 1003H, PPG 1004H, PPG 1005H, and PPG 1007H. • Substitute PPG 1008H with an equivalent Law course (0.5 full-course equivalent [FCE]) and obtain a minimum B+. • In the Summer session of Year 2, complete PPG 2006Y *MPP Internship*.
3 and 4	• MPP and JD program requirements.	• Complete 2.0 FCEs in the MPP program: PPG 2002H, PPG 2003H, PPG 2008H, and either PPG 2011H or PPG 2022H. • In Year 3, complete a minimum of 1.0 FCE 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
http://socialwork.utoronto.ca/programs/msw-programs/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 both the JD program, the 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.

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.
- Please see the contact information to find details on each program’s admission requirements.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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: SWK 4102H, SWK 4103H, SWK 4105H, SWK 4107H, SWK 4510H, SWK 4602H, SWK 4603H, SWK 4605H, SWK 4654H, and SWK 4658H. • Complete the MSW Year 1 practicum (SWK 4701H).
3 and 4	• Complete JD credits and MSW program requirements.	• Complete 32 JD credits including a moot, a perspective course, and an international/comparative/transnational (ICT) perspective course. • Complete all course requirements for one of the MSW fields chosen from: o Children and Their Families o Social Justice and Diversity o Health and Mental Health o Social Service Administration o Gerontology. • Complete the Year 2 MSW practicum (SWK 4702Y) in Year 3 of the CDP. Advanced-standing students complete the Year 2 MSW practicum in Year 2 of the CDP. • Complete 6 JD credits or 1.0 FCE in integrated courses: o LAW 345Y1 (3 JD credits) plus a directed reading project (3 JD credits) or a directed reading course (3 JD credits) **OR** o 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 program, and the CDP.
- Applicants must gain independent admission to both the JD and PhD programs before they may be considered for admission 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.
- Please see the contact information to find details on each program's admission requirements.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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 JD program, the PhD program, and the CDP.
- Applicants must gain independent admission to both the JD and PhD programs before they may be considered for admission 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.
- Please see the contact information to find details on each program's admission requirements.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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: http://munkschool.utoronto.ca/mga/joint-degrees/master-of-global-affairs-mba

Master of Business Administration Program
Rotman School of Management
Email: dimitra.tsalpouris@rotman.utoronto.ca

Master of Global Affairs Program
Munk School of Global Affairs
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.
- Please see the contact information to find details on each program's admission requirements.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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 global affairs with a minimum B+ standing.	• **4.5 FCEs in global affairs:** GLA 1001H, GLA 1003H, GLA 1004H, GLA 1005H, GLA 1006H, GLA 1010H, GLA 1011H, GLA1012H, GLA 1014H. • **0.5 FCE** (GLA 1007H) to be taken in the Summer session.
2	• 6.13 FCEs in management with a minimum B+ standing.	• **3.0 FCEs in management**: RSM 1151H, RSM 1152H, RSM 1160H, RSM 1210H, RSM 1211H, RSM 1212H, RSM 1222H, RSM 1231H, RSM 1232H, RSM 1241H, RSM 1261H, RSM 1262H, RSM 1291H, RSM 1292H, RSM 1320H, RSM 1350H, RSM 1382H.
3	• 2.5 FCEs in management. • 3.0 FCEs in global affairs.	• **2.5 FCEs** in management electives from the 2000-level MBA course list. • **2.5 FCEs** in global affairs electives. • **0.5 FCE:** GLA 2000H *Capstone Seminar* (required course).

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, 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** 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.

Students earn a bachelor's degree from the University of Toronto Mississauga (UTM) and an accredited professional Master of Teaching (MT) 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
Department of Mathematical and Computational Sciences, University of Toronto Mississauga
Web: www.utm.utoronto.ca/math-cs-stats
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 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) 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.
- Complete the requirements of their HBSc degree.
- Be conferred with the HBSc degree.
- 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:
    - At least 6.0 FCEs in their first teaching subject and at least 3.0 FCEs in their second teaching subject. Some secondary teaching subjects require more than 3.0 FCEs regardless of whether they are selected as the first or second teaching subject. Visit the Master of Teaching website for more information.
    - At least 3.0 FCEs in their first teaching subject and at least 1.5 FCE in their second teaching subject by the time they are conditionally admitted to the MT program.
    - Completion of the specialist in Mathematical Sciences fulfils the 6.0 FCEs required for Mathematics as a first teaching subject. Students may need to complete additional courses to fulfil the minimum 3.0 FCEs for their second teaching subject. Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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.	• 20.0 FCEs in undergraduate courses. This includes: o a minimum of 6.0 FCEs as part of the Mathematical Sciences specialist requirements, which will also qualify as prerequisite courses in the first teaching subject; and o a minimum of 3.0 FCEs in the second teaching subject [1]. • By the end of Year 3, complete at least half of the teaching subjects' prerequisite courses (i.e., 3.0 FCEs in the first teaching subject and 1.5 FCE in the second teaching subject). • In Year 4, complete any two of the elective half courses recommended for CDP students, which are double counted towards the program requirements for the HBSc (20.0 FCEs) degree and MT (10.0 FCEs) degree.
5	• Remaining courses from Year 1 of the MT program.	• 4.5 FCEs of Year 1 MT program requirements.

6	• Remaining courses from Year 2 of the MT program.	• 4.5 FCEs of Year 1 MT program requirements.
[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** 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.

Students earn a bachelor's degree from the University of Toronto Mississauga (UTM) and an accredited professional Master of Teaching (MT) 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
Department of Mathematical and Computational Sciences, University of Toronto Mississauga
Web: www.utm.utoronto.ca/math-cs-stats
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 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 degree 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) 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.
- Complete the requirements of their HBSc degree.
- Be conferred with the HBSc degree.
- 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:
    - At least 6.0 FCEs in their first teaching subject and at least 3.0 FCEs in their second teaching subject. Some secondary teaching subjects require more than 3.0 FCEs regardless of whether they are selected as the first or second teaching subject. Visit the Master of Teaching website for more information.
    - At least 3.0 FCEs in their first teaching subject and at least 1.5 FCE in their second teaching subject by the time they are conditionally admitted to the MT program.
    - Completion of the major in Mathematical Sciences fulfils the 6.0 FCEs required for Mathematics as a first teaching subject. Students may need to complete additional courses to fulfil the minimum 3.0 FCEs for their second teaching subject. Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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.	• 20.0 FCEs in undergraduate courses. This includes: o a minimum of 6.0 FCEs as part of the Mathematical Sciences major requirements, which will also qualify as prerequisite courses in the first teaching subject; and o a minimum of 3.0 FCEs in the second teaching subject[1]. • By the end of Year 3, complete at least half of the teaching subjects' prerequisite courses (i.e., 3.0 FCEs in the first teaching subject and 1.5 FCE in the second teaching subject). • In Year 4, complete any two of the elective half courses recommended for CDP students, which are double counted towards the program requirements for the HBSc (20.0 FCEs) degree and MT (10.0 FCEs) degree.
5	• Remaining courses from Year 1 of the MT program.	• 4.5 FCEs of Year 1 MT program requirements.

6	• Remaining courses from Year 2 of the MT program.	• 4.5 FCEs of Year 1 MT program requirements.
[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** is designed for students interested in studying the intersections of math and education, coupled with professional teacher preparation.

Students earn an honours bachelor's degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching (MT) 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: www.utsc.utoronto.ca/cms
Email: mdefreitas@utsc.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

- Applicants must be admitted to the HBSc degree program and the Mathematics specialist program.
- Applicants must meet the admission requirements of the School of Graduate Studies and the MT 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]).
- To be given full, unconditional admission to the MT program, applicants must:

    - 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;
    - Complete the requirements of their HBSc program;
    - Be conferred with the HBSc degree;
    - Provide at two letters of reference;
    - 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:
        - At least 6.0 FCEs in their first teaching subject and at least 3.0 FCEs in their second teaching subject. Some secondary teaching subjects require more than 3.0 FCEs regardless of whether they are selected as the first or second teaching subject. Visit the Master of Teaching website for more information.
        - At least 3.0 FCEs in their first teaching subject and at least 1.5 FCE in their second teaching subject by the time they are conditionally admitted to the MT program.
        - Completion of the specialist in Mathematics fulfils the 6.0 FCEs required for Science-Mathematics as a first teaching subject. Students may need to complete additional courses to fulfil the minimum 3.0 FCEs for their second teaching subject. Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP.
- 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.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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.	• Students must complete all HBSc program requirements and degree requirements. o This includes a minimum of 6.0 FCEs in the first teaching subject and a minimum of 3.0 FCEs in the second teaching subject.[1] • Students are expected to carry a full course load of 5.0 FCEs over the three academic sessions (Fall, Winter, Summer) of each year. • In Year 3, qualified students may apply to the MT program and the CDP and may be offered conditional admission. • 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 degree (20.0 FCEs) and MT degree (10.0 FCEs). • By the end of Year 4, fulfil both the undergraduate program requirements and the undergraduate degree requirements.
5	• Remaining courses from Year 1 of the MT program.	• 4.5 FCEs of Year 1 MT program requirements.
6	• Remaining courses from Year 2 of the MT program.	• 4.5 FCEs of Year 2 MT program requirements.

[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** is designed for students interested in studying the intersections of math and education, coupled with professional teacher preparation.

Students earn an honours bachelor's degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching (MT) 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: www.utsc.utoronto.ca/cms
Email: mdefreitas@utsc.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

- Applicants must be admitted to the HBSc degree program and the Mathematics specialist co-op program.
- Applicants must meet the admission requirements of the School of Graduate Studies and the MT 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]).
- To be given full, unconditional admission to the MT program, applicants must:

  - 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;
  - Complete the requirements of their HBSc program;
  - Be conferred with the HBSc degree;
  - Provide at least two letters of reference;
  - 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:
    - At least 6.0 FCEs in their first teaching subject and at least 3.0 FCEs in their second teaching subject. Some secondary teaching subjects require more than 3.0 FCEs regardless of whether they are selected as the first or second teaching subject. Visit the Master of Teaching website for more information.
    - At least 3.0 FCEs in their first teaching subject and at least 1.5 FCE in their second teaching subject by the time they are conditionally admitted to the MT program.
    - Completion of the specialist co-op in Mathematics fulfils the 6.0 FCEs required for Science-Mathematics as a first teaching subject. Students may need to complete additional courses to fulfil the minimum 3.0 FCEs for their second teaching subject. Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP.
- 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.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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.	• Students must complete all HBSc program requirements and degree requirements. o This includes a minimum of 6.0 FCEs in the first teaching subject and a minimum of 3.0 FCEs in the second teaching subject.[1] • Students are expected to carry a full course load of 5.0 FCEs over the three academic sessions (Fall, Winter, Summer) of each year. • In Year 3, qualified students may apply to the MT program and the CDP and may be offered conditional admission. • 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 degree (20.0 FCEs) and MT degree (10.0 FCEs). • By the end of Year 4, fulfil both the undergraduate program requirements and the undergraduate degree requirements.
5	• Remaining courses from Year 1 of the MT program.	• 4.5 FCEs of Year 1 MT program requirements.
6	• Remaining courses from Year 2 of the MT program.	• 4.5 FCEs of Year 2 MT program requirements.

[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** is designed for students interested in studying the intersections of math and education, coupled with professional teacher preparation.

Students earn a bachelor's degree from the Faculty of Arts and Science and an accredited professional Master of Teaching (MT) 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

Honours Bachelor of Science, Major in Mathematics / Master of Teaching
www.vic.utoronto.ca/students/academics/combinedprogram.htm

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 enrolled in the HBSc degree program.
- Meet the admission requirements of the School of Graduate Studies and the MT program.
- Have completed or be on course to complete the Education and Society minor program (Victoria College).

- Be registered in Year 3 of the HBSc program, in the Mathematics major 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 1.5 FCEs in the second teaching subject) 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.

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.
- Have completed the required courses to meet the first and second teaching subjects.
- Be conferred with the HBSc degree.
- Regardless of the division to which applicants are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), they will have completed a minimum of 6.0 FCEs as part of the Mathematics major requirements in the first teaching subject and a minimum of 3.0 FCEs in the second teaching subject, from a recognized university. 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. Please visit the MT program website for more information.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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.	• 20.0 FCEs in undergraduate courses. This includes: o the minor in Education and Society; o a minimum of 6.0 FCEs as part of the Mathematics major requirements, which will also qualify as prerequisite courses in the first teaching subject; and o 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). • In Year 4, complete any two of the elective half courses recommended for CDP students, which are double counted towards the program requirements for the HBSc (20.0 FCEs) degree and MT (10.0 FCEs) degree.
5	• Remaining courses from Year 1 of the MT program.	• In Years 5 and 6: 9.0 FCEs of MT program requirements.

6	• Remaining courses from 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** is designed for students interested in studying the intersections of math and education, coupled with professional teacher preparation.

Students earn an honours bachelor's degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching (MT) 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: www.utsc.utoronto.ca/cms
Email: mdefreitas@utsc.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

- Applicants must be admitted to the HBSc degree program and the Mathematics major program.
- Applicants must meet the admission requirements of the School of Graduate Studies and the MT 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]).
- To be given full, unconditional admission to the MT program, applicants must:

    - 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;
    - Complete the requirements of their HBSc program;
    - Be conferred with the HBSc degree;
    - Provide at least two letters of reference;
    - 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:
        - At least 6.0 FCEs in their first teaching subject and at least 3.0 FCEs in their second teaching subject. Some secondary teaching subjects require more than 3.0 FCEs regardless of whether they are selected as the first or second teaching subject. Visit the Master of Teaching website for more information.
        - At least 3.0 FCEs in their first teaching subject and at least 1.5 FCE in their second teaching subject by the time they are conditionally admitted to the MT program.
        - Completion of the major in Mathematics fulfils the 6.0 FCEs required for Science-Mathematics as a first teaching subject. Students may need to complete additional courses to fulfil the minimum 3.0 FCEs for their second teaching subject. Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP.
- 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.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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.	• Students must complete all HBSc program requirements and degree requirements. o This includes a minimum of 6.0 FCEs in the first teaching subject and a minimum of 3.0 FCEs in the second teaching subject.[1] • Students are expected to carry a full course load of 5.0 FCEs over the three academic sessions (Fall, Winter, Summer) of each year. • In Year 3, qualified students may apply to the MT program and the CDP and may be offered conditional admission. • 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 degree (20.0 FCEs) and MT degree (10.0 FCEs). • By the end of Year 4, fulfil both the undergraduate program requirements and the undergraduate degree requirements.
5	• Remaining courses from Year 1 of the MT program.	• 4.5 FCEs of Year 1 MT program requirements.
6	• Remaining courses from Year 2 of the MT program.	• 4.5 FCEs of Year 2 MT program requirements.

[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** is designed for students interested in studying the intersections of math and education, coupled with professional teacher preparation.

Students earn an honours bachelor's degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching (MT) 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: www.utsc.utoronto.ca/cms
Email: mdefreitas@utsc.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

- Applicants must be admitted to the HBSc degree program and the Mathematics major co-op program.
- Applicants must meet the admission requirements of the School of Graduate Studies and the MT 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]).
- To be given full, unconditional admission to the MT program, applicants must:

  - 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;
  - Complete the requirements of their HBSc program;
  - Be conferred with the HBSc degree;
  - Provide at least two letters of reference;
  - 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:
    - At least 6.0 FCEs in their first teaching subject and at least 3.0 FCEs in their second teaching subject. Some secondary teaching subjects require more than 3.0 FCEs regardless of whether they are selected as the first or second teaching subject. Visit the Master of Teaching website for more information.
    - At least 3.0 FCEs in their first teaching subject and at least 1.5 FCE in their second teaching subject by the time they are conditionally admitted to the MT program.
    - Completion of the major co-op in Mathematics fulfils the 6.0 FCEs required for Science-Mathematics as a first teaching subject. Students may need to complete additional courses to fulfil the minimum 3.0 FCEs for their second teaching subject. Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP.
- 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.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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.	• Students must complete all HBSc program requirements and degree requirements. o This includes a minimum of 6.0 FCEs in the first teaching subject and a minimum of 3.0 FCEs in the second teaching subject.[1] • Students are expected to carry a full course load of 5.0 FCEs over the three academic sessions (Fall, Winter, Summer) of each year. • In Year 3, qualified students may apply to the MT program and the CDP and may be offered conditional admission. • 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 degree (20.0 FCEs) and MT degree (10.0 FCEs). • By the end of Year 4, fulfil both the undergraduate program requirements and the undergraduate degree requirements.
5	• Remaining courses from Year 1 of the MT program.	• 4.5 FCEs of Year 1 MT program requirements.
6	• Remaining courses from Year 2 of the MT program.	• 4.5 FCEs of Year 2 MT program requirements.

[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 / 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 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
Faculty of Medicine
Web: http://mdphd.utoronto.ca
Email: mdphd.program@utoronto.ca

STG MD / PhD: Requirements

Minimum Admission Requirements

- Applicants must be accepted by the 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, 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** 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
http://socialwork.utoronto.ca/programs/msw-programs/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: http://socialwork.utoronto.ca/programs/msw-programs
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.

- Please see the contact information to find details on each program's admission requirements.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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: o UTSC D-level research course PSYD98Y3 *Thesis in Psychology* under the supervision of a UTSC Psychology faculty member in consultation with a Social Work faculty member (1.0 FCE). o UTSC D-level course PSYD37H3 *The Social Context of Mental Health and Illness* (0.5 FCE). • By the end of Year 4, 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: SWK 4102H, SWK 4103H, SWK 4105H, SWK 4107H, SWK 4510H, SWK 4602H, SWK 4603H, SWK 4654H. • Student must complete the Year 1 practicum (SWK 4701H+). • 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 (SWK 4702Y), and additional courses in their chosen field of specialization: o Children and Their Families: SWK 4514H, SWK 4608H, SWK 4620H, SWK 4625H. o Gerontology: AGE 2000H, SWK 4513H, SWK 4612Y, SWK 4618H. o Health and Mental Health: SWK 4412H, SWK 4511H, and *either:* SWK 4622H and SWK 4604H, *or* SWK 4622H and SWK 4632H, *or* SWK 4604H and SWK 4631H. o Social Justice and Diversity: SWK 4304H, SWK 4306H, SWK 4512H, SWK 4606H. o Social Service Administration: SWK 4425H, SWK 4426H, SWK 4427H, SWK 4515H.

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** 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 Master of Social Work (MSW) two-year full-time program.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

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: http://socialwork.utoronto.ca/programs/msw-programs
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.
- Please see the contact information to find details on each program's admission requirements.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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: o UTSC D-level research course PSYD98Y3 *Thesis in Psychology* under the supervision of a UTSC Psychology faculty member in consultation with a Social Work faculty member (1.0 FCE). o UTSC D-level course PSYD37H3 *The Social Context of Mental Health and Illness* (0.5 FCE). • By the end of Year 4, 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: SWK 4102H, SWK 4103H, SWK 4105H, SWK 4107H, SWK 4510H, SWK 4602H, SWK 4603H, SWK 4654H. • Students must complete the Year 1 practicum (SWK 4701H+). • 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 (SWK 4702Y), and additional courses in their chosen field of specialization: o Children and Their Families: SWK 4514H, SWK 4608H, SWK 4620H, SWK 4625H. o Gerontology: AGE 2000H, SWK 4513H, SWK 4612Y, SWK 4618H. o Health and Mental Health: SWK 4412H, SWK 4511H, and *either:* SWK 4622H and SWK 4604H*, *or* SWK 4622H and SWK 4632H, *or* SWK 4604H* and SWK 4631H. o Social Justice and Diversity: SWK 4304H, SWK 4306H, SWK 4512H, SWK 4606H. o Social Service Administration: SWK 4425H, SWK 4426H, SWK 4427H, SWK 4515H. *Students who have completed the specialist co-op in Mental Health Studies are exempt from SWK 4604H and must replace this with another SWK elective.

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** 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.

Students earn a bachelor's degree from the University of Toronto Mississauga (UTM) and an accredited professional Master of Teaching (MT) 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
Department of Biology, University of Toronto Mississauga
Web: www.utm.utoronto.ca/biology
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 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) 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 (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.
- Complete the requirements of their HBSc program.
- Be conferred with the HBSc degree.
- 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:
    - At least 6.0 FCEs in their first teaching subject and at least 3.0 FCEs in their second teaching subject. Some secondary teaching subjects require more than 3.0 FCEs regardless of whether they are selected as the first or second teaching subject. Visit the Master of Teaching website for more information.
    - At least 3.0 FCEs in their first teaching subject and at least 1.5 FCE in their second teaching subject by the time they are conditionally admitted to the MT program.
    - Completion of the specialist in Molecular Biology fulfils the 6.0 FCEs required for Science-Biology, Science-Chemistry, or Science-General as a first teaching subject. Students may need to complete additional courses to fulfil the minimum 3.0 FCEs for their second teaching subject. Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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.	• 20.0 FCEs in undergraduate courses. This includes: o a minimum of 6.0 FCEs as part of the Molecular Biology specialist requirements, which will also qualify as prerequisite courses in the first teaching subject; and o a minimum of 3.0 FCEs in the second teaching subject.[1] • By the end of Year 3, complete at least half of the teaching subjects' prerequisite courses (i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject). • In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc degree (20.0 FCEs) and MT degree (10.0 FCEs).
5	• Remaining courses from Year 1 of the MT program.	• 4.5 FCEs of Year 1 MT program requirements.

6	• Remaining courses from Year 2 of the MT program.	• 4.5 FCEs of Year 2 MT program requirements.
[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** is designed for Music Education students who are interested in pursuing a teaching career to gain early, conditional admission to the Master of Teaching (MT) program.

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: https://music.utoronto.ca/programs.php
Email: undergrad.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 apply to the Bachelor of Music (MusBac) program, the MT program, and the CDP.
- Applicants must gain independent admission to both the MusBac 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 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 program:
    - Have a B+ average (cumulative grade point average [CGPA]) 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 full-course equivalents [FCEs] in the first teaching subject and 1.5 FCEs 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 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.

To be given **full, unconditional admission to the MT program**, applicants must:

- Maintain a B+ average (CGPA of 3.3) or higher in their final year of study in the MusBac 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 MusBac program.
- Be conferred with the MusBac degree.
- Regardless of the division to which applicants are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for two teaching subjects as follows:
    - At least 6.0 FCEs in their first teaching subject and at least 3.0 FCEs in their second teaching subject. Some secondary teaching subjects require more than 3.0 FCEs regardless of whether they are selected as the first or second teaching subject. Visit the Master of Teaching website for more information.
    - At least 3.0 FCEs in their first teaching subject and at least 1.5 FCE in their second teaching subject by the time they are conditionally admitted to the MT program.
    - Completion of the MusBac program fulfils the 6.0 FCEs required for Music-Instrumental or Music-Vocal as a first teaching subject. Students may need to complete additional courses to fulfil the minimum 3.0 FCEs for their second teaching subject. Students should consult often with their MusBac academic program supervisor to ensure they fulfil all the requirements of the CDP.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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 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.	• 20.0 FCEs in undergraduate courses. This includes: o a minimum of 6.0 FCEs as part of the MusBac requirements, which will also qualify as prerequisite courses in the first teaching subject; and o a minimum of 3.0 FCEs in the second teaching subject.[1] • By the end of Year 3, complete at least half of the teaching subjects' prerequisite courses (i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject). • In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the MusBac degree (20.0 FCEs) and MT degree (10.0 FCEs).
5	• Remaining courses from Year 1 of the MT program.	• 4.5 FCEs of Year 1 MT program requirements.
6	• Remaining courses from Year 2 the MT program.	• 4.5 FCEs of Year 2 MT program requirements.
[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 / 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 / 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
Web: www.rotman.utoronto.ca/Degrees/MastersPrograms/JointDegrees/PharmDMBA.aspx

Doctor of Pharmacy Program
Leslie Dan Faculty of Pharmacy
Email: pharm.sci@utoronto.ca

Master of Business Administration Program
Rotman School of Management
Email dimitra.tsalpouris@rotman.utoronto.ca

STG PharmD / MBA: Application Process

- Applicants must apply to the PharmD program, the MBA program, and the CDP.
- Applicants must gain independent admission to both the PharmD and MBA programs before they may be considered for admission to the CDP.
- 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.
- Please see the contact information to find details on each program's admission requirements.
- 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.

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** is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Students earn an honours bachelor's degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching (MT) 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: www.utsc.utoronto.ca/physsci
Email: mdefreitas@utsc.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

- Applicants must be admitted to the HBSc degree program and the Physical and Mathematical Sciences specialist program.
- Applicants must meet the admission requirements of the School of Graduate Studies and the MT 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]).
- To be given full, unconditional admission to the MT program, applicants must:

    - 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;
    - Complete the requirements of their HBSc program;
    - Be conferred with the HBSc degree;
    - Provide at least two letters of reference;
    - 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:
        - At least 6.0 FCEs in their first teaching subject and at least 3.0 FCEs in their second teaching subject. Some secondary teaching subjects require more than 3.0 FCEs regardless of whether they are selected as the first or second teaching subject. Visit the Master of Teaching website for more information.
        - At least 3.0 FCEs in their first teaching subject and at least 1.5 FCE in their second teaching subject by the time they are conditionally admitted to the MT program.
        - Completion of the specialist in Physical and Mathematical Sciences fulfils the 6.0 FCEs required for Science-Physics as a first teaching subject. Students may need to complete additional courses to fulfil the minimum 3.0 FCEs for their second teaching subject. Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP.
- 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.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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.	• Students must complete all HBSc program requirements and degree requirements. o This includes a minimum of 6.0 FCEs in the first teaching subject and a minimum of 3.0 FCEs in the second teaching subject.[1] • Students are expected to carry a full course load of 5.0 FCEs over the three academic sessions (Fall, Winter, Summer) of each year. • In Year 3, qualified students may apply to the MT program and the CDP and may be offered conditional admission. • 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 degree (20.0 FCEs) and MT degree (10.0 FCEs). • By the end of Year 4, fulfil both the undergraduate program requirements and the undergraduate degree requirements.
5	• Remaining courses from Year 1 of the MT program.	• 4.5 FCEs of Year 1 MT program requirements.
6	• Remaining courses from Year 2 of the MT program.	• 4.5 FCEs of Year 2 MT program requirements.

[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

Overview

The **Combined Degree Program (CDP): STG, Bachelor of Physical and Health Education / Master of Teaching** is designed for students interested in studying the intersections of kinesiology and education, coupled with professional teacher preparation.

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 (MT) 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: https://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 enrolled in the BPHE program.
- Meet the admission requirements of the School of Graduate Studies and the MT program.
- Have an average grade of at least B+ (3.3), 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 1.0 FCE in the second teaching subject) 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.

To be given **full, unconditional admission to the MT program**, applicants must meet the following admission requirements:

- Maintain at least a B+ average (cumulative grade point average [CGPA] of 3.3) 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.
- Successfully complete the requirements for the BPHE program.
- Be conferred with the BPHE degree.
- Have successfully completed 6.0 FCEs in the first teaching subject (i.e., health and physical education) and a minimum of 3.0 FCEs in the second teaching subject. 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. Visit the MT program website for more information.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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.	• Complete all program requirements and degree requirements for the BPHE degree. • In Year 3, students apply for admission to the MT program and the CDP. • 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 are double counted towards the program requirements for the BPHE and MT programs.
5	• Remaining courses from Year 1 of the MT program.	• Conditions of admission are removed. • 4.5 FCEs of Year 1 MT program requirements.
6	• Remaining courses from Year 2 of the MT program.	• 4.5 FCEs of Year 2 MT program requirements.
*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** 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.

Students earn a bachelor's degree from the University of Toronto Mississauga (UTM) and an accredited professional Master of Teaching (MT) 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
Department of Mathematical and Computational Sciences, University of Toronto Mississauga
Web: www.utm.utoronto.ca/math-cs-stats
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) 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 (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.
- Complete the requirements of their HBSc degree.
- Be conferred with the HBSc degree.
- 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:
    - At least 6.0 FCEs in their first teaching subject and at least 3.0 FCEs in their second teaching subject. Some secondary teaching subjects require more than 3.0 FCEs regardless of whether they are selected as the first or second teaching subject. Visit the Master of Teaching website for more information.
    - At least 3.0 FCEs in their first teaching subject and at least 1.5 FCE in their second teaching subject by the time they are conditionally admitted to the MT program.
    - Completion of the major in Physics fulfils the 6.0 FCEs required for Science-Physics as a first teaching subject. Students may need to complete additional courses to fulfil the minimum 3.0 FCEs for their second teaching subject. Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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.	• 20.0 FCEs in undergraduate courses. This includes: o a minimum of 6.0 FCEs as part of the Physics major requirements, which will also qualify as prerequisite courses in the first teaching subject; and o a minimum of 3.0 FCEs in the second teaching subject.[1] • By the end of Year 3, complete at least half of the teaching subjects' prerequisite courses (i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject). • In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc degree (20.0 FCEs) and MT degree (10.0 FCEs).
5	• Remaining courses from Year 1 of the MT program.	• 4.5 FCEs of Year 1 MT program requirements.

6	• Remaining courses from Year 2 of the MT program.	• 4.5 FCEs of Year 2 MT program requirements.
[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** is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Students earn an honours bachelor's degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching (MT) 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: www.utsc.utoronto.ca/physsci
Email: mdefreitas@utsc.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

- Applicants must be admitted to the HBSc degree program and the Physics and Astrophysics specialist program.
- Applicants must meet the admission requirements of the School of Graduate Studies and the MT 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]).
- To be given full, unconditional admission to the MT program, applicants must:

  - 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;
  - Complete the requirements of their HBSc program;
  - Be conferred with the HBSc degree;
  - Provide at least two letters of reference;
  - 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:
    - At least 6.0 FCEs in their first teaching subject and at least 3.0 FCEs in their second teaching subject. Some secondary teaching subjects require more than 3.0 FCEs regardless of whether they are selected as the first or second teaching subject. Visit the Master of Teaching website for more information.
    - At least 3.0 FCEs in their first teaching subject and at least 1.5 FCE in their second teaching subject by the time they are conditionally admitted to the MT program.
    - Completion of the specialist in Physics and Astrophysics fulfils the 6.0 FCEs required for Science-Physics as a first teaching subject. Students may need to complete additional courses to fulfil the minimum 3.0 FCEs for their second teaching subject. Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP.
- 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.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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.	• Students must complete all HBSc program requirements and degree requirements. o This includes a minimum of 6.0 FCEs in the first teaching subject and a minimum of 3.0 FCEs in the second teaching subject.[1] • Students are expected to carry a full course load of 5.0 FCEs over the three academic sessions (Fall, Winter, Summer) of each year. • In Year 3, qualified students may apply to the MT program and the CDP and may be offered conditional admission. • 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 degree (20.0 FCEs) and MT degree (10.0 FCEs). • By the end of Year 4, fulfil both the undergraduate program requirements and the undergraduate degree requirements.
5	• Remaining courses from Year 1 of the MT program.	• 4.5 FCEs of Year 1 MT program requirements.
6	• Remaining courses from Year 2 of the MT program.	• 4.5 FCEs of Year 2 MT program requirements.

[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 (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
Department of Psychology, University of Toronto Mississauga
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 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.
- Please see the contact information to find details on each program's admission requirements.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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 (APHD) and, in some cases, other departments. Elective courses that are especially recommended for Child Study and Education students are listed in the APHD program guidelines. Students without an undergraduate course in child development must take APD 1201H Child and Adolescent Development as an elective. • Upon degree conferral, students apply to the MA program in order to lift conditions of admission.
5	• Graduate courses in accordance with the U of T regulations for the MA program.	• 5.0 FCEs in MA Year 1 program requirements. See the Child Study and Education calendar entry for full course requirements.
6	• Graduate courses in accordance with the U of T regulations for the MA program.	• 4.0 FCEs in MA program requirements. • Note that students will have previously completed the 1.0 FCE in electives in the spring and summer of Year 3 and Year 4 of the HBSc program.

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** is designed for students interested in studying the intersections of psychology and education, coupled with professional teacher preparation.

Students earn a bachelor's degree from the Faculty of Arts and Science and an accredited professional Master of Teaching (MT) 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

Honours Bachelor of Science, Major in Psychology / Master of Teaching
www.vic.utoronto.ca/students/academics/combinedprogram.htm

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 enrolled in the HBSc degree program.
- Meet the admission requirements of the School of Graduate Studies and the MT program.

- Have completed or be on course to complete the Education and Society minor program (Victoria College).
- Be registered in Year 3 of the HBSc program, in the Mathematics major 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 1.5 FCEs in the second teaching subject) 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.

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.
- Have completed the required courses to meet the first and second teaching subjects.
- Be conferred with the HBSc degree.
- Regardless of the division to which applicants are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), they will have completed a minimum of 6.0 FCEs as part of the Mathematics major requirements in the first teaching subject and a minimum of 3.0 FCEs in the second teaching subject, from a recognized university. 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. Visit the MT program website for more information.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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.	• 20.0 FCEs in undergraduate courses. This includes: o the minor in Education and Society; o a minimum of 6.0 FCEs as part of the Mathematics major requirements, which will also qualify as prerequisite courses in the first teaching subject; and o 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). • In Year 4, complete any two of the elective half courses recommended for CDP students, which are double counted towards the program requirements for the HBSc (20.0 FCEs) degree and MT (10.0 FCEs) degree.
5	• Remaining courses from Year 1 of the MT program.	• In Years 5 and 6: 9.0 FCEs of MT program requirements.

6	• Remaining courses from 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
Department of Psychology, University of Toronto Mississauga
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) HBSc / CSE MA: Application Process

- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the 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 (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.
- Please see the contact information to find details on each program's admission requirements.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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 (APHD) and, in some cases, other departments. Elective courses that are especially recommended for Child Study and Education students are listed in the APHD program guidelines. Students without an undergraduate course in child development must take APD 1201H Child and Adolescent Development as an elective. • Upon degree conferral, students apply to the MA program in order to lift conditions of admission.
5	• Graduate courses in accordance with the U of T regulations for the MA program.	• 5.0 FCEs in MA Year 1 program requirements. See the Child Study and Education calendar entry for full course requirements.
6	• Graduate courses in accordance with the U of T regulations for the MA program.	• 4.0 FCEs in MA program requirements. • Note that students will have previously completed the 1.0 FCE in electives in the spring and summer of Year 3 and Year 4 of the HBSc program.

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** is designed for students interested in studying the intersections of sociology and education, coupled with professional teacher preparation.

Students earn a bachelor's degree from the Faculty of Arts and Science and an accredited professional Master of Teaching (MT) 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

Honours Bachelor of Arts, Major in Sociology / Master of Teaching
www.vic.utoronto.ca/students/academics/combinedprogram.htm

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 enrolled in the HBA degree program.
- Meet the admission requirements of the School of Graduate Studies and the MT program.
- Have completed or be on course to complete the Education and Society minor program (Victoria College).

- Be registered in Year 3 of the HBA program, in the sociology major 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 1.5 FCEs in the second teaching subject) 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.

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.
- Have completed the required courses to meet the first and second teaching subjects.
- Be conferred with the HBA degree.
- Regardless of the division to which applicants are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), they will have completed a minimum of 6.0 FCEs as part of the Sociology major requirements in the first teaching subject and a minimum of 3.0 FCEs in the second teaching subject, from a recognized university. 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. Please visit the MT program website for more information.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. 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.	• 20.0 FCEs in undergraduate courses. This includes: o the minor in Education and Society; o 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 o 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). • In Year 4, complete any two of the elective half courses recommended for CDP students, which are double counted towards the program requirements for the HBA (20.0 FCEs) degree and MT (10.0 FCEs) degree.
5	• Remaining courses from Year 1 of the MT program.	• In Years 5 and 6: 9.0 FCEs of MT program requirements.

6	• Remaining courses from 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.		

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

Public Health

Participating Degree Programs

Counselling and Clinical Psychology—MA, PhD
Criminology and Sociolegal Studies—MA, PhD
Information—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, the Canadian Centre on Substance Abuse, 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 receive the notation “Completed Collaborative Specialization in Addiction Studies” on their transcript and parchment.

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
Assistant Professor, Dalla Lana School of Public Health, University of Toronto
155 College Street, Toronto, Ontario M5T 3M7
Telephone: 416-978-7096
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 PAS 3700H *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 PAS 3700H *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

PAS 3700H	Multidisciplinary Aspects of Addiction

Elective Courses

APD 1291H	Addictive Behaviours: Approaches to Assessment and Intervention
CHL 5120H	Population Health Perspectives on Mental Health and Addictions
CHL 5417H	Tobacco and Health: From Cells to Society
CRI 2040H	Drugs and Crime
JPM 1005Y	Behavioural Pharmacology
MSC 1085H	Molecular Approaches to Mental Health and Addictions
PAS 3701H	Advanced Research Issues in Addictions
SOC 6123H	Sociology of Addiction
SWK 4616H	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

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
Exercise Sciences—MSc, PhD
Health Administration—MHSc
Health Policy, Management and Evaluation—MSc, PhD
Information—MI, 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:

1. aging and the life course
2. 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 receive the notation "Completed Collaborative Specialization in Aging, Palliative and Supportive Care Across the Life Course" on their transcript and parchment.

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
Suite 328, 263 McCaul Street
Toronto, Ontario M5T 1W7
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

Adult Education and Community Development; Anthropology;
Counselling and Clinical Psychology;
Counselling Psychology;
Dentistry;
Exercise Sciences;
Health Administration;
Health Policy, Management and Evaluation;
Information (Thesis and Co-op Options);
Medical Science;
Music;
Nursing Science;
Pharmaceutical Sciences;
Psychology;
Public Health Sciences;
Rehabilitation Science;
Social Work;
Sociology;
Speech-Language Pathology;
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

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

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.
- 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

AGE 2000H	Principles of Aging

Doctoral Level

AGE 3000H	Advanced Research Seminar in Aging and the Life Course (AGE 2000H 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

AGE 1000H	Multidisciplinary Research Concepts in Palliative and Supportive Care

Doctoral Level

AGE 1500H	Advanced Research Methodologies in Palliative and Supportive Care (AGE 1000H is a prerequisite for entry into the doctoral level of the collaborative specialization)

Elective Courses for Option 1 or 2

Students must check their home graduate unit's website for course availability in any given session.

AGE 2500H	Current Research Topics in Aging and the Life Course
DEN 1003Y	Preventive Dentistry
EXS 5501H	Physical Activity and Aging
EXS 5502H	Aging and Functional Capacity: an Integrative Approach
NUR 1057H	Interventions to Enhance Health, Abilities and Well-Being
NUR 1058H	Aging, Gender, and Equity
REH 1520H	Physiological Factors Constraining Rehabilitation of the Elderly
REH 1620H	Methodological Issues in Research on Aging and Health
REH 1640H	Sociology of Disability
SLP 1533Y	Aphasias
SLP 1534Y	Motor Speech Disorders
SLP 2501H	Special Topics in Communication Disorders
SLP 2502Y	Specialized Study in Communication Disorders
SOC 6707H	Intermediate Data Analysis
SWK 4612H	Social Work and Aging: Integrated Policy and Practice
SWK 4613H	Social Work Practice with the Aged: Policy and Practice
SWK 4618H	Special Issues in Gerontological Social Work
SWK 4634H	Family Practice Across the Life Cycle
SWK 4635H	Evidence-Based Practice in Social Work
SWK 4637H	Special Topics in Health
SWK 4641H	Special Topics in Social Work in Gerontology
SWK 4803H	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

AGE 1200H	Interprofessional Psychosocial Oncology: Introduction to Theory and Practice
AGE 1250H	Relational Practices with Families in Oncology and Palliative Care
HAD 5301H	Intro to Clinical Epidemiology and Health
HAD 5730H	Research Economics I: Economic Evaluation
HAD 5771H	Resource Allocation Ethics
LAW 6006H	Public Health Law
MSC 1051H	Research Bioethics
MSC 1060H	Biostatistics for Health Sciences
MSC 1090H	Intro to Clinical Biostatistics
MSC 3003Y	Empirical Approaches in Bioethics
NUR 1021H	Nursing Ethics
NUR 1023H	Critical Issues in the Design of Controlled Trials of Behavioural Health Care Interventions
NUR 1024H	Foundations of Qualitative Inquiry

NUR 1025H	Doing Qualitative Research
NUR 1026H	Evaluating Interventions in Clinical Settings
NUR 1045H	Theories of Pain: Impact on the Individual, Family, and Society
NUR 1046H	Persistent Illness: Theoretical, Research, and Practice Implications
NUR 1050H	Coping With Illness
NUR 1051H	Assessment and Management of Common Responses to Illness
PHL 2145H	How Bioethics Fits into Other Disciplines
PHL 2146Y	Topics in Bioethics

Ancient and Medieval Philosophy

Ancient and Medieval Philosophy: Introduction

Lead Faculty

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 receive the notation “Completed Collaborative Specialization in Ancient and Medieval Philosophy” on their transcript and parchment.

Interested students should contact the director and the graduate coordinator of the unit in which they intend to register.

Contact and Address

Web: http://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 (AMP 2000Y).
    - 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

AMP 2000Y	Collaborative Specialization in Ancient and Medieval Philosophy (CSAMP) Proseminar (CR/NCR)

Ancient Greek and Roman History

Ancient Greek and Roman History: Introduction

Lead Faculty

Arts and Science

Participating Degree Programs

Classics (University of Toronto)—PhD
History (York University)—PhD

Overview

The Department of Classics at the University of Toronto and the Graduate Program in History at York University participate in the **Joint Collaborative Specialization in Ancient Greek and Roman History**. The program in History provides a broad historical context and methodological framework; Classics provides integration with other fields of study within the ancient world and access to linguistic, cultural, and ancillary disciplines. The collaborative specialization operates only at the doctoral level.

Students are enrolled in one of the two units. The specialization is administered by a committee of four faculty members, two from each unit, one of whom is the Director. The two units contribute courses and provide facilities and supervision for research. Upon successful completion of the doctoral degree requirements of the participating home graduate unit and the collaborative specialization, students receive the notation “Completed Collaborative Specialization in Ancient Greek and Roman History” on their transcript and parchment.

Interested applicants should contact the director of the joint collaborative specialization as well as the graduate coordinator of the unit in which they intend to register.

Contact and Address

University of Toronto

Web: http://classics.utoronto.ca
Email: grad.classics@utoronto.ca
Telephone: (416) 978-5513
Fax: (416) 978-7174

Joint Collaborative Specialization in Ancient Greek and Roman History
Department of Classics
University of Toronto
125 Queen's Park Crescent
Toronto, Ontario M5S 2C7
Canada

York University

Web: http://history.gradstudies.yorku.ca
Email: jedmond@yorku.ca
Telephone: (416) 736-5123
Fax: (416) 736-5836

Joint Collaborative Program in Ancient Greek and Roman History
Department of History
York University
2140 Vari Hall
Toronto, Ontario M3J 1P3
Canada

Ancient Greek and Roman History: Doctoral Level

Admission Requirements

- Applicants must meet the admissions criteria of the graduate unit through which they wish to enrol. Interested applicants register in the joint collaborative specialization with the approval of the collaborative specialization committee upon admission to the PhD program in either unit.
- A strong background in ancient history will be expected of all interested applicants, as will a level of preparation in the ancient languages and languages of research that is appropriate for the institution in which they register.

Specialization Requirements

- Students take the required seminars CLA 3020H, CLA 3200Y, as well as 1.5 full-course equivalents (FCEs) in Greek and Roman history offered by the collaborating graduate units. They will take all other courses to fulfil the requirements of either the graduate program in Classics at the University of Toronto or the graduate program in History at York University.
- Students take all examinations and meet all language requirements of their home graduate unit.
- The collaborative specialization committee approves the major and minor fields of all students in the joint collaborative specialization; the major field must always be in Greek and Roman history, whereas the minor field will normally be in a complementary area of ancient history but can, where appropriate, be selected from other areas of study covered by the participating units.
- Students must complete the requirements of the collaborative specialization in addition to those of their home unit.

Ancient Greek and Roman History: Courses

CLA 3020H	Research Methods in Ancient History (Credit/No Credit)
CLA 3200Y	Work in Progress in Ancient History (Credit/ No Credit)

Bioethics

Bioethics: Introduction

Lead Faculty

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 receive the notation “Completed Collaborative Specialization in Bioethics" on their transcript and parchment.

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:
  - SRM 3333Y, a credit/no credit graduate seminar series in bioethics.
  - PHL 2145H, 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 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:
    - SRD 4444Y, a credit/no credit graduate seminar series in bioethics.
    - PHL 2145H, 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

HAD 5011H	Canada's Health Care System and Health Policy
HAD 5306H	Introduction to Health Services Research and the Use of Health Administrative Data
HAD 5741H	Health Law and Ethics
HAD 5768H	International Perspectives on Health Services Management
HAD 5771H	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.

LAW 267H	Health Law and Bioethics
LAW 388H	Public Health Law
LAW 582H	Privacy, Property, and the Human Body

Nursing Science

NUR 1021H	Nursing Ethics

Philosophy

PHL 2131H	Ethics
PHL 2132H	Seminar in Ethics
PHL 2133H	Topics in Ethics
HPS 1105H	Philosophy of Medicine

Public Health Sciences

CHL 3001Y	Core Topics in Bioethics
CHL 3002Y	Teaching Bioethics
CHL 3003Y	Empirical Approaches in Bioethics
CHL 3004Y	Ethics and Health Institutions
CHL 3051H	Research Ethics
CHL 5111H	Qualitative Research Methods
CHL 5121H	Genomics, Bioethics, and Public Policy
CHL 5401H	Epidemiology Methods I
CHL 5411H	International Health
JRH 5124H	Public Health Ethics

Rehabilitation Sciences

REH 3120H	International Issues in Disability and Rehabilitation

Religion

RLG 2018H	Religion and Bioethics

Social Work

SWK 6308H	Designing and Implementing Quantitative Social Work Research

Biomedical Engineering

Biomedical Engineering: Introduction

Lead Faculty

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 Biomaterials and Biomedical Engineering (IBBME).

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 receive the notation "Completed Collaborative Specialization in Biomedical Engineering" on their transcript and parchment.

Contact and Address

Web:
www.ibbme.utoronto.ca/students/graduate/prospective/collaborative-specialization
Email: admissions.ibbme@utoronto.ca
Telephone: (416) 978-4841
Fax: (416) 978-4317

Collaborative Specialization in Biomedical Engineering
Institute of Biomaterials and 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 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 JPB 1022H *Human Physiology as Related to Biomedical Engineering* (or an equivalent).
    - Biological science students will be expected to take a physical sciences course such as JPB 1055H *Bioengineering for Life Scientists* (or an equivalent).
    - Students will be expected to take BME 1450H *Bioengineering Science* 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 BME 1010H or BME 1011H *Graduate Seminar*

Series (0.0 FCE) and JDE 1000H *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 IBBME, 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 JPB 1022H *Human Physiology as Related to Biomedical Engineering* (or an equivalent).
    - Biological science students will be expected to take a physical sciences course such as JPB 1055H *Bioengineering for Life Scientists* (or an equivalent).
    - Students will be expected to take BME 1450H *Bioengineering Science* 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 BME 1010H or BME 1011H *Graduate Seminar* series (0.0 FCE), and JDE 1000H *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 IBBME office for details.

BME 1010H	Graduate Seminar
BME 1011H	Graduate Seminar
BME 1405H	Clinical Engineering Instrumentation I
BME 1436H	Clinical Engineering Surgery
BME 1439H	Clinical Engineering Instrumentation II
BME 1450H	Bioengineering Science
BME 1452H	Signal Processing for Bioengineering
BME 1453H	Cell and Tissue Engineering
BME 1454H	Regenerative Medicine: Fundamentals and Applications
BME 1456H	Changing Health Care Technologies, People, and Places
BME 1457H	Biomedical Nanotechnology
BME 1458H	Pattern Discovery Methods for Biomedical Engineering
BME 1459H	Protein Engineering
BME 1460H	Quantitative Fluorescence Microscopy: Theory and Application to Live Cell Imaging
BME 1480H	Experimental Design and Multivariate Analysis in Bioengineering
BME 4444Y	Practice in Clinical Engineering
CHE 1107H	Applied Mathematics
CHE 1141H	Advanced Chemical Reaction Engineering
CHE 1143H	Transport Phenomena
CHE 1310H	Chemical Properties of Polymers
DEN 1070H	Advances in Dental Materials Science
DEN 1081H	Bone Interfacing Implants
ECE 1228H	Electromagnetic Theory
ECE 1352H	Analog Circuit Design I
ECE 1475H	Bio Photonics
ECE 1502H	Information Theory
ECE 1511H	Signal Processing
ECE 1521H	Detection and Estimation Theory
ECE 1647H	Introduction to Nonlinear Control Systems
JCB 1349H	Molecular Assemblies: Structure/Function/Properties
JEB 1365H	Ultrasound: Theory and Applications in Biology and Medicine
JEB 1433H	Medical Imaging
JEB 1444H	Neural Engineering

JEB 1447H	Sensory Communications
JMB 1050H	Biological and Bio-inspired Materials
JNP 1017H[+]	Current Topics in Molecular and Biochemical Toxicology
JNP 1018H[+]	Molecular and Biochemical Basis of Toxicology
JNR 1444Y	Fundamentals of Neuroscience: Cellular and Molecular
JNS 1000Y	Fundamentals of Neuroscience: Systems and Behaviour
JPB 1022H	Human Physiology as Related to Biomedical Engineering
JPB 1055H	Bioengineering for Life Scientists
JTC 1135H	Applied Surface Chemistry
JTC 1331H	Biomaterials Science
MBP 1007Y	Fundamentals in Molecular and Cell Biology
MBP 1022H	Advanced Cell Biology for Physical Scientists
MIE 1001H	Advanced Dynamics
MIE 1101H	Advanced Classical Thermodynamics
MIE 1201H	Advanced Fluid Mechanics I
MSE 1026H	Analytical Electron Microscopy
PHM 1109H	Recent Developments in Dosage Form Design
PSL 1432H	Theoretical Physiology
PSL 1452H	Fundamentals of Ion Channel Function
REH 1100H	Theory and Research in Rehabilitation Science

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

Biomedical Toxicology

Biomedical Toxicology: Introduction

Lead Faculty

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 Biomedical Toxicology provides graduate students with a unique opportunity to gain breadth and depth of knowledge in biomedical 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 communication skills in addition to acquiring greater knowledge of basic principles and specific aspects of biomedical 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 Biomedical Toxicology and the graduate advisor(s) in their home graduate unit to discuss the possibility. Detailed information is available on the Biomedical 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 receive the notation “Completed Collaborative Specialization in Biomedical Toxicology” on their transcript and parchment.

Contact and Address

Web: www.pharmtox.utoronto.ca/collaborative-specialization-biomedical-toxicology-cpbt
Email: pharmtox.dept@utoronto.ca
Telephone: (416) 978-5244
Fax: (416) 978-6395

Collaborative Specialization in Biomedical Toxicology
Department of Pharmacology and Toxicology
University of Toronto
Medical Sciences Building
Room 4207, 1 King's College Circle
Toronto, Ontario M5S 1A8
Canada

Biomedical 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 Biomedical Toxicology by contacting the collaborative specialization director.

Specialization Requirements

- Complete JNP 1014Y *Interdisciplinary Toxicology* and JNP 1016H *Graduate Seminar in Toxicology*.
- Attend a minimum of six academic seminars related to toxicology during the master's program.
- 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 biomedical toxicology.

Biomedical 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 Biomedical Toxicology by contacting the collaborative specialization director.

Specialization Requirements

- Complete JNP 1014Y *Interdisciplinary Toxicology*; JNP 1016H *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.
- Attend a minimum of 12 academic seminars related to toxicology during the doctoral specialization.
- 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 biomedical toxicology.

Biomedical Toxicology: Courses

JNP 1014Y	Interdisciplinary Toxicology
JNP 1016H	Graduate Seminar in Toxicology

Book History and Print Culture

Book History and Print Culture: Introduction

Lead Faculty

Arts and Science

Participating Degree Programs

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
German Literature, Culture and Theory—PhD
History—MA, PhD
History and Philosophy of Science and Technology—MA, PhD
History of Art—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 receive the notation “Completed Collaborative Specialization in Book History and Print Culture” on their transcript and parchment.

Contact and Address

Web: http://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

Classics;
East Asian Studies (Thesis Option);
English (Creative Writing Field);
French Language and Literature;
Germanic Languages and Literature;
History;
History of Art;
History and Philosophy of Science and Technology;
Information (Thesis Option);
Medieval Studies (Thesis Option);
Museum Studies (Thesis Option);
Religion

- Students must fulfil the degree requirements of the unit in which they are enrolled.
- BKS 1001H *Introduction to Book History* (0.5 full-course equivalent [FCE]) and BKS 1002H *Book History in Practice* (0.5 FCE), both of which should be taken in Year 1.
- The major research paper or thesis 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

Comparative Literature;
East Asian Studies (Coursework-Only Option);
English;
Italian Studies;
Medieval Studies (Coursework-Only Option);
Spanish

- Students must fulfil the degree requirements of the unit in which they are enrolled.
- BKS 1001H *Introduction to Book History* (0.5 full-course equivalent [FCE]) and BKS 1002H *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

Museum Studies;
Music

- Students must fulfil the degree requirements of the unit in which they are enrolled.
- BKS 1001H *Introduction to Book History* (0.5 full-course equivalent [FCE]) and BKS 1002H *Book History in Practice* (0.5 FCE), both of which should be taken in Year 1.
- At least 1.0 FCE in additional elective courses related to book history and print culture.
- Collaborative specialization courses may be taken as electives for the purpose of satisfying home program requirements.

Specialization Requirements

Information (Coursework-Only Option)

- Students must fulfil the degree requirements of the unit in which they are enrolled.
- BKS 1001H *Introduction to Book History* (0.5 full-course equivalent [FCE]) and BKS 1002H *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.

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 BKS 1001H *Introduction to Book History* (if

that course has not been taken previously at the master's level), BKS 2000H *Advanced Seminar in Book History and Print Culture*, and BKS 2001H *Individual Practicum in Book History and Print Culture*. BKS 1001H must be taken as a prerequisite or co-requisite to BKS 2000H and BKS 2001H.

- 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

BKS 1001H	Introduction to Book History
BKS 1002H	Book History in Practice
BKS 2000H	Advanced Seminar in Book History and Print Culture
BKS 2001H	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

Medicine

Participating Degree Programs

Biomedical Engineering—MASc, PhD
Chemical Engineering and Applied Chemistry—MASc, PhD
Clinical Engineering—MHSc
Dentistry—MSc, PhD
Exercise Sciences—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 receive the notation “Completed Collaborative Specialization in Cardiovascular Sciences” on their transcript and parchment.

Contact and Address

Web: www.cscp.utoronto.ca
Email: cv.program@utoronto.ca
Telephone: (416) 978-0746

Cardiovascular Sciences Collaborative Specialization
University of Toronto
FitzGerald Building
Room 83E, 150 College Street
Toronto, Ontario M5S 3E2
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: JCV 1060H, JCV 3060H, JCV 3061H, JCV 3062H, JCV 3063H, JCV 3064H, and JCV 3065H.
- 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

Course List

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.

EXS 5508H	Cardiovascular Disease and Exercise
JCV 1060H	Developmental Cardiovascular Physiology
JCV 3060H	Advanced Topics in Cardiovascular Sciences—Molecular Biology and Heart Signal Transduction
JCV 3061H	Advanced Topics in Cardiovascular Sciences—Hormones and the Cardiovascular System
JCV 3062H	Advanced Topics in Cardiovascular Sciences—Heart Function
JCV 3063H	Advanced Topics in Cardiovascular Sciences—Vascular
JCV 3064H	Advanced Topics in Cardiovascular Sciences—Microvascular Medicine
JCV 3065H	Advanced Topics in Cardiovascular Sciences—Systems Biology
JEB 1365H	Ultrasound: Theory and Applications in Biology and Medicine
JTC 1331H	Biomaterials Science
LMP 1015H	Vascular Pathobiology
LMP 1504H	Cell and Molecular Biology of Cardiovascular Diseases
PSL 1462H	Molecular Aspects of Cardiac Function

Community Development

Community Development: Introduction

Lead Faculty

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 receive the notation “Completed Collaborative Specialization in Community Development” on their transcript and parchment.

Contact and Address

Web: www.dlsph.utoronto.ca/program/collaborative-specialization-in-community-development-cdcp
Email: blake.poland@utoronto.ca
Telephone: (416) 978-7542
Fax: (416) 978-1883

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 UCS 1000H *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 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 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

UCS 1000H	Community Development

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

LHA 1102H	Community Development: Innovative Models
LHA 1104H	Social Action Education: Community Development, Social Services, and Social Movements
LHA 1182H	Nonprofits, Co-operatives, and the Social Economy: An Overview
LHA 1190H	Community Healing and Peacebuilding
LHA 1194H	Cyberliteracy, Adult Education, and Community Development
LHA 1196H	Walking Together, Talking Together: The Praxis of Reconciliation
LHA 3119H	Global Perspectives on Feminist Education, Community Development, and Community Transformation
LHA 3182H	Citizenship Learning and Participatory Democracy
LHA 5100H	Special Topics in Adult Education and Community Development: Master's Level (with approval of the Director)
LHA 6100H	Special Topics in Adult Education and Community Development: Doctoral Level (with approval of the Director)

Counselling Psychology

APD 1290H	Indigenous Healing in Counselling and Psychoeducation

Nursing

NUR 1047Y	Community Participation and Health
NUR 1083H	Comparative Politics of Health Policy in a Globalizing World

Planning

JPG 1410H	Institutional and Organizational Ecology
JPG 1415H	Global Environmental Justice and Social Movements
JPG 1507H	Housing Markets and Housing Policy Analysis
JPG 1508H	Planning for the Urban Poor in Developing Countries
JPG 1512H	Place, Politics, and the Urban
JPG 1518H	Sustainability and Urban Communities
JPG 1615H	Planning the Social Economy
JPG 1812Y	Planning for Change: Community Development in Practice

Public Health Sciences

CHL 5112H	Community Development in Health
CHL 5126H	Building Community Resilience
CHL 5411H	International Health
CHL 7001H	Directed Reading

Social Work

SWK 4210H	Promoting Empowerment: Working at the Margins
SWK 4304H	Globalization and Transnationalism: Intersections of Policy and Community Practice Locally and Globally
SWK 4306H	Theoretical Approaches to Defining Social Injustice and Engaging in Social Change
SWK 4422H	Social Housing and Homelessness
SWK 4512H	Research Knowledge for Social Justice

Comparative, International and Development Education

Comparative, International and Development Education: Introduction

Lead Faculty

Ontario Institute for Studies in Education (OISE)

Participating Degree Programs

Adult Education and Community Development—MA, MEd, PhD
Curriculum Studies and Teacher Development—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 programs 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 program will appeal to both Canadian and international students interested in applying a comparative and international lens in their professional work at home or abroad.

Students can take courses in such fields as education, political science, feminist studies, sociology, and geography. The CIDE collaborative specialization is linked with events and programs at the Munk School of Global Affairs 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.
- 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 courses will satisfy this requirement without any additional course load.
- Course requirements are as follows:
    - 0.5 full-course equivalent (FCE) required introduction: CIE 1001H *Introduction to Comparative, International and Development Education*. CIE 1001H 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 master's-level course.
    - 1.0 FCE (equivalent to two half courses) other core CIDE or elective master's-level courses.
- Regular participation in and attendance at the CIDE Seminar Series. Participation at a minimum of five seminars required.

- 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.
- Students **officially registered in the collaborative specialization prior to 2005-06** and who had undertaken CTL 6000H *Introduction to Comparative, International and Development Education* are not required to take CIE 1001H.

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.
- 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 courses will satisfy this requirement without any additional course load.
- Course requirements are as follows:
  - 0.5 full-course equivalent (FCE) required introduction: CIE 1001H *Introduction to Comparative, International and Development Education*, if not already taken, or equivalent if transferring from another university. CIE 1001H 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 CIE 1001H at the master's level must select a 0.5 FCE from the list of core or elective courses, with approval from the CIDE Specialization Director at the time of course selection.
  - 0.5 FCE core CIDE doctoral-level course.
  - 1.0 FCE (equivalent to two half courses) other core CIDE or elective doctoral-level courses.
- 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 required.
- 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.

Core Courses

Comparative Education

CIE 1001H	Introduction to Comparative, International, and Development Education
CIE 1002H	Practicum for Comparative, International, and Development Education
CIE 1006H	Transnational Perspectives on Democracy, Human Rights, and Democratic Education in an Era of Globalization
CIE 6000H	Special Topics in Comparative, International, and Development Education

Curriculum, Teaching and Learning

CTL 1037H	Comparative and Cross-Cultural Perspectives
CTL 1060H	Education and Social Development
CTL 1312H	Democratic Citizenship Education
CTL 1319H	Religious Education: Comparative and International Perspectives
CTL 1330H	Education and Peacebuilding in Conflict Zones: International Comparative Perspectives
CTL 1864H	Methodologies for Comparing Educational Systems
CTL 3015H	Seminar in Second-Language Literacy Education

Leadership, Higher and Adult Education

LHA 1016H	School Program Development and Implementation
LHA 1019H	Diversity and the Ethics of Educational Administration
LHA 1065H	Educational Equity and Excellence in International Comparison
LHA 1114H	Comparative and International Perspectives in Adult Education

LHA 1146H	Women, War, and Learning
LHA 1807H	Strategic and Long-Range Planning for Postsecondary Systems
LHA 1825H	Comparative Education: Theory and Methodology
LHA 1826H	Comparative Higher Education
LHA 3104H	Adult Education and Marxism
LHA 3180H	Global Governance and Educational Change: the Politics of International Cooperation in Education
LHA 3182H	Citizenship Learning and Participatory Democracy
LHA 3810H	International Academic Relations
LHA 5100H	Special Topics in Adult Education and Community Development: Master's Level
LHA 6100H	Special Topics in Adult Education and Community Development: Doctoral Level

Social Justice Education

SJE 1924H	Modernization, Development, and Education in African Contexts
SJE 1927H	Migration and Globalization
SJE 3911H	Cultural Knowledges, Representation, and Colonial Education

Elective Courses

The list of CIDE elective courses may change. Please refer to www.oise.utoronto.ca/cidec for the current list.

Applied Psychology and Human Development

APD 3202H	A Foundation of Program Evaluation in Social Services (RM)
APD 3228H	Mixed Methods Research Design in Social Sciences (RM)

Curriculum, Teaching and Learning

CTL 1031H	Language, Culture, and Identity: Using the Literary Text in Teacher Development
CTL 1033H	Multicultural Perspectives in Teacher Development: Reflective Practicum
CTL 1063H	Pedagogies of Solidarity
CTL 1221H	Education for Human Goals Local and Global: How's Science Education Helping?
CTL 1307H	Identity Construction and Education of Minorities
CTL 1318H	Teaching Conflict and Conflict Resolution
CTL 1320H	Introduction to Aboriginal Land-Centered Education: Historical and Contemporary Perspectives
CTL 1321H	Aboriginal Civilization: Language, Culture, and Identity
CTL 1405H	The Origins of Modern Schooling I: Problems in Education Before the Industrial Revolution
CTL 1406H	The Origins of Modern Schooling: Issues in the Development of the North American Educational System
CTL 1427H	Commemorating Canada, 1800s–1900s
CTL 1430H	Gendered Colonialisms, Imperialisms, and Nationalisms in History
CTL 1448H	Popular Culture and the Social History of Education II
CTL 1816H	Minority Education and Inclusion: Policies in Practices
CTL 1819H	Multicultural Literature in the Schools: Critical Perspectives and Practices
CTL 3000H	Foundations of Bilingual and Multicultural Education
CTL 3007H	Discourse Analysis/Séminaire sur le langage et la communication
CTL 3008H	Critical Pedagogy, Language, and Cultural Diversity
CTL 3011H	Cognitive Sociolinguistic and Sociopolitical Orientations in Bilingual Education Research
CTL 3015H	Seminar in Second-Language Literacy Education
CTL 3018H	Language Planning and Policy/Politique et aménagement linguistique
CTL 3024H	Second Language Teacher Education
CTL 3025H	Educational Sociolinguistics
CTL 3026H	Pragmatics in Language Education
CTL 3031H	Children's Literature Within a Multicultural Context
CTL 3805H	Multilingualism and Pluralism
CTL 5014H	Special Topics in Curriculum: Master's Level
CTL 5300H	Special Topics in Language and Literacies Education Program: Master's Level
CTL 5700H	Special Topics in Teaching
CTL 6300H	Special Topics in Language and Literacies Education Program: Doctoral Level

Leadership, Higher and Adult Education

LHA 1020H	Teachers and Educational Change
LHA 1027H	The Search for Educational Quality and Excellence in a Global Economy
LHA 1029H	Special Applications of the Administrative Process
LHA 1041H	Educational Administration II: Social and Policy Context of Schooling
LHA 1047H	Managing Changes in Classroom Practice
LHA 1102H	Community Development: Innovative Models
LHA 1115H	Learning for the Global Economy
LHA 1142H	Young Adulthood in Crisis: Learning, Transitions, and Activism
LHA 1145H	Participatory Research in the Community and the Workplace
LHA 1147H	Women, Migration, and Work
LHA 1180H	Indigenous Worldviews: Implications for Education
LHA 1181H	Embodied Learning and Alternative Approaches to Community Wellness
LHA 1184H	Aboriginal Knowledge: Implications for Education
LHA 1190H	Community Healing and Peacebuilding
LHA 1196H	Walking Together, Talking Together: The Praxis of Reconciliation
LHA 1803H	Recurring Issues in Postsecondary Education
LHA 1806H	Systems of Higher Education
LHA 1846H	Internationalization of Higher Education in a Comparative Perspective
LHA 2006H	Educational Finance and Economics (exclusion: students who have taken LHA 1017H or LHA 1841H are not eligible to take LHA 2006H)

LHA 3041H	Administrative Theory and Educational Problems II: Doctoral Seminar on Policy Issues in Education
LHA 3045H	Educational Policy and Program Evaluation
LHA 3055H	Democratic Values, Student Engagement, and Democratic Leadership
LHA 3103H	Teaching about Global and Social Issues
LHA 3119H	Global Perspectives on Feminist Education, Community Development, and Community Transformation
LHA 3132H	Special Topics in Women in Development and Community Transformation
LHA 3140H	Decolonization and Transformative Education
LHA 5100H	Special Topics in Adult Education and Community Development: Master's Level
LHA 5800H	Special Topics in Higher Education: Master's Level
LHA 6000H	Special Topics in Educational Leadership and Policy: Doctoral Level

Social Justice Education

SJE 1438H	Democratic Approaches to Pedagogy
SJE 1447H	Technology in Education: Philosophical Issues
SJE 1912H	Foucault and Research in Education and Culture: Discourse, Power, and the Subject
SJE 1921Y	The Principles of Anti-Racism Education
SJE 1922H	Sociology of Race and Ethnicity
SJE 1925H	Indigenous Knowledge and Decolonization: Pedagogical Implications
SJE 1926H	Race, Space and Citizenship: Research Methods
SJE 1956H	Social Relations of Cultural Production in Education
SJE 3910H	Advanced Seminar on Race and Anti- Racism Research Methodology in Education
SJE 3912H	Race and Knowledge Production: Research Methods
SJE 3914H	Anti-Colonial Thought and Pedagogical Challenges
SJE 3915H	Franz Fanon and Education
SJE 3933H	Globalisation and Transnationality: Feminist Perspectives
SJE 5000H	Special Topics in Social Justice Research in Education: Master's Level
SJE 6000H	Special Topics in Social Justice Research in Education: Doctoral Level

Special topics courses: Only the special topics course titles listed on the CIDE website can be counted toward CIDE program requirements in the current year.

Contemporary East and Southeast Asian Studies

Contemporary East and Southeast Asian Studies: Introduction

Lead Faculty

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 receive the notation “Completed Collaborative Specialization in Contemporary East and Southeast Asian Studies” on their transcript and parchment.

Contact and Address

Web: https://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
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 ASI 1000Y *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 (e.g., ASI 1001H *Independent Research in Asia-Pacific Studies*). This 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. The topic must be on contemporary East and Southeast Asian studies.
- 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

ASI 1001H	Independent Research in Contemporary East and Southeast Asian Studies
ASI 1000Y	Issues in Contemporary East and Southeast Asian Studies

Please consult the website for courses offered by participating graduate units.

Developmental Biology

Developmental Biology: Introduction

Lead Faculty

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:

1. promote and foster excellence in developmental biology research in Toronto;
2. 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;
3. provide a single, comprehensive, advanced PhD-level graduate course to complement a number of introductory courses provided by different graduate units;
4. 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 receive the notation “Completed Collaborative Specialization in Developmental Biology” on their transcript and parchment.

Contact and Address

Web: http://sites.utoronto.ca/devbiol
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 JDB 1024Y.
- 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 JDB 1025H and the seminar course JDB 1026Y. 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:

JDB 1024Y[0]	Topics in Developmental Biology
JDB 1025H	Developmental Biology
JDB 1026Y[0]	Student Seminars in Developmental Biology

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

Development Policy and Power

Development Policy and Power: Introduction

Lead Faculty

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

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 development. The understandings include the changing evolution of power dynamics within particular development policy domains over time at the global, national, and local levels of analysis, the role of the power struggles over development policy making and implementation that ensue from these power dynamics, and the ways in which these power struggles pose severe challenges to the institutionalization of policy domains that are equitable and rights oriented.

Students will be immersed in thematic discussions around development policy fields such as: trade and financialization; agriculture and land struggles; environmental protection; health inequity; displacement, immigration and citizenship; aid, taxation, and (illicit) financial flows; race, indigenous, and gender struggles; political economy of knowledge production, governance and the exercise of state power; resistance and popular mobilization; and neoliberal globalization and corporate power 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 and supervision for master's-level research.

Upon successful completion of the master's degree requirements of the participating home graduate unit and the collaborative specialization, students receive the notation "Completed Collaborative Specialization in Development Policy and Power" on their transcript and parchment.

Contact and Address

Web: www.utsc.utoronto.ca/ccds
Email: ccds-cs-ma@utsc.utoronto.ca
Telephone: (416) 208-2898
Fax: (416) 287-7283

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

Anthropology;
Geography;
Political Science (Political Economy of International Development and Political Science Fields);
Public Health (Health Promotion Field);
Social Justice Education (MA; MEd Option II, III); Sociology (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:
    - IDS 1000H (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* SRM 3333H.
    - 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 Option IV)

- 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:
    - IDS 1000H (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* SRM 3333H.
    - 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:
    - IDS 1000H (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* SRM 3333H.
    - 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

MEnvSc (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:
    - IDS 1000H (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* SRM 3333H.
    - 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

MEnvSc (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:
    - IDS 1000H (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* SRM 3333H.
    - 1.5 elective FCEs from the following: EES 1122H, EES 1134H, EES 1135H, EES 3002H.
- Collaborative specialization courses may be taken as electives for the purpose of satisfying home program requirements.

Development Policy and Power: Courses

Core Courses

IDS 1000H	Development Policy and Power
SRM 3333H	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

ANT 6019H	Anthropology of Neoliberalism
ANT 7002H	Medical Anthropology II

Comparative, International and Development Education

CIE 1001H	Introduction to Comparative, International, and Development Education
CIE 1006H	Transnational Perspectives on Democracy, Human Rights, and Democratic Education in an Era of Globalization

Curriculum, Teaching and Learning

CTL 1060H	Education and Social Development

Geography and Planning

GGR 1807H	Special Topics: Geographies of Postcoloniality and Development, Exploring the 'Infrastructure Turn'
JPG 1426H	Natural Resources, Differences, and Conflict
JPG 1429H	Political Ecology of Food and Agriculture
JPG 1502H	Global Urbanism and Cities of the Global South
JPG 1520H	Contested Geographies of Class Formation
JPG 1706H	Violence and Security

Leadership, Higher and Adult Education

LHA 1104H	Social Action Education: Community Development, Social Services, and Social Movements

Physical and Environmental Sciences

EES 1122H	Global Environmental Security and Sustainable Development
EES 1134H	Climate Change Policy
EES 1135H	Environmental Change and Human Health
EES 3002H	Conservation Policy

Political Science

POL 2205H	Topics in International Politics I
POL 2212H	Human Rights Politics and International Relations
POL 2226H	Ethics and International Relations
POL 2322H	Topics in Comparative Politics II
POL 2345H	Politics of Growth in Developing Countries
POL 2351H	Contentious Politics
POL 2361H	Globalization and Indigenous Politics
POL 2391H	Topics in International Politics III
POL 2392H	Topics in International Politics IV
POL 2405H	Topics in Latin American Politics
POL 2418H	Topics in Middle East Politics
POL 2408H	Political Economy of International Development

Public Health Sciences

CHL 5113H	Migration and Health
CHL 5702H	History of International Health
CHL 8001H	Selected Topics in Public Health Issues

Social Justice Education

SJE 1909H	Environmental Sustainability and Social Justice 1
SJE 1954H	Marginality and the Politics of Resistance

Sociology

SOC 6008H	Network Analysis I
SOC 6009H	Ethnicity I
SOC 6101H	Sociological Theory II
SOC 6119H	Gender Relations II
SOC 6210H	Political Sociology III

Diaspora and Transnational Studies

Diaspora and Transnational Studies: Introduction

Lead Faculty

Arts and Science

Participating Degree Programs

Anthropology—MA, MSc, 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
German Literature, Culture and Theory—PhD
History—MA, PhD
History of Art—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 receive the notation “Completed Collaborative Specialization in Diaspora and Transnational Studies” on their transcript and parchment.

Contact and Address

Web: http://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 (DTS 2000H); course theme to be decided each year by the collaborative specialization committee. With the approval of the collaborative specialization director, a student may

substitute a course from their home graduate unit for the DTS topics course.
    - 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 (DTS 2000H); course theme to be decided each year by the collaborative specialization committee. With the approval of the collaborative specialization director, a student may substitute a course from their home department for the DTS topics course.
    - 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

DTS 1000H	Comparative Research Methods in Diaspora and Transnationalism
DTS 2000H	Graduate Topics in Diaspora Studies

Earth Sciences and Physics

Earth Sciences and Physics: Introduction

Lead Faculty

Arts and Science

Participating Degree Programs

Earth Sciences—MSc, PhD
Physics—MSc, PhD

Overview

The graduate programs listed above participate in the Collaborative Specialization in Earth Sciences and Physics. These programs foster graduate education in those areas of study that overlap traditional departmental boundaries.

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 Earth Sciences and Physics” on their transcript and parchment.

Contact and Address

Web: www.es.utoronto.ca/programs/graduate
Email: bailey@geology.utoronto.ca
Telephone: (416) 978-3231
Fax: (416) 978-7606

Collaborative Specialization in Earth Sciences and Physics
c/o R. C. Bailey
University of Toronto
McLennan Physical Laboratories
Room 501, 60 St. George Street
Toronto, Ontario M5S 1A7
Canada

Earth Sciences and Physics: Master's Level

Admission Requirements

- Applicants who wish to enrol in the collaborative specialization must apply to and be admitted to both a graduate degree program in one of the collaborating graduate units, this being either Earth Sciences or Physics, and to the collaborative specialization. Note that MSc students enrolled in option I in Physics or in the course-only option in Earth Sciences are not eligible to enrol in the collaborative specialization.
- Applicants must submit a supplementary brief application form, available from either the home graduate unit or collaborative specialization office, to the collaborative specialization director.
- Normal deadlines apply for application to the School of Graduate Studies. Students who have already been admitted to one of the two home graduate units may apply to the collaborative specialization until October 1.

Specialization Requirements

- Students must meet all respective degree requirements of the School of Graduate Studies, the home graduate unit, and the collaborative specialization.
- The MSc research, thesis, and thesis defence requirements are the same as those of the home unit.
- The MSc will normally require work equivalent to 5.5 full-course equivalents (FCEs) as follows:
    - the core course GLG 1101H (0.5 FCE)
    - two lecture courses in Earth Sciences (1.0 FCE)
    - two lecture courses in Physics (1.0 FCE)
    - a supervised research project in the field of geophysics or the overlap area of physics and earth sciences (3.0 FCEs).
- The supervised research project and associated report or thesis will be completed under the regulations of the home graduate unit.
- Students are expected to attend the regular seminar series of both the Earth Sciences Department and the Geophysics Lab in the Physics Department and to participate in the graduate student seminar programs of both the Earth Sciences Department and the Geophysics Lab.
- Requirements are normally completed within 12 months of entry to the collaborative specialization.

Earth Sciences and Physics: Doctoral Level

Admission Requirements

- Applicants who wish to enrol in the collaborative specialization must apply to and be admitted to both a graduate degree program in one of the collaborating graduate units, this being either Earth Sciences or Physics, and to the collaborative specialization.
- Applicants must submit a supplementary brief application form, available from either the home graduate unit or collaborative specialization office, to the collaborative specialization director.
- Normal deadlines for application to the School of Graduate Studies apply. Students who have already been admitted to one of the two home graduate units may apply to the collaborative specialization until October 1.

Specialization Requirements

- Students must meet all respective degree requirements of the School of Graduate Studies, the home graduate unit, and the collaborative specialization.

- The PhD research, thesis, and thesis defence requirements are the same as those of the home unit.
- The lecture course requirements are the Earth Sciences graduate seminar course in addition to the course requirements of the home unit, and at least 1.0 full-course equivalent (FCE) in the non-home unit.
- The student's research supervisor will normally be a faculty member in the student's home unit, unless an explicit exception is approved by both graduate units.

Editing Medieval Texts

Editing Medieval Texts: Introduction

Lead Faculty

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 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 receive the notation “Completed Collaborative Specialization in Editing Medieval Texts” on their transcript and parchment.

Contact and Address

Web: http://medievaltexts.utoronto.ca
Email: medieval.studies@utoronto.ca
Telephone: (416) 978-4884
Fax: (416) 978-8294

Collaborative Specialization in Editing Medieval Texts
Centre for Medieval Studies
University of Toronto
3rd Floor, 125 Queen's Park
Toronto, Ontario M5S 2C7
Canada

Editing Medieval Texts: Doctoral Level

Admission Requirements

- The Collaborative Specialization in Editing 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

- 1.0 full-course equivalent (FCE): MST 1104H and either MST 1105H or MST 1115H.
- 1.0 FCE chosen from MST 1101H, MST 1107H, MST 1110H, MST 1113H, MST 1384H, ENG 1093H, or another approved course.
- 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.

Editing Medieval Texts: Courses

Courses marked (PR) have prerequisites; further information may be obtained from the Centre of Medieval Studies' website.

English

ENG 1093H	The Medieval Vernacular Book

Italian Studies

ITA 1165H	Introduction to Italian Philology
ITA 1170H	Textual Criticism and the Editing of Early Italian Texts

Medieval Studies

MST 1000Y	Medieval Latin I
MST 1101H	Codicology (PR)
MST 1104H	Latin Palaeography I (PR)
MST 1105H	Latin Palaeography II (PR)
MST 1107H	Latin Textual Criticism (PR)
MST 1110H	Diplomatics and Diplomatic Editing (PR)
MST 1113H	Vernacular Text-Editing: A Collaborative Project
MST 1115H	English Palaeography (PR)
MST 1384H	The Exeter Book of Old English Verse (PR)
MST 1392H	Editing and Appreciating Wulfstan's Prose (PR)
MST 3230H	The Common Law of Medieval Europe

Education, Francophonies and Diversity

Education, Francophonies and Diversity: Introduction

This information is available in French.

Lead Faculty

Ontario Institute for Studies in Education (OISE)

Participating Degree Programs

Curriculum Studies and Teacher Development—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 receive the notation “Completed Collaborative Specialization in Education, Francophonies and Diversity” on their transcript and parchment.

Contact and Address

Web: http://crefo.oise.utoronto.ca
Email: crefo.oise@utoronto.ca
Telephone: (416) 978-1977
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 CRE 1001H *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 (SRM 3333H *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 CRE 1001H *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 (SRM 4444H *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

CRE 1001H	Séminaire d'études : Éducation, francophonies et diversité

Elective Courses

CTL 1000H	Fondements du l'étude des programmes scolaires
CTL 1011H	L'éducation pour l'anti-oppression en milieu scolaire
CTL 1304H	Études culturelles et éducation
CTL 1306H	La recherche qualitative en éducation : bases théoriques et pratiques
CTL 1307H	Identité collective et éducation minoritaire de langue française
CTL 3007H	Séminaire sur le langage et la communication
CTL 3011H	Bilinguisme et éducation
CTL 3018H	Politique et aménagement linguistique
SJE 1900H	Introduction à la sociologie de l'éducation
SJE 1911H	Sociologie de l'éducation inclusive
SJE 1951H	L'école, la participation parentale et la communauté
SJE 3333H	Master's Seminar Series—Compulsory Attendance
SJE 4444H	Doctoral Seminar Series—Compulsory Attendance
JTE 1952H	Langue, culture et éducation

Educational Policy

Educational Policy: Introduction

Lead Faculty

Ontario Institute for Studies in Education (OISE)

Participating Degree Programs

Adult Education and Community Development—MA, MEd, PhD
Curriculum Studies and Teacher Development—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 receive the notation "Completed Collaborative Specialization in Educational Policy" on their transcript and parchment.

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 EDP 3045H *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]) EDP 3045H *Educational Policy and Program Evaluation*, if not already taken.
    - Take the core half course (0.5 FCE) EDP 3145H *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

EDP 3045H	Educational Policy and Program Evaluation

Master's-Level Electives

APD 1211H	Psychological Foundations of Early Development and Education
APD 1241H	Outcomes of Early Education and Child Care
APD 1259H	Family Relationships with Early Childhood Services and Schools
LHA 1016H	School Program Development and Implementation
LHA 1018H	Political Skill in the Education Arena
LHA 1020H	Teachers and Educational Change
LHA 1045H	Language Policy Across the Curriculum
LHA 1065H	Educational Equity and Excellence in International Comparison
LHA 1171H	Foundations of Aboriginal Education in Canada
LHA 1189H	Work and Literacy: Theory, Policy, and Practice
LHA 5800H	Special Topics in Higher Education: Master's Level
SJE 1902H	Introductory Sociological Research Methods in Education
SJE 1903H	Major Concepts and Issues in Social Justice Education
SJE 1912H	Foucault and Research in Education and Culture: Disclosure, Power, and the Subject
SJE 1922H	Sociology of Race and Ethnicity
SJE 1951H	The School and the Community
SJE 1954H	Marginality and the Politics of Resistance
SJE 5000H	Special Topics in Social Justice Research in Education: Master's Level

Doctoral-Level Core Courses

EDP 3045H	Educational Policy and Program Evaluation
EDP 3145H	Advanced Issues in Educational Policy Analysis and Program Evaluation

Doctoral-Level Electives

CTL 3000H	Foundations of Bilingual and Multicultural Education
CTL 3008H	Critical Pedagogy, Language, and Cultural Diversity
CTL 3018H	Language Planning and Policy
JOI 3048H	Intermediate Statistics in Educational Research: Multiple Regression Analysis (RM)
JSA 5147H	Language, Nationalism, and Post-nationalism
LHA 3043H	Survey Research in Educational Leadership and Policy (RM)
LHA 3180H	Global Governance and Educational Change: the Politics of International Cooperation in Education
LHA 6000H	Special Topics in Educational Leadership and Policy: Doctoral Level

SJE 2941H	Bourdieu: Theory of Practice in Social Sciences
SJE 2942H	Education and Work
SJE 6000H	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.

Engineering Education

Engineering Education: Introduction

Lead Faculty

Applied Science and Engineering

Participating Degree Programs

Chemical Engineering and Applied Chemistry—MASc, PhD
Civil Engineering—MASc, PhD
Curriculum Studies and Teacher Development—MA, PhD
Mechanical and Industrial Engineering—MASc, PhD

Overview

The Collaborative Specialization in Engineering Education is an interdisciplinary program 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 receive the notation "Completed Collaborative Specialization in Engineering Education" on their transcript and parchment.

Contact and Address

Web: http://gradstudies.engineering.utoronto.ca/research-degrees/collaborative-program-engineering-education
Email: natalieyl.leung@utoronto.ca
Telephone: (416) 978-5932
Fax: (416) 978-8605

Collaborative Specialization in Engineering Education
Faculty of Applied Science and Engineering
200 College Street
Toronto, Ontario M5S3E5
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:

- Complete a total of 0.5 full-course equivalent (FCE) as follows:
  - the core course APS 1204H *Instructional Design in Engineering Education*.
- Participate continuously in a seminar series (CR/NCR) APS 1205Y *Engineering Education Research Seminar*.
- 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 Program

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:

- Complete a total of 1.0 full-course equivalent (FCE) as follows:
  - the core course APS 1204H *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 (CR/NCR) APS 1206Y 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 APS 1204H; 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.

Engineering Education: Courses

Core Courses

APS 1204H	Instructional Design in Engineering Education
APS 1205Y	Engineering Education Research Seminar—Master's Level
APS 1206Y[0]	Engineering Education Research Seminar—Doctoral Level

[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

CTL 1018H	Introduction to Qualitative Inquiry in Curriculum, Teaching, and Learning
CTL 1028H	Constructive Feedback in Teaching
CTL 1032H	Knowing and Teaching
CTL 1041H	Research Methods in Education
CTL 1042H	Instrument Development in Education
CTL 1047H	Course Self-Assessment
CTL 1206H	Teaching and Learning Science
CTL 1207H	Teaching and Learning about Science: Issues and Strategies in Science, Technology, Society and Environment (STSE) Education
CTL 1211H	Action Research in Science, Mathematics, and Technology Education
CTL 1215H	Teaching and Learning about Science and Technology: Beyond Schools
CTL 1218H	Culture and Cognition in Mathematics, Science, and Technology Education
CTL 1306H	Qualitative Research Methods in Education: Concepts and Methods
CTL 1603H	Introduction to Knowledge Building
CTL 1608H	Constructive Learning and Design of Online Environments
CTL 1842H	Mixed Methods Research in Education: Combining Qualitative and Quantitative Inquiries
CTL 1846H	Assessment for Teaching and Learning

Faculty of Applied Science and Engineering

APS 520H	Technology, Engineering, and Global Development
APS 530H	Appropriate Technology and Design for Global Development
APS 1001H	Project Management
APS 1003H	Professional Education and Instruction
APS 1010H	Cognitive and Psychological Foundations of Effective Leadership
APS 1011H	Concepts and Application of Authentic Leadership
APS 1012H	Managing Business Innovation and Transformational Change
APS 1013H	Applying Innovation in Engineering and Business Operations
APS 1018H	History and Philosophy of Engineering
APS 1501H	Leadership and Leading in Groups and Organizations
JEI 1901H	Technology, Society, and the Environment I
MIE 1402H	Experimental Methods in Human Factors Research
MIE 1403H	Analytical Methods in Human Factors Research
MIE 1413H	Statistical Models in Empirical Research
MIE 1415H	Analysis and Design of Cognitive Work

Faculty of Information

KMD 2001H	Human-Centred Design

Environment and Health

Environment and Health: Introduction

Lead Faculty

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
Geography—MA, MSc, PhD
Medical Science—MSc, 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 Environment and Health (EH) Collaborative Specialization, which is offered through the School of the Environment. Graduate students admitted to a participating graduate degree program in the respective degree-granting unit, also called the home graduate unit, can apply to the Collaborative Specialization and pursue coursework and research in environment and health areas. The School of the Environment currently has graduate students from across the disciplinary spectrum.

The health implications of human impacts on the environment cover a very broad range of issues including air and water quality, contaminated land, and shifts in the distribution of vector-borne diseases (related to changes in land use, climate, and human migration). The EH Collaborative Specialization provides students in the health sciences with a broad environmental perspective while at the same time exposes environmental studies students to the health implications of environmental quality. This program may also be of interest to students who are concerned with sociological and policy approaches to the field of environment and health.

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 Environment and Health” on their transcript and official parchment from the School of Graduate Studies.

Contact and Address

Web: www.environment.utoronto.ca/graduate
Email: grad.director.env@utoronto.ca
or pavel.pripa@utoronto.ca or grad.office.env@utoronto.ca
Telephone: (416) 978-3475
Fax: (416) 978-3884

Environment and Health (EH) Collaborative Specialization
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 EH Collaborative Specialization 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 graduate unit. Information about applying to a home graduate unit can be found on the School of Graduate Studies website and on the respective degree-granting unit's website.
- Prospective students who are planning to enrol in the EH Collaborative Specialization 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 respective home graduate unit. Applicants should contact the home unit to which they intend to apply in order to confirm its application deadline. The School of the Environment also allows potential students to enrol in its EH Collaborative Specialization beyond the deadline set by their home unit, provided that students will be able to complete the EH Collaborative Specialization 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 master's degree program requirements of the student’s respective home graduate unit and are normally counted as electives toward the degree program requirements of the student’s home graduate 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 programs. Specific Collaborative Specialization requirements for each participating degree program are listed on the School of the Environment website under the Environment and Health Collaborative Specialization.

Master's Degree Coursework Option

- Complete the mandatory core course ENV 4001H (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 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 research project must be submitted to the School of the Environment prior to graduation.

Master's Degree Thesis Option

- Complete the mandatory core course ENV 4001H (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.

Environment and Health: Doctoral Level

Admission Requirements

- Students who wish to enrol in the EH Collaborative Specialization 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 graduate unit. Information about applying to a home graduate unit can be found on the School of Graduate Studies website and on the respective degree-granting unit's website.
- Prospective students who are planning to enrol in the EH Collaborative Specialization 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 respective home graduate unit. Applicants should contact the home unit to which they intend to apply in order to confirm its application deadline. The School of the Environment also allows potential students to enrol in its EH Collaborative Specialization beyond the deadline set by their home unit, provided that students will be able to complete the EH Collaborative Specialization 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 graduate unit and 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 programs. Specific Collaborative Specialization requirements for each participating degree program are listed on the School of the Environment website under the Environment and Health Collaborative Specialization.
- Complete the mandatory core course ENV 4001H (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.
- Present a seminar either in the Environment and Health Seminar Series or at the School of the Environment's Research Day.
- Complete a thesis on a theme in environment and health. The thesis committee membership will include a supervisor (from the student's home unit who is a member of the core faculty of the Collaborative Specialization and a member of the graduate faculty in the School of the Environment) and at least one other member from a collaborating unit. 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 graduate unit 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.

Environment and Health: 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. With the exception of the core course, not all courses are offered every year. Graduate students enrolled in the Environment and Health Collaborative Specialization are also allowed to take Environmental Studies Collaborative Specialization elective courses towards completing their Environment and Health requirements. For a current graduate course listing, please refer to the School of the Environment website.

Core Course

ENV 4001H	Graduate Seminars in Environment and Health

Elective Courses

ENV 1703H	Water Resources Management and Policy
ENV 1704H	Environmental Risk Analysis and Management
ENV 4002H	Environment and Health of Vulnerable Populations

Elective Joint Courses With the School of the Environment

JNC 2503H	Environmental Pathways
JNP 1014Y	Interdisciplinary Toxicology
JNP 1016H	Graduate Seminar in Toxicology

Other Electives

CHL 5112H	Community Development in Health
CHL 5126H	Building Community Resilience (online course)
CHL 5413H	Public Health Sanitation
CHL 5416H	Environmental Epidemiology
CHL 5903H	Environmental Health
CHL 5910H	Occupational and Environmental Hygiene I
CHL 5911H	Occupational and Environmental Hygiene II
CHL 5916H	Environmental Health Policy
CHL 7001H	Directed Reading
CHL 8001H	Selected Topics in Public Health Issues
CIV 1399H	Special Studies in Civil Engineering
ESS 1463H	Contaminants in the Environment
JPG 1421H	Health in Urban Environments
LHA 1837H	Environmental Health, Transformative Higher Education, and Policy Change: Education Toward Social and Ecosystem Healing
LHA 1197H	The Pedagogy of Food

Environmental Studies

Environmental Studies: Introduction

Lead Faculty

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
Forest Conservation—MFC
Forestry—MScF, PhD
Geography—MA, MSc, PhD
Global Affairs—MGA
Information—MI, PhD
Management—MBA, 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 programs listed above participate in the Environmental Studies (ES) Collaborative Specialization, which is offered through the School of the Environment. Graduate students admitted to a participating graduate degree program in the respective degree-granting unit, also called the home graduate unit, can apply to the Collaborative Specialization and pursue coursework and research in environmental areas. The School of the Environment currently has graduate students from across the disciplinary spectrum.

The Collaborative Specialization in Environmental Studies provides students who have an interest in the environment with interdisciplinary learning that complements the discipline-based study they are doing in their home units. That learning takes place in both the formal courses offered by the School and in the informal contacts with other students and faculty at seminars and other School events. One of the compelling strengths of the specialization is the interdisciplinary environment in which teaching and research are conducted. For example, the core course ENV1001H typically has students from 10 to 20 academic disciplines and accordingly places an emphasis upon the challenges and rewards of interdisciplinary communication. Students are both able to specialize in an area of environmental research and gain exposure to a wide range of intellectual and methodological disciplines focused on environmental issues.

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 Environmental Studies” on their transcript and official parchment from the School of Graduate Studies.

Contact and Address

Web: www.environment.utoronto.ca/graduate
Email:
grad.director.env@utoronto.ca or pavel.pripa@utoronto.ca or grad.office.env@utoronto.ca
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Environmental Studies Collaborative Specialization
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 Environmental Studies (ES) Collaborative Specialization 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 graduate unit. Information about applying to a home graduate unit can be found on the School of Graduate Studies website and on the respective degree-granting unit's website.
- Prospective students who are planning to enrol in the ES Collaborative Specialization 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 respective home unit. Applicants should contact the home unit to which they intend to apply in order to confirm its application deadline. The School of the Environment also allows potential students to enrol in its ES Collaborative Specialization beyond the deadline set by their home unit, provided that students will be able to complete the ES Collaborative Specialization 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 master's degree program requirements of the student’s respective home graduate unit and are normally counted as electives toward the degree program requirements of the student’s home graduate unit. 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 graduate unit 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 Collaborative Specialization requirements, unless they have an internship component built into their degree program. Specific Collaborative Specialization requirements for each participating degree program are listed on the School of the Environment website under the Environmental Studies Collaborative Specialization.

Master's Degrees Coursework Option

- Complete the mandatory core course ENV 1001H (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 (ENV 4444Y; 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 (ENV 5555Y; 1.0 FCE), unless students have a research paper requirement included in their degree program.

Master's Degrees Thesis Option

- Complete the mandatory core course ENV 1001H (0.5 FCE).
- Complete one elective course (0.5 FCE) from the School's list of approved courses.
- Write a thesis in the home graduate unit on an environment-related topic.

Environmental Studies: Doctoral Level

Admission Requirements

- Students who wish to enrol in the Environmental Studies (ES) Collaborative Specialization 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 graduate unit. Information about applying to a home graduate unit can be found on the School of Graduate Studies website and on the respective degree-granting unit's website.
- Prospective students who are planning to enrol in the ES Collaborative Specialization 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 respective home unit. Applicants should contact the home unit to which they intend to apply in order to confirm its application deadline. The School of the Environment also allows potential students to enrol in its ES Collaborative Specialization beyond the deadline set by their home unit, provided that students will be able to complete the ES Collaborative Specialization 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 graduate unit and 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 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 graduate unit programs. Specific Collaborative Specialization requirements for each participating degree program are listed on the School of the Environment website under the Environmental Studies Collaborative Specialization.

- Complete the mandatory core course ENV 1001H (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.
- Present a seminar on thesis research, either in the School of the Environment's Environment Seminar Series or at the School of the Environment Research Day.
- Complete a thesis on an environmental topic in the home graduate unit. The thesis committee membership will include a supervisor (from the student's home unit who is a member of the core faculty of the Collaborative Specialization and a member of the graduate faculty in the School of the Environment) and at least one other member from a collaborating unit. 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 unit 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 graduate unit and the School of the Environment.

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. With the exception of the core course, not all courses are offered every year. Graduate students enrolled in the Environmental Studies Collaborative Specialization are also allowed to take Environment and Health Collaborative Specialization elective courses toward completing their Environmental Studies requirements. For a current graduate course listing, please refer to the School of the Environment website.

Core Course

ENV 1001H	Environmental Decision Making

Elective Courses

ENV 1002H	Environmental Policy
ENV 1004H	Urban Sustainability and Ecological Technology
ENV 1005H	Business and Environmental Politics
ENV 1008H	Worldviews and Ecology
ENV 1103H	U of T Campus as a Living Lab of Sustainability
ENV 1444H	Capitalist Nature
ENV 1701H	Environmental Law
ENV 1704H	Environmental Risk Analysis and Management
ENV 1707H	Environmental Finance and Sustainable Investing
ENV 2000H, Y	Topics in Environmental Studies
ENV 2002H	Special Topics—Environmental Studies
ENV 4444Y+	Internship
ENV 5555Y+	Research Paper

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

Elective Joint Courses With the School of the Environment

JGE 1413H	Workshop in Environmental Impact Assessment
JGE 1420H	Urban Waste Management: an International Perspective
JGE 1425H	Livelihoods, Poverty, and Environment in the Developing Countries
JGE 1609H	Cities, Industry, and the Environment
JSE 1708H	The Development of Sustainability Thought

Other Elective Courses

Adult Education and Community Development

LHA 1104H	Community Education and Organizing
LHA 1160H	Introduction to Transformative Learning Studies
LHA 1193H	Adult Education for Sustainability
LHA 5100H	Special Topics in Adult Education and Community Development: Master's Level

Anthropology

ANT 6018H	Approaches to Nature and Culture

Chemical Engineering and Applied Chemistry

CHE 2504H	Environmental Pollution Prevention
JNC 2503H	Environmental Pathways

Chemistry

CHM 1401H	Transport and Fate of Chemical Species in the Environment
CHM 1404H	Molecular Analysis of Natural Systems
CHM 1410H	Analytical Environmental Chemistry
CHM 1415H	Atmospheric Chemistry
CHM 1420H	Environmental Chemistry of Soil
CHM 1425H	Modelling the Fate of Organic Chemicals in the Environment

Computer Science

CSC 2720H	Systems Thinking for Global Problems

Forestry

FOR 1270H	Forest Biomaterial Sciences: Fundamentals, Applications, and the Next Frontier
FOR 1288H	Design and Manufacturing of Biomaterials
FOR 1294H	Bioenergy and Biorefinery Technology
FOR 1416H	Forest Fire Danger Rating
FOR 1555H	Wildlife Ecology and Conservation
FOR 1575H	Urban Forest Conservation
JFG 1610H	Sustainable Forest Management and Certification

Geography and Planning

GGR 1216H	Advanced Biogeochemical Processes
GGR 1406H	Energy Supply and Use
GGR 1407H	Efficient Use of Energy
GGR 1408H	Carbon-Free Energy
JGE 1413H	Workshop in Environmental Impact Assessment
JGE 1420H	Urban Waste Management: an International Perspective
JGE 1425H	Livelihoods, Poverty, and Environment in the Developing Countries
JGE 1609H	Cities, Industry, and the Environment
JPG 1402H	Environment and Development
JPG 1403H	Political Ecology of African Environments
JPG 1404H	Issues in Global Warming
JPG 1410H	Institutional and Organizational Ecology
JPG 1415H	Global Environmental Justice and Social Movements
JPG 1419H	Aboriginal/Canadian Relations in Environment and Resource Management
JPG 1518H	Sustainability and Urban Communities
PLA 1601H	Environmental Planning and Policy

Global Affairs

JSE 1708H	The Development of Sustainability Thought

Information

INF 2125H	Information and Culture in a Global Context

Management

RSM 2000H	Multi-Disciplinary Special Topics

Mechanical and Industrial Engineering

MIE 1120H	Current Energy Infrastructure and Resources

Physics

PHY 1498H	Introduction to Atmospheric Physics
PHY 2502H	Climate System Dynamics
PHY 2504H	Advanced Atmospheric Dynamics
PHY 2505H	Atmospheric Radiative Transfer and Remote Sounding
PHY 2506H	Data Assimilation and Retrieval Theory

Political Science

POL 2213H	Global Environmental Politics

Social Justice Education

SJE 1909H	Environmental Sustainability and Social Justice 1
SJE 1919H	Environmental Sustainability and Social Justice 2
SJE 2999H	Special Topics in Sociological Research in Education

Ethnic and Pluralism Studies

Ethnic and Pluralism Studies: Introduction

Lead Faculty

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 and Pluralism Studies at the University of Toronto offers students with interests in ethnic 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 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 receive the notation “Completed Collaborative Specialization in Ethnic and Pluralism Studies” on their transcript and parchment.

Contact and Address

Web: https://munkschool.utoronto.ca/ethnicstudies
Email: ethnic.studies@utoronto.ca
Telephone: (416) 946-0118

Collaborative Specialization in Ethnic and Pluralism Studies
Munk School of Global Affairs
University of Toronto
1 Devonshire Place, room 064S
Toronto, Ontario M5S 3K7
Canada

Ethnic 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 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, 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. The seminar is the place to discuss, compare, and bring together the various approaches to the study of ethnicity. As well, students will be expected to present and discuss their projects.
- When a practicum is required, it will focus on ethnicity.
- It is understood that the major paper or thesis as required by the graduate unit will be in an ethnic studies area.

Ethnic 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 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, 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. The seminar is the place to discuss, compare, and bring together the various approaches to the study of ethnicity. 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 ethnicity.
- When there are no comprehensive examinations, but an examination on the thesis proposal is required, the examination will focus on ethnicity, and in all cases the thesis will be on subject matter dealing with ethnicity.
- The PhD thesis will focus on ethnicity. The supervisor of the thesis committee will be a specialist in the area of ethnicity.

Ethnic and Pluralism Studies: Courses

1. Courses eligible for credit towards meeting specialization requirements in Ethnic and Pluralism Studies are listed below.
2. Students should check with the professor responsible for each course since a prerequisite may be required.
3. Not all courses are offered each year. Please consult the collaborative specialization office or the appropriate graduate unit for course availability.
4. 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

JTH 3000H	Ethnic Relations Theory, Research, and Policy

Anthropology

ANT 5150H	Nation, State, and Language in Francophone Canada
ANT 6033H	Advanced Research Seminar III

Curriculum, Teaching and Learning

CTL 1424H	Religion, Ideology, and Social Movement in the Development of North American Education
CTL 1428H	Immigration and the Development of Canadian Education
CTL 1429H	Ethnicity and the Development of Canadian Education
CTL 3023H	Introduction to Aboriginal Land-Centered Education: Historical and Contemporary Perspectives
CTL 3026H	Pragmatics in Language Education
CTL 3038H	Aboriginal Civilization: Language, Culture, and Identity
CTL 3799H	Special Topics in Language and Literacies Education: Master's Level
CTL 3803H	Ethnographic Research in the Language Disciplines
JTE 1952H	Language Culture and Education/M. Heller

Economics

ECO 2800H	Labour Economics I (prerequisite: an undergraduate course in statistics and a graduate course in applied statistics)

European, Russian, and Eurasian Studies

ERE 1188H	European Identities: Ethnicity, Citizenship, and Culture

Geography

PLA 1503H	Planning and Social Policy
JPG 1505H	The Multicultural City: Diversity, Policy, and Planning
JPG 1506H	Urban and Regional Social Policy: An International Perspective
JPG 1805H	Transnationalism, Diaspora, and Gender

History

HIS 1117H	Canada: Colonialism/Postcolonialism
HIS 1287H	Polish Jews Since the Partitions of Poland (joint graduate/undergraduate)
HIS 1297H	National Survival in Eastern Europe
HIS 1440H	Irish Nationalism in Canada, 1858–1870

Industrial Relations and Human Resources

IRE 1725H	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.

LAW 5022H	Introduction to Islamic Law
LAW 7024H	Citizenship: Inside and Out
LAW 7052Y	Aboriginal Peoples and Canadian Law
LAW 7053H	Intensive Course: Who Belongs? Dilemmas of Citizenship and Immigration
LAW 7060Y	Discrimination Law
LAW 7066H	Canadian Migration Law
LAW 7076H	Refugee Law
LAW 7078H	Law of Forced Migration

Leadership, Higher and Adult Education

LHA 1029H	Special Applications of Educational Leadership and Policy: Master's Level
LHA 1042H	Educational Leadership and Diversity
LHA 3042H	Field Research in Educational Leadership and Policy

Political Science

POL 2026H,Y	Topics in Political Thought I
POL 2102H	Topics in Canadian Politics I
POL 2103H	Topics in Canadian Politics II
POL 2167H	The Politics of Immigration and Multiculturalism in Canada
POL 2207H	Topics in International Politics III
POL 2361Y	Globalization and Indigenous Politics
JRA 2391H	Topics in Comparative Politics
POL 2392H,Y	Topics in Comparative Politics IV

Public Policy

PPG 1005H	The Social Context of Policy-Making (this course often includes content related to ethnicity and immigration; please verify a particular instructor's course with the Ethnic and Pluralism Studies specialization)
PPG 2001H	Legal Analysis of Public Policy

Religion

RLG 2027H	Law and Religion: Critical Conversations
RLG 3236H	Religious Pluralism and the Church
RLG 3512H	Introduction to Islamic Law
RLG 3931H	Topics in North American Religions

Social Justice Education

JSA 5147H	Language, Nationalism, and Post-Nationalism
JTE 1952H	Language, Culture, and Education
SJE 1921Y	The Principles of Anti-Racism Education
SJE 1922H	Sociology of Race and Ethnicity
SJE 1926H	Race, Space, and Citizenship: Research Methods
SJE 1927H	Migration and Globalization
SJE 3933H	Globalisation and Transnationality: Feminist Perspectives

Social Work

SWK 4210H	Promoting Empowerment: Working at the Margins
SWK 4304H	Globalization and Transnationalism: Intersections of Policy and Community Practice Locally and Globally
SWK 4306H	Theoretical Approaches to Defining Social Injustice and Engaging in Social Change
SWK 4617H	Cross Cultural Social Work Practice
SWK 4658H	Social Work with Immigrants and Refugees

Sociology

SOC 6002H	Immigration I
SOC 6003H	Immigration II
SOC 6009H	Ethnicity I
SOC 6109H	Ethnicity II

Women and Gender Studies

WGS 1026H	Special Topics in Race and Feminism

Food Studies

Food Studies: Introduction

Lead Faculty

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 receive the notation "Completed Collaborative Specialization in Food Studies" on their transcript and parchment.

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
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 FST 1000H *Comparative Research Methods in Food Studies* (0.5 full-course equivalent [FCE]).
- Regular and active participation in SRM 3333H *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 FST 1000H *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 SRM 3333H *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 FST 1000H *Comparative Research Methods in Food Studies* (0.5 full-course equivalent [FCE]).
- Successful completion of the practicum INF 2173H (0.5 FCE) in an area related to food studies.
- Successful completion of 1.5 elective FCEs related to food studies.
- Regular and active participation in SRM 3333H *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 FST 1000H *Comparative Research Methods in Food Studies* (0.5 full-course equivalent [FCE]).
- Successful completion of 2.0 FCEs from a combination of:
  - an internship MSL 3000Y (1.0 FCE) related to food studies;
  - a project MSL 4000Y (1.0 FCE) related to food studies;
  - up to 2.0 elective FCEs related to food studies.
- Regular and active participation in SRM 3333H *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 FST 1000H *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 FST 2000H *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 SRD 4444H *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

FST 1000H	Comparative Research Methods in Food Studies
FST 2000H	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.

ANT 4039H	The Origins and Nature of Early Resource Producing Societies
CHL 5652H	Foundations of Practice III
JPG 1429H	The Political Ecology of Food and Agriculture
HIS 1301H	History of Food and Drink
LHA 1197H	The Pedagogy of Food
MST 1370H	From Farm to Market: Social and Economic Transformations in Medieval Europe
NFS 1201H	Public Health Nutrition
NFS 1212H	Regulation of Food Composition, Health Claims, and Safety
NFS 1216H	Selected Topics in Nutrition
NFS 1218H	Recent Advances in Nutritional Sciences
SOC 6519H	Sociology of Food

Genome Biology and Bioinformatics

Genome Biology and Bioinformatics: Introduction

Lead Faculty

Medicine

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 recent elucidation of the genomes of many organisms has led to the appreciation that our knowledge of the function of the proteome 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, structure, and function. The Collaborative Specialization in Genome Biology and Bioinformatics addresses this need for cooperation with a coherent course of study that educates and trains doctoral graduate students across these diverse disciplines. The collaborative specialization serves as a model for a content-driven, interdepartmental unit that responds to the University's need to adapt to cutting-edge scientific developments.

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 receive the notation "Completed Collaborative Specialization in Genome Biology and Bioinformatics" on their transcript and parchment.

Contact and Address

Web: www.gbb.utoronto.ca
Email: TBD
Telephone: (416) 978-0774

Collaborative Specialization in Genome Biology and Bioinformatics
Department of Biochemistry
University of Toronto
Room 5207, Medical Sciences Building
Toronto, Ontario M5S 1A8
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 and any core courses as required by the student's host graduate unit.
- Complete the interdepartmental courses* or alternates (one of JBB 2026H, JBZ 1472H, JTB 2010H*, or EEB 1460H; and one of BME 1458H, CSC 2417H, CSC 2515H, or JTB 2020H*). The interdepartmental courses may be taken in place of some host graduate unit PhD course requirements after a student obtains written permission from the host graduate unit. Courses not included in the course list below will be considered by the collaborative specialization director on a case-by-case basis. Requests, along with the syllabus of the course in question, should be submitted to the director.
- Participate in the seminar series and 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 should take one genome biology/omics course (Group I) and one computational biology/bioinformatics course (Group II) from the following lists. Courses not on these lists will be considered by the collaborative specialization director on a case-by-case basis. Requests, along with the syllabus of the course in question, should be submitted to the director.

Interdepartmental courses mounted by the Genome Biology and Bioinformatics specialization are marked with an asterisk (*).

Group I

EEB 1460H	Molecular Evolution
JBB 2026H	Protein Structure, Folding, and Design
JBZ 1472H	Computational Genomics and Bioinformatics
JTB 2010H*	Proteomics and Functional Genomics

Group II

BME 1458H	Pattern Discovery Methods for Biomedical Engineering
CSC 2417H	Algorithms for Genome Sequence Analysis
CSC 2515H	Introduction to Machine Learning
JTB 2020H*	Applied Bioinformatics

Elective

CSB 1482H	Readings in Genome Biology and Bioinformatics

Global Health

Global Health: Introduction

Lead Faculty

Public Health

Participating Degree Programs

Anthropology—MA, MSc, PhD
Chemical Engineering and Applied Chemistry—MASc, MEng, PhD
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), MScCH, PhD
Rehabilitation Science—MSc, PhD

Overview

The graduate programs listed above participate in the Collaborative Specialization in Global Health. 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 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 receive the notation “Completed Collaborative Specialization in Global Health” on their transcript and parchment.

Contact and Address

Web: www.dlsph.utoronto.ca/global-health/office-of-global-public-health-education-training/collaborative-specialization-in-global-health
Email: ghoffice.dlpsh@utoronto.ca
Telephone: (416) 946-7909

Collaborative Specialization in Global Health
Office of Global Public Health Education and Training
Dalla Lana School of Public Health
University of Toronto
155 College Street
Toronto, Ontario M5T 3M7
Canada

Global Health: 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.

Specialization Requirements

- Meet all the degree requirements of the School of Graduate Studies, the home graduate unit, and the Collaborative Specialization in Global Health.

- Students must successfully complete the global health core course, CHL 5700H *Global Public 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 Courses

CHL 5700H Global Public 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: 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.
- 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.

- Students must successfully complete:
    - The global health research seminar series CHL 5701H (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: CHL 5702H, CHL 5704H, HAD 5768H, NUR 1038H, NUR 1083H, or
        - 1.0 FCE: JCR 1000Y.
    - 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 Committee.

Core Courses

CHL 5701H	Doctoral Seminar, Collaborative Specialization in Global Health

Plus one of the following:

CHL 5702H	History of International Health
CHL 5704H	International Human Rights Law and Global Health
HAD 5768H	International Perspectives on Health Services Management
JCR 1000Y	An Interdisciplinary Approach to Addressing Global Challenges
NUR 1038H	Social Determinants of Health in a Global Context: Theories and Methods
NUR 1083H	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

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 Science—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:

1. Prepare doctoral students to understand, explain, and improve health outcomes associated with technologically mediated health care.
2. 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.
3. 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 receive the notation “Completed Collaborative Specialization in Health Care, Technology, and Place” on their transcript and parchment.

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 (SRD 4444H [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

BME 1456H	Changing Health Care Technologies, People, and Places
JNH 5001H	Health Care Settings, Sites, and Human Well-Being
JNH 5002H	The Body, Health Care, Technology, and Place
NUR 1031H	Technology and Place in Contemporary Health Care Work

Health Services and Policy Research

Health Services and Policy Research: Introduction

Lead Faculty

Public Health

Participating Degree Programs

Exercise Sciences—MSc, PhD
Health Policy, Management and Evaluation—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:

1. understanding the Canadian health-care system;
2. ability to carry out health services research;
3. understanding theories regarding how the health of populations is produced;
4. understanding theories of health and health services knowledge production; and
5. 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 receive the notation “Completed Collaborative Specialization in Health Services and Policy Research” on their transcript and parchment.

Contact and Address

Web: http://ihpme.utoronto.ca/academics/collaborative
Email: whit.berta@utoronto.ca
Telephone: (416) 946-5223
Fax: (416) 978-7350

Collaborative Graduate Specialization in Health Services and Policy Research
c/o Dr. Whitney Berta
Institute of Health Policy, Management and Evaluation, Faculty of Medicine
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:

    - HSR 1000H *Research and/or Policy Practicum*
    - HSR 1002H *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:
    - HSR 1000H *Research and/or Policy Practicum*
    - HSR 1002H *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

HSR 1000H	Research and/or Policy Practicum
HSR 1002H	Health Services Research Seminar (Credit/No Credit)

Electives

HAD 5011H	Canada's Health Care System and Health Policy
HAD 5021H	Canada's Health System and Health Policy Part 2
HAD 5727H	Knowledge Transfer and Exchange
HAD 5728H	Performance Measurement in Health Care: Theory and Application
HAD 5774H	Comparative Health Care Systems
HAD 5780H	Program Planning and Evaluation for Health Services and Policy Research
HAD 7001H	Reading Course
HSR 1001H	Introduction to Qualitative Methods for Health Services and Policy Research

Human Development

Human Development: Introduction

Admissions to the Collaborative Specialization in Human Development have been administratively suspended.

Lead Faculty

Medicine

Participating Degree Programs

Biomedical Engineering—PhD
Developmental Psychology and Education—PhD
Ecology and Evolutionary Biology—PhD
Immunology—PhD
Medical Biophysics—PhD
Medical Science—PhD
Music—PhD
Nutritional Sciences—PhD
Pharmacology—PhD
Physiology—PhD
Psychology—PhD
Public Health Sciences—PhD
Social Work—PhD

Supporting Units

Fraser Mustard Institute for Human Development (FMIHD)
Department of Physiology, Faculty of Medicine

Overview

The Collaborative Specialization in Human Development is transdisciplinary, exploring issues surrounding early human development. The healthy development of our children is at the core of our societal values. Recent evidence shows that early experiences strongly influence the biological pathways surrounding health and the well-being of individuals throughout their lives. This phenomenon involves complex interactions between genes and environments; the Human Development specialization provides students with the skills and resources necessary to start dissecting and untangling those interrelationships in animals and humans.

Keeping in mind the fundamental goal of improving the well-being of children, this collaborative specialization also nurtures translational skills in students with the ultimate goal of bridging the gap between basic research and public policy and practices. In summary, the specialization aims both to facilitate research on the ways that early childhood experiences become embedded in our biology, and to foster translational skills in order to disseminate this research most effectively to educators, policy makers, etc. The successful achievement of both of these aims will be supervised by an eminent group of academics with expertise in all relevant areas.

Upon successful completion of the PhD degree requirements of the participating home graduate unit and the collaborative specialization, students receive the notation “Completed Collaborative Specialization in Human Development" on their transcript and parchment.

Contact and Address

Web: http://ahd.ca/
Email: humandevelopment@utoronto.ca
Telephone: (416) 978-8325

Fraser Mustard Institute for Human Development
Ontario Institute for Studies in Education, University of Toronto
252 Bloor Street West, 7th Floor
Toronto, ON M5S 1V6
Canada

Human Development: 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 submit the following:
  - curriculum vitae (CV);
  - one- to two-page essay explaining the applicant’s interest in the collaborative specialization, and how the proposed work is related to human development or areas that intersect with human development;
  - two letters of recommendation from faculty members commenting on the student’s academic ability, potential as a researcher, and fit within the collaborative specialization topic area.

Specialization Requirements

- Students must meet all respective degree requirements of the School of Graduate Studies, the participating home graduate unit, and the collaborative specialization. The collaborative specialization director and/or 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 program requirements.
- Collaborative specialization students must:
  - complete the required core course, HDV 1000H+ *Pluralistic Human Development* (0.5 full-course equivalent [FCE]);
  - attend at least 75% of the seminars in the FMIHD seminar series in Year 1 and 50% of the seminars thereafter for the duration of the PhD program (SRD 4444H, CR/NCR);
  - attend an annual research day to present their work at least once during registration in the PhD program;

- complete a thesis in the broad area of human development or an area that intersects with human development under the supervision of a core collaborative specialization faculty member.

Human Development: Courses

Core Courses

HDV 1000H+	Pluralistic Human Development
SRD 4444H	Doctoral Seminar Series

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

Indigenous Health

Indigenous Health: Introduction

Lead Faculty

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 involves the graduate programs listed above. Indigenous Health is offered in collaboration with the Faculty of Arts and Sciences' Indigenous Studies program and the Waakebiness-Bryce Institute for Indigenous Health (WBIIH). The main objective is to provide graduate training in Indigenous health research and practice while enhancing mutually beneficial relationships with Indigenous communities and organizations.

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 Aboriginal Health" on their transcript and parchment.

Contact and Address

Web: www.dlsph.utoronto.ca/institutes/wbiih/collaborative-specialization-in-indigenous-health
Email: angela.mashford.pringle@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
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 CHL 5520H *Indigenous Health* (0.5 full-course equivalent [FCE]).
- 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 (Option IV), 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 CHL 5520H *Indigenous Health* during their master's

program are required to take a different course, approved by the CS 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

CHL 5520H Indigenous Health

Jewish Studies

Jewish Studies: Introduction

Lead Faculty

Arts and Science

Participating Degree Programs

Anthropology—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
German Literature, Culture and Theory—PhD
History—MA, PhD
History of Art—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 receive the notation "Completed Collaborative Specialization in Jewish Studies" on their transcript and parchment.

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 CJS 1000H, 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 CJS 2000H, 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

CJS 1000H	Jewish Studies Master's Seminar
CJS 2000H	Jewish Studies Doctoral Seminar

Elective Courses

Anthropology

ANT 5146H#	Colonial and Post-Colonial Discourses

Comparative Literature/Germanic Languages and Literatures

JGC 1750H#	Modernity and its Discontents

English

ENG 5023H	Elegy, the Elegiac, and the Judaic in Twentieth-Century Anglo-American Poetry
ENG 5573H#	Performance and Identity in America
ENG 5578H	Parvenus and Passing in Modern American Literature

Germanic Languages and Literatures

GER 1400H	From Real to Virtual Shtetl: Jewish Culture in Russia, 1917–2010
GER 1530H	Heine and Critical Theory

History

HIS 1267H	Nationalism
HIS 1274H	The Nazis, Occupied Europe, and the Jews
HIS 1276H	The Third Reich and the Holocaust
HIS 1277H	Topics in Jewish History
HIS 1279H	World War II in East Central Europe
HIS 1287H	Polish Jews Since the Partitions of Poland

Medieval Studies

MST 3210H	Medieval Spain
MST 3225H#	Jews and Christians in Medieval and Renaissance Europe

Music

CJS 1010H	Representations of Jews and Jewishness in Opera

Near and Middle Eastern Civilizations

NMC 1100Y#	Introduction to Aramaic
NMC 1101Y#	Early Syriac Texts
NMC 1102Y	Palestinian Aramaic Texts
NMC 1104Y#	Aramaic Epigraphy
NMC 1105Y#	Syriac Historical Texts
NMC 1106Y#	Syriac Exegetical Texts
NMC 1111Y#	Babylonian Aramaic
NMC 1300 Y	Intensive Prerequisite Hebrew
NMC 1304Y	Biblical Narrative
NMC 1306H	Scribes, Manuscripts, and Translations of the Hebrew Bible
NMC 1308H#	Readings in Hebrew Bible
NMC 1309H#	Wisdom in Ancient Israel
NMC 1311Y	Post Biblical Hebrew: Mishnah and Midrashim
NMC 1312H	Midrash Before the Rabbis: The Beginnings of Biblical Interpretation
NMC 1316H	Modern Hebrew Poetry
NMC 1317H	Modern Hebrew Prose
NMC 1318H	Midreshei Halakha: Purity and Cultic Texts
NMC 1324Y	Hebrew Legal Codes
NMC 1326Y	Topics in Midrashic Literature
NMC 1608Y	Life Cycle and Personal Status in Judaism: Reproductive Technology and Jewish Law

NMC 1609H#	Gender-Related Topics in Law and Religion

Philosophy

Various courses, depending upon their content in a given year. Consult the collaborative specialization director.

PHL 2084H#	Seminar in Nineteenth-Century Continental Philosophy
PHL 2089H#	Seminar in Twentieth-Century Continental Philosophy
PHL 2090H	Hermeneutics

Political Science

POL 2021Y#	Comparative Studies in Jewish and Non-Jewish Political Thought

Religion

RLG 2012H	Natural Law in Judaism and Christianity II
RLG 2018H#	Religion and Bioethics
RLG 3103H	Problems in Israelite Religion
RLG 3611H	Hebrew Literature and Religion: Midrash Aggadah
RLG 3641H	Interpretations of Jewish Tradition
RLG 3621H	Modern Jewish Thought
RLG 3622H	Maimonides and His Modern Interpreters
RLG 3623H	The Thought of Leo Strauss: Philosophy, Theology, and Politics
RLG 3624Y#	The Jurisprudence of Maimonides
RLG 3634H#	Worship and Scripture at Qumran
RLG 3641H	Interpretations of Jewish Tradition
RLG 3645Y	The Jewish Legal Tradition
RLG 3647H	Early Rabbinic Judaism
RLG 3661H#	Judaism and Philosophy
RLG 3692H#	Themes in Jewish Studies II
RLG 3655H	Readings in Jewish Literature (200 BCE–200 CE)

Slavic Languages and Literatures

SLA 1207H	The Imaginary Jew

Knowledge Media Design

Knowledge Media Design: Introduction

Lead Faculty

Information

Participating Degree Programs

Architecture—MArch
Computer Science—MSc, PhD
Curriculum Studies and Teacher Development—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 receive the notation “Completed Collaborative Specialization in Knowledge Media Design” on their transcript and parchment.

Contact and Address

Web: http://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
Claude T. Bissell Building, Room 713
140 St. George Street
Toronto, Ontario M5S 3G6
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: MA, MArch, MASc, MEng (Project Option), MHSc, MLA, MMSt, MSc, MUD, and MVS

- Students must meet all the requirements of their home program.
- Students must successfully complete a total of **1.0 full-course equivalent (FCE)**:
  - KMD 1001H (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. Attendance will be monitored and appear on the transcript as KMD 2100Y (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 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 be a component of their thesis or major research project.
- Collaborative specialization courses may be taken as electives for the purpose of satisfying home program requirements.

Specialization Requirements: MEd, MEng (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)**:
  - KMD 1001H (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. Attendance will be monitored and appear on the transcript as KMD 2100Y (Credit/No Credit).
- Students must submit a portfolio that includes completed student 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.
- 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 requirements of their home program.
- Students must successfully complete a total of **2.5 full-course equivalents (FCEs)**:
  - KMD 1001H (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. Attendance will be monitored and appear on the transcript as KMD 2100Y (Credit/No Credit).
- Students must submit a portfolio that includes completed student 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.
- Collaborative specialization courses may be taken as electives for the purpose of satisfying home program requirements.

Specialization Requirements: MI (Thesis Option)

- Students must meet all the requirements of their home program.
- Students must successfully complete a total of **1.0 full-course equivalents (FCE)**:
  - KMD 1001H (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. Attendance will be monitored and appear on the transcript as KMD 2100Y (Credit/No Credit).
- Students must submit a portfolio that includes completed student 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 be a component of their thesis.
- 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)**:
  - KMD 1001H and KMD 1002H 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. Attendance will be monitored and appear on the transcript as KMD 2200Y (Credit/No Credit).
- Students must submit a portfolio that includes completed student 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 their dissertation proposal.

- 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

KMD 1001H	Theory and Methods in Knowledge Media Design (required for master's and PhD students)
KMD 1002H	Applications in Knowledge Media (required for PhD students only; elective for master's students)
KMD 2100Y	Master's Seminar (Credit/No Credit)
KMD 2200Y	Doctoral Seminar (Credit/No Credit)

Electives

KMD 2002H	Technologies for Knowledge Media
KMD 2004H	Knowledge Media, Culture, and Society
KMD 2005H+	Modules in Knowledge Media Design (Credit/No Credit) (prerequisite: KMD 1001H)
KMD 3000H, 3001H	Readings in Knowledge Media Design
KMD 4000H	Knowledge Media Design: Special Topics (prerequisite: KMD 1001H)

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

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

LAN 1021H	Visual Communication 1
LAN 1022H	Visual Communication 2
LAN 1031H	History Theory Criticism 1
LAN 1032H	History Theory Criticism 2
URD 1031H	The History of Toronto Urban Form
URD 1033H	Urban Design Culture and Media
URD 1041H	Introduction to Urban Design Theory
VIS 1010H	Contemporary Art Since 1960
VIS 1020H	Contemporary Art: Theory and Criticism
VIS 1101H	Paradigmatic Exhibitions: History, Theory, Criticism

Computer Science

CSC 2514H	Human-Computer Interaction
CSC 2526H	HCI: Topics in Ubiquitous Computing
CSC 2537H	Information Visualization
CSC 2552H	Topics in Computational Social Science
CSC 2556H	Algorithms for Collective Decision Making
CSC 2720H	Systems Thinking for Global Problems

Curriculum Studies and Teacher Development; Language and Literacies Education

CTL 1926H	Knowledge Media and Learning
CTL 5015H	Special Topics in Curriculum: Master's Level

Drama, Theatre and Performance Studies

DRA 3904H	Topics in Theatre, Drama, and Performance

Information

INF 2122H	Digital Preservation and Curation
INF 2169H	User-Centred Information Systems Development
INF 2170H	Information Architecture
INF 2191H	User Interface Design
INF 2192H	Representing UX
INF 2241H	Critical Making: Information Studies, Social Values, and Physical Computing
INF 2242H	Studying Information and Knowledge Practice
INF 2243H	Critical Histories of Information and Communication Technologies
INF 2300H	Special Topics in Information Studies
INF 2306H	Special Topics in Information Studies
INF 2330H	Information Ethnography
INF 2331H	The Future of the Book

Mechanical and Industrial Engineering

MIE 1401H	Human Factors Engineering
MIE 1402H	Experimental Methods in Human Factors Research

Medical Science

MSC 1002H	Overview of Methods in Practices and Contexts
MSC 1003H	Rhetoric of Science

Museum Studies

MSL 2000H	Curatorial Practice
MSL 2325H	Museums and New Media Practice
MSL 2330H	Interpretation and Meaning-Making in Cultural Institutions
MSL 2500H	Constructing and Curating Digital Heritage

Religion

RLG 2023H	Religion, Media, and Culture

Mediterranean Archaeology

Mediterranean Archaeology: Introduction

Lead Faculty

Arts and Science

Participating Degree Programs

Anthropology—PhD
Art—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 receive the notation "Completed Mediterranean Archaeology Collaborative Specialization" on their transcript.

Contact and Address

Web: www.archaeology.utoronto.ca/macs.html
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)**: MAC 1000Y *Methods in Mediterranean Archaeology*.
- **Fieldwork** (MAC 2000H): 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

MAC 1000Y	Methods in Mediterranean Archaeology
MAC 2000H	Mediterranean Archaeology Fieldwork (Credit/No Credit)

Musculoskeletal Sciences

Musculoskeletal Sciences: Introduction

Lead Faculty

Medicine

Participating Degree Programs

Biomedical Engineering—MASc, PhD
Dentistry—MSc, PhD
Exercise Sciences—MSc, PhD
Health Policy, Management and Evaluation—MSc, PhD
Laboratory Medicine and Pathobiology—MSc, PhD
Medical Science—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 receive the notation “Completed Collaborative Specialization in Musculoskeletal Sciences” on their transcript and parchment.

Contact and Address

Web: http://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: MSC 3001H *Foundations In Musculoskeletal Science*.
- Attend and participate in 12 seminars of the SRM 3335H *Master's Seminar Series* (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.

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 MSC 3001H *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: MSC 3001H *Foundations in Musculoskeletal Science*. Students who have completed MSC 3001H 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 SRD 4445H *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, MSC 3001H. However, the student will be required to attend and participate in 18 seminars of the SRD 4445H *Doctoral Seminar Series* and complete the doctoral thesis in the area under the supervision of a core faculty member.

Musculoskeletal Sciences: Courses

MSC 3001H	Foundations in Musculoskeletal Science
SRM 3335H	Master's Seminar Series
SRD 4445H	Doctoral Seminar Series

Neuroscience

Neuroscience: Introduction

Lead Faculty

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 receive the notation “Completed Collaborative Specialization in Neuroscience” on their transcript and parchment.

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 NEU 1000H *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 JNR 1444Y *Fundamentals of Neuroscience: Cellular and Molecular*, or JNS 1000Y *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 NEU 2000H *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 NEU 2000H *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.

APD 3286H	Developmental Neurobiology
APD 5000H	Special Topics in Applied Psychology and Human Development: Master's Level
CSC 2506H	Probabilistic Learning and Reasoning
CSC 2515H	Introduction to Machine Learning
CSC 2523H	Object Modelling and Recognition
CSC 2545H	Kernel Methods and Support Vector Machines
DEN 1060H	Oral Physiology: Sensory and Neuromuscular Function
JEB 1444H	Neural Engineering
JNP 1017H+	Current Topics in Molecular and Biochemical Toxicology
JNP 1018H+	Molecular and Biochemical Basis of Toxicology
JNR 1444Y	Fundamentals of Neuroscience: Cellular and Molecular—Lectures
JNS 1000Y	Fundamentals of Neuroscience: Systems and Behaviour
JPM 1005Y	Behavioural Pharmacology
JPY 1007Y	Neuropharmacology of Neurotransmitter Receptors
JYG 1555H	Advanced Topics: Cellular and Molecular Neurobiology
LMP 2222H	Neurodegenerative Disease—Mechanisms, Models, and Methods
MSC 1006H	Neuroanatomy
MSC 1081H	Studies in Schizophrenia
MSC 1085H	Molecular Approaches to Mental Health and Addictions
MSC 1086H	Integrative Perspectives in Consciousness and Self-Awareness
MSC 1087H	Neuroimaging Methods Using Magnetic Resonance Imaging
MSC 1088H	Brain Positron Emission Tomography
MSC 6000H	Special Topics Reading Course (requires prior permission of the Neuroscience Program Director)
MUS 2122H	Music and Brain
MUS 7110H	Neurosciences of Music: Scientific Foundations, Clinical Translations
NEU 1000H0	Neuroscience Distinguished Lecture Series (Master's) (Credit/No Credit)
NEU 2000H0	Neuroscience Distinguished Lecture Series (Doctoral) (Credit/No Credit)
PCL 1012H	Cognitive Neuropharmacology
PSL 1024H	Advanced Topics: Neuroendocrinology
PSL 1026H	Advanced Topics: Experimental Cell Physiology
PSL 1047H	Advanced Topics: Somatosensory and Pain Neuroscience
PSL 1050H	Advanced Topics: The Hippocampus from Cell to Behaviour
PSL 1053H	Advanced Topics: Critical Assessment of Ion Channel Function
PSL 1068H	Advanced Topics: Molecular Basis of Behaviour
PSL 1071H	Advanced Topics: Computational Neuroscience
PSL 1075H	Biology In Time
PSL 1441H	Systems Level Neuroplasticity
PSL 1445H	Mechanistic Molecular and Cellular Neuroscience
PSL 1446H	Molecular and Cellular Aspects of Neural Disorders
PSL 1452H	Fundamentals of Ion Channel Function
PSY 1200H	Selected Topics in Psychology
PSY 4706H	Human Brain Neuroanatomy
PSY 5101H	Mechanisms of Behaviour
PSY 5103H	Learning and Plasticity
PSY 5104H	Neuropsychology Advanced Courses
PSY 5110H	Advanced Topics in Behavioural Neuroscience I
PSY 5111H	Advanced Topics in Behavioural Neuroscience II
PSY 5112H	Advanced Topics in Behavioural Neuroscience III
PSY 5120H	Advanced Topics in Animal Behaviour and Motivation I
PSY 5121H	Advanced Topics in Animal Behaviour and Motivation II
PSY 5130H	Advanced Topics in Neuropsychology I
PSY 5131H	Advanced Topics in Neuropsychology II
PSY 5132H	Advanced Topics in Neuropsychology III
PSY 5201H	Audition
PSY 5202H	Vision
PSY 5203H	Higher Cognition
PSY 5204H	Attention
PSY 5205H	Memory
PSY 5210H	Advanced Topics in Perception I
PSY 5211H	Advanced Topics in Perception II

PSY 5212H	Advanced Topics in Perception III
PSY 5220H	Advanced Topics in Cognition I
PSY 5221H	Advanced Topics in Cognition II
PSY 5222H	Advanced Topics in Cognition III
PSY 5310H	Advanced Topics in Development I
PSY 5311H	Advanced Topics in Development II
REH 1510H	Disordered Restorative Motor Control
REH 5100H	Introduction to Cognitive Rehabilitation Neuroscience I: Basic Science to Clinical Applications
REH 5102H	Cognitive Rehabilitation Neuroscience II

[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.*

Other Courses

Courses not specifically in neuroscience which do not fulfil the requirements as neuroscience courses but might be useful for neuroscience students.

JBL 1507H	Biochemistry of Inherited Disease
JDB 1025H	Developmental Biology
PHM 1122H	Fundamentals of Drug Discovery
PSY 5102H	Motivational Processes
SLP 1522Y	Speech Physiology and Acoustics
SLP 1533Y	Aphasia
SLP 3001H	Theoretical Foundations of Communication Sciences

Optics

Optics: Introduction

Lead Faculty

Arts and Science

Participating Degree Programs

Chemistry—MSc
Electrical and Computer Engineering—MASc
Materials Science and Engineering—MASc
Physics—MSc

Overview

The graduate programs listed above participate in the Collaborative Master's Specialization in Optics. The collaborative specialization focuses on the study of optics, photonics, and the interaction of light and matter. Optics is a truly multidisciplinary field, crossing the boundaries between pure and applied science. The collaborative specialization allows students to explore these multidisciplinary aspects.

Students who wish to participate in the collaborative specialization must be admitted to both a master's program in one of the collaborating graduate units mentioned above and the collaborative specialization. Submit an application form, available from the collaborative specialization office (the Institute for Optical Sciences); normal deadlines for application to the School of Graduate Studies apply. Students who have already been admitted to a master's program in a home graduate unit may apply to the collaborative specialization within the first month of their program.

Upon successful completion of the master's degree requirements of the participating home graduate unit and the collaborative specialization, students receive the notation “Completed Collaborative Specialization in Optics” on their transcript and parchment.

Contact and Address

Web: www.optics.utoronto.ca
Email: eistrate@optics.utoronto.ca
Telephone: (416) 978-1804
Fax: (416) 978-3936

Collaborative Master's Specialization in Optics
Institute for Optical Sciences
University of Toronto
Suite 331, 60 St. George Street
Toronto, Ontario M5S 1A7
Canada

Optics: Master's Level

Admission Requirements

- Admission to an MSc or MASc degree program in one of the four collaborating units.
- Commitment to make optics or photonics the main focus of study in that program, as stated in the application form for the collaborative specialization.

Specialization Requirements

- Meet all respective degree requirements of the School of Graduate Studies and the home graduate unit.
- Successful completion of the collaborative specialization core course IOS 1500H.
- If a thesis is required by the home graduate unit, its topic must fall in the broad area of optics. A member of the collaborative specialization's faculty must be part of the examination committee.

Optics: Courses

IOS 1500H	Selected Topics in Optics

See also full course listings in the Departments of:
Chemistry
Electrical and Computer Engineering
Materials Science and Engineering
Physics

Psychology and Engineering

Psychology and Engineering: Introduction

Lead Faculty

Applied Science and Engineering

Participating Degree Programs

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 Department of Mechanical and Industrial 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 receive the notation "Completed Collaborative Specialization in Psychology and Engineering" on their transcript and parchment.

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: 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

- APS 1305H *PsychEng Seminar Series*—Master's Level (CR/NCR) worth 0.0 full-course equivalent [FCE].
- Two elective half courses (1.0 FCE). One of the courses must be from the other participating graduate unit.
- 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: 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 APS 1308Y *PsychEng Seminar Series—PhD Level* (CR/NCR) worth 0.0 full-course equivalent [FCE].
- Two PsychEng elective half courses (1.0 FCE). One of the courses must be from the other participating graduate unit.
- 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: Courses

Core Course

APS 1305H	PsychEng Seminar Series—Master's Level (Credit/No Credit)
APS 1308Y[0]	PsychEng Seminar Series—Doctoral Level (Credit/No Credit)

Elective Courses

Mechanical and Industrial Engineering

MIE 1070H	Intelligent Robots for Society
MIE 1402H	Experimental Methods in Human Factors Research
MIE 1403H	Analytical Methods in Human Factors Research
MIE 1412H	Human-Automation Interaction
MIE 1415H	Analysis and Design of Cognitive Work
MIE 1505H	Enterprise Modelling
MIE 1510H	Formal Techniques in Ontology Engineering
MIE 1720H	Creativity in Conceptual Design

Psychology

PSY 1000H	Directed Studies
Department of Psychology courses offered in the 5000 series; contact the department for exclusions.	

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

Public Health Policy

Public Health Policy: Introduction

Lead Faculty

Public Health

Participating Degree Programs

Exercise Sciences—MSc, PhD
Health Administration—MHSc
Health Policy, Management and Evaluation—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 receive the notation “Completed Collaborative Specialization in Public Health Policy" on their transcript and parchment.

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: CHL 5300H *Public Health Policy*, CHL 5308H *Tools and Approaches for Public Health Policy Analysis and Evaluation*, HAD 5011H *Canada's Health Care System*, or PPG 1001H *The Policy Process*.
    - Complete the *Master's Seminar Series* course, SRM 3333H.

- 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: CHL 5300H *Public Health Policy*, CHL 5308H *Tools and Approaches for Public Health Policy Analysis and Evaluation*, HAD 5011H *Canada's Health Care System*, or PPG 1001H *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 CHL 5309H.
- 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

CHL 5300H	Public Health Policy
CHL 5308H	Tools and Approaches for Public Health Policy Analysis and Evaluation
CHL 5309H	Advanced Analysis of Topical Issues in Public Health Policy
HAD 5011H	Canada's Health Care System and Health Policy (Doctoral Stream)
PPG 1001H	The Policy Process
SRM 3333H	Public Health Policy Seminar Series (Master's Level)

Resuscitation Sciences

Resuscitation Sciences: Introduction

Lead Faculty

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 receive the notation "Completed Collaborative Specialization in Resuscitation Sciences" on their transcript and parchment.

Contact and Address

Web: http://stmichaelshospitalresearch.ca/research-programs/rescu/cprs/
Email: cprsinfo@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 MSC 4001H *Foundations in Resuscitation Science Research*
    - attend at least 75% of the SRM 3333H *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 MSC 4001H core course.

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 MSC 4001H *Foundations in Resuscitation Science Research* (doctoral students who have already taken this course as part of their master's program will be exempted)
    - take MSC 4002H *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 SRD 4444H *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 MSC 4001H core course.

Resuscitation Sciences: Courses

MSC 4001H	Foundations in Resuscitation Science Research
MSC 4002H	Advanced Topics in Resuscitation Science Research (PhD students only)
SRM 3333H	Resuscitation Sciences Graduate Seminar Series (master's level)
SRD 4444H	Resuscitation Sciences Graduate Seminar Series (doctoral level)

Sexual Diversity Studies

Sexual Diversity Studies: Introduction

Lead Faculty

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 Studies and Teacher Development—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
Exercise Sciences—MSc, 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
History of Art—MA, PhD
Information—MI, PhD
Italian Studies—MA, 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
Social Justice Education—MA, MEd, EdD, PhD
Social Work—MSW, PhD
Sociology—MA, PhD
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 receive the notation “Completed Collaborative Specialization in Sexual Diversity Studies” on their transcript and parchment.

Contact and Address

Web: http://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 (SDS 1000H)
    - 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 (SDS 1000H)
  - 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 SDS 1000H. 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

SDS 1000H	Theoretical and Methodological Issues in Sexual Diversity Studies
SDS 1002H	Comparative Disciplinary Approaches: A Research Seminar (prerequisite: SDS 1000H or permission of the instructor)

South Asian Studies

South Asian Studies: Introduction

Lead Faculty

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 receive the notation “Completed Collaborative Specialization in South Asian Studies” on their transcript and parchment.

Contact and Address

Web: https://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
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

SAS 2004H	Issues in South Asian Studies

Women and Gender Studies

Women and Gender Studies: Introduction

Lead Faculty

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 Studies and Teacher Development—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
Exercise Sciences—MSc, PhD
French Language and Literature—MA, PhD
Geography—MA, MSc, PhD
Germanic Languages and Literatures—MA
German 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
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 receive the notation “Completed Collaborative Specialization in Women and Gender Studies” on their transcript and parchment.

Contact and Address

Web: www.wgsi.utoronto.ca/graduate/collaborative-program
Email: grad.womenstudies@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: Courses

Core Courses

WGS 5000H	Feminist Theories, Histories, Movements I
WGS 5001H	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

Public Health

Participating Degree Programs

Anthropology—MA, MSc, PhD
Dentistry—MSc, PhD
English—MA, PhD
Exercise Sciences—MSc, PhD
Health Policy, Management and Evaluation—MSc, PhD
Immunology—MSc, PhD
Information—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 receive the notation “Completed Collaborative Specialization in Women's Health” on their transcript and parchment.

Contact and Address

Web: www.dlsph.utoronto.ca/programs/collaborative-specialization-in-womens-health
Email: CGPWH.admin@wchospital.ca
Telephone: (416) 351-3732 ext. 2331
Fax: (416) 351-3746

Janice Du Mont, Director
Collaborative Graduate Specialization in Women's Health
c/o Women's College Research Institute, Women's College Hospital
76 Grenville Street, 6th floor
Toronto, Ontario M5S 1B1
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 one to five paragraphs) 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 (CHL 5109H *Gender and Health*).
- Participate in **at least six of the eight** monthly sessions in the **Student Research Seminar Series** and in the Annual Women's College Research Institute Graduate Student Research Day. 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 one to five paragraphs) 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 (CHL 5109H *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 of the eight** monthly sessions in the **Student Research Seminar Series** and present their completed or in-progress research at one of the seminars. 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 student's primary mentor (graduate supervisor from their home unit) and the mentor, who both sign study/research plan.
- Complete a dissertation on a topic relevant to women's health.

Women's Health: Courses

Core Course

CHL 5109H	Gender and Health

Workplace Learning and Social Change

Workplace Learning and Social Change: Introduction

Lead Faculty

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:

1. to situate workplace learning within broader social trends such as globalization, neo-liberalism, and organizational restructuring;
2. to allow exploration of the connections between learning as an individual phenomenon and learning as a social/organizational and public policy phenomenon; and
3. 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 receive the notation “Completed Collaborative Specialization in Workplace Learning and Social Change” on their transcript and parchment.

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) (WPL 1131H *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) (WPL 3931H *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) (WPL 3931H *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

WPL 1131H	Introduction to Workplace Learning and Social Change

Master's-Level Electives

The list of electives is subject to change.

IRE 1362H	Organizational Behaviour
IRE 1611H	Sociology of Industrial Relations
IRE 1615H	Labour and Globalization
IRE 1620H	Labour Relations Problems in Historical Perspective
LHA 1108H	Adult Learning
LHA 1113H	Gender and Race at Work
LHA 1115H	Learning for the Global Economy
LHA 1117H	Consulting Skills for Adult Educators
LHA 1119H	Creating a Learning Organization
LHA 1141H	Organizations and the Adult Educator: Historical and Theoretical Perspectives on Organization Development
LHA 1145H	Participatory Research in the Community and the Workplace
LHA 1146H	Women, War, and Learning
LHA 1147H	Women, Migration, and Work
LHA 1148H	Introduction to Workplace, Organizational, and Economic Democracy
LHA 1150H	Critical Perspectives on Organizational Change
LHA 1156H	Power and Difference in Teams and Small Groups
LHA 1182H	Nonprofits, Co-operatives, and the Social Economy: An Overview
LHA 1185H	Leadership in Organizations: Changing Perspectives
LHA 1186H	Organizational Change in the Nonprofit and Public Sectors
LHA 1195H	Technology @ Work: The Internet in Workplace Learning and Change
LHA 5100H	Special Topics in Adult Education and Community Development (Master's Level)
LHA 5801H	Special Topics in Higher Education: Master's Level
SJE 2942H	Education and Work
SJE 5000H	Special Topics in Social Justice Research in Education: Master's Level
WGS 486 / WGS 1020H	Special Topics in Feminist Studies
WPL 2944H	Sociology of Learning and Social Movements

Doctoral-Level Core Course

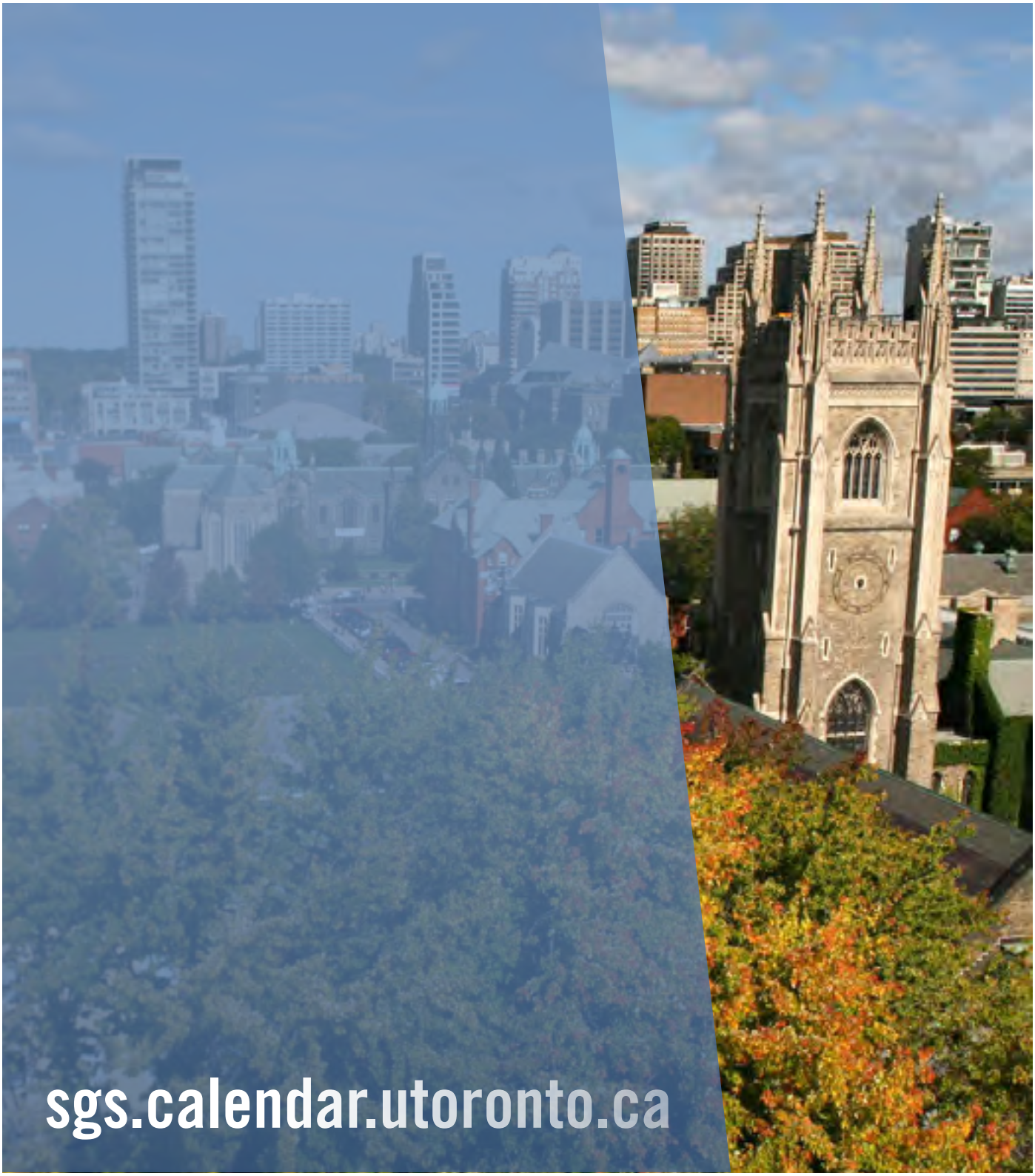
WPL 3931H	Advanced Studies in Workplace Learning and Social Change

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:

LHA 1812H	Education and the Professions
LHA 3183H	Introduction to Institutional Ethnography
LHA 6100H	Special Topics in Adult Education and Community Development (Doctoral Level)
WPL 2944H	Sociology of Learning and Social Movements

Special topics courses: Only the special topics course titles listed on the WLSC website can be counted toward WLSC program requirements in the current year.



sgs.calendar.utoronto.ca

UNIVERSITY OF TORONTO
SCHOOL OF GRADUATE STUDIES