UNIVERSITY OF TORONTO
SCHOOL OF GRADUATE STUDIES

calendar

2012
2013

also online

sgs.utoronto.ca/calendar

University of Toronto

School of Graduate Studies 2012/2013 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
www.sgs.utoronto.ca

Student Services at SGS
Telephone: (416) 978-6614
Fax: (416) 978-4367
E-mail:
graduate.information@utoronto.ca
graduate.awards@utoronto.ca

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

Graduate Studies at the University of Toronto

Established in 1827 by royal charter, the University of Toronto is the largest research-intensive university in Canada, located in one of the world's great urban regions. Operating on three campuses with more than 80,000 students, including 15,000 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 more than 150 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

The mission of the School of Graduate Studies is to promote University-wide excellence in graduate education and research and to ensure consistency and high standards across the divisions. Sharing responsibility for graduate studies with graduate units and divisions, and operating through a system of collegial governance, consultation, and decanal leadership, SGS defines and administers University-wide regulations for graduate education.

SGS also provides expertise, advice, and information; reviews the design and delivery of programs; develops performance standards; supports diversity, equity, fairness, and ethical conduct in graduate education; organizes services and financial assistance to graduate students; encourages a close and positive relationship between research and graduate instruction; and represents the cause of graduate education at the University of Toronto in the wider academic and general community.

Deans and Directors of the School of Graduate Studies

Dean of Graduate Studies and Vice-Provost, Graduate Education
B. Corman, AB, AM, PhD

Vice-Dean, Programs
E. M. Smyth, BA, BEd, MA, EdD

Vice-Dean, Students
L. F. De Nil, MSc, PhD

Director of Quality Assurance and Governance
J. E. Alderdice, BDes

Director of Student Services
H. A. Kelly, BA, MA, EdD

Director of Information Systems
(L.) F. G. Altena

Director of Support Services
C. H. Kim, BComm

Dean's Welcome

I am delighted to welcome you to the many graduate communities of the University of Toronto. We are proud of our accomplishments as a centre for graduate education that integrates advanced scholarship and research into every degree program. Please use this publication to learn more about the excellent programs we offer.

Here at the largest graduate school in Canada, approximately 15,000 graduate students are studying in an extraordinary range of scholarly fields. The enormous range of our programs makes it highly likely that we offer the focus and expertise you need to fulfil your aspirations for graduate study.

We welcome graduate applicants from around the world, inviting those who are successful to participate in advanced study that links research and scholarship with graduate training. We offer you a scholarly community of superb quality, one of the best academic library systems in the world, and a lively intellectual environment within a remarkably cosmopolitan city.

You can investigate graduate studies at the University of Toronto more closely through the website, www.gradschool.utoronto.ca. That site is a gateway to the fields of study that you may choose.

With my best wishes,

Brian Corman
Dean of Graduate Studies and Vice-Provost, Graduate Education

About this Calendar

Effective Academic Period

The *2012/2013 School of Graduate Studies Calendar* is effective for the academic period September 1, 2012 to August 31, 2013. References in the calendar to "current academic year" refer to this period.

Available Calendar Formats

The *SGS Calendar* is edited annually, and is available in both online and printed editions. Every effort has been made to ensure the compatibility of both versions. In the case of any discrepancy, the online version shall apply. Any post-publication corrections and/or updates to the print edition of this calendar will be posted as amendments on www.sgs.utoronto.ca/calendar/2012-2013. 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* is posted on the SGS website in August. Published copies are printed by August and may be purchased using the online order form on the SGS website or in person from the SGS office at 63 St. George Street.

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 four 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, accessible online.

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

Fees and Financial Support

Fees schedules, types of fees, and fees for graduate student categories are explained.

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, or institute.

The section is divided into three categories:

1. degree and diploma programs by graduate unit
2. collaborative programs
3. joint programs

Each graduate unit entry contains valuable information about the programs it offers, together with admission and program requirements and course lists. 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 additional details about a graduate program, visit the unit's website and/or consult the graduate unit's handbook.

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, 2012, to August 31, 2013. 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 must 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. Each student must become familiar with the policies, and the University will assume that he or she has 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 Degree and Diploma Programs by Graduate Unit) of the academic year in which the student first registered in the graduate program.

All University policies can be found at www.governingcouncil.utoronto.ca/policies.htm. Those of particular importance to students are:

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

For more information about students' rights and responsibilities, visit http://life.utoronto.ca/get-help/rights-responsibilities.htm.

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 a student wishes to tape-record, photograph, video-record, or otherwise reproduce lecture presentations, course notes, or other similar materials provided by instructors, he or she 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 your privacy. Personal information that you provide 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 admission, registration, academic programs, University-related student activities, activities of student societies, financial assistance and awards, graduation and University advancement, and for the purpose of statistical reporting to government agencies. At all times it will be protected in accordance with the Freedom of Information and Protection of Privacy Act. If you have questions, please refer to www.utoronto.ca/privacy or contact the University Freedom of Information and Protection of Privacy Coordinator at (416) 946-7303, 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 calendar.

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Sessional Dates 2012/2013

Fall Session 2012

M August 6	Civic Holiday (University closed)
M August 13	Registration for fall session begins
August	Undergraduate course enrolment begins[1]
F August 31	Last date for payment of tuition fees to meet registration deadline
M September 3	Labour Day (University closed)
M September 10	Most formal graduate courses and seminars begin in the week of September 10[2]
F September 14	Coursework must be completed and grades submitted for summer session courses and extended courses[4]
F September 14	Registration for fall session ends; after this date, a late registration fee will be assessed
M September 17	Final date to submit final doctoral theses to SGS to avoid fee charges for 2012/2013[3]
M September 24	Final date to add full-year and fall session courses
W September 26	Summer session grades available for viewing by students on the Student Web Service
F October 5	Final date to submit final doctoral thesis for fall convocation
F October 5	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[5]
M October 8	Thanksgiving Day (University closed)
M October 29	Final date to drop fall session full or half courses without academic penalty
November	Fall convocation information and dates are posted at www.convocation.utoronto.ca
M December 24	University closed for winter break from Monday, December 24 to Friday, January 4 inclusive (for last day of classes before winter break, consult graduate units concerned)

Winter Session 2013

M January 7	University re-opens
M January 7	Most formal graduate courses and seminars begin in the week of January 7[2]
F January 11	Final date for registration of students beginning program in winter session; after this date, a late registration fee will be assessed
F January 11	Coursework must be completed and grades submitted for fall session courses[4]
T January 15	Final date to submit doctoral theses without fee payment for winter session
W January 16	Fall session grades available for viewing by students on the Student Web Service
M January 21	Final date to add winter session courses[4]
F January 25	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[5]
F January 25	Final date for all students to request that their degrees be conferred *in absentia* in March
F January 25	Fall dual registrants must be recommended for the master's degree by this date to maintain their PhD registration[5]
M February 18	Family Day (University closed)
M February 25	Final date to drop full-year and winter session courses without academic penalty[6]

March	March Graduation *In Absentia* Information is posted at www.convocation.utoronto.ca
F March 29	Good Friday (University closed)
April	For last day of winter classes, consult unit concerned

Summer Session 2013

F April 19	For students obtaining degrees at June convocation, coursework must be completed and grades submitted for full-year and winter session courses
F April 19	Final date for receipt of degree recommendations and submission of any required theses for master's degrees for June convocation[5]
F April 19	Final date for submission of final doctoral thesis for students whose degrees are to be conferred at the June convocation[3]
F April 19	Final date for degree recommendations of winter dual registrants for the master's degree to maintain their PhD registration[5]
May	For first day of summer classes, consult graduate unit concerned
F May 3	Final date for registration for May session
F May 10	Final date to enrol in May–June or May–August session courses
F May 10	Coursework must be completed and grades submitted for full-year and winter session courses (except for extended courses)[4]
W May 15	Winter session grades available for viewing by students on the Student Web Service
M May 20	Victoria Day (University closed)
F May 31	Final date to drop May–June F section courses without academic penalty[6]
June	June convocation information and dates are posted at www.convocation.utoronto.ca
F June 21	Final date to drop May–August session Y section courses without academic penalty[6]
F June 21	Final date to enrol in July coursework-only programs
F June 28	Final date to enrol in July–August courses[7]
M July 1	Canada Day holiday (University closed)
F July 19	Final date to drop July–August S section courses without academic penalty[6]
F July 19	Coursework must be completed and grades submitted for May–June F section courses[4]
W July 24	Grades for May–June F section courses available for viewing by students on the Student Web Service

(1) 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.

(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 policy states that the first day of classes in the fall session in all teaching divisions should not be scheduled on the first and second days of Rosh Hashanah (from 1½ hours before sunset on Wednesday, September 16, 2012 to about 1½ hours after sunset on Friday, September 18, 2012) or on Yom Kippur (from about 1½ hours before sunset on Tuesday, September 25, 2012 to about 1½ hours after sunset on Wednesday, September 26, 2012).

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

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

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

(6) 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.

(7) Students starting their program in the summer and OISE students are required to register by this date by paying the minimum tuition amount stated in their invoice.

Divisional Structure

Graduate units (departments, centres, and institutes) are allocated into four divisions. Collaborative (interdisciplinary) programs are designated as CP; joint programs are designated as JP.

Division I: Humanities

Ancient and Medieval Philosophy (CP)
Ancient Greek and Roman History (CP)
Art
Book History and Print Culture (CP)
Cinema Studies
Classics
Comparative Literature
Diaspora and Transnational Studies (CP)
Drama, Theatre and Performance Studies
East Asian Studies
Editing Medieval Texts (CP)
English
French Language and Literature
Germanic Languages and Literatures
History
History and Philosophy of Science and
    Technology
Jewish Studies (CP)
Italian Studies
Linguistics
Medieval Studies
Museum Studies
Music
Near and Middle Eastern Civilizations
Philosophy
Religion
Slavic Languages and Literatures
South Asian Studies (CP)
Spanish
Women and Gender Studies
Women and Gender Studies (CP)

Division II: Social Sciences

Anthropology
Applied Psychology and Human Development
Architecture, Landscape, and Design
Asia-Pacific Studies (CP)
Community Development (CP)
Comparative, International and Development
    Education (CP)
Criminology and Sociolegal Studies
Curriculum, Teaching and Learning
Dynamics of Global Change (CP)
Economics
Educational Policy (CP)
Ethnic and Pluralism Studies (CP)
European, Russian, and Eurasian Studies
Financial Economics (JP)
Geography
Global Affairs
Humanities, Social Sciences and Social Justice
    Education
Industrial Relations and Human Resources
Information
Law
Leadership, Higher and Adult Education
Management
Management and Economics (CP)
Political Science
Professional Graduate Programs Centre
    (Mississauga)
Public Policy and Governance
Sexual Diversity Studies (CP)
Social Work
Sociology
Workplace Learning and Social Change (CP)

Division III: Physical Sciences

Aerospace Science and Engineering
Astronomy and Astrophysics
Astrophysics (CP)
Biomedical Engineering
Biomedical Engineering (CP)
Chemical Engineering and Applied Chemistry
Chemistry
Civil Engineering
Computer Science
Design and Manufacturing (JP)
Earth Sciences
Earth Sciences and Physics (CP)
Electrical and Computer Engineering
Environment and Health (CP)
Environmental Engineering (CP)
Environmental Studies (CP)
Knowledge Media Design (CP)
Materials Science and Engineering
Mathematical Finance
Mathematics
Mechanical and Industrial Engineering
Optics (CP)
Physical and Environmental Sciences
Physics
Statistics
Theoretical Astrophysics

Division IV: Life Sciences

Aboriginal Health (CP)
Addiction Studies (CP)
Aging, Palliative and Supportive Care Across
    the Life Course (CP)
Biochemistry
Bioethics (CP)
Biomedical Toxicology (CP)
Biomolecular Structure (CP)
Cardiovascular Sciences (CP)
Cell and Systems Biology
Dentistry
Developmental Biology (CP)
Doctor of Medicine/Doctor of Philosophy
Ecology and Evolutionary Biology
Exercise Sciences
Forestry
Genome Biology and Bioinformatics (CP)
Global Health (CP)
Health Policy, Management and Evaluation
Health Services and Policy Research (CP)
Immunology
Laboratory Medicine and Pathobiology
Medical Biophysics
Medical Science
Molecular Genetics
Neuroscience (CP)
Nursing Science
Nutritional Sciences
Occupational Science and Occupational
    Therapy
Pharmaceutical Sciences
Pharmacology and Toxicology
Physical Therapy
Physiology
Psychology
Public Health Sciences
Rehabilitation Science
Resuscitation Sciences (CP)
Speech-Language Pathology
Women's Health (CP)

Graduate Programs at a Glance

This graduate programs chart lists degree, combined, collaborative, and diploma programs. All programs are offered full-time unless otherwise noted.

Degree and Combined Degree Programs

Graduate Unit	Program	Degrees
Aerospace Studies	Aerospace Science and Engineering	MASc, MEng[p], PhD
Anthropology	Anthropology	MA[p], MSc[p], PhD
Applied Psychology and Human Development	Child Study and Education	MA
	Counselling Psychology	MA[p], MEd[p], EdD[p], PhD[flex]
	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
Art	History of Art	MA[p], PhD
	Visual Studies	MVS
Astronomy and Astrophysics	Astronomy and Astrophysics	MSc, PhD
Biochemistry	Biochemistry	MSc, PhD
Biomedical Engineering	Biomedical Engineering	MASc, 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[p], PhD
Chemistry	Chemistry	MSc, PhD
Cinema Studies	Cinema Studies	MA
Civil Engineering	Civil Engineering	MASc, MEng[p], PhD

Note: All programs are offered full-time, unless otherwise indicated
p   Part-time option available in addition to full-time program
p~   Program only offered part-time
ƒlex   Flexible-time program option available in addition to full-time program
*   Admissions suspended

Graduate Unit	Program	Degrees
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	MA[p], PhD
	Criminology/Law Combined Program	MA/JD
Curriculum, Teaching and Learning	Curriculum Studies and Teacher Development	MA[p], MEd[p], PhD[flex]
	Elementary and Secondary Education	MT
	Second Language Education	MA[p], MEd[p], PhD[flex]
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
	Economics/Law Combined Program	MA/JD, PhD/JD
	Financial Economics	MFE
Electrical and Computer Engineering	Electrical and Computer Engineering	MASc, MEng[p], PhD
English	English	MA[p], PhD
	English/Law Combined Program	MA/JD
European, Russian, and Eurasian Studies	European, Russian, and Eurasian Studies	MA
	European, Russian, and Eurasian Studies/ Law Combined Program	MA/JD
Exercise Sciences	Exercise Sciences	MSc[p], PhD[flex]
Forestry	Forest Conservation	MFC[p]
	Forestry	MScF, PhD
French Language and Literature	French Language and Literature	MA[p], PhD
Geography	Geography	MA[p], MSc[p], PhD
	Planning	MScPl[p], PhD
	Urban Design Studies	MUDS[p]

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p~   Program only offered part-time
ƒlex   Flexible-time program option available in addition to full-time program
*   Admissions suspended

Graduate Unit	Program	Degrees
Germanic Languages and Literatures	German Literature, Culture and Theory	MA[p], PhD
Global Affairs	Global Affairs	MGA
	Global Affairs/Law Combined Program	MGA/JD
	Management/Global Affairs Combined Program	MBA/MGA
Health Policy, Management and Evaluation	Health Administration	MHSc
	Health Administration/Nursing Combined Program	MHSc/MN
	Health Administration/Social Work Combined Program	MHSc/MSW
	Health Informatics	MHI
	Health Policy, Management and Evaluation	MSc[p], PhD[flex]
	Management of Innovation	MMI
History	History	MA[p], PhD
History and Philosophy of Science and Technology	History and Philosophy of Science and Technology	MA[p], PhD
Humanities, Social Sciences and Social Justice Education	History and Philosophy of Education	MA[p], MEd[p]
	Sociology in Education	MA[p], MEd[p], EdD[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]
	Information/Law Combined Program	MI/JD
	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

Note: All programs are offered full-time, unless otherwise indicated
p   Part-time option available in addition to full-time program
p~   Program only offered part-time
ƒlex   Flexible-time program option available in addition to full-time program
*   Admissions suspended

Graduate Unit	Program	Degrees
Leadership, Higher and Adult Education	Adult Education and Community Development	MA[p], MEd[p], PhD[flex]
	Educational Administration	MA[p], MEd[p], EdD[p], PhD[flex]
	Higher Education	MA[p], MEd[p], EdD, PhD[flex]
Linguistics	Linguistics	MA, PhD
Management	Finance	MF[p]
	Management	MBA[p], PhD
	Management/Engineering Combined Program	MBA/BASc
	Management/Global Affairs Combined Program	MBA/MGA
	Management/Law Combined Program	MBA/JD
Materials Science and Engineering	Materials Science and Engineering	MASc, MEng[p], PhD
Mathematical Finance	Mathematical Finance	MMF[p]
Mathematics	Mathematics	MSc[p], PhD
Mechanical and Industrial Engineering	Design and Manufacturing	MEngDM[p~]
	Mechanical and Industrial Engineering	MASc, MEng[p], PhD
Medical Biophysics	Medical Biophysics	MSc, PhD
Medical Science	Bioethics	MHSc[p~]
	Biomedical Communications	MScBMC
	Medical Radiation Sciences	MHSc
	Medical Science	MSc, PhD
Medicine	Doctor of Medicine/Doctor of Philosophy Combined Program	MD, PhD
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	Nursing Science	MN[p], PhD[flex]

Note: All programs are offered full-time, unless otherwise indicated
p   Part-time option available in addition to full-time program
p~   Program only offered part-time
ƒlex   Flexible-time program option available in addition to full-time program
*   Admissions suspended

Graduate Unit	Program	Degrees
	Health Administration/Nursing Combined Program	MHSc/MN
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
	Philosophy/Law Combined Program	PhD/JD
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
	Political Science/Law Combined Program	MA/JD, PhD/JD
Professional Graduate Programs Centre	Biotechnology	MBiotech
	Management and Professional Accounting	MMPA
Pyschology	Psychology	MA, PhD
Public Health Sciences	Community Health	MScCH[p]
	Public Health Sciences	MPH[p], MSc[p], PhD[flex]
Public Policy and Governance	Public Policy	MPP
	Public Policy/Law Combined Program	MPP/JD
Rehabilitation Science	Rehabilitation Science	MSc[p], PhD
Religion	Religion	MA[p], PhD
Slavic Languages and Literatures	Slavic Languages and Literatures	MA, PhD
Social Work	Social Work	MSW[p], PhD[flex]
	Health Administration/Social Work Combined Program	MHSc/MSW
	Social Work/Law Combined Program	MSW/JD
Sociology	Sociology	MA[p], PhD

Note: All programs are offered full-time, unless otherwise indicated
p   Part-time option available in addition to full-time program
p~   Program only offered part-time
*f*lex   Flexible-time program option available in addition to full-time program
*   Admissions suspended

Graduate Unit	Program	Degrees
Spanish	Spanish	MA[p], PhD
Speech-Language Pathology	Speech-Language Pathology	MHSc[p], MSc, PhD
Statistics	Statistics	MSc[p], PhD
Women and Gender Studies	Women and Gender Studies	MA

Note: All programs are offered full-time, unless otherwise indicated
p   Part-time option available in addition to full-time program
p~   Program only offered part-time
ƒlex   Flexible-time program option available in addition to full-time program
*   Admissions suspended

Collaborative Programs

Program	Participating Degree Programs	Degrees
Aboriginal Health	Adult Education and Community Development	MA, MEd, PhD
	Anthropology	MA, MSc, PhD
	Counselling Psychology	MA, MEd, EdD, PhD
	Geography	MA, PhD
	Medical Science	MSc, PhD
	Nursing Science	MN, PhD
	Nutritional Sciences	MHSc, MSc, PhD
	Public Health Sciences	MPH, PhD
	Sociology in Education	MA, MEd, EdD, PhD
Addiction Studies	Anthropology	MA, MSc, PhD
	Biomedical Engineering	MASc, PhD
	Counselling Psychology	MA, PhD
	Criminology	MA, PhD
	Exercise Sciences	MSc, PhD
	Information	MI
	Information Studies	PhD
	Medical Science	MSc, PhD
	Nursing Science	MN, PhD
	Pharmaceutical Sciences	MSc, PhD
	Pharmacology	MSc, PhD
	Psychology	MA, PhD
	Public Health Sciences	MPH, MSc, PhD
	Social Work	MSW, PhD
	Sociology	MA, PhD
	Women and Gender Studies	MA
Aging, Palliative and Supportive Care Across The Life Course	Adult Education and Community Development	MA, MEd, PhD
	Anthropology	MA, MSc, PhD
	Counselling Psychology	MA, MEd, EdD, PhD
	Dentistry	MSc, PhD
	Exercise Sciences	MSc, PhD
	Health Administration	MHSc
	Health, Policy, Management and Evaluation	MSc, PhD
	Information	MI
	Information Studies	PhD
	Medical Science	MSc, 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

Program	Participating Degree Programs	Degrees
Asia-Pacific Studies	Anthropology	MA
	East Asian Studies	MA
	Economics	MA
	Geography	MA
	History	MA
	Management	MBA
	Planning	MScPl
	Political Science	MA
	Public Policy	MPP
	Social Work	MSW
	Sociology	MA
	Women and Gender Studies	MA
Astrophysics	Astronomy and Astrophysics	MSc
	Physics	MSc
Bioethics	Health Administration	MHSc
	Health Policy, Management and Evaluation	MSc, PhD
	Law	LLM, SJD
	Medical Science	MSc, PhD
	Nursing Science	MN, PhD
	Philosophy	MA, PhD
	Public Health Sciences	MPH, MSc, PhD
	Rehabilitation Science	MSc, PhD
	Religion	MA, PhD
	Social Work	PhD
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 Science	MSc, PhD
	Pharmaceutical Sciences	MSc, PhD
	Physics	MSc, PhD
	Physiology	MSc, PhD
	Rehabilitation Science	MSc, PhD
Biomedical Toxicology	Ecology and Evolutionary Biology	MSc, PhD
	Laboratory Medicine and Pathobiology	MSc, PhD
	Medical Science	MSc, PhD
	Nutritional Sciences	MSc, PhD
	Pharmaceutical Sciences	MSc, PhD
	Pharmacology	MSc, PhD
Biomolecular Structure	Biochemistry	PhD
	Chemistry	PhD
	Medical Biophysics	PhD
	Molecular Genetics	PhD

Program	Participating Degree Programs	Degrees
Book History and Print Culture	Classics	MA, PhD
	Comparative Literature	MA, PhD
	East Asian Studies	MA, PhD
	English	MA, PhD
	French Language and Literature	MA, PhD
	German Literature, Culture and Theory	MA, PhD
	History	MA, PhD
	History and Philosophy of Science and Technology	MA, PhD
	History of Art	MA, PhD
	Information	MI
	Information Studies	PhD
	Italian Studies	MA, PhD
	Medieval Studies	MA, PhD
	Museum Studies	MMSt
	Music	MA, PhD
	Religion	MA, PhD
	Spanish	MA, PhD
Cardiovascular 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 Biophysics	MSc, PhD
	Medical Science	MSc, PhD
	Nursing Science	MN, PhD
	Pharmaceutical Sciences	MSc, PhD
	Pharmacology	MSc, PhD
	Physiology	MSc, PhD
	Public Health Sciences	MSc, PhD
	Rehabilitation Science	MSc, PhD
Community Development	Adult Education and Community Development	MA, MEd
	Counselling Psychology	MEd
	Nursing Science	MN
	Planning	MScPl
	Public Health Sciences	MPH
	Social Work	MSW
Comparative, International and Development Education	Adult Education and Community Development	MA, MEd, PhD
	Curriculum Studies and Teacher Development	MA, MEd, PhD
	Educational Administration	MA, MEd, EdD, PhD
	Higher Education	MA, MEd, EdD, PhD
	History and Philosophy of Education	MA, MEd
	Second Language Education	MA, MEd, PhD
	Sociology in Education	MA, MEd, EdD, PhD
Developmental Biology	Biochemistry	MSc, PhD
	Cell and Systems Biology	MSc, PhD
	Immunology	MSc, PhD
	Laboratory Medicine and Pathobiology	MSc, PhD
	Molecular Genetics	MSc, PhD
	Physiology	MSc, PhD

Program	Participating Degree Programs	Degrees
Diaspora and Transnational Studies	Anthropology	MA, MSc, PhD
	Cinema Studies	MA
	Comparative Literature	MA, PhD
	Criminology	MA, PhD
	Drama, Theatre and Performance Studies	MA, PhD
	English	MA PhD
	Geography	MA, MSc, PhD
	German Literature, Culture and Theory	MA, 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
	Sociology	MA, PhD
	Sociology in Education	MA, MEd, EdD, PhD
	Spanish	MA, PhD
	Women and Gender Studies	MA
Dynamics of Global Change	Adult Education and Community Development	PhD
	Anthropology	PhD
	Chemical Engineering and Applied Chemistry	PhD
	Computer Science	PhD
	Economics	PhD
	Educational Administration	PhD
	Geography	PhD
	Health Policy, Management and Evaluation	PhD
	Higher Education	PhD
	Law	SJD
	Management	PhD
	Medical Science	PhD
	Political Science	PhD
Earth Sciences and Physics	Earth Sciences	MSc, PhD
	Physics	MSc, PhD
Editing Medieval Texts	Classics	PhD
	English	PhD
	History	PhD
	Italian Studies	PhD
	Medieval Studies	PhD
	Music	PhD
	Philosophy	PhD
	Religion	PhD
	Spanish	PhD
Educational Policy	Adult Education and Community Development	MA, MEd, PhD
	Curriculum Studies and Teacher Development	MA, MEd, PhD
	Developmental Psychology and Education	MA, MEd, PhD
	Educational Administration	MA, MEd, EdD, PhD
	Higher Education	MA, MEd, EdD, PhD
	History and Philosophy of Education	MA, MEd
	Second Language Education	MA, MEd, PhD
	Sociology in Education	MA, MEd, EdD, PhD

Program	Participating Degree Programs	Degrees
Environment and Health	Geography	MA, MSc, PhD
	Medical Science	MSc, PhD
	Planning	MScPl, PhD
	Public Health Sciences	MPH, MSc, PhD
	Women and Gender Studies	MA
Environmental Engineering	Chemical Engineering and Applied Chemistry	MASc, MEng, PhD
	Civil Engineering	MASc, MEng, PhD
	Materials Science and Engineering	MASc, MEng, PhD
	Mechanical and Industrial Engineering	MASc, MEng, PhD
Environmental Studies	Adult Education and Community Development	MA, MEd, PhD
	Anthropology	MA, MSc, PhD
	Chemical Engineering and Applied Chemistry	MASc, MEng, PhD
	Chemistry	MSc, PhD
	Counselling Psychology	MA, MEd, EdD, PhD
	Earth Sciences	MASc, MSc, PhD
	Ecology and Evolutionary Biology	PhD
	Economics	MA
	Forest Conservation	MFC
	Forestry	MScF, PhD
	Geography	MA, MSc, PhD
	Information	MI
	Information Studies	PhD
	Management	MBA, PhD
	Philosophy	MA, PhD
	Physics	MSc, PhD
	Planning	MScPl, PhD
	Political Science	MA, PhD
	Religion	MA, PhD
	Sociology	MA, PhD
	Sociology in Education	MA, MEd, EdD, PhD
	Women and Gender Studies	MA
Ethnic and Pluralism Studies	Anthropology	MA, PhD
	Educational Administration	MA, MEd, EdD, PhD
	European, Russian, and Eurasian Studies	MA
	Geography	MA, PhD
	History	MA, PhD
	History and Philosophy of Education	MA, MEd
	Industrial Relations and Human Resources	MIRHR, PhD
	Nursing Science	MN, PhD
	Political Science	MA, PhD
	Religion	MA, PhD
	Social Work	MSW, PhD
	Sociology	MA, PhD
	Sociology in Education	MA, MEd, EdD, PhD
	Women and Gender Studies	MA

Program	Participating Degree Programs	Degrees
Global Health	Anthropology	PhD
	Chemical Engineering and Applied Chemistry	PhD
	Health Policy, Management and Evaluation	PhD
	Law	SJD
	Management	PhD
	Medical Science	PhD
	Nursing Science	PhD
	Pharmaceutical Sciences	PhD
	Political Science	PhD
	Public Health Sciences	PhD
	Rehabilitation Science	PhD
Health Care, Technology, and Place	Biomedical Engineering	PhD
	English	PhD
	Health Policy, Management and Evaluation	PhD
	Mechanical and Industrial Engineering	PhD
	Medical Science	PhD
	Nursing Science	PhD
	Pharmaceutical Sciences	PhD
	Public Health Sciences	PhD
	Rehabilitation Science	PhD
	Social Work	PhD
Health Services and Policy Research	Exercise Sciences	MSc, PhD
	Health Policy, Management and Evaluation	MSc, PhD
	Medical Science	MSc, PhD
	Nursing Science	PhD
	Pharmaceutical Sciences	MSc, PhD
	Public Health Sciences	MPH, PhD
	Rehabilitation Science	MSc, PhD
	Social Work	MSW, PhD
Jewish Studies	Anthropology	MA, PhD
	Classics	MA, PhD
	Comparative Literature	MA
	Drama, Theatre and Performance Studies	MA, PhD
	English	MA, PhD
	European, Russian, and Eurasian Studies	MA
	German Literature, Culture and Theory	MA, PhD
	History	MA, PhD
	History of Art	MA, PhD
	Medieval Studies	MA, PhD
	Museum Studies	MMSt
	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

Program	Participating Degree Programs	Degrees
Knowledge Media Design	Architecture	MArch
	Computer Science	MSc, PhD
	Curriculum Studies and Teacher Development	MA, MEd, PhD
	History and Philosophy of Education	MA, MEd
	Information	MI
	Information Studies	PhD
	Landscape Architecture	MLA
	Mechanical and Industrial Engineering	MASc, MEng, PhD
	Medical Science	MSc, PhD
	Second Language Education	MA, MEd, PhD
	Sociology	MA, PhD
	Urban Design	MUD
	Visual Studies	MVS
Management and Economics	Economics	PhD
	Management	PhD
Neuroscience	Biochemistry	MSc, PhD
	Biomedical Engineering	MASc, MSc, PhD
	Cell and Systems Biology	MSc, PhD
	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
	Molecular Genetics	MSc, PhD
	Pharmaceutical Sciences	MSc, PhD
	Pharmacology	MSc, PhD
	Physiology	MSc, PhD
	Psychology	MA, PhD
	Rehabilitation Science	MSc, PhD
	Speech-Language Pathology	MSc, PhD
Optics	Chemistry	MSc
	Electrical and Computer Engineering	MASc
	Materials Science and Engineering	MASc
	Physics	MSc
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, MSc, 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

Program	Participating Degree Programs	Degrees
Sexual Diversity Studies	Anthropology	MA, MSc, PhD
	Cinema Studies	MA
	Classics	MA, PhD
	Counselling Psychology	MA, MEd, EdD, 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 Administration	MA, MEd, EdD, PhD
	English	MA, PhD
	Exercise Sciences	MSc, PhD
	Higher Education	MA, MEd, EdD, PhD
	History	MA, PhD
	History and Philosophy of Education	MA, MEd
	History and Philosophy of Science and Technology	MA, PhD
	History of Art	MA, PhD
	Information	MI
	Information Studies	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 Work	MSW, PhD
	Sociology	MA, PhD
	Sociology in Education	MA, MEd, EdD, PhD
	Visual Studies	MVS
	Women and Gender Studies	MA
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
	Sociology in Education	MA, MEd, EdD, PhD
	Women and Gender Studies	MA

Program	Participating Degree Programs	Degrees
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 Psychology	MA, MEd, EdD, PhD
	Criminology	MA, PhD
	Curriculum Studies and Teacher Development	MA, MEd, PhD
	Drama, Theatre and Performance Studies	MA, PhD
	Educational Administration	MA, MEd, EdD, PhD
	English	MA, PhD
	Exercise Sciences	MSc, PhD
	French Language and Literature	MA, PhD
	Geography	MA, MSc, PhD
	German Literature, Culture and Theory	MA, PhD
	Health Administration	MHSc
	Health Policy, Management and Evaluation	MSc, PhD
	Higher Education	MA, MEd, EdD, PhD
	History	MA, PhD
	History and Philosophy of Education	MA, MEd
	Information	MI
	Information Studies	PhD
	Law	LLM, SJD
	Medieval Studies	MA, PhD
	Near and Middle Eastern Civilizations	MA, PhD
	Nursing Science	MN, PhD
	Philosophy	MA, PhD
	Political Science	MA, PhD
	Public Health Sciences	MPH, PhD
	Religion	MA, PhD
	Second Language Education	MA, MEd, PhD
	Social Work	MSW, PhD
	Sociology	MA, PhD
	Sociology in Education	MA, MEd, EdD, 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	MI
	Information Studies	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

Program	Participating Degree Programs	Degrees
Workplace Learning and Social Change	Adult Education and Community Development	MA, MEd, PhD
	Sociology in Education	MA, MEd, EdD, PhD

Diploma Programs

Graduate Unit	Program Name	Diploma
Information	Advanced Study in Information Studies	GDipISt[p]
Nursing Science	Master of Nursing (Nurse Practitioner Field) Concurrent Diploma in Anesthesia Care	GDipNPAC
	Post Master of Nursing (Nurse Practitioner Field) Diploma in Anesthesia Care	GDipNPAC
	Post-Master's Nurse Practitioner	DipNP[p] (PMNP)
Professional Graduate Programs Centre (Mississauga)	Investigative and Forensic Accounting	DIFA[p~]
Social Work	Advanced Diploma in Social Service Administration	DSSA[p]

Note: All programs are offered full-time, unless otherwise indicated
p   Part-time option available in addition to full-time program
p~   Program only offered part-time
ƒlex   Flexible-time program option available in addition to full-time program
*   Admissions suspended

General Regulations

All graduate students are accepted under the General Regulations of the School of Graduate Studies (SGS). See also Degree Regulations section and the program entry in the section entitled Degree and Diploma Programs by Graduate Unit.

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 Admissions and Programs Committee.

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 includes a council and is organized into four divisions. Each of the departments, centres, and institutes (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 Education.

The Graduate Education Council is primarily responsible for determining policies and regulations affecting the administration and operation of graduate studies, determining general admission and program requirements for all graduate programs, 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

Graduate units (including departments, centres, and institutes) offer degree programs and courses and conduct research. A number

of graduate diploma programs are also offered.

Each graduate student is enrolled in one of the graduate departments/centres/institutes that offer graduate study. Interdisciplinary studies may be undertaken within collaborative programs, but a student must first register in a graduate unit (informally known as "home" unit). 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 Coordinator of Graduate Studies is responsible for the administration of graduate affairs within the unit, as delegated by the unit's Chair or Director.

1.4   School of Graduate Studies Centres and Institutes

Historically, a substantial number of centres and institutes with interdisciplinary foci were administered within the School of Graduate Studies. All these administrative units have been relocated to other Faculties, such as Arts and Science, Medicine, or the Ontario Institute for Studies in Education (OISE). Search for centres and institutes on the University of Toronto website using the A–Z index, accessible from the University of Toronto home page, www.utoronto.ca.

1.5   Graduate Programs

Graduate programs are listed alphabetically in the Graduate Programs section of this calendar. They are also described on the University of Toronto website at www.gradschool.utoronto.ca.

1.5.1   Degree Programs

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

1.5.2   Collaborative Programs

The School of Graduate Studies currently offers 40 graduate collaborative programs. Collaborative programs emerge from cooperation between two or more graduate units and their graduate programs. The collective experience of the participating graduate

programs provides the student with 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 collaborative program. Each collaborative program is designed to allow a focus in the area of speciality. On successful completion of the program, the student receives a transcript notation indicating completion of the collaborative program, in addition to the degree.

1.5.3   Combined Programs

The University of Toronto offers a number of combined programs involving two existing degree programs in different disciplines. The combination may comprise two graduate programs or a graduate and an undergraduate program. In most cases, the combination involves at least one professionally oriented program.

1.5.4   Diploma Programs

A limited number of graduate diploma programs are offered.

1.5.5   Conjoint Programs

The University of Toronto and the Toronto School of Theology offer a limited number of graduate conjoint programs.

1.5.6   Joint Programs

The University of Toronto participates in several joint degree programs involving partnership between two or more graduate units or universities.

1.6   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:

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, where such examinations are required by SGS, and perform all associated duties; assume responsibility for the setting and marking of comprehensive (general) examinations; teach, set, and mark examinations for a graduate course; and give such other graduate direction as may be required.

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.

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.

Members emeriti may perform all duties of a full member, but may only take on new supervision with the approval of the Graduate Chair or Director.

2   Student Categories

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 program in the School of Graduate Studies.

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. See General Regulations, section 8.5.1 Achieving Candidacy: Requirements and Time Limit.

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 must hold a recognized degree with appropriate standing.

After 4 months, but before the end of 12 months, the graduate unit may wish to recommend to the School of Graduate Studies that the student's probationary status be removed. Work completed during the period on probation 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. All special students must be enrolled in at least one graduate course; some may be enrolled in both undergraduate and graduate courses.

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.

2.2.2 Special Student, Part-Time

Students wishing to take one or two graduate courses not for degree credit may be admitted as part-time special students.

2.3 Visiting Student

Visiting students are registered under special arrangements in the School of Graduate Studies and are not admitted to a degree. See www.sgs.utoronto.ca/informationfor/students/involved/exchanges.htm.

3 Application for Admission to a Degree Program

3.1 Procedures

1. Formal application for admission should be submitted using the SGS Online Admissions Application (exceptions: MBA, MF, MMPA, and DIFA, which have specialized application systems; MScPT, MScOT, and the MHSc in Speech-Language Pathology, which participate in a common provincial application for professional rehabilitation medicine programs) accessible through the graduate unit website. Applicants must pay an application fee of $110; some graduate programs have set higher application fees. Payment options: (a) online using a credit card (MasterCard or Visa); (b) by mailing a certified cheque or money order in Canadian funds made payable to the University of Toronto. No decision on the application will be sent to the applicant until this fee has been paid.

2. Applicants must arrange to have one official copy of their complete academic records from all universities attended forwarded as part of their application. Letters of reference are also required. Individual graduate units may require further documentation.

3. 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 date by which applicants should 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.

Earlier submission is recommended for applications from outside Canada to ensure timely arrival, particularly where special documentation (and/or translation) and proof of English-language facility are required.

Most programs commence in September. Some graduate units offer January admission. A few programs commence at other times.

Consult the graduate unit concerned for more information.

3.3   Financial Assistance

For detailed information about financial assistance, see Fees and Financial Support in this calendar.

3.4   Acceptance

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 decide that the offer of admission be valid 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, a new application must be submitted.

If the graduate unit approves, 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 and incidental), which is additional to the fall and winter session fees. Students engaged only in research do not pay summer session fees but must register.

4   Admission Policies and Procedures

The University's admission policies and procedures are designed so that students entering a graduate program may normally have the capacity and preparation necessary to meet the challenge 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.

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.

4.1.1   Master's Programs

An appropriate bachelor's degree with high academic standing from a recognized university is required. Other qualifications may be specified by the graduate unit. See General Regulations (section 5 Admission Regulations) and Degree Regulations for further details.

4.1.2   Doctor of Philosophy Programs

An appropriate master's degree or, in some programs, an appropriate bachelor's degree, with high academic standing from a recognized university is required. See General Regulations (section 5 Admission Regulations) and Degree Regulations for further details.

4.1.3   Other Doctoral Programs

Normally, an appropriate master's degree with high academic standing from a recognized university is required. See appropriate graduate unit entry for specific details. See General Regulations (section

5 Admission Regulations) and Degree Regulations for further information.

See Degree Regulations for specific details on degree transfers (master's to PhD and PhD to master's).

4.1.4   Diploma Programs

There are several types of graduate diplomas, including master's level and post-master's level. Some diploma programs involve concurrent registration with the degree program. The minimum requirements are as follows:

- A bachelor's degree is an appropriate degree for a master's-level or concurrent master's diploma.
- A master's degree is an appropriate degree for a post-master's diploma.

Other qualifications may apply, as specified by a graduate unit.

4.1.5   Special Students

Special students must submit an application for admission for each academic year of study.

Applicants accepted as special student, full-time, must have completed an appropriate bachelor's degree with good academic standing from a recognized university. See General Regulations, section 5 Admission Regulations, for further details.

Applicants accepted as special student, part-time must hold an appropriate bachelor's degree from a recognized university. See General Regulations, section 5 Admission Regulations, for further details.

4.1.6   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 will offer an advanced-standing option. Consult the graduate unit regarding advanced-standing options.

4.1.7   Eligibility of Students for Second Graduate Degree of Same Title

The University may confer upon a person more than one graduate degree having the same title, provided the degrees are completed in different fields of study.

4.1.8   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 contribution and its impact on the profession must be detailed and documented (e.g., publications, research, professional advancement, development of new skills, responsibility, etc.) and presented as part of the application. Such applicants may be considered for admission if they have achieved qualifications at least equivalent to those stated in the preceding sections and if a graduate unit so recommends.

4.1.9   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 the SGS Admissions and Programs Committee 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.

4.1.10   English-Language Facility

It is essential that all incoming graduate students have a good command of English. Facility 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 facility tests listed in the Admission Regulations. 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 facility test.

5   Admission Regulations

All applicants to the School of Graduate Studies must meet the minimum standards required by the school. However, satisfying minimum standards does not guarantee admission, since the number of qualified applicants far exceeds the number of places available. As a result, many well-qualified applicants cannot be accommodated.

5.1   Master's Programs

Minimum requirements:

1. An appropriate bachelor's degree that has appropriate breadth, depth and, where appropriate, an affinity to the graduate program to which the applicant is seeking admission as determined by the School of Graduate Studies.
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 a graduate unit.

5.2   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.
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 a graduate unit.

5.3   Diploma Programs

There are several types of graduate diplomas, including master's level and post-master's level. Some diploma programs

involve concurrent registration with the degree program. Minimum requirements are as follows:

1. A bachelor's degree is an appropriate degree for a master's-level or concurrent master's diploma.
2. A master's degree is an appropriate degree for a post-master's diploma.

Other qualifications may apply, as specified by a graduate unit.

5.4 Special Students

Before applying, applicants should identify the courses they wish to take and obtain approval from the graduate unit offering the course.

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 a graduate unit.

5.4.1 Courses Taken as a Special Student

On the recommendation of the graduate unit, and with the School of Graduate Studies' approval, graduate courses taken as a special student may count for up to 1.0 full-course equivalent (FCE) or 25% of the course requirements for the degree, whichever is greater, in a subsequent degree program at this University, provided that they have not already been credited towards another degree, diploma, certificate, or any other qualification. 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.

5.5 English-Language Facility Tests

The English-language facility requirements may be satisfied by using one of the following tests. Minimum scores are listed; however, many graduate units require a higher score. Applicants should consult the graduate unit to determine whether a higher minimum score applies.

TOEFL Minimum Score Requirements		
Consult the graduate unit to which you are applying to determine if a higher minimum score is required.		
Academic Division	**Paper-Based Test and TWE**	**Internet-Based Test including Writing and Speaking Sections**
I. Humanities	Overall score: 580 TWE: 5	Overall score: 93 Writing: 22 Speaking: 22
II. Social Sciences	Overall score: 580 TWE: 5	Overall score: 93 Writing: 22 Speaking: 22
III. Physical Sciences	Overall score: 580 TWE: 4	Overall score: 93 Writing: 22 Speaking: 22
IV. Life Sciences	Overall score: 580 TWE: 5	Overall score: 93 Writing: 22 Speaking: 22

5.5.1 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: the traditional paper-based format (only offered on specific dates in a limited number of countries) and the Internet-based format (offered year-round). Applicants registering for the paper-based TOEFL must include the Test of Written English (TWE) component. The Internet-based test must include the writing and speaking sections. All applicants must satisfy the minimum TOEFL score requirements set by each of the four SGS academic divisions listed in the accompanying chart.

5.5.2 Michigan English Language Assessment Battery (MELAB)

Web: www.cambridgemichigan.org
Required score: 85

MELAB evaluates advanced-level English language competence of adult non-native speakers of English and offers a general assessment of English language proficiency.

5.5.3 International English Language Testing System (IELTS)

Web: www.ielts.org
Required score: 7.0

IELTS tests English proficiency across the globe and respects international diversity. IELTS tests are held in over 500 centres. Note that applicants must take the academic format of this test.

5.5.4 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

The COPE comprises a series of tests which are designed to assess an applicant's level of proficiency in the English language to academic institutions where the language of instruction is English.

5.5.5 Academic English Level 60

School of Continuing Studies

University of Toronto
Web: http://english.learn.utoronto.ca
Required score: B

This course strengthens language skills and academic strategies in reading, writing, listening, and speaking.

6   Structure of Academic Programs

6.1   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: the fall session (September to December), the winter session (January to April), and the summer session (May to August).

6.2   Academic Programs

Academic programs leading to graduate degrees are defined by the units that offer them and by the degree regulations found in the Degree Regulations section. Consult the relevant graduate unit listing in the Degree and Diploma Programs by Graduate Unit section of this calendar or on the web at www.sgs.utoronto.ca/programs.htm for additional information.

6.3   Minimum Period of Registration

All academic programs (full-time and part-time) specify a minimum period of registration defined as the shortest length of time a student must be registered in that program on a full-time basis in order to qualify for the degree. This period also establishes the minimum degree fee students must pay.

6.4   Normal Program Length

Normal program length refers to the period of time (sessions or academic years) that is normally required for a student to complete a program. Actual time to complete a program may vary for individual students. See each program entry (in the Degree and Diploma Programs by Graduate Unit section) for normal program length.

6.5   Residence

Many programs specify a period of residence during which the student is required to be on campus and consequently in such geographical proximity as 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.

6.6   Time Limit

All degree 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 degree. The time limit for all graduate degrees is as follows:

- PhD: 6 years (7 years for direct-entry, i.e., 5-year PhD students)
- flexible-time PhD program option: 6–8 years (depending upon program)
- professional doctoral: 5–6 years
- full-time master's: 3 years (except for the MArch: 4 years)
- part-time master's: 6 years
- combined programs (master's degrees): 4 years

See Degree Regulations and General Regulations (section 7.1.10 Extension of Time for Completion of Degree Requirements) for more information.

7   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 the approved engagement by a student in a course or other unit or component of a program of study.

The complete policy on Association, Admission, and Registration is available on the University of Toronto website at www.governingcouncil.utoronto.ca/policies/assoc.htm.

7.1   Registration Policies and Procedures

7.1.1   Registration Procedures

Graduate students are required to register at the beginning of each session they wish to attend. New graduate students will receive registration instructions prior to the registration dates listed in the Sessional Dates at www.sgs.utoronto.ca/informationfor/students/inform/deadlines.htm. Students may access registration instructions on the web at www.sgs.utoronto.ca/informationfor/students/start/reg_enrol.htm.

Students registering in programs offered by the Ontario Institute for Studies in Education (OISE) should consult OISE for information.

For the fall and winter sessions, 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 ROSI 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 it does not override any other notification students receive about academic status and eligibility.

New students who have received a conditional offer of admission should make arrangements with their graduate unit to clear conditions as soon as possible.

The first step to registration is the payment of fees or arrangements to pay such fees. New students can access the School of Graduate Studies calendar online at www.sgs.utoronto.ca/calendar.htm.

A student is considered to be registered once any conditions of admission have been satisfied and academic and incidental fees are paid or a fees arrangement has been made.

7.1.2   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 he or she is 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.

7.1.3   Part-Time Studies

From first registration, part-time studies are permitted in those master's degree programs offering a part-time program.

Students wishing to take 0.5 or 1.0 full-course equivalent (FCE) not for degree credit are admitted as part-time special students, in any session. A switch from full-time to part-time status is not permitted once the minimum period of registration for a program has been completed.

7.1.4 Flexible-Time Studies

Some PhD programs offer a flexible-time PhD program option in which students are registered full-time for four years and may transfer to part-time registration later in the program. For further information, see Degree Regulations, Doctoral Degrees, PhD, Admission Requirements, section 1.1.1.3 Flexible-Time PhD Program Option; and Program Requirements, section 1.1.3.8 Flexible-Time PhD Program Option.

7.1.5 Summer Session Courses

All students, whether attending formal courses or engaging in research or project work, must register for the summer session. Students may view summer session registration instructions on the SGS website. Doctoral, MSc, and MASc students register for the September to August or January to August period when they first register in September or January and, therefore, are already registered for the summer session.

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 12–14 weeks while others will meet for only 7 weeks.

For students attending 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.

7.1.6 First Registration

Students beginning their degree programs normally register for the first time in September. In some cases, graduate units may give permission for new students to start their programs either in January, May, or July.

7.1.7 Continuity of Registration

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

7.1.7.1 Master's Students: Continuous Registration

Once they have first registered, full-time and part-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 minimum period of registration may not register as part-time students.

7.1.7.2 Master's Students: Coursework-Only

Full-time master's students in coursework-only programs must register initially for the minimum registration period 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 minimum period of registration for a 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.

Students are reminded that there are time limits for all degree programs.

For further details, see General Regulations, section 7.1.10 Extension of Time for Completion of Degree Requirements.

7.1.7.3 Doctoral Students

All doctoral students must register annually until all degree requirements have been fulfilled. See General Regulations section 7.1.10 Extension of Time for Completion of Degree Requirements for further details.

7.1.8   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 Fees and Financial Support section of this calendar.

7.1.9   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 will apply to reinstated students as if they had been continuously registered, and 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.

7.1.10   Extension of Time for Completion of Degree Requirements

7.1.10.1   Master's Students

In exceptional circumstances, a master's student who did not complete all the requirements for the degree within the period 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 (www.sgs.utoronto.ca/informationfor/students/inform/stuforms.htm) and present to the graduate unit concerned the causes for the delay and evidence that the remaining degree requirements may be completed within the period of the extension request. No registration beyond the extension period will be permitted.

For information on tuition fees, see Fees and Financial Support, Fees for Students on Extension section of this calendar.

7.1.10.2   Doctoral Students

In exceptional circumstances, a doctoral student who has not completed all the requirements for the degree within the time limit for 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 (www.sgs.utoronto.ca/informationfor/students/inform/stuforms.htm) and present to the graduate unit concerned the causes for the delay and evidence that the remaining degree requirements may be completed within the period of the extension request. No registration beyond the four-year extension period will be permitted.

For information on tuition fees, see Fees and Financial Support, Fees for Students on Extension section of this calendar.

7.1.11   Concurrent Registration Option

Note: Available at the master's-degree level only.

The concurrent registration option is available only in degree programs with approved partner degree programs at the University of Toronto. Students who are accepted into each partner degree program separately may enrol in the concurrent program option in each degree program, subject to the approval of both programs. Graduate master's programs may partner with other graduate programs or with undergraduate degree programs (e.g., JD).

7.1.12   Joint Educational Placement for Doctoral Students

Joint Educational Placement is a registration option available for full-time study towards the earning of a doctorate at the University of Toronto and a recognized collaborator institution. The Joint Educational Placement is intended to allow exceptional doctoral students to pursue research opportunities and acquire research experience in two institutions at an early stage in their career.

Applicants must meet the admission, registration, and degree requirements of both SGS and the joint institution. To be considered for this option, an applicant will complete the Agreement for a Joint Educational Placement (see below), 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.

At the time of application to the Joint Educational Placement, 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*. The academic and research program of a student enrolled in a Joint Educational Placement 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 www.sgs.utoronto.ca/informationfor/students/inform/stuforms.htm.

7.1.13   Dual Registration

A student in a master's program at this University who has been offered admission to a PhD 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 PhD studies and will be registered full-time in the PhD and part-time in the master's program. Only the appropriate PhD 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 PhD for the period as a dual registrant, the student must be recommended for the award of the master's degree by January 25 for September dual registrants, or by April 19 for January dual registrants. Otherwise, the PhD registration will be cancelled, no credit for the PhD 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. PhD 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 PhD 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 PhD program.

7.1.14   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.

7.1.15   Leave Policy

Graduate students whose programs require continuous registration may apply to their Graduate Coordinator for a one-session to three-session leave during their program of study for:

1. **serious 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. Parental leave must be

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. As an exception, students on leave for parental or serious 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.

Students may make application for a leave by completing the Leave of Absence Form (www.sgs.utoronto.ca/informationfor/students/inform/stuforms.htm) and submitting it to their Graduate Coordinator for approval. The form is then sent to the School of Graduate Studies for processing. The termination date 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. Normally, the start and finish of the leave would coincide with the start and end of a session. When students require a leave to begin in mid-session, they are advised to contact the Director of Student Services at the School of Graduate Studies to make special arrangements.

Leave requests that do not fall under the terms of this policy will require final approval from the School of Graduate Studies.

7.1.16 Withdrawal from a Graduate Program

In order to withdraw from a program, students must submit a Program Withdrawal Form to their graduate unit (www.sgs.utoronto.ca/informationfor/students/inform/stuforms.htm). Withdrawal from a graduate program should be reported immediately to SGS. A rebate of fees, if any, will be determined by the date on which written notification of withdrawal is received by SGS. Any application for re-admission by a student who

has withdrawn must be made in competition with all other applicants.

Students enrolled in coursework-only degree programs who withdraw from all courses in which they are currently enrolled must withdraw from their programs. The School of Graduate Studies will approve recommendations from the graduate units that such students be eligible to re-register at any time within 12 months following withdrawal.

7.1.17 Policy on Graduate Courses and Other Academic Activities

See also SGS Guidelines on Graduate Courses and Other Academic Activities (www.sgs.utoronto.ca/governance/policies.htm).

7.1.17.1 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 according to the relevant SGS policies and procedures. All graduate courses must have an instructor in charge who has a graduate faculty membership in the graduate unit(s) responsible for the course. A full graduate course (course weight of 1.0 full-course equivalent [FCE]) should involve a minimum of 48–72 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 courses may take many forms, and their timing may not always coincide with the normal beginning and end of classes in each session.

If a course is not offered for more than five years, it becomes inactive and SGS will archive the course in the Repository of Student Information (ROSI). Download the SGS Guidelines for De-activating/Archiving and Re-activating Graduate Courses at www.sgs.utoronto.ca/Assets/SGS+Digital+Assets/governance/policies/CourseArchivingGuidelines.pdf.

7.1.17.2 Course Codes

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 via 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

Course weight variations occur in some graduate programs. These variations often take the form of modular courses. A modular course is a course that has a non-standard weight, may have non-standard start and end dates within a session, and is usually combined with other course components so that the total equals 0.5 or 1.0 FCE. The minimum contact hour requirement applies to modular courses, equivalent to course weight.

7.1.17.3 Other Academic Activities

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 major research papers, comprehensive examinations, practica, and internships.

7.2   Enrolment Policies and Procedures

7.2.1   Enrolment

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

Most of the formal classes and seminars in the fall session begin in the week of September following Labour Day. Most formal winter session classes and seminars begin during the first week of January, and those beginning in the summer session begin in

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

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

7.2.2   Deadlines for Enrolment Changes

Graduate units may establish earlier deadlines for course changes. Courses must be dropped by completing a Course Add/Drop Form (www.sgs.utoronto.ca/informationfor/students/inform/stuforms.htm) or by using the Student Web Service (www.rosi.utoronto.ca), if the graduate unit permits access. In order to avoid academic penalties, courses must be dropped by the following deadlines:

Sep. 24, 2012	Deadline to add full courses (Y) and fall session half courses (H).
Oct. 29, 2012	Deadline to drop a fall session full course or half course without academic penalty.
Jan. 21, 2013	Deadline to add winter session full courses (Y) and half courses (H).
Feb. 25, 2013	Deadline to drop a full course (Y) or winter session half course (H), or withdraw from a program without academic penalty.
May 10, 2013	Deadline to add summer session May–June half courses (H) or May–August full courses (Y).
May 31, 2013	Deadline to drop a May–June half course without academic penalty.
Jun. 21, 2013	Deadline to drop a May–August full course without academic penalty.
Jun. 28, 2013	Deadline to enrol in July–August half courses (H).
Jul. 19, 2013	Deadline to drop a July–August half course without academic penalty.

Students enrolled in coursework-only programs who drop all courses by the deadlines must withdraw from the program. See General Regulations, section 7.1.16 Withdrawal from a Graduate Program.

Some graduate units offer modular courses which have enrolment deadlines that do not conform to the deadlines in the above

chart. Confirm modular course Add/Drop deadlines with the graduate unit offering the course prior to enrolment.

7.2.3 Completion of Coursework and Grade Submission

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

Jan. 11, 2013	Fall session (Y, H) courses
May 10, 2013	Fall/winter session (Y) and winter session (Y, H) courses *For students receiving degrees at June convocation, grades must be submitted by April 19.
Jul. 19, 2013	May/June summer session courses
Sept. 13, 2013	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.

7.2.4 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.

7.2.4.1 Petitions

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 ex-

tensions, using a standard form provided by SGS at www.sgs.utoronto.ca/informationfor/students/inform/stuforms.htm.

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.

7.2.4.2 Grounds

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.

7.2.4.3 Time Limits

If a graduate unit grants a petition for an 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, 2013	Fall session (Y, H) courses
Sept. 13, 2013	Fall/winter session (Y) and winter session (Y, H) courses

Jan. 10, 2014	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 SGS Admissions and Programs Committee.

7.2.4.4   Grade-Reporting Procedures

The graduate unit will assign the temporary course report of SDF (Standing Deferred) to a student on 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 following the original one for the course. 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 SGS Admissions and Programs Committee.

7.2.4.5   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.

7.2.5   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.

7.2.6   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.

7.2.7   Auditing of Graduate Courses

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 (www.governingcouncil. utoronto.ca/policies/phoct2094.htm) 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 University of Toronto's Code of Student Conduct (online at www.governingcouncil.utoronto. ca/policies/studentc.htm) applies to auditors. Further information about access, certificates of attendance, and fees for auditing may be obtained from the office of the Director of Student Services at the School of Graduate Studies.

7.2.8   Transfer Credit and Exemptions

Transfer credit for graduate work completed in another program 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 the SGS Dean, that percentage may be exceeded by doctoral students. In all cases, transfer credit arrangements for exchange program participants must be approved in advance by the SGS Dean or designate.

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.

8 Good Academic Standing and Satisfactory Academic Progress, Time Limits, Supervision, and Candidacy

8.1 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 Graduate Programs 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 Graduate Programs section) 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. 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.

8.2   Full-Time Students

Students must meet the full-time studies requirements—see General Regulations, section 7.1.1 Registration Procedures.

8.3   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 Graduate Programs 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.

8.4   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, he or she must repeat the relevant course, or 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.

8.5   Doctoral Students

8.5.1   Achieving Candidacy: Requirements and Time Limit

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 the third year for all doctoral programs, except for the five-year PhD 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 the fourth year 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
PhD, four-year program	by end of third year
PhD, five-year program (direct-entry)	by end of fourth year
Flexible-time PhD program option	by end of fourth year
Professional doctoral program, full-time	by end of third year
Professional doctoral program, part-time	by end of fourth year

In exceptional circumstances, a student who has not met these requirements may be permitted to register in the program for up to 12 months 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 SGS Admissions and Programs Committee.

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 Graduate Programs section of this calendar.

8.5.2   Supervision and Satisfactory Progress

All doctoral students should 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 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) PhD 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
PhD, four-year program	by end of first session in second year
PhD, five-year program (direct-entry)	by end of first session in third year
Flexible-time PhD program option	by end of first session in third year
Professional doctoral program, full-time	by end of first session in second year
Professional doctoral program, part-time	by end of first session in third year

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 his or her 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 9 Graduate Student Supervision; Degree Regulations, section 1 Doctoral Degrees; and specific program requirements in the Degree and Diploma Programs by Graduate Unit section.

9   Graduate Student Supervision

9.1   Thesis Topic and Supervision

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.

A student must choose a thesis topic for which the graduate unit in which he or she is registered is able to provide adequate supervision.

A student's choice of thesis topic, as well as his or her 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 unit in which the student is registered.

9.2   Doctoral 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 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 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 document *Graduate Supervision: Guidelines for Students, Faculty, and Administrators (*www.sgs.utoronto.ca/ Assets/SGS+Digital+Assets/admin+support/ Supervision+Guide.pdf). In addition, updated statements must be made available to students on a regular basis. These will include a list of graduate students (with their general thesis topic, supervisors, and advisors), the availability of financial assistance, and relevant information to affected students about the expected absences of their supervisor(s) and/or advisor(s). Any doctoral student who believes that his or her graduate unit is not following the supervision guidelines may inform his or her Coordinator of Graduate Studies or the Vice-Dean, Students, of 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 document *Graduate Supervision: Guidelines for Students, Faculty, and Administrators* (www. sgs.utoronto.ca/Assets/SGS+Digital+Assets/ admin+support/Supervision+Guide.pdf), the procedure must contain, at minimum, a supervisory committee that:

1. consists of the supervisor and at least two graduate faculty members;
2. 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
3. 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.

9.3   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 the SGS Vice-Dean, Programs.

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 three or more 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 should be a recognized expert on the subject of the thesis and should 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 by audio connection), 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.

   The SGS Vice-Dean, Programs, 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 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 the SGS Vice-Dean, 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 may 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; or
    b. 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; or
    b. 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.

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.

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.

15. The Library and Archives Canada publication agreement must be signed by the candidate when the final thesis is submitted electronically through T-Space; see General Regulations, section 9.4 Submission of Theses. The format of the submitted thesis must comply with the School of Graduate Studies guidelines.

16. SGS requires that every doctoral thesis be published substantially as it is accepted.

It is the intention of the University of Toronto that there be no restriction on the distribution and publication of theses. 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.

For further details, students should consult Producing Your Thesis at www.sgs.utoronto.ca/informationfor/students/finup/producingthesis.htm.

9.4 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 T-Space (https://tspace.library.utoronto.ca), the digital research repository for the University of Toronto community. 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. It is the intention of the University of Toronto that there will be no restriction on the distribution and publication of theses. 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 of 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 Graduate Education Council.

Following electronic submission of the thesis, a signed hard copy of the Library and Archives Canada Theses Non-exclusive License form (available online at www.collectionscanada.gc.ca/thesescanada), along with

any necessary copyright permissions, must also be submitted to SGS. Candidates will be charged a fee for the processing and indexing of the thesis.

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 Information for Students section of the SGS website: www.sgs.utoronto.ca/informationfor/students/finup/producingthesis.htm.

9.4.1   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 9.4 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 9.3 Doctoral Final Oral Examination). Thesis submission represents 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.

9.4.2   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.

10   Graduation

10.1   Degree Recommendations

When all requirements for a master's degree or graduate diploma program have been fulfilled, the graduate unit is required to submit a degree (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 masters' 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.

10.2   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. The Director of Student Services of the School of Graduate Studies 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, where there is no ceremony but rather diplomas are mailed to graduands, or attend the ceremony in June.

Graduation information is available on the University of Toronto website at www. convocation.utoronto.ca.

11   Academic Appeals Policy

11.1   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 11.1.1) must be initiated within the student's home graduate unit (hereafter referred to in this policy as "department") unless the appeal relates to a course outside the department, in which case it must be initiated in the department in which the course was taken, with notification to the student's home department chair (hereafter referred to in this policy as "Chair of the department"). In the case of collaborative program core courses, the appeal is pursued through the student's home department where representation from the collaborative program will be included in the constitution of an appeal committee or hearing.

11.1.1   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 11.3.3). 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.

11.2   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 the relevant SGS Vice-Dean for advice and/or informal mediation. The Vice-Dean will serve as informal mediator, attempting to resolve the dispute or clarify issues. Timelines are not affected by mediation. Consultation with the Vice-Dean at an early stage is encouraged. In cases where the Vice-Dean has approved the termination of a student's registration or in cases where perceived or actual conflict of interest is identified, the student will have access to an alternate informal mediator.

11.3   Steps

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

11.3.1   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/Associate Chair (hereafter referred to in this policy as "Graduate Coordinator") and/or Chair of the department.

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	
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 PhD 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 or Director b. **8 weeks** from written notification of failure of the Final PhD 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 PhD 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 the Vice-Dean 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

11.3.2   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 the GDAAC; a copy of this notice is available from the Graduate Coordinator in every graduate department. This form must be completed and delivered to the Chair of the graduate department 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 his or her 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 of the graduate department regarding the merits of the appeal. The Chair of the department will then render the department-level appeal decision. GDAAC guidelines for department chairs are made available to all parties in an appeal.

11.3.3   Step 3: Appeal to GAAB

1. The student may appeal the decision of the Chair of the department by filing a Notice of Appeal to the SGS Graduate Academic Appeals Board (GAAB) within eight weeks of the decision of the Chair of the department.
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.

11.3.4   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.

12   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. These appear on the SGS website at www.sgs.utoronto.ca/governance/policies.htm. Furthermore, University of Toronto–wide policies affecting students are posted at www.governingcouncil.utoronto.ca/policies.htm.

12.1   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.

The purpose of the University Assessment and Grading Practices Policy is to ensure:

- that assessment and grading practices across the University are consistent and reflect appropriate academic standards;
- that student performance is evaluated in a manner that is fair, accurate, consistent, and objective and in compliance with these academic standards;
- that the academic standing of every student can be accurately assessed even when conducted in different divisions of the University and evaluated according to different grading scales.

This policy applies to the evaluation of student performance in for-credit programming at both the graduate and undergraduate level within all divisions/Faculties of the University. 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.

The University Assessment and Grading Practices Policy comprises three parts:

Part A: Grades
Part B: Grading Practices
Part C: Designators and Other Non-Grade Symbols Approved for Use in Reporting Course Results

The full text of the University Assessment and Grading Practices Policy is available on the University of Toronto website at www.governingcouncil.utoronto.ca/Governing_Council/policies.htm.

12.2 Academic Continuity Policy

The University of Toronto is committed to fulfilling its core academic mission of educating students. It recognizes that events such as pandemic health emergencies, natural disasters, prolonged service interruptions, and ongoing labour disputes are potential threats to academic continuity. Good stewardship requires that the University undertake appropriate planning and preparation to promote continuity. At the same time, the University must be prepared to respond to extraordinary circumstances in which the normal academic operations of the University may be disrupted.

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.

The full text of the Academic Continuity Policy is available on the University of Toronto website at www.governingcouncil.utoronto.ca/Governing_Council/policies.htm.

12.3 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/for-researchers-administrators/applying-for-funding/intellectual-property/.

12.4 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. See also Student Guide on Ethical Conduct in Research Involving Human Subjects on the SGS website at www.sgs.utoronto.ca/governance/policies/ethicresearch.htm.

12.5 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

The following academic sanctions will be imposed on students who have outstanding recognized financial obligations to the University.

1. Statements of results or official transcripts of record or both will not be issued.
2. The University will not release the official document (called the diploma) which declares the degree earned, nor provide

oral confirmation or written certification of degree status to external enquirers. Indebted graduands will be allowed to walk on stage and have their names appear on the convocation program.

3. Registration will be refused to a continuing or returning student. Payments made by continuing or returning students shall be applied first to outstanding University debts, and second, to current fees.

The full text of the Policy on Academic Sanctions for Students Who Have Outstanding University Obligations is available on the University of Toronto website at www.governingcouncil.utoronto.ca/policies/sanction.htm.

12.6 Code of Behaviour on Academic Matters

The Governing Council of the University of Toronto has approved a Code of Behaviour on Academic Matters applying to members of the University. The Code of Behaviour on Academic Matters addresses the responsibilities of all parties to the integrity of the teaching and learning experience. It concerns the accountability of faculty members and students as they cooperate in all phases of this relationship. Honesty and fairness must inform these activities, the foundation of which is mutual respect for the aims of education and for those ethical principles which characterize the pursuit and transmission of knowledge within the University.

The code addresses offences, procedures, and sanctions; more information appears in three appendices. The code is enforced by Divisional Deans, the Provost, and the University Disciplinary Tribunal.

In cases involving graduate students, the divisional dean is the Dean of the School of Graduate Studies.

The full text of the Code of Behaviour on Academic Matters is available on the University of Toronto website at www.governingcouncil.utoronto.ca/policies/behaveac.htm.

12.7 Policy and Procedures: Sexual Harassment

Harassment in any situation is reprehensible. In particular, within the University community it fosters a hostile or unfair environment which counteracts the spirit of cooperation and education. To guard against sexual harassment, the Governing Council of the University of Toronto has approved a Policy and Procedures: Sexual Harassment, which protects students, faculty, and staff from sexual harassment within the University community. All complaints will be guided by a spirit of fairness to each party and ensures a fair and impartial hearing. Under the policy, complainants have the right to seek a remedy and respondents have the right to know both the allegations and the accuser. The highest standards of confidentiality are maintained in order to protect any party against unsubstantiated claims which might result in harm or malicious gossip. The full text of Policy and Procedures: Sexual Harassment is available at www.governingcouncil.utoronto.ca/policies/sexual.htm.

12.8 Code of Student Conduct

Students have an obligation to make legal and responsible decisions concerning their conduct. The University has no general responsibility for the moral and social behaviour of its students. In the exercise of its disciplinary authority and responsibility, the University recognizes that students are free to organize their own personal lives, behaviour, and associations subject only to the law and to University regulations that are necessary to protect the integrity and safety of University activities, the peaceful and safe enjoyment of University housing by residents and neighbours, or the freedom of members of the University to participate reasonably in the programs of the University and in activities in or on the University's premises.

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

The full text of the Code of Student Conduct is available on the University of Toronto website at www.governingcouncil.utoronto.ca/policies/studentc.htm.

12.9 Access to Official Student Academic Records

Academic records of students are ultimately the property of the University; it is the responsibility of the University to establish overall University policy in this area. 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.

The guidelines ensure that students, alumni, and former students are allowed as great a degree of access to their own academic records as is academically justifiable and administratively feasible. A student's right to privacy in relation to his or her academic records is safeguarded as far as both internal University access and external public access are concerned. The guidelines call for basic University-wide consistency in the kinds of information collected, recorded, filed, and made available.

The full text of the Guidelines Concerning Official Access to Student Academic Records is available on the University of Toronto website at www.governingcouncil.utoronto.ca/ policies/Guidelines_Concerning_Access_to_ Official_Student_Academic_Records.htm.

12.10 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.

- The transcript should reflect academic history only.
- The transcript should be a meaningful reflection of the student's academic activity and achievement.
- The transcript must provide the reader with the information required to interpret the transcript.

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

The full text of the Transcript Policy is available on the University of Toronto website at www.governingcouncil.utoronto.ca/ Governing_Council/policies.htm.

12.11 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.

12.11.1 Postal Addresses and Electronic Mail Accounts

Students are responsible for maintaining and advising the University—via the University's student information system (currently ROSI)—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.

12.11.2 University Rights and Responsibilities Regarding Official Correspondence

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, available on the website of the Office of the Vice-President and Provost at www.provost.utoronto.ca/ policy/use.htm.

12.11.3 Students' Rights and Responsibilities Regarding Retrieval of Official Correspondence

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.

The full text of the Policy on Official Correspondence with Students is available on the University of Toronto website at www.governingcouncil.utoronto.ca/policies/studentemail.htm.

12.12 Policy on the Framework on Off-Campus Safety

In the normal course of University-related life, University members may participate in a wide range of activities taking place at locations away from the University campuses. Some of these activities include field research, field placements, and internships.

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.

The full text of the Policy on the Framework on Off-Campus Safety is available on the University of Toronto website at www.governingcouncil.utoronto.ca/Assets/Governing+Council+Digital+Assets/Policies/PDF/ppmay191988.pdf.

Students are also encouraged to review the Guidelines for Safety in Field Research produced by the Office of Environmental Health and Safety at www.ehs.utoronto.ca/resources/manindex/policies/fieldres.htm.

12.13 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.

The full text of the Appropriate Use of Information and Communication Technology is available on the Provost's website at www.provost.utoronto.ca/policy/use.htm.

12.14 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. In this affirmation, the University:

1. acknowledges that it conducts its teaching, research, and other activities in the context of a richly diverse society;
2. recognizes that the attainment of excellence in pursuit of its mission is furthered by the contribution made by persons reflecting this rich diversity;
3. acts within its purview to prevent or remedy discrimination or harassment on the basis of race, gender, sexual orientation, age, disability, ancestry, place of origin, colour, ethnic origin, citizenship, creed, marital status, family status, receipt of public assistance, or record of offence;
4. acts conscientiously in keeping with its own policies and existing legislation related to human rights, such as its Code of Behaviour on Academic Matters, its Policies and Procedures: Sexual Harassment, its Employment Equity Policy, and the Human Rights Code of the Province of Ontario.

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 the Good Academic Standing requirements, section 8 on Good Academic Standing in General Regulations.

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; however, details are found in each program entry; see Graduate Programs by graduate unit, referred to as "graduate unit entries" below.

1   Doctoral Degrees

The University of Toronto offers programs of study leading to four doctoral degrees. Degrees offered in multiple programs are listed first, followed by degrees specific to one graduate program.

1.1   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 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 have been asked to include a statement to that effect in their calendar entries.

1.1.1   Admission Requirements

1.1.1.1   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 to 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 the Admission Regulations section of General Regulations.

1.1.1.2 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 the relevant discipline. Students who hold a master's degree in another discipline or require further preparation also normally would be admitted to this program.

1.1.1.3 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. 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 "practicing 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. This category may include recently retired individuals who maintain professional engagement.

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 their professional activities while registered in the program.

Admission to this option is subject to availability of a supervisor.

1.1.2 Transfers

1.1.2.1 Master's to PhD

A student may be recommended for transfer from a master's program to a PhD program. In such cases, the student will transfer to a five-year PhD with the years in the master's program being counted as part of the PhD program. The total number of courses required for the PhD is the sum of the normal master's and PhD course requirements unless otherwise specified by the graduate unit.

1.1.2.2 PhD to Master's

Students transferring from the PhD 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 SGS Vice-Dean, Students. 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 PhD to the master's program will not be permitted to transfer subsequently to the PhD program within the same graduate unit unless approved by the SGS Admissions and Programs Committee.

1.1.3 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 period of registration is one academic year, that is, three consecutive sessions. All PhD students are subject to rules and regulations outlined in the General Regulations, including section 8 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 1.1.3.8 Flexible-Time PhD Program Option, below.

1.1.3.1 Approval

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

1.1.3.2 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 of the second year. Graduate units may, at their discretion, require an earlier date.

1.1.3.3 Language Requirement

The student must have an adequate knowledge of such language or languages, other than English, as are required by the graduate unit and 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 acceptable certificate of language competence is deposited in the official student file.

1.1.3.4 Achieving Candidacy: Requirements and Time Limit

See General Regulations, section 8 on Good Academic Standing for detailed requirements.

1.1.3.5 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 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, that demonstrates his or her 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, and no language other than English or French may be used for the conduct of Doctoral Final Oral Examinations.

See also General Regulations sections Doctoral Supervision and Submission of Theses.

1.1.3.6 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 Doctoral Final Oral Examination section in General Regulations for detailed requirements and deadlines.

1.1.3.7 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 Extension of Time for Completion of Degree Requirements, Doctoral Students section in General Regulations.

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

For flexible-time PhD program option, see details below.

1.1.3.8 Flexible-Time PhD Program Option

Graduate units may offer a flexible-time PhD program option, approved by University of Toronto governance. Such a program option is offered where there is sufficient demand by practicing 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 1.1.1.3 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 program offering a flexible-time PhD option will identify a normal 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 departmental regulations. 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.

1.2 Doctor of Education (EdD)

The EdD program is offered in a variety of programs in multiple graduate units. 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 8 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 Degree and Diploma 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 Doctoral Final Oral Examination in General Regulations 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 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.

1.2.1 Admission Requirements

1. An MEd or MA in Education, or its equivalent from a recognized university, in the same area of specialization proposed at the doctoral level, completed with standing equivalent to a B+ or better.

2. Successful professional experience in education, or in a relevant field.

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

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

1.2.2 Program Requirements

For specific program and registration requirements, see the Degree and Diploma 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 will be required to take a comprehensive examination. Consult the specific graduate-unit entry for details.

5. A thesis embodying the results of original investigation conducted by the student under the direction of an Ontario Institute

for Studies in Education (OISE) thesis committee.

6. 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.

7. All requirements for the EdD must be completed within six years of first enrolment as an EdD student.

1.3 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 8 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 Doctoral Final Oral Examination in General Regulations for detailed requirements and deadlines.

1.4 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 8 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 Doctoral Final Oral Examination in General Regulations for detailed requirements and deadlines.

2 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 8 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 degrees specific to one graduate program.

2.1 Degrees in Multiple Graduate Programs

2.1.1 Master of Arts (MA)

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

2.1.1.1 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 usual length of program may be extended.

2.1.1.2 Program Requirements

1. Under the direction of a graduate unit, a student in this University must pursue a program of advanced study approved by the graduate unit.

2. All requirements for the degree of MA must be satisfactorily completed within 3 years (full-time)/6 years (part-time) from first enrolment

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

2.1.2 Master of Science (MSc)

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

2.1.2.1 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.

2.1.2.2 Program Requirements

1. Under the direction of a graduate unit, a student in this University will pursue a program of advanced study approved by the graduate unit.

2. All requirements for the degree of MSc must be satisfactorily completed within 3 years (full-time)/6 years (part-time) from first enrolment.

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

2.1.3 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.

2.1.3.1 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 Science and Engineering
- Biomaterials and Biomedical Engineering
- Chemical Engineering and Applied Chemistry
- Civil Engineering
- Electrical and Computer Engineering
- Earth Sciences (formerly Geology)
- Materials Science and Engineering

- Mechanical and Industrial Engineering

2.1.3.2 Program Requirements

1. Under the direction of a graduate unit, a student in this University must pursue a program of advanced 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 degree of MASc must be satisfactorily completed within 3 years (full-time)/6 years (part-time) from first enrolment.

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

2.1.4 Master of Education (MEd)

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

2.1.4.1 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.

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

- Applied Psychology and Human Development
- Curriculum, Teaching and Learning
- Humanities, Social Sciences and Social Justice Education
- Leadership, Higher and Adult Education

2.1.4.2 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.

Option I—Coursework Plus Comprehensive
- 5.0 full-course equivalents (FCEs) plus a comprehensive examination/requirement

Option II—Research Project
- 4.0 full-course FCEs plus a research project or a Major Research Paper

Option III—Thesis
- 3.0 FCEs plus a thesis

Option IV—Coursework-Only
- 5.0 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 degree must be satisfactorily completed within 3 years (full-time)/6 years (part-time) from first enrolment.

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

2.1.5 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.

2.1.5.1 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 Science and Engineering
- Chemical Engineering and Applied Chemistry
- Civil Engineering
- Electrical and Computer Engineering
- Materials Science and Engineering
- Mechanical and Industrial Engineering

2.1.5.2 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 degree program must be completed within 3 years (full-time)/6 years (part-time) from first enrolment.

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

2.1.6 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 graduate unit entry for details.
- Biomedical Engineering
- Health Policy, Management and Evaluation
- Medical Science
- Speech-Language Pathology

2.2 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 are outlined in the applicable entry in the Degree and Diploma 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 8 on Good Academic Standing requirements, in addition to the degree requirements specified in the relevant graduate unit entry.

2.2.1 Global Professional Master of Laws (GPLLM)

See Law entry.

2.2.2   Master of Architecture (MArch)

See Architecture, Landscape, and Design entry.

2.2.3   Master of Biotechnology (MBiotech)

See Professional Graduate Programs Centre (UTM) entry.

2.2.4   Master of Business Administration (MBA)

Admission and program requirements for the following degree programs are outlined in the Management entry.
- Master of Business Administration in Management
- Executive Master of Business Administration in Management
- Global Executive Master of Business Administration in Management

2.2.5   Master of Engineering in Design and Manufacturing (MEngDM)

See Design and Manufacturing entry in Joint Programs.

2.2.6   Master of Environmental Science (MEnvSc)

See Physical and Environmental Sciences entry.

2.2.7   Master of Finance (MF)

See Management entry.

2.2.8   Master of Financial Economics (MFE)

See Financial Economics entry in Joint Programs.

2.2.9   Master of Forest Conservation (MFC)

See Forestry entry.

2.2.10   Master of Global Affairs (MGA)

See Global Affairs entry.

2.2.11   Master of Health Informatics (MHI)

See Health Policy, Management and Evaluation entry.

2.2.12   Master of Industrial Relations and Human Resources (MIRHR)

See Industrial Relations and Human Resources entry.

2.2.13   Master of Information (MI)

See Information entry.

2.2.14   Master of Landscape Architecture (MLA)

See Architecture, Landscape, and Design entry.

2.2.15   Master of Laws (LLM)

See Law entry.

2.2.16   Master of Management and Professional Accounting (MMPA)

See Professional Graduate Programs Centre (UTM) entry.

2.2.17   Master of Management of Innovation (MMI)

See Health Policy, Management and Evaluation entry.

2.2.18   Master of Mathematical Finance (MMF)

See Mathematical Finance entry.

2.2.19   Master of Museum Studies (MMSt)

See Information entry.

2.2.20   Master of Music (MMus)

See Music entry.

2.2.21 Master of Nursing (MN)

See Nursing Science entry.

2.2.22 Master of Public Health Science (MPH)

See Public Health Sciences entry.

2.2.23 Master of Public Policy (MPP)

See Public Policy and Governance entry.

2.2.24 Master of Science in Applied Computing (MScAC)

See Computer Science entry.

2.2.25 Master of Science in Biomedical Communications (MScBMC)

See Medical Science entry.

2.2.26 Master of Science in Community Health (MScCH)

See Public Health Sciences entry.

2.2.27 Master of Science in Forestry (MScF)

See Forestry entry.

2.2.28 Master of Science in Occupational Therapy (MScOT)

See Occupational Science and Occupational Therapy entry.

2.2.29 Master of Science in Physical Therapy (MScPT)

See Physical Therapy entry.

2.2.30 Master of Science in Planning (MScPl)

See Geography entry.

2.2.31 Master of Social Work (MSW)

See Social Work entry.

2.2.32 Master of Studies in Law (MSL)

See Law entry.

2.2.33 Master of Teaching (MT)

See Curriculum, Teaching and Learning entry.

2.2.34 Master of Urban Design (MUD)

See Architecture, Landscape, and Design entry.

2.2.35 Master of Urban Design Studies (MUDS)

See Geography entry.

2.2.36 Master of Visual Studies (MVS)

See Art entry.

Fees and Financial Support

Fees

Schedule of Fees

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

Fees and Registration

Students are informed of fees payable online through the Student Web Service (www.rosi.utoronto. ca). University of Toronto students normally pay tuition fees at a branch of a financial institution in Canada. Students wishing to make a fees payment from outside of Canada may choose one of the following three fee payment options: Travelex bank-to-bank transfer, bank draft/money order, or transfer of funds. More information on these payment options can be found on the Student Accounts website (www.fees. utoronto.ca). 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.

Academic Fees Structure

Because the course of study in many graduate units is unstructured 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 minimum period of registration (see General Regulations section 6.3 Minimum Period of Registration). This period establishes the minimum degree fee that must be paid before graduation.

In the Faculty of Information, where there is no residence or full-time attendance required and the master's degree is achieved by coursework only, the length of program will be determined by the number of full-course equivalents (FCEs) required to complete the degree requirements.

Full-Time Student Fee

The full-time student fee is charged to a full-time student for the minimum period of registration and all subsequent registrations. See also Fees for Final-Year Doctoral Students and Fees for Students on Extension, below, regarding fees for PhD students on extension.

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.

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.

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 7.1.15 Leave Policy) do not pay summer session fees.

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 to the completion of their program.

Flexible-Time PhD Degree Students

Students undertaking a flexible-time PhD program are required to pay full-time academic and incidental fees for 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 General Regulations section 7.1.10 Extension of Time for Completion of Degree Requirements.

Special Students

Full-time special students pay the full academic fee per annum. 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, check www.fees.utoronto.ca.

Fees for International Students

In accordance with the recommendations of the Ontario government, 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 at www.fees.utoronto.ca.

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. See also Fees for Final-Year Doctoral Students and Fees for Students on Extension, below.

Incidental Fees

Compulsory incidental fees are charged for the Graduate Students' Union, the Health Service, Hart House, the Athletic Centre, and other student services.

Minimum Payment

For other than those registering for only one session.

The minimum fee payment consists of 65% of the academic fee and 100% of the incidental fees. For students starting in the fall session, the first fee payment is due by the end of the September registration period and the balance of the required fees may be paid at any time but is due by April 30 without further notice and is subject to monthly service charges. For students starting in the winter session, the first fee payment is due by the end of the January registration period and the balance of the required fees may be paid at any time but is due by April 30. For students starting in the summer session, the first fee payment is due by the end of the May registration period and the balance of the required fees may be paid at any time but is due by August 31.

Service Charges

All outstanding fees, regardless of the source of payment, are subject to a service charge of 1.5% per month compounded (19.56% per annum). For students starting in the fall session, service charges are first assessed on November 15 and on the 15th of every month thereafter until paid in full. For students starting in the winter session, service charges are first assessed on February 15 and on the 15th of every month thereafter until paid in full. For students starting in the summer session, service charges are first assessed on June 15 and on the 15th of every month thereafter until paid in full.

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 plus $5 for each day of delay to a maximum of $94.

Balance of Degree Fee

The length of the program, as defined by the graduate unit, into which a student is admitted predetermines the minimum total academic fee that a student must pay prior to graduation. Many part-time master's students must pay a balance of degree fee prior to graduation.

Full-time students who accelerate their programs and finish the degree requirements in less time than the minimum period of registration must pay a balance of degree fee.

Part-time and full-time students, see chart on www.sgs.utoronto.ca/informationfor/students/money/fees.htm#Balance_of_Degree_Fees.

If a student has paid more than the full-time program fee due to the time taken to complete the degree requirements, there will be no refund of fees.

Any fees paid as a non-degree student (whether at the University of Toronto or at another institution) will not be counted towards the balance of degree fee. The SGS-approved transfer of graduate credit does not reduce the required balance of degree fee.

See also General Regulations 6.3 Minimum Period of Registration, in Structure of Academic Programs.

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 25, 2013, are required to register for the fall session and pay the appropriate fees.

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 before the 16th day of the month. Incidental and ancillary fees will be charged per session and are not pro-rated monthly.

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 fees during each year of extension. Part-time students will pay the relevant part-time fee and incidental fees.

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.

Also see General Regulations section 7.1.9 Failure to Register.

Outstanding Fees and Charges

See General Regulations section 12.5 Policy on Academic Sanctions for Students Who Have Outstanding Obligations to the University.

Receipts for Income Tax

Tuition Fee Certificates are available online at www.rosi.utoronto.ca. There is a charge of $5 for the preparation of duplicate receipts.

Transcripts

A $10 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 from the University of Toronto Transcript Centre, 100 St. George Street, Toronto, Ontario M5S 3G3 or online at www.rosi.utoronto.ca.

Calendars

The entire calendar is accessible on the web at www.sgs.utoronto.ca/calendar. Printed copies of the *School of Graduate Studies Calendar* may be purchased from SGS at a cost of $5 each, plus any necessary postage charges. Details and order form are available online at www.sgs.utoronto.ca/calendar.

Financial Support

Graduate Funding

The University of Toronto gives high priority to the matter of graduate financial support. For many doctoral-stream students, programs commit to a minimum level of funding at the beginning of each year, for up to five years of study. For further information about the funding available from specific programs, see the Graduate Funding Structures document at www.sgs.utoronto.ca/informationfor/students/money/funding.htm.

Although financial support cannot be guaranteed for all graduate students in all programs, we encourage you to inquire about financial assistance at your academic department or the Graduate Awards Office at the School of Graduate Studies.

Internal Awards

The School of Graduate Studies offers a number of internal awards to meritorious graduate students such as the Connaught International Scholarship for Doctoral Students as well as other endowed awards. For more information on internal awards, visit www.sgs.utoronto.ca/informationfor/students/money/support/internal.htm.

External Awards

Canadians and Canadian permanent residents may also apply for external support in the form of scholarships and fellowships offered by the Natural Sciences and Engineering Research Council of Canada (www.nserc.ca), the Social Sciences and Humanities Research Council of Canada (www.sshrc.ca) and the Canadian Institutes of Health Research (www.cihr.ca). All three granting councils (NSERC, SSHRC, and CIHR) also offer Canadian Graduate Scholarships (CGS) and Vanier Canada Graduate Scholarships. Both domestic and international students are eligible for the Vanier Canada Graduate Scholarships only. Please visit www.vanier.gc.ca for Vanier award information.

The Government of the Province of Ontario provides graduate scholarships tenable at Ontario universities. Ontario Graduate Scholarships (https://osap.gov.on.ca/OSAPPortal/en/A-ZListofAid/PRD1346626.html#P198_16037) are available for graduate studies in all disciplines. A limited number of these awards are available to visa students.

The Queen Elizabeth II Graduate Scholarships in Science and Technology (QEII-GSST) are designed to encourage excellence in graduate studies in science and technology; these are available only to Canadian citizens or permanent residents.

Ontario Student Assistance Program (OSAP)

The federal and provincial governments provide financial support to qualified students who are Canadian citizens or permanent residents of Ontario. The loan amount depends on your calculated financial need. Students can apply online at http://osap.gov.on.ca.

Awards for Non-Canadians

In addition to the internal funding normally available to all international students, a number of external funding sources can also be explored. For more information on awards for non-Canadians, please visit www.sgs.utoronto.ca/informationfor/students/money/support/international.htm. International students are encouraged to apply for all possible funding opportunities in their home country.

International students are eligible for the Vanier Canada Graduate Scholarships. Please visit www.vanier.gc.ca for more information on specific awards.

The Government of the Province of Ontario provides graduate scholarships tenable at Ontario universities. Ontario Graduate Scholarships (http://osap.gov.on.ca) are available for graduate studies in all disciplines. A limited number of these awards are available to visa students.

Additionally, the Ontario Trillium Scholarship is a recent scholarship program intended to attract the best-qualified international students to Ontario for PhD studies. For further information, please visit www.sgs.utoronto.ca/informationfor/students/money/support/provincial.htm. A select number of applicants will be nominated to SGS through graduate units.

Other Funding Sources

Teaching Assistantships

Some graduate units hire teaching assistants who spend up to 10 hours a week conducting tutorials, grading undergraduate essays and exams, and acting as a resource for undergraduate students. For further information, write to the chair of your graduate unit, giving full particulars of your academic training and experience.

Research Assistantships

Research assistants normally work with a faculty member, assisting with research projects. Apply directly to the graduate unit chair concerned.

Financial Aid

For graduate students who are faced with sudden and often unanticipated financial need, SGS offers a number of financial assistance programs.

Emergency Grant Program

The Emergency Grant Program is designed to assist 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. For more information on the Emergency Grant Program, visit www.sgs.utoronto.ca/informationfor/students/money/support/assistance.htm.

Emergency Loan Program

The Emergency Loan Program is designed to alleviate temporary cash flow problems for students who are expecting to receive a payment in the near future. The maximum loan amount is $1,500 and is interest free until the mutually agreed upon repayment date. For more information on the Emergency Grant Program, visit www.sgs.utoronto.ca/informationfor/students/money/support/assistance.htm.

Accessibility Grant Program

The Accessibility Grant Program is designed to assist currently registered, full-time graduate students with accommodations necessary to meet unexpected needs arising from the particular demands of their graduate program. The grant is intended to assist with relatively short-term needs that are required to complete the program. Students are expected to plan for long-term assistance. Students must apply for this grant through Accessibility Services. Visit www.sgs.utoronto.ca/informationfor/students/money/support/assistance.htm.

Financial Counselling

Financial counselling can relieve stress, resolve immediate financial problems, and help plan for the future. Financial counsellors are trained to assist students in all aspects of financial management including budget planning and debt load management. Financial counselling sessions are confidential and available to graduate students free of charge. To schedule an appointment, contact the Graduate Awards Office by telephone at (416) 946-0808 or by e-mail to graduate.awards@utoronto.ca.

Further Information on Financial Support

Visit

www.sgs.utoronto.ca/informationfor/students/money

Opportunities Database

An Opportunities Database has been developed by ULife and provides a listing of internal and external awards available to University of Toronto students. This list will be updated regularly as new awards become available, and we encourage students to visit the website (https://ulife.utoronto.ca/opportunities/list/type/award) often.

Contact

Graduate Awards Office
School of Graduate Studies
University of Toronto
Room 202, 63 St. George Street
Toronto, Ontario M5S 2Z9
Canada

Telephone: (416) 946-0808
Fax: (416) 971-2864
E-mail: graduate.awards@utoronto.ca *or*
　　　　gradschool@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. Collaborative programs
3. Joint programs

SGS comprises over 80 graduate units, 40 collaborative (interdisciplinary) programs, and two joint programs.

Within each program type, graduate units are listed alphabetically with a descriptive overview, contact information, a list of degree programs offered, together with admission and program requirements and courses. Each calendar entry concludes with a list of graduate faculty appointed to the graduate unit.

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

Faculty Affiliation

Applied Science and Engineering

Degree Programs Offered

Aerospace Science and Engineering – MASc, MEng, PhD

Overview

The University of Toronto Institute for Aerospace Studies (UTIAS) offers graduate programs leading to research-intensive **Master of Applied Science** and **Doctor of Philosophy** degrees and a professionally oriented **Master of Engineering** degree. Faculty research areas include aircraft flight systems and control, flight simulation, computational fluid dynamics, combustion and propulsion, aerodynamic shape optimization, experimental fluid dynamics, flow control, structural mechanics, advanced composite materials, multidisciplinary optimization of aircraft, multifunctional systems, spacecraft dynamics and control, autonomous space robotics, microsatellites, space mechatronics, plasma-materials interactions, and materials for fusion reactors. Details of entrance regulations and courses of study are given in this calendar and on the UTIAS website.

Contact and Address

Web: www.utias.utoronto.ca
Telephone: (416) 667-7714
Fax: (416) 667-7743

University of Toronto Institute for Aerospace Studies
Room 169, 4925 Dufferin Street
Toronto, Ontario M3H 5T6
Canada

Degree Programs

Aerospace Science and Engineering

Master of Engineering

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.

Program Requirements

- Under the guidance of the Graduate Coordinator or a staff supervisor, a student selects a program of study that consists of at least 10 half courses (5.0 full-course equivalents [FCEs]). Individual programs

will be arranged to make up for background deficiency. The program may be pursued on a full-time or part-time basis. On a full-time basis, completion is possible in three sessions.

Normal Program Length: 3 sessions full-time; 8 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

Master of Applied Science

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Qualified graduates in engineering, mathematics, physics, or chemistry are encouraged to apply. Individual programs are arranged to make up for background deficiencies.

Program Requirements

- Minimum of 2.5 full-course equivalents (FCEs), of which 0.5 FCE must be AER 1800H *Research Seminar in Aerospace Science and Engineering.* All required courses must be completed during the first year of the program.
- A thesis based on research or development, selected in consultation with the student's supervisor.
- Research performance is assessed by a Research Assessment Committee (RAC), which includes the student's supervisor.
- MASc students are anticipated to complete their degree requirements in 18 months.
- Students interested in pursuing a PhD degree, who have achieved excellent performance in an MASc program at UTIAS, are encouraged to transfer directly into a PhD program, under the same supervisor, at the end of their first year of MASc studies. Approval for transfer is based on the student's research ability, research progress during the first year, and academic standing. Students transferring from an MASc to a PhD program shall be referred to as "transfer students."

Normal Program Length: 5 sessions full-time

Time Limit: 3 years full-time

Doctor of Philosophy

Minimum Admission Requirements

- An MASc degree in engineering, mathematics, physics, or chemistry and demonstrated ability to perform advanced research. Applicants with an appropriate bachelor's degree from a recognized university who wish to pursue PhD studies at UTIAS will initially be admitted into the MASc program and

will be considered for direct transfer into the PhD program.

Program Requirements

- Full-time continuous registration for every session, including the summer session, until all degree requirements are completed. PhD students starting with an MASc or MEng degree must spend a minimum of two years in the program. Transfer students spend a minimum of three years in the program from the date of registration in the MASc program.

- Following acceptance into a PhD program, the student shall undertake a program of study under the guidance of a Doctoral Examination Committee (DEC) which includes the student's supervisor.

- Coursework and a thesis which must be based on research conducted while registered for the PhD program. PhD students starting with an MASc or MEng degree require 2.0 full-course equivalents (FCEs). Transfer students need 1.0 FCE in addition to the 2.5 FCEs completed prior to the MASc to PhD transfer for a total of 3.5 FCEs. All courses must be completed during the first two years in the PhD program.

- A student with a master's degree in a discipline appropriate to the field of PhD study is anticipated to complete the PhD program on a full-time basis in less than four years. The anticipated period for transfer students is less than five years from the date of registration in the MASc program. The DEC plays an important role in assisting students to meet this goal. The functions of the DEC are to:
  - ascertain the suitability of the student for advanced research,
  - assess the thesis topic,
  - conduct formal reviews of the student's progress at least once a year (unsatisfactory progress may result in the termination of the student's candidacy), and
  - provide first assessment of the completed thesis.

- Program milestones:
  1. The first DEC meeting is held within six months of PhD program start (or date of transfer for transfer students); the aim is to identify the topic and scope of the thesis.
  2. The second DEC meeting (approximately 1.5 years after PhD start) is the Qualifying Examination, which determines whether the student should continue in the program or whether his or her candidacy should be terminated.
  3. Subsequent DEC meetings are held at least once a year.

- Upon thesis completion, the student presents the thesis at a Departmental Doctoral Seminar before defending it at the Doctoral Final Oral Examination

as prescribed under the SGS Degree Regulations in this calendar.

- Prior to convocation, PhD students must prepare at least one formal manuscript, based on the thesis, for publication in refereed journals or refereed conference proceedings.

Normal Program Length: 4 years full-time; 5 years direct-entry

Time Limit: 6 years full-time; 7 years direct-entry; 7 years transfer-from-master's

Course List

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 1214H	Airplane Dynamics (Flight Laboratory)
AER 1215H	Aerodynamics and Flight Mechanics of Rotorcraft
AER 1220H	Remotely Piloted Flight Vehicles

Aerodynamics, Fluid Dynamics, and Propulsion

AER 0510H	Aerospace Propulsion
AER 1301H	Kinetic Theory of Gases
AER 1302H	Viscous Flows and Boundary Layers
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

Structures and Multidisciplinary Optimization

AER 0501H	Advanced Mechanics of Structures
AER 1403H	Advanced Aerospace Structures (PR)
AER 1411H	Theory of Composite Materials
AER 1415H	Optimization Concepts and Applications

Space Systems Engineering

AER 0506H	Spacecraft Dynamics and Control I
AER 0525H	Robotics
AER 1503H	Spacecraft Dynamics and Control II
AER 1512H	Multibody Dynamics

AER 1513H	State Estimation for Aerospace Vehicles
AER 1515H	Intelligent Robotics
AER 1520H	Microsatellite Design I
AER 1521H	Microsatellite Design II

Engineering Physics

AER 0507H	Introduction to Fusion Energy
AER 1705H	Plasma Physics and Fusion Energy
AER 1706H	Fusion Reactor Systems
AER 1716H	Fusion Reactor Materials (reading course)
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.)

Graduate Faculty

Full Members

Damaren, Christopher - BASc, MASc, PhD
D'Eleuterio, Gabriele - BASc, MASc, 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
Hansen, Jorn - BASc, MASc, PhD
Liu, Hugh - BSc, MASc, PhD *(Interim Associate Director; Graduate Coordinator)*
Martins, Joaquim - MEng, MSINAE, PhD
Nair, Prasanth - BTech, MTech, PhD
Sislian, Jean - MSc, PhD, PhD
Steinberg, Adam - BASc, MSc, PhD
Zee, Robert - BASc, MASc, PhD
Zingg, David - BASc, MASc, PhD *(Director)*

Members Emeriti

de Leeuw, Jacob - MS, PhD
DeLaurier, James - BS, MS, PhD, Fell Cdn Aero & Space Inst
Hughes, Peter - BASc, MASc, PhD
Reid, Lloyd - BASc, MASc, PhD
Stangeby, Peter - BSc, MSc, PhD
Sullivan, Philip - DIC, BEng, MEng, PhD
Tennyson, Roderick - BASc, MASc, PhD

Associate Members

Davis, James - BASc, MASc, PhD
Fejtek, Ian - BSc, BEng, MASc, PhD
Liu, Fengshan - BSc, PhD

Ower, Cameron - BASc, MASc, PhD
Sallaberger, Christian - BASc, MSc, PhD

Anthropology

Faculty Affiliation

Arts and Science

Degree Programs Offered

Anthropology – MA, MSc, PhD

Collaborative Programs

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

1. **Aboriginal Health**
   - Anthropology, MA, MSc, PhD
2. **Addiction Studies**
   - Anthropology, MA, MSc, PhD
3. **Aging, Palliative and Supportive Care Across the Life Course**
   - Anthropology, MA, MSc, PhD
4. **Asia-Pacific Studies**
   - Anthropology, MA
5. **Diaspora and Transnational Studies**
   - Anthropology, MA, MSc, PhD
6. **Dynamics of Global Change**
   - Anthropology, PhD
7. **Environmental Studies**
   - Anthropology, MA, MSc, PhD
8. **Ethnic and Pluralism Studies**
   - Anthropology, MA, PhD
9. **Global Health**
   - Anthropology, PhD
10. **Jewish Studies**
    - Anthropology, MA, PhD
11. **Sexual Diversity Studies**
    - Anthropology, MA, MSc, PhD
12. **South Asian Studies**
    - Anthropology, MA, MSc, PhD
13. **Women and Gender Studies**
    - Anthropology, MA, MSc, PhD
14. **Women's Health**
    - Anthropology, MA, MSc, PhD

Overview

The Department of Anthropology offers research training and courses of instruction in five fields:

- Archaeology
- Biological Anthropology
- Linguistic and Semiotic Anthropology
- Medical Anthropology
- Sociocultural Anthropology

The department offers a **Master of Arts** degree program in all five fields.

The **Master of Science** degree program is normally taken in three fields: Archaeology, Biological Anthropology, and Medical Anthropology.

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.

Contact and Address

Web: www.anthropology.utoronto.ca
E-mail: 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

Degree Programs

Anthropology

Master of Arts

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies.
- 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

- 4.0 full-course equivalents (FCEs), which must include ANT 1000H and ANT 2000Y.

The program normally extends over a 12-month period lasting from September to September; the MA program may also be taken on a part-time basis.

Normal Program Length: 3 sessions full-time; 6 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

Master of Science

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies.
- 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

- 5.0 full-course equivalents (FCEs), which must include ANT 1000H and ANT 2500Y. Of the remaining 3.5 FCEs, 1.5 will normally be science courses in archaeology, biological anthropology, medical anthropology, or related disciplines depending on the student's program.

    The MSc is a two-year program that is normally completed by the summer of the second year. The MSc program may also be taken on a part-time basis.

Normal Program Length: 6 sessions full-time; 9 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

Doctor of Philosophy

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies.
- 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 encouraged 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 exceptionally strong backgrounds (i.e., with a cumulative GPA of 3.85 or above) and who have earned an appropriate bachelor's degree with a concentration in anthropology may apply for direct entry to the PhD program.

Program Requirements

All PhD Students

- Before proceeding to full-time research, students must:
    - be resident on campus for one year
    - complete a minimum of 3.0 FCEs, 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
- 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.
- 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.

Entry with a Master's Degree

- Minimum of 3.0 full-course equivalents (FCEs).
- 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 the second year (e.g., May 1 for students who start in September).

Direct-Entry Students (entry with a bachelor's degree)

- 5.0 full graduate course equivalents (FCEs), of which 3.0 will normally be taken in the first year; the remaining 2.0 FCEs can be taken in the second year, 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 the third year (e.g., May 1 for students who start in September).

Normal Program Length: 4 years full-time; 5 years direct-entry

Time Limit: 6 years full-time; 7 years direct-entry

Course List

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 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 2000Y[0]	MA Research Paper
ANT 2500Y[0]	MSc Research Paper
JAC 1001H	Media, Mind, and Society
JTH 3000H	Coordinating Seminar in Ethnic and Pluralism Studies (for students in the Ethnic and Pluralism Studies Collaborative Program)

Archaeology

JPA 1040Y	Advanced Physics and Archaeology
ANT 4010H	Archaeology in Contemporary Society
ANT 4020H	Archaeology Theory
ANT 4022H	Culture Resource Management
ANT 4025H	Archaeology of Eastern North America
ANT 4026H	Arctic Archaeology
ANT 4028H	Violence and Civilization
ANT 4029H	Lithic Technology
ANT 4030H	Artifacts
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 4060H	Specific Problems I
ANT 4065H	Specific Problems II
ANT 4066H	Household Archaeology

ANT 4068H	Archaeology of Technology

Biological Anthropology

ANT 3005H	Advanced Topics in Paleoanthropology
ANT 3010H	Human Osteology: Theory and Practice
ANT 3011H	Palaeopathology
ANT 3022H	New Techniques for Biological Anthropology
ANT 3031H,Y	Advanced Research Seminar I
ANT 3034H,Y[+]	Advanced Research Seminar IV
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 3439H	Advanced Seminar in Forensic Anthropology
ANT 3440H	Molecular Anthropology: Theory and Practice

Linguistic and Semiotic Anthropology

JAL 1140H	Special Topics in Anthropology and Linguistics
JAL 1153H	Conversational Structures
JAL 1155H	Language and Gender
ANT 5141H	Critical Issues in Linguistic Anthropology
ANT 5142H	Language in Anthropological Thought
ANT 5143H	Critical Issues in Linguistic Anthropology
ANT 5144H	Foundations in Linguistic Anthropology
ANT 5145H	Classic Texts in Cultural Studies
ANT 5146H	West and Non-West: Anthropology and the Notion of the Other
ANT 5162H	Ethnography of Communication
ANT 6013H	Language and Publics in the Ethnography of Speaking
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

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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.

ANT 6010H	Anthropology of Korea: History and Dialogues with Other Disciplines within Korean Studies
ANT 6012H	Metamorphosis of Citizenship
ANT 6014H	Textuality and Technologies of Mass Mediation
ANT 6016H	Medicine and Globalization
ANT 6017H	Post-colonial Science Studies and the Cultural Politics of Knowledge Translation
ANT 6018H	Theories of Nature and Society
ANT 6019H	Anthropology of Neoliberalism
ANT 6020H	The Political Economy of Global/Local Dialectics
ANT 6021H	Political Anthropology: State, Power, and Sovereignty
ANT 6022H	Symbolic Anthropology: Structuralism, Hermeneutics, and Poststructuralism
ANT 6023H	Governmentality, Development and the Improvement of the World
ANT 6024H	Contemporary Trends in Anthropological Theory
ANT 6025H	Anthropology and Epistemology
ANT 6026H	Anthropology of Identity and Subject Formation
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 6033H,Y	Advanced Research Seminar III
ANT 6034H,Y	Advanced Research Seminar IV
ANT 6037H,Y	Advanced Research Seminar VII
ANT 6038H,Y+	Advanced Research Seminar VIII
ANT 6040H	Research Design and Fieldwork Methods
EAS 1603H	Anthropology of South Korea
JAR 6053H	Aboriginal Religion in Comparative Experience
JAR 6510H	From Theory to Ethnography: Anthropological Approaches to Religion

Graduate Faculty

Full Members

Bamford, Sandra - BA, MA, MPA, PhD
Banning, Edward - BA, MA, PhD *(Chair)*
Barker, Joshua - BA, MA, PhD
Begun, David - BA, MA, PhD
Boddy, Janice - BA, MA, PhD
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

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

Dave, Prakruti - BA, MA, PhD
Friesen, T Max - BA, MA, PhD
Gillison, Gillian - BA, PhD
Heller, Monica - BA, MA, PhD
Kalmar, Ivan - BA, MA, PhD *(Coordinator of Graduate Studies)*
Krupa, Chris - BA, MA, PhD
Lambek, Michael - BA, MA, PhD
Lehman, Shawn - BA, MA, PhD
Li, Tania - BA, PhD
Luong, Hy Van - BA, 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
Parga, Joyce Ann - BSc, MA, PhD
Parra, Esteban - BA, MA, PhD
Paz, Alejandro - BA, MPA, MA, PhD
Pfeiffer, Susan - BA, MA, PhD
Rogers, Tracy - BA, MA, PhD
Sanders, Todd - BA, MA, MSc, PhD
Satsuka, Shiho - BA, BA, MA, PhD
Sawchuk, Lawrence - BA, MA, PhD
Schillaci, Michael - BA, MA, PhD
Sellen, Daniel - BA, AM, PhD
Sidnell, Jack - BA, MA, PhD
Silcox, Mary Teresa - BSc, PhD
Smith, David - BA, MA, PhD
Song, Je Sook - BA, PhD
Swenson, Edward - BA, MA, PhD
Wardlow, Holly - BA, MA, MPH, PhD
Yao, Alice - BA, MA, PhD

Members Emeriti

Alderson-Smith, Gavin - BA, MA, DPhil
Burton, Frances - BSc, 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
Sigmon, Becky - BA, MS, PhD
Turner, David - BA, PhD
Vanderburgh, Rosamond - BA, MA

Associate Members

Clark, Terence - BA, MA, PhD
Dei, George JS - BA, MA, PhD
Dewar, Genevieve - BS, MA, PhD
Forni, Silvia - BA, MA, PhD
Gibbs, Alison - BS, MS, PhD
Harrison, Timothy - BA, MA, PhD
Jennings, Justin - BA, MA, PhD
Klassen, Pamela - BA, MA, PhD
Knappett, Carl - MA, PhD
Mittermaier, Amira - MA, PhD
Munson, Marit - BA, MA, PhD

Shen, Chen - BA, PhD
Williamson, Ronald - BA, MA, PhD
Young, Donna Jean - BA, MA, PhD

Applied Psychology and Human Development

Faculty Affiliation

Ontario Institute for Studies in Education

Degree Programs Offered

Child Study and Education – MA
Counselling Psychology – MA, MEd, EdD, PhD
- Counselling Psychology for Psychology Specialists (MA, PhD)
- Counselling Psychology for Community and Educational Settings (MEd, EdD)
- Guidance and Counselling (MEd)

Developmental Psychology and Education – MA, MEd, PhD
School and Clinical Child Psychology – MA, PhD

Collaborative Programs

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

1. **Aboriginal Health**
   - Counselling Psychology, MA, MEd, EdD, PhD
2. **Addiction Studies**
   - Counselling Psychology, MA, PhD
3. **Aging, Palliative and Supportive Care Across the Life Course**
   - Counselling Psychology, MA, MEd, EdD, PhD
4. **Community Development**
   - Counselling Psychology, MEd
5. **Educational Policy**
   - Developmental Psychology and Education, MA, MEd, PhD
6. **Environmental Studies**
   - Counselling Psychology, MA, MEd, EdD, PhD
7. **Neuroscience**
   - Developmental Psychology and Education, MA, PhD
8. **Sexual Diversity Studies**
   - Counselling Psychology, MA, MEd, EdD, PhD
9. **Women and Gender Studies**
   - Counselling Psychology, MA, MEd, EdD, PhD

Overview

The Department of Applied Psychology and Human Development currently offers four graduate programs:

1. Child Study and Education
2. Counselling Psychology
3. Developmental Psychology and Education
4. School and Clinical Child Psychology

Consult the department for further details of all graduate programs, including admission requirements, program requirements, and descriptions of programs as well as for information about financial support for students.

All the programs in the department commence in September.

Note: The department strongly discourages student requests to transfer between programs.

Contact and Address

Web: www.oise.utoronto.ca

Department of Applied Psychology and Human Development
The Ontario Institute for Studies in Education (OISE)
University of Toronto
252 Bloor Street West
Toronto, Ontario M5S 1V6
Canada

Degree Programs

Child Study and Education

The MA in Child Study and Education (CSE) program is offered at the Dr. Eric Jackman Institute of Child Study (ICS), a centre of professional teacher training and research in childhood and education, which includes a nursery-through-grade-6 Laboratory School. Eligible graduates are recommended to the Ontario College of Teachers for an Ontario Teachers Certificate of Qualification, which qualifies the holder to teach in the primary and junior divisions of Ontario schools (JK to grade 6). For students who choose research course electives and undertake an optional qualifying research paper (QRP), the program also provides the possibility of further graduate study.

Core ICS faculty teach the majority of program courses. Laboratory School teachers supervise practicum placements and internships in their classrooms, making direct links between research and practice. (Teachers in the public and private schools also mentor students' practicum placements/internships.) Other graduate faculty in the Department of Applied Psychology and Human Development teach elective courses; students in the CSE program thus profit from participating in a research-oriented department.

Master of Arts

Minimum Admission Requirements

- An appropriate bachelor's 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

- Two years of full-time study. 8.0 full-course equivalents (FCEs), including practicum placements and an internship as follows:
  Year 1
  ○ HDP 2200Y *Child Study: Observation, Evaluation, Reporting and Research*
  ○ HDP 2201H *Childhood Education Seminar I*
  ○ HDP 2210Y *Introduction to Curriculum I: Core Areas*
  ○ HDP 2220H *Teaching Practicum*
  ○ 1.0 elective FCE (equivalent to two half courses)
  ○ Four six-week half-day placements in kindergarten/early childhood, grades 1–3, and grades 4–6. A fifth placement is optional for those who would like more experience.
  ○ Registration in Year 2 of the program is contingent on successful completion of all Year 1 work.
  Year 2
  ○ HDP 2211H *Theory and Curriculum I: Language and Literacy*
  ○ HDP 2212H *Theory and Curriculum II: Mathematics*
  ○ HDP 2214H *Introduction to Curriculum II: Special Areas*
  ○ 0.5 elective FCE
  ○ 3.5-month full-time internship (HDP 2221Y *Advanced Teaching Practicum*) to be taken in one session
- During the internship session of Year 2, students are required to take HDP 2202H *Childhood Education Seminar II: Advanced Teaching*, and another 0.5 elective FCE.
- In both years, electives may be chosen from among master's-level courses in the Department of Applied Psychology and Human Development and, in some cases, other departments. Elective courses that are especially recommended to CSE students are listed in the Applied Psychology and Human Development program guidelines.
- Students who wish to qualify for a condensed version of OISE's Special Education Part 1 Additional Qualifications (AQ) course must meet coursework and practicum requirements.
- Students planning further graduate study in the foreseeable future are advised to undertake a Qualifying Research Paper (QRP), normally under the supervision of a qualified ICS faculty member.

Normal Program Length: 6 sessions full-time

Time Limit: 3 years full-time

Course List

Year 1 Required Courses

HDP 2200Y	Child Study: Observation, Evaluation and Reporting
HDP 2201Y	Childhood Education Seminar
HDP 2210Y	Introduction to Curriculum I: Core Areas
HDP 2220Y	Teaching Practicum
Plus	Two elective half courses (one each session)
Plus	Full-year religious education course (if interested in teaching in the Roman Catholic Separate School Board)

Note: Students without an undergraduate course in child development must take HDP 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:

HDP 2211H	Theory and Curriculum I: Language and Literacy
HDP 2212H	Theory and Curriculum II: Mathematics
HDP 2214H	Introduction to Curriculum II: Special Areas
Plus	One elective half course

Internship Session:

HDP 2202H	Childhood Education Seminar II: Advanced Teaching
HDP 2221Y	Advanced Teaching Practicum
Plus	One elective half course

In addition, students must demonstrate knowledge of the acts and regulations respecting education in Ontario (addressed in HDP 2202H).

Recommended Elective Courses

Students may elect any Applied Psychology and Human Development or other OISE course for which they are eligible. Please refer to the Special Education and Early Childhood portions of the Child Study and Education program guidelines above for elective options in these areas of study. In addition, the following courses are especially recommended:

HDP 1237H	Cognitive Development, Learning and Instruction
HDP 1279H	Preventative Interventions for Children at Risk
HDP 1299H	Language Acquisition and Development

Recommended Special Education Electives

HDP 1284H	Psychology and Education of Children and Adolescents with Behavior Disorders
HDP 1285H	Psychology and Education of Children and Adolescents with Learning Disabilities

HDP 2280H   Introduction to Special Education and Adaptive Instruction
HDP 2283H   Psychology and Education of Gifted Children and Adolescents
HDP 2292H   Assessment for Instruction
HDP 2296H   Reading and Writing Difficulties

Recommended Early Childhood Electives

HDP 1211H   Psychological Foundations of Early Development and Education
HDP 1241H   Outcomes of Early Education and Child Care
HDP 1259H   Child and Family Relationships— Implications for Education
HDP 1272H   Play and Education
HDP 2252H   Independent Reading and Research (in early childhood education)
JPX 1001Y   Parenting: Multidisciplinary Perspectives

Counselling Psychology

Field Counselling Psychology for Psychology Specialists

Master of Arts

This MA program is designed for applicants interested in working as researchers or practitioners in a variety of psychological and educational settings. The program leads to registration with the College of Psychologists of Ontario as a Psychological Associate. It also meets the needs of students who plan to apply to the PhD program in Counselling Psychology for Psychology Specialists.

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

- An appropriate bachelor's degree in psychology or any appropriate bachelor's degree that would contain the psychology requirement equivalent (defined as 6.0 full-course equivalents [FCEs] in psychology, including 0.5 FCE in research methods, 0.5 FCE in statistics, and at least 3.0 FCEs at the third- and fourth-year levels).
- A standing equivalent to a University of Toronto A- or better in the final year.

Program Requirements

- The MA in Counselling Psychology for Psychology Specialists consists of 4.0 FCEs.
- 500 hours of practicum.
- A master's thesis.
- Every program of study includes courses in counselling theory, practice, assessment, ethics, personality and cognitive assessment skills, and research methodology, as well as a practicum placement.

- **Full-time option:** Full-time on-campus study is required from September to April, which represents the fall and winter sessions; however, students may begin their program of study in the preceding summer session. 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. 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.

Normal Program Length: 6 sessions full-time; 9 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

Doctor of Philosophy

The principal emphasis of this degree program is the development of research and theoretical knowledge in counselling psychology, assessment skills, and knowledge and training in professional issues. Students are expected to conduct advanced research and to develop professional knowledge and skills in counselling psychology. Graduates will be prepared to assume a variety of positions in psychological practice and research in schools and universities, in community settings, in agencies offering psychological services, and in university or college counselling centres. The Counselling Psychology program offers both a full-time and flexible-time PhD, and progress in the program will be reviewed annually. The program is accredited by the Canadian Psychological Association.

Minimum Admission Requirements

Full-time PhD

The PhD in Counselling Psychology requires the following:
- An appropriate bachelor's degree in psychology or any appropriate bachelor's degree that would contain the psychology requirement equivalent (defined as 6.0 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 with specialization in Counselling Psychology for Psychology Specialists with a grade of A- or better, or its equivalent.

Flexible-Time PhD

- 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

- The PhD program requires a minimum of 5.0 full-course equivalents (FCEs), including practicum AEC 3217Y and internship AEC 3268Y. See details below.
- **Practicum:** Complete a 500-hour practicum in conjunction with the doctoral practicum course AEC 3217Y.
- **Internship:** 2,000 hours of internship (AEC 3268Y). All internship arrangements must be made in consultation with the Coordinator of Internship and Counselling Services.
- **Comprehensive examination:** In addition to normal course requirements, students will be examined systematically in general psychology and in professional psychology. The examination will normally be taken at the end of the second year 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 Psychology faculty. The content of such dissertation research may address theoretical issues applicable to 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 counselling psychology.

Normal Program Length: 5 years full-time; 6 years flexible-time

Time Limit: 6 years full-time, 8 years flexible-time

Field Counselling Psychology for Community and Educational Settings

Master of Education

This degree program provides individuals with the opportunity to learn and develop counselling skills appropriate for a variety of work settings. Students are encouraged to develop their courses and practicum learning experiences to suit their own goals. Examples of the types of goals for which suitable programs of study could be developed are adult counselling, college and university counselling centres, career counselling, geriatrics counselling, multicultural counselling, and community mental health and family life centres.

The program of study provides students with the basic preparation for certification as a Certified Canadian Counsellor (CCC) with the Canadian Counselling Association (CCA).

Minimum Admission Requirements

- 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

- The MEd in Counselling Psychology for Community and Educational Settings requires 5.0 full-course equivalents (FCEs) plus a comprehensive examination.
- The 3.0 FCEs required in Counselling Psychology include courses in counselling, group theory, ethics, and a practicum.
- Arrangements regarding a practicum placement must be made in consultation with the Coordinator of Internship and Counselling Services.

Normal Program Length: 5 sessions full-time; 10 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

Doctor of Education

Counsellor training in this degree program emphasizes the role of the counsellor in the educational system, the acquisition of effective supervisory and consultative skills, and the development and assessment of student counselling services in addition to the advanced study of counselling theory and practice. Graduates will be prepared to take leadership positions in the field of educational counselling; 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 personnel; and as providers of advanced levels of personal counselling to school, college, and related populations.

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.

Minimum Admission Requirements

- Students 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 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 as a counsellor in an educational setting or in a related position. Applicants who hold an MEd or other non-thesis master's degree must submit evidence of their ability to identify a research or development problem, to design and conduct a study or project, and to report the findings or results, all in a rigorous manner. This constitutes a Qualifying Research Paper (QRP).

Program Requirements

- All students are required to take courses related to the development of competence in counselling theory and practice and to the development of research skills.
- The EdD program requires a minimum of 4.0 full-course equivalents (FCEs), including practicum and internship, and a doctoral dissertation.
- 3.0 of the 4.0 FCEs must be in Counselling Psychology.
- Each student must complete a minimum of one year of full-time, on-campus study.
- **Practicum:** complete a 500-hour practicum in conjunction with the doctoral practicum course AEC 3217Y.
- **Internship:** complete 500 hours of internship (AEC 3270H). All internship arrangements must be made in consultation with the Coordinator of Internship and Counselling Services.
- **Thesis:** all students must develop, complete, and defend in a Doctoral Final Oral Examination a doctoral dissertation. The content of such dissertation research may address theoretical issues applicable to 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 counselling psychology.
- The EdD may be taken on a part-time basis.

Normal Program Length: 5 years full-time

Time Limit: 6 years full-time; 6 years part-time

Field Guidance and Counselling

Master of Education

The MEd degree program helps meet the need for well-prepared practitioners in the field of guidance and counselling in the schools. Therefore, 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 Association

(CCA). Students completing this MEd program may have their degree credited toward Parts I and II of the Ontario College of Teachers (OCT) Specialist Certificate in Guidance. Students may pursue the MEd degree on a full-time or part-time basis.

Minimum Admission Requirements

- 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

- 5.0 full-course equivalents (FCEs) plus a comprehensive examination.
- The program of study, planned by the student in consultation with the faculty advisor, cannot be reduced because of guidance certificates held. Within the 3.0 FCEs required in Counselling Psychology, every program of study must include counselling and group theory and a practicum experience.

Normal Program Length: 5 sessions full-time; 10 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

Course List

Not all courses are given each year. Please consult the course schedules available from the Registrar's Office.

AEC 1201H	Personality Theories
AEC 1202H	Theories and Techniques of Counselling
AEC 1203Y+	Practicum I: Interventions in Counselling Psychology
AEC 1207H	Counselling Topics in Sexual Orientation and Gender Identity Diversity
AEC 1214H	Critical Multicultural Practice: Diversity Issues in Counselling
AEC 1219H	Ethical Issues in Professional Practice in Psychology
AEC 1228H	Individual and Group Psychotherapy: Family and Marital Counselling
AEC 1229H	Individual and Group Psychotherapy for Counselling
AEC 1245H	Brief Counselling Strategies
AEC 1247H	Practicum in Adult Counselling
AEC 1252H	Individual Reading and Research in Counselling Psychology: Master's Level
AEC 1253H	Feminist Issues in Counselling Psychology and Psychotherapy
AEC 1261H	Group Work in Counselling
AEC 1262H	Educational and Psychological Testing for Counselling

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.

AEC 1263H	Seminar in Research Methods for MA Students
AEC 1266H	Career Counselling and Development: Transition from School to Work
AEC 1267Y	Advanced Practicum in Counselling
AEC 1268H	Career Counselling and Development: Transitions in Adulthood
AEC 1269H	Use of Guided Imagery in Counselling and Psychotherapy
AEC 1275H	Special Topics in Counselling Psychology (Master's)
AEC 1278H	Cognitive Therapy
AEC 3215H	Seminar in Counselling Psychology: Part I
AEC 3216H	Seminar in Counselling Psychology: Part II
AEC 3217Y[+]	Practicum II: Interventions in Counselling Psychology
AEC 3218H	Research Seminar in Counselling
AEC 3224H	Individual Cognitive and Personality Assessment
AEC 3225H	Assessment and Diagnosis of Personality and Psychopathology
AEC 3253H	Individual Reading and Research in Counselling Psychology: Doctoral Level
AEC 3258H	Special Topics in Counselling Psychology
AEC 3260H	Psychopathology and Diagnosis
AEC 3268Y	PhD Internship
AEC 3269H	Research Seminar in Critical Multicultural Counselling and Psychotherapy
AEC 3270H	EdD Internship
AEC 3271H[0]	Additional PhD Practicum

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.

AEC 1173H	Creativity and Wellness: Learning to Thrive
AEC 1400H	Special Topics in Adult Education and Counselling Psychology
AEC 1405H	Introduction to Qualitative Research: Part I
AEC 1406H	Introduction to Qualitative Research: Part II
AEC 1408H	Working with Survivors of Trauma
AEC 1409H	Creative Empowerment Work with the Disenfranchised
AEC 3173H	Effecting Change: Creating Wellness
CTL 1602H	Introduction to Computers in Education
HDP 1223H	Depression in the Schools: Assessment, Prevention, and Intervention
HDP 1287H	Introduction to Applied Statistics
HDP 1288H	Intermediate Statistics and Research Design
HDP 3204H	Contemporary History and Systems in Human Development and Applied Psychology

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.

Developmental Psychology and Education

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 and PhD programs are designed for students wishing to pursue an academic or research-based career. The MEd program is designed for the reflective teacher or other practitioner in education or related fields.

Master of Arts

Minimum Admission Requirements

- 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

- 3.0 full-course equivalents (FCEs) plus a thesis. Courses should be chosen in consultation with the advisor.
  - HDP 1209H *Research Methods and Thesis Preparation in Human Development and Applied Psychology*
  - HDP 1288H *Intermediate Statistics and Research Design*
  - HDP 2252H *Individual Reading and Research in Human Development and Applied Psychology: Master's Level*
  - Additional courses from the MA required courses listed in the departmental guidelines menu
  - Students who have not taken a previous course in human development are required to take HDP 1201H *Child and Adolescent Development* or an equivalent.
  - In addition to their required 3.0 FCEs, students who have not taken a previous course in statistics are required to take HDP 1287H

Introduction to Applied Statistics or an equivalent course.

Normal Program Length: 3 sessions full-time

Time Limit: 3 years full-time

Master of Education

Minimum Admission Requirements

- 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 one year of relevant professional experience.

Program Requirements

- The MEd program may be taken on a full-time or part-time basis. The length of time required to complete the program will vary depending on full-time or part-time status.
- 5.0 full-course equivalents (FCEs).
  Year 1
  - HDP 1200H *Foundations of Human Development and Education*
  - HDP 2293H *Interpretation of Educational Research*
- 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.

Time Limit: 3 years full-time; 6 years part-time

Doctor of Philosophy

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.

Minimum Admission Requirements

Full-Time PhD

- 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.

Flexible-Time PhD

- 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

- Degree requirements for full-time and flexible-time PhD programs are the same.
- 3.0 full-course equivalents (FCEs), a comprehensive examination, and a thesis.
- Courses should be chosen in consultation with the faculty advisor.
  Year 1
  - HDP 3200H *Research Proseminar in Human Development and Applied Psychology.*
  - 0.5 FCE in statistics and research methods from an approved menu.
  - 1.0 FCE from the Developmental Psychology and Education doctoral program menu.
  - 1.0 elective FCE.
- Students who have an insufficient background in developmental psychology may have to complete additional courses.

Normal Program Length: 4 years full-time; 6 years flexible-time

Time Limit: 6 years full-time; 8 years flexible-time

School and Clinical Child Psychology

The School and Clinical Child Psychology (SCCP) program is a Canadian Psychological Association (CPA)-accredited program. It provides theoretical, research, and professional training in preparation for psychological work with children in schools, clinics, private practice, and research settings. The program is designed to provide training in assessment, therapy, and other psychosocial and instructional interventions, professional consultation, and prevention. The degrees are also intended to meet the academic requirements

for registration as a psychological associate (MA) or psychologist (PhD). Opportunities are available for research and clinical work with infants, young children, adolescents, and families.

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.

Master of Arts

Minimum Admission Requirements

- 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 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

- The program is undertaken on a full-time basis and normally takes two years to complete.
- 5.0 FCEs (including a practicum course) and a thesis.
  - HDP 1215H *Psychological Assessment of School-Aged Children.*
  - HDP 1216H *Psychoeducational Assessment.*
  - HDP 1218H *Seminar and Practicum in Assessment.*
  - HDP 1219H *Ethical Issues in Applied Psychology.*
  - HDP 1220H *Introduction to School and Clinical Child Psychology.*
  - HDP 1236H *Developmental Psychopathology.*
  - HDP 1285H *Psychology and Education of Children with Learning Disabilities.*
  - HDP 1288H *Intermediate Statistics and Research Design.*

- 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 undergraduate level approved by the program may substitute an elective course for this requirement.)
  - 0.5 elective FCE.
  - A listing of approved cognitive/affective bases of behaviour courses is available on the department website and in the Applied Psychology and Human Development program guidelines.
  - The practicum portion of HDP 1218H consists of 250 hours (one day a week from September to June) and is normally taken in a school setting.
- In addition, students will be required to take HDP 1201H *Childhood and Adolescent Development* and HDP 1287H *Introduction to Applied Statistics*, if equivalent courses have not been taken previously.
- Students must achieve a minimum of A- in at least one of HDP 1215H *Psychological Assessment of School-Aged Children* and HDP 1216H *Psychoeducational Assessment,* and must pass HDP 1218H *Seminar and Practicum in Assessment and Intervention with Children* 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.

Normal Program Length: 6 sessions full-time

Time Limit: 3 years full-time

Doctor of Philosophy

Minimum Admission Requirements

Full-Time PhD

- 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.

Flexible-Time PhD

- 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

- 5.0 FCEs, including a doctoral practicum course and an internship course, as follows:
  - HDP 3222Y *Approaches to Psychotherapy Across the Lifespan.*
  - HDP 3240H *Advanced Social and Emotional Assessment Techniques.*
  - HDP 3241H *Seminar and Practicum in Assessment and Intervention with Children* (normally taken in Year 2 of the program). The practicum portion of HDP 3241H consists of 500 hours (two days a week from September to June) and is normally taken in a clinical setting.
  - HDP 3242Y *Internship in School and Clinical Child Psychology*. The internship consists of a 1,600-hour placement, normally taken on a full-time basis over the course of a year near the end of the student's program.
  - 1.0 FCE from the Instructional Interventions menu.
  - 0.5 FCE from each of the following menus (for a total of 1.5 FCEs): Psychosocial Interventions, Social Bases of Behaviour, and Biological Bases of Behaviour. **Note:** Students who have a 1.0 FCE in Social Bases of Behaviour at the under-graduate level approved by the program may substitute an elective course for this require-ment. Students who have a 1.0 FCE in Biological Bases of Behaviour at the undergraduate level approved by the program may substitute an elective course for this requirement. A list-ing of courses in these menus is available on the departmental website and in the Applied Psychology and Human Development program guidelines.
- A comprehensive examination.
- A doctoral dissertation.
- Students must have successfully completed all coursework, passed the comprehensive examina-tion, and have their dissertation completed or well underway, prior to commencing their internship.
- In addition, students will be required to take HDP 1201H *Childhood and Adolescent Development*, HDP 1287H *Introduction to Applied Statistics*, and HDP 3204H *Contemporary History and Systems in Human Development and Applied Psychology*, if equivalent courses have not been taken previously.
- Students must achieve a minimum of A- in at least one of HDP 1215H *Psychological Assessment of School-Aged Children* and HDP 1216H *Psychoeducational Assessment,* and must pass HDP 1218H *Seminar and Practicum in Assessment* and HDP 3241H *Seminar and Practicum in*

Assessment and Intervention with Children 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.

Normal Program Length: 4 years full-time

Time Limit: 6 years full-time; 8 years flexible-time

Course List

HDP 1200H	Foundations of Human Development and Education
HDP 1201H	Child and Adolescent Development
HDP 1209H	Research Methods and Thesis Preparation in Human Development and Applied Psychology
HDP 1211H	Psychological Foundations of Early Development and Education
HDP 1215H	Psychological Assessment of School-Aged Children
HDP 1216H	Psychoeducational Assessment
HDP 1217H	Foundations of Proactive Behavioural and Cognitive-Behavioural Intervention with Children
HDP 1218H[+]	Seminar and Practicum in Assessment
HDP 1219H	Ethical Issues in Applied Psychology
HDP 1220H	Introduction to School and Clinical Child Psychology
HDP 1234H	Foundations of Cognitive Science
HDP 1236H	Developmental Psychopathology
HDP 1237H	Cognitive Development and Learning
HDP 1238H	Special Topics in Human Development and Applied Psychology
HDP 1241H	Outcomes of Early Education and Child Care
HDP 1256H	Child Abuse: Intervention and Prevention
HDP 1259H	Family Relationships with Early Childhood Services and Schools
HDP 1260H	Children, Psychology and the Law
HDP 1265H	Advanced Topics in Social and Personality Development
HDP 1272H	Play and Education
HDP 1279H	Preventative Interventions for Children at Risk
HDP 1284H	Psychology and Education of Children and Adolescents with Behaviour Disorders
HDP 1285H	Psychology and Education of Children with Learning Disabilities
HDP 1287H	Introduction to Applied Statistics
HDP 1288H	Intermediate Statistics and Research Design
HDP 1289H	Multivariate Analysis with Applications
HDP 1290H	Causal Inference Methods for Quasi-Experimental Data

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

HDP 1291H   Structural Equation Modeling
HDP 1292H   Instrument Design and Analysis
HDP 1293H   Applied Research Design and Data Analysis
HDP 1299H   Language Acquisition and Development
HDP 2200Y   Child Study: Observation, Evaluation, Reporting, and Research
HDP 2201H   Childhood Education Seminar
HDP 2202H   Childhood Education Seminar II: Advanced Teaching
HDP 2210Y   Introduction to Curriculum I: Core Areas
HDP 2211H   Theory and Curriculum I: Language and Literacy
HDP 2212H   Theory and Curriculum II: Mathematics
HDP 2214H   Introduction to Curriculum ll: Special Areas
HDP 2220H   Teaching Practicum
HDP 2221Y   Advanced Teaching Practicum
HDP 2275H   Technology for Adaptive Instruction and Special Education
HDP 2280H   Introduction to Special Education and Adaptive Instruction
HDP 2283H   Psychology and Education of Gifted Children and Adolescents
HDP 2287H   Classroom-Based Counselling Approaches
HDP 2288H   Reflective Teaching and Analysis of Instruction
HDP 2292H   Assessment for Instruction
HDP 2293H   Interpretation of Educational Research
HDP 2296H   Reading and Writing Difficulties
HDP 3200H   Research Proseminar in Human Development and Applied Psychology
HDP 3201H   Qualitative Research Methods in Human Development and Applied Psychology
HDP 3203H   Children's Theory of Mind
HDP 3204H   Contemporary History and Systems in Human Development and Applied Psychology
HDP 3205H   Social and Moral Development
HDP 3208H   Adolescence
HDP 3209H   Psychology of Language and Literacy
HDP 3221H   Cross-Cultural Perspectives on Children's Problems
HDP 3222Y   Approaches to Psychotherapy Across the Lifespan
HDP 3224H   Advanced Proactive Behavioural and Cognitive-Behavioural Interventions
HDP 3225H   Developmental Trajectories and High Risk Environments
HDP 3226H   Research Methods and Doctoral Thesis Preparation in Human Development and Applied Psychology
HDP 3227H   Multi-Level Modelling in Social Scientific and Educational Research
HDP 3229H   Cognition and Emotion in Development
HDP 3230H   Understanding Narrative
HDP 3231H   Psychodynamic Bases of Therapy

HDP 3238H   Special Topics in Human Development and Applied Psychology
HDP 3240H   Advanced Social and Emotional Assessment Techniques
HDP 3241H[+]   Seminar and Practicum in Assessment and Intervention with Children
HDP 3242Y   Internship in School and Clinical Child Psychology
HDP 3243H   Additional PhD Practicum
HDP 3255H   Systemic Family Therapy
HDP 3282H   The Psychology of Critical Thinking
HDP 3286H   Developmental Neurobiology
HDP 3292H   Advanced Psychoeducational Assessment and Psychodiagnosis
HDP 3297H   Biological and Psychological Foundations of Low Incidence Disorders
HDP 5271Y   Assessment and Programming for Reading and Writing Difficulties
HDP 5281H   Research and Theories of Reading Disability
HDP 5284Y   Assessment and Intervention in Multicultural/Bilingual Contexts
HDP 5284H   Assessment and Intervention in Multicultural/Bilingual Contexts
JDS 1233H   Cognitive Development and Applications
JDS 1249H   Social-emotional Development and Applications
JDS 3000H   Advanced Methods in Developmental Science
JHC 1251H   Reading in a Second Language
JPX 1001H   Parenting: Multidisciplinary Perspectives

Individual Reading and Research Courses

HDP 2295H   Individual Reading and Research in Adaptive Instruction and Special Education: Master's Level
HDP 3252H   Individual Reading and Research in Human Development and Applied Psychology: Doctoral Level

Graduate Faculty

Full Members

Arnold, Mary Louise - BA, MA, EdD
Astington, Janet - BSc, BA, MA, PhD
Atkinson, Leslie - PhD
Barrera, Maria - MA, PhD
Biemiller (Jr), Andrew - BA, MS, PhD
Chen, Charles - BA, MEd, MA, PhD
Chen, Xi (Becky) - BA, MEd, MA, PhD
Cohen, Nancy - BSc, MSc, PhD¬
Corter, Carl - BA, PhD
Cumming, Alister - BA, MA, PhD
Ducharme, Joseph - BA, MPSY, PhD
Ferrari, Michel - BA, MA, PhD
Geva, Esther - BA, MA, PhD *(Chair and Graduate Chair)*
Gillis, Joseph - BSc, MA, PhD
Grusec, Joan - BA, PhD
Helwig, Charles - BA, PhD
Jenkins, Jennifer - BA, MA, PhD

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

Keating, Daniel - BA, MA, PhD
Lee, Kang - BSc, MEd, PhD
Manassis-Krumma, Katharina - MD
Mendlowitz, Sandra - PhD
Moodley, Roy - BA, MA, PhD
Moore, Chris - BA, PhD
Pelletier, Janette - AB, BE, MEd, PhD
Perlman, Michal - BA, MA, PhD
Peskin, Joan - BA, MPSY, PhD
Peterson-Badali, Michele - BA, MA, PhD
Piran, Niva - BA, PhD
Rovet, Joanne - BSc, PhD
Scardamalia, Marlene - PhD
Schachar, Russell James - MD
Schmuckler, Mark - BA, PhD
Schneider, Margaret - BA, MA, PhD
Scott, Katreena - BA, MA, PhD
Stermac, Lana - BSc, MA, PhD
Tannock, Rosemary - BSc, MA, PhD
Taylor, Margot - BA, MA, PhD
Volpe, Richard - BA, MA, PhD
Watson, Jeanne - PhD
Wiener, Judith - BA, MEd, PhD
Willows, Dale - PhD
Wolfe, Richard - BA
Woodruff, Earl - MA, PhD *(Associate Chair)*
Zelazo, Philip - PhD
Zucker, Kenneth - MA, PhD

Members Emeriti

Guttman, Mary Alice - BEd, MSc, PhD
Lewis, Marc - BA, MA, PhD
Lindsay, Peter - BA, MA, PhD
Miezitis, Solveiga - BA, MA, PhD
Oatley, Keith - BA, PhD
Olson, David - BEd, MEd, PhD

Associate Members

Akman, Donna – PhD
Armstrong, Ann – MBA, PhD
Arnold, Paul - BSc, MD
Bernstein, Lori – BA, MA MPH, PhD
Blanchard, Ray – MA, PhD
Bodnar, Ana - DBA
Caspary, Arthur - BSc, MSc, PhD
Church, Kathryn – PhD
Courbasson, Christine - PhD
Deacon, Helene - BS, PhD
Eriks-Brophy, Alice - BEd, AB, MSL, PhD
Helms-Park, Rena - BA, MA, AM, DPhil
Henderson, Joanna - BA, MA, PhD
Hong, Guanglei - BA, MA, MEd, PhD
Jasper, Karin – BA, MA
Josefowitz, Nina – BA, MSc, PhD
Kwan, Kenneth – MEd
Langton, Calvin - PhD
Link, Nancy - BA, PhD
Martinussen, Rhonda - BE, MEd, PhD
McBride, Hazel - BA, BEd, MPsy, PhD
Milligan, Karen - BA, MA, PhD
Minsky, Sam – BSc, MA
Moran, Greg - BA, MA, PhD
Moss, Joan - BA, MA, PhD

O'Connor, Tom - BA, MA, PhD
Roncadin, Caroline - BSc, MA, PhD
Silver, Judith – BSc, PhD
Stewart, Suzanne – BA, MA
Stuckless, Noreen - PhD
Tackett, Jennifer - BA, MA, PhD
Toneatto, Anthony – PhD
Toner, Brenda – BA, MA, PhD
Wade-Woolley, Lesly - MA, PhD
Wilansky-Traynor, Pamela - PhD
Wu, Helen Xiaoyan - MA, PhD

Architecture, Landscape, and Design

Faculty Affiliation

Architecture, Landscape, and Design

Degree Programs Offered

Architecture – MArch
Landscape Architecture – MLA
Urban Design – MUD

Collaborative Programs

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

Knowledge Media Design

- Architecture, MArch
- Landscape Architecture, MLA
- Urban Design, MUD

Overview

The Faculty of Architecture, Landscape, and Design offers three graduate programs.

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.

The **Master of Landscape Architecture** (MLA) is a professional program that focuses on urban landscape architecture, design, and theory within a challenging studio-based curriculum. Integrated courses in history, technology, and the environment, as well as options for free electives, provide a comprehensive professional landscape architecture education.

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.

Contact and Address

Web: www.daniels.utoronto.ca
E-mail: enquiry@daniels.utoronto.ca
Telephone: (416) 978-5038
Fax: (416) 971-2094

John H. Daniels Faculty of Architecture, Landscape, and Design
University of Toronto
230 College Street
Toronto, Ontario M5T 1R2
Canada

Degree Programs

Architecture

Master of Architecture

Minimum Admission Requirements

3.5-Year Program

- An appropriate bachelor's degree (BA, BSc, BASc) with a final-year grade point average of at least mid-B, and showing leadership potential in the field.
- Required: 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.

2.5-Year Program: Second-Year Advanced-Standing Option

- 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. Each MArch applicant with a suitable undergraduate degree will be evaluated for this option during the admissions process.
- 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 twentieth-century), and two courses in architectural technology and ecology.

1.5-Year Program: Post-Professional Advanced-Standing Option

- 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 professional degree from a recognized university.
- Students enter the third year of the MArch program.
- The post-professional advanced-standing option does not grant a professionally accredited degree.

General Program Requirements

- The course of study is rigorous and comprehensive, preparing 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. A B- grade in two design studio courses or a B- grade 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 language requirement other than proficiency in English. Writing support is integrated into the program in order to develop specialized skills in writing which are essential to effective learning and communication in the design fields.

Specific Program Requirements

3.5-Year Program

- Students must take 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 and Theory 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 and Theory stream

Normal Program Length: 10 sessions full-time

Time Limit: 4 years full-time

2.5-Year Program: Second-Year Advanced-Standing Option

- Students must take a total of 12.5 FCEs as follows:
  - 10.0 FCEs 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 elective courses, of which 1.0 FCE must be in the History and Theory stream

Normal Program Length: 7 sessions full-time

Time Limit: 4 years full-time

1.5-Year Program: Post-Professional Advanced-Standing Option

- Students must take a total of 7.5 FCEs as follows:
  - 4.5 FCEs core courses
    - 2.0 FCEs Option Design Studios
    - 0.5 FCE Proseminar course
    - 0.5 FCE Thesis Preparation and Research course
    - 1.5 FCEs Design or Research Thesis
  - 3.0 FCEs elective courses

Normal Program Length: 4 sessions full-time

Time Limit: 4 years full-time

Course List

Consult the department regarding course availability.

Core Courses

DESIGN

ARC 1011Y	Architectural Design Studio 1: Design
ARC 1012Y	Architectural Design Studio 2: Site, Building, Tectonics
ARC 2013Y	Architectural Design Studio 3: Culture and the Metropolis
ARC 2014Y	Architectural Design Studio 4: Comprehensive Building Project
ARC 3015Y	Architectural Design Studio 5: Option Studios
ARC 3016Y	Architectural Design Studio 6: Option Studios
ARC 3017H	Thesis Research and Preparation
ARC 4018Y	Architectural Design Studio 7: Thesis

COMPUTER MODELLING

ARC 2023H Intermediate Computer Applications in Architecture

VISUAL COMMUNICATION

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

HISTORY AND THEORY

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

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

PROSEMINAR

ALA 3031H Proseminar

PROFESSIONAL PRACTICE

ARC 3052Y Professional Practice

Elective Courses

Not all elective courses are offered every year. Please check the timetable available from the program office in August.

DESIGN

ARC 1013H Graphic Design
ARC 1014H Furniture Design
ARC 1016H Selected Topics in Industrial Design
ARC 2015H Global Architecture: Urban Analysis and Documentation

COMPUTER MODELLING

ARC 3024H Advanced Computer Applications in Architecture

HISTORY AND THEORY

ARC 1033H Architecture, Media and Communications
ARC 1034H Architecture, Philosophy, Art
ARC 1035H Toronto Architecture and Urban Form
ARC 1037H Topics in Architecture and Cultural Difference
ARC 2031H (Re)Constructing Domesticity: Ideas and Techniques of Construction in Mid-Century North American Houses
ARC 2039H Architecture Theory
ARC 3031H Analysis of Architectural Form
ARC 3033H Selected Topics in Architectural History and Theory
ARC 3034H Selected Architects
ARC 3035H Selected Topics in Urban Design
ARC 3036H Current Art in Its Urban Context
ARC 3038H Global Architecture: History and Theory

ARC 3039H Independent Study and Research in Architecture

TECHNICS AND PLANNING

ARC 3041H Selected Topics in Architecture, Technology, Ecology
ARC 3042H Sustainable Architecture

PROFESSIONAL PRACTICE

ARC 4053H Topics in Professional Practice

Landscape Architecture

Master of Landscape Architecture

Minimum Admission Requirements

3-Year Program

- An appropriate bachelor's degree (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, geography, English, and history
  - preparation in the visual arts, such as drawing, sculpture, graphics, photography, film, or new media, as well as in computing and advanced writing

2-Year Program: Second-Year Advanced-Standing Option

- 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 MLA admissions committee. Each applicant with a suitable undergraduate degree will be evaluated for this option during the admissions process.
- **Required:** minimum previous completion of three design studio courses, two courses in visual communications or representation, two courses in architectural history and theory (one in twentieth-century), and two courses in architectural technology and/or ecology.

1-Year Program: Post-Professional Advanced-Standing Option

- 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.
- Students enter the third year of the MLA program.
- The post-professional advanced-standing option does not grant a professionally accredited degree.

General Program Requirements

- Students study full-time, taking all required courses in each given session. A B- grade in two design studio courses or a B- grade 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 language requirement other than proficiency in English. Writing support is integrated into the program in order to develop specialized skills in writing which are essential to effective learning and communication in the design fields.

Specific Program Requirements

3-Year Program

- Students must take a total of 15.5 full-course equivalents (FCEs) as follows:
  - 14.0 FCEs in core courses
    - 4.0 FCEs Design Studios
    - 1.0 FCE Option Design Studio
    - 0.5 FCE Thesis Preparation and Research course
    - 1.5 FCEs Design Thesis
    - 0.5 FCE Environment Field courses
    - 1.5 FCEs History and Theory courses
    - 1.5 FCEs Visual Communication courses
    - 0.5 FCE Computation course
    - 1.5 FCEs Technology courses
    - 1.0 FCE Environment courses
    - 0.5 FCE Professional Practice course
  - 1.5 FCEs in electives, of which it is recommended that 1.0 FCE be taken in other academic divisions of the University.

Normal Program Length: 6 sessions full-time

Time Limit: 3 years full-time

2-Year Program: Second-Year Advanced-Standing Option

- Students must take a total of 10.5 FCEs in core courses as follows:
  - 2.0 FCEs Design Studios
  - 1.0 FCE Option Design Studio
  - 0.5 FCE Thesis Preparation and Research course
  - 1.5 FCEs Design Thesis
  - 0.5 FCE Environment Field courses

- 1.5 FCEs History and Theory courses
- 0.5 FCE Visual Communication courses
- 0.5 FCE Computation course
- 1.0 FCE Technology courses
- 1.0 FCE Environment courses
- 0.5 FCE Professional Practice course

Normal Program Length: 4 sessions full-time

Time Limit: 3 years full-time

1-Year Program: Post-Professional Advanced-Standing Option

- Students must take a total of 5.0 FCEs in core courses as follows:
  - 1.0 FCE Option Design Studio
  - 0.5 FCE Proseminar course
  - 0.5 FCE Thesis Preparation and Research course
  - 1.5 FCEs Design Thesis
  - 0.5 FCE Computation course
  - 0.5 FCE Technology course
  - 0.5 FCE Professional Practice course

Normal Program Length: 2 sessions full-time

Time Limit: 3 years full-time

Course List

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 3015H	Thesis Research and Preparation
LAN 3016Y	Design Studio Options
LAN 3017Y	Design Studio Thesis

COMPUTATION

LAN 3025H	Advanced Computation in Landscape Architecture

VISUAL COMMUNICATION

LAN 1021H	Visual Communication 1
LAN 1022H	Visual Communication 2
LAN 2023H	Intermediate Digital Visual Communications in Landscape

HISTORY AND THEORY

LAN 1031H	History Theory Criticism 1
LAN 1032H	History Theory Criticism 2
LAN 2018H	Contemporary Issues in Urban Landscape Design

TECHNOLOGY

LAN 1045H	Site Engineering and Ecology
LAN 2042H	Urban Site Technologies 1

LAN 3045H   Urban Site Technologies 2

ENVIRONMENT

LAN 1041H   Urban Plant Ecosystems 1 (field course)
LAN 1043H   Urban Plant Ecosystems 2 (field course)
LAN 2043H   Integrated Ecological Studies
LAN 2044H   Urban Environmental Systems

PROSEMINAR

ALA 3031H   Proseminar

PROFESSIONAL PRACTICE

LAN 3051H   Professional Practice

Elective Courses

Not all elective courses are offered every year. Please check the timetable available from the program office in August.

DESIGN

LAN 1033H   Urban Landscape Architecture and
                      Community
LAN 2033H   Landscape and Urban Form
LAN 2035H   Landscape Design Research Methods

COMPUTATION

LAN 2034H   Landscape Architecture and Digital
                      Communications

HISTORY AND THEORY

LAN 1036H   The Historic Basis for the Contemporary
                      Use of Plants in Landscape Design
LAN 2036H   Topics in Landscape History and Theory
LAN 2038H   Landscape Conservation and Restoration
LAN 2039H   Independent Study in Landscape
                      Architecture
LAN 3031H   Mass-Urbanization in the 21st Century

ENVIRONMENT

LAN 2037H   Selected Topics in Landscape Architecture,
                      Technology and Ecology

Urban Design

Master of Urban Design

Minimum Admission Requirements

2-Year Program

- 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.

General Program Requirements

- Students study full-time, taking all required courses in each given session. A B- grade in two design studio courses or a B- grade in any three courses will normally result in a recommendation to the School of Graduate Studies to terminate the student's candidacy for the degree program.

- There is no language requirement other than proficiency in English. Writing support is integrated into the program in order to develop specialized skills in writing which are essential to effective learning and communication in the design fields.

Specific Program Requirements

- Students must take a total of 10.0 full-course equivalents (FCEs) as follows:
  - 7.0 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
    - 0.5 FCE History, Theory, Criticism course
    - 1.5 FCEs other courses
  - 3.0 FCEs in electives, of which 2.0 FCEs must be selected from offerings in the History, Theory, Criticism category.

Normal Program Length: 4 sessions full-time

Time Limit: 3 years full-time

Course List

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   Urban Design Studio Options
URD 2015Y   Urban Design Studio Thesis

HISTORY, THEORY, CRITICISM

URD 1031H   Urban History, Theory, Criticism

OTHER

URD 1021H   Urban Design Computation
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 available from the program office in August.

HISTORY, THEORY, CRITICISM

URD 1032H   Urban Design in the History of the Post-
                      Industrial World
URD 1033H   Urban Design Culture and Media
URD 1035H   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

Graduate Faculty

Full Members

Danahy, John - BLA, MRP
El-Khoury, Rodolphe - BFA, BArch, BArch, MArch, MA,
  PhD
Farhat, Georges - MSc, MA
Kesik, Ted - BASc, MASc, DPhil
Levit, Robert - BA, MArch
Liu, An Te - BA, MArch
Lobsinger, Mary Lou - BArch, BES, BA, MES, PhD
Sommer, Richard - BFA, BArch, MArch *(Dean)*
Williamson, Robert Shane - BSc, MArch
Wolff, Jane - AB, MLA
Wright, Robert - BSc, MLA

Members Emeriti

Baird, George - BArch
Richards, Larry - BArch, MArch
van Ginkel, Blanche - BArch, MCP

Associate Members

Boigon, Brian - BAR
Celik, Zeynep - MArch, PhD
Chaouni, Aziza - BScCE, MArch
Fong, Steven - BArch, MArch
May, John Joseph - BA, MArch, PhD
Miller, Laura J. - BA, MArch
Moukheiber, Carol Leila - BArch, BA
North, Alissa - BLA, MLA
Payne, Andrew - BA, MA, PhD
Petricone, Pina - MArch
Shim, Brigitte - BES, BAR
Shnier, John - BArch, BES
White, Mason - BArch, MArch

Art

Faculty Affiliation

Arts and Science

Degree Programs Offered

History of Art – MA, PhD
Fields:
    Ancient
    Medieval
    Renaissance and Baroque
    Modern
Visual Studies – MVS
Fields:
    Studio
    Curatorial Studies

Collaborative Programs

The following collaborative programs 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. **Knowledge Media Design**
   - Visual Studies, MVS
5. **Sexual Diversity Studies**
   - History of Art, MA, PhD
   - Visual Studies, MVS

Overview

The **Master of Arts** 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 **Doctor of Philosophy** program is designed to prepare history of art students for college and university teaching, museum curatorships, and other research positions.

The **Master of Visual Studies** (MVS) is a two-year, full-time professional program with two fields: Studio (which prepares students to further their visual art practice) and Curatorial Studies (which prepares students for a contemporary curatorial practice in the visual arts).

Contact and Address

Web: www.art.utoronto.ca
E-mail: Gaby Sparks at gaby.binette@utoronto.ca
Telephone: (416) 946-3960
Fax: (416) 978-1491

Graduate Department of Art
University of Toronto
Sidney Smith Hall
Room 6037A, 100 St. George Street
Toronto, Ontario M5S 3G3
Canada

Degree Programs

History of Art

Master of Arts

Minimum Admission Requirements

- Students are admitted under the General Regulations of the School of Graduate Studies.
- 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

- 3.0 graduate full-course equivalents (FCEs); coursework must be chosen from at least three of four fields: Ancient; Medieval; Renaissance and Baroque; Modern. No more than 2.0 FCEs may be taken in any one of these fields. 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 (typically) of French, German, or Italian; tested in the first session.
- Orientation to Art Historical Research Methods must be taken in first year.

Normal Program Length: 3 sessions full-time; 6 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

Doctor of Philosophy

Minimum Admission Requirements

- Minimum A- average in MA.

- Direct entry from BA with exceptionally strong academic record; minimum grade average of A- in art history and humanities courses in last two years.
- Reading knowledge of French, German, or Italian; tested in the first session.
- One or more additional language(s) may be required; 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.
- 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).
- Acceptance is limited to students who propose theses corresponding to research expertise of faculty. See faculty research profiles at www.art.utoronto.ca/people.

Program Requirements

- **Students with an MA** take at least 2.0 full-course equivalent (FCEs) of graduate courses. MA and PhD courses combined should be in three of the following four fields: Ancient; Medieval; Renaissance and Baroque; Modern. Courses crossing boundaries will count as one field only.
- **Students with a BA** must take a minimum of 4.5 FCEs in art history and maintain an average grade of at least an A-.
- Orientation to Art Historical Research Methods must be taken in first year.
- FAH 1001H *Methods of Art History,* a departmental methodology course, must be taken in first year. With departmental approval, credit may be given for a research methodology course taken previously at the University of Toronto or elsewhere.
- At the end of the first and second years, 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 languages (German, French, or Italian) by the end of second year, if they have not already done so in the MA. Students focusing on Ancient, Medieval, and Renaissance/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 taking the comprehensive exams.
- Within the first two years for students entering with an MA, or three years for students entering with a BA, students are required to take a three-part

comprehensive examination, the first part focusing on one of the four fields, the second on the dissertation field, and the third (oral) discussing the first two. Upon the completion of all coursework and language requirements, 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—and chaired by the Director of Graduate Studies or designate) in order to define the areas of the examination, the length of study, and such readings and special topics as deemed appropriate.
- 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. 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 Graduate Program Committee. 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.

Normal Program Length: 4 years full-time; 5 years direct-entry (some students may take longer to complete the program)

Time Limit: 6 years full-time; 7 years direct-entry

Course List

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 2034H	Topics in Roman Imperial Art

Medieval

FAH 1120H	Medieval Pilgrimage Art and Architecture
FAH 1121H	12th-Century Renaissance?

FAH 1123H   The Art of the Medieval Book
FAH 1124H   Byzantine Church Decoration
FAH 1125H   Medieval Pilgrimage Art and Architecture
FAH 1126H   Exceptional Cities of the Middle Ages
FAH 1127H   Early Medieval Art

FAH 1134H   Communal Painting and Propaganda in Italy during the 13th and 14th Centuries
FAH 1142H   Multicultural Middle Ages
FAH 1200H   Crusader Art

Renaissance and Baroque

FAH 1221H   Inside the Painter's Studio
FAH 1224H   Renaissance in Miniature
FAH 1226H   Architecture and Alchemy Before Modernism
FAH 1299H   Heinrich Wölfflin's Principles of Art History (1915) @ 100: A Worldwide Reception History
FAH 1240H   Art Biography
FAH 1243H   The Economic Lives of Renaissance and Baroque Artists
FAH 1246H   Renaissance Gothic: Architecture and the Arts 1460–1540
FAH 1249H   Margaret of Austria and the Renaissance in the Netherlands
FAH 1288H   Gianlorenzo Bernini

Modern

FAH 1410H   Artwriting, Past and Present
FAH 1464H   The Recalcitrant Icon
FAH 1475H   Picasso
FAH 1477H   Psychoanalysis and the Visual
FAH 1478H   Art and Animation
FAH 1492H   Retreating the Aesthetic
FAH 1494H   Queer Sexuality, Visuality & Theory
FAH 1520H   Photography & Modernism
FAH 1800H   James Wilson Morrice
FAH 1801H   Portraiture in Canada: 1750–1870
FAH 1870H   Recent Canadian Art in International Perspective
FAH 1901H   Tom Thomson
FAH 1910H   Contemporary Art of South Asia and Its Diaspora
FAH 1920H   Primitivism to Globalism: Theories of Otherness in Modern and Contemporary Arts
FAH 1921H   GeoAesthetics
FAH 1923H   Modernist Exiles in Postcolonial Perspective
FAH 1930H   Contemporary Art Since 1960
FAH 1931H   Contemporary Art: Theory and Criticism
FAH 1932H   Paradigmatic Exhibitions: History, Theory, Criticism
FAH 1933H   Canadian Artists: Michael Snow
FAH 1951H   Contemporary Chinese Art and its Discontents
FAH 1956H   Can Art History Speak Chinese?
FAH 1970H   The Art of Confrontation: Chinese Visual Culture in the 20th and 21st Centuries

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

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 2500Y   Introduction to Islamic Art and Architecture
NMC 2520H   Western Medieval Islamic Architecture
NMC 2521H   The Taj Mahal and Its Origins: Medieval Islamic Architecture in Iran, Central Asia, and India
NMC 2526H   Islamic Painting
NMC 2527H   Islamic Decorative Arts

Visual Studies

Master of Visual Studies

Minimum Admission Requirements

- An appropriate bachelor's degree (BA, BSc) 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 or curatorial to be undertaken during the two-year program
  - full curriculum vitae (CV) with details of exhibition, professional activity, and education
  - documentation of recent studio or curatorial work
  - three letters of recommendation

- Applicants to the MVS Studio program must present a portfolio with documentation of their artworks (video on VHS or DVD) and/or up to 20 slides or images on CD, and/or video documentation of performance or installation. 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), circumstances of display (in the case of installations works and performance works). Details are available on the program's website.

- Applicants to the MVS Curatorial Studies program must present a sample of curatorial or critical writing (published or unpublished), exhibition brochures, announcement cards, and/or catalogues from curatorial work.
- Facility 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 primary language of instruction and exam.ination was not English.

Program Requirements

- Full-time program normally begins in September.
- MVS Studio and Curatorial Studies: 4.5 full-course equivalents (FCEs) from the list below in MVS and 1.5 FCEs in outside electives.
- MVS Studio students are supervised by an Advisory Panel made up of the Graduate Coordinator of the MVS program, a studio faculty member of the MVS program who is considered the student's Principal Advisor, a second MVS studio faculty member, and possibly another graduate faculty member (not necessarily a member of the MVS program).
- MVS Curatorial Studies students are supervised by an Advisory Panel made up of a member of the graduate faculty who will be considered to be the student's Principal Advisor, the Graduate Coordinator of the MVS program or their designate and one of the University of Toronto's curators or outside curator as appropriate.
- MVS Proseminar, a no-credit course that normally meets biweekly.

Normal Program Length: 6 sessions full-time

Time Limit: 3 years full-time

Course List

MVS Studio Courses

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 2001H	Studio Practicum/Critiques III
VIS 2002H	MVS Contemporary Art Issues
VIS 2003Y	MVS Project

MVS Curatorial Studies Courses

VIS 1101H	Paradigmatic Exhibitions: History, Theory, Criticism
VIS 1010H	Contemporary Art Since 1960
VIS 1020H	Contemporary Art: Theory and Criticism
VIS 1102H	Curatorial Studies Collaborative Project
VIS 1004H	Internship

VIS 2002H	MVS Contemporary Art Issues
VIS 2101Y	MVS Curatorial Studies Exhibition Research
VIS 2102H	MVS Curatorial Research

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
Cohen, Adam - PhD
Ewald, Bjorn - AM, PhD
Harney, Elizabeth - AB, MA, PhD
Hawken, George - BA
Jain, Kajri - PhD
Kaplan, Louis - AB, AM, DPhil
Kavaler, Ethan Matt - PhD
Knappett, Carl - MA, PhD
Legge, Elizabeth MM - BA, BA, MA, PhD *(Chair and Graduate Chair)*
Levy, Evonne - MFA, PhD
Lloyd, Sue - BA, MFA
Periti, Giancarla - PhD
Purtle, Jennifer - BA, MPH, MA, PhD
Reid, Dennis - BA, MA
Ricco, John - BA, MA, PhD
Safran, Linda - PhD
Schelle, Susan - BFA
Sohm, Philip - BA, MA, PhD
Steele, Lisa - BA
Syme, Alison - PhD *(Director of Graduate Studies)*
Wollesen, Jens - 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

Bartlett, Kenneth - BA, MA, PhD
Fischer, Barbara - BFA, MA
Hlynsky, David - BFA
Kwan, Will - BA, MFA
MacDonald, Ann - BA
Martin, Therese - PhD

Astronomy and Astrophysics

Faculty Affiliation

Arts and Science

Degree Programs Offered

Astronomy and Astrophysics – MSc, PhD

Collaborative Programs

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

Astrophysics
- Astronomy and Astrophysics, MSc

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) and the Dunlap Institute for Astronomy and Astrophysics (DIAA), which further enhance the opportunities for our 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, ALMA, and the Thirty Metre Telescope. We have 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, post-doctoral fellows, graduate students, and staff in the Department of Astronomy and Astrophysics, CITA, and DIAA. 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
E-mail: grad.sec@astro.utoronto.ca
Telephone: (416) 978-2016
Fax: (416) 971-2026

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

Degree Programs

Astronomy and Astrophysics

Master of Science

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must hold an appropriate bachelor's degree with high academic standing from a recognized university. Applicants educated outside Canada should pay particular attention to the English-language competency requirements.
- Because many universities do not offer extensive undergraduate training in astronomy and astrophysics, preparation in physics and mathematics is an acceptable background.
- All applicants are strongly advised to take the General Test and Physics Test of the Graduate Record Examination (GRE) administered by the Educational Testing Service, Princeton.

Program Requirements

- 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 the first year, and AST 1500Y is completed in the following summer.
- Minimum of 1.0 FCE (two half courses) from the AST preparatory, elective, or specialized courses, subject to the approval of the instructor, the student's MSc program committee, and the department.
- More courses may be taken for credit or audited as appropriate.

Normal Program Length: 5 sessions full-time

Time Limit: 3 years full-time

Doctor of Philosophy

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies.

Applicants educated outside Canada should pay particular attention to the English-language competency requirements.

- Students are accepted into the PhD program through one of two routes:
    1. an appropriate master's degree with an average of at least B+ or demonstrated comparable research competence
    2. directly from 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.
- All applicants are strongly advised to take the General Test and Physics Test of the Graduate Record Examination (GRE) administered by the Educational Testing Service, Princeton.

Program Requirements

- Students are normally expected to be on campus full-time for the duration of the program.
- Students with 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 by the department, may apply for admission to the four-year PhD program. Requirements for the four-year PhD program are identical to those for the five-year program, except for the courses. There is no minimum course requirement in the four-year program except for courses deemed necessary by the student's PhD committee.
- 2.0 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 the first year, and AST 1500Y is completed in the following summer. An oral exam by committee is held for each.
- 400#Y (in sequence of the last digit: 2, 3, etc.) Students register each year, beginning in the second year, in the research course AST 400#Y.
- Written PhD thesis proposal, defended in a Doctoral Final Oral Examination conducted by a panel of faculty members. The intention of this "qualifying examination" is to assess the student's ability and readiness to carry forward and successfully complete independent PhD-level research. This assessment is based on the student's graduate record to date, including graduate lecture courses

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

and research performed, together with the presentation and defense of the proposed PhD thesis. The qualifying examination is taken after four and within five sessions of beginning the program.

- A minimum of 2.0 FCEs from the AST preparatory, elective, or specialized courses, and courses of equivalent levels from a cognate department, subject to the approval of the student's Program/PhD Committees, the instructor, and the department. More courses may be taken for credit or audited as appropriate.
- 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.

Normal Program Length: 4 years full-time; 5 years direct-entry

Time Limit: 6 years full-time; 7 years direct-entry

Course List

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 400*Y[+]	Research (*Students register each year, beginning in the second year, in sequence of the last digit: 2, 3, etc.)

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 II
AST 3050H,Y	Theoretical Cosmology

AST 3100H   Lecture Series in Specialized Topics (mini courses)

Supplementary Research for PhD Students

AST 3500H   Non-thesis Research Project in Astronomy/ Astrophysics

Graduate Faculty

Full Members

Abraham, Roberto - BSc, DPhil *(Associate Chair, Graduate)*
Artymowicz, Pawel - MS, PhD
Bond, J Richard - BSc, MS, PhD, FRSC, Fell Royal Society London
Carlberg, Raymond - BSc, MS, PhD
Dyer, Charles - BS, MSc, PhD
Graham, James - DIC, BSc, PhD, FRSC
Jayawardhana, Ray - BS, PhD
Lester, John - BA, MS, PhD
Lowman, Julian - BSc, MS, DPhil
Martin, Peter - BSc, MSc, PhD
Matzner, Christopher - BA, MA, PhD
Mochnacki, Stefan - BSc, MSc, PhD
Moon, Dae-Sik - BS, MS, PhD
Murray, Norman - BSc, PhD
Netterfield, C. Barth - BSc, PhD
Pen, Ue-Li - BSc, PhD
Pfeiffer, Harald - PhD
Thompson, Christopher - BSc, PhD
van Kerkwijk, Marten - MA, PhD
Wu, Yanqin - PhD
Yee, Howard - BASc, PhD, FRSC

Members Emeriti

Bolton, Charles - BS, MS, PhD
Clement, Christine - BSc, MA, PhD
Clement, Maurice - BSc, 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
Rucinski, Slavek - MS, PhD, DSc

Biochemistry

Faculty Affiliation

Medicine

Degree Programs Offered

Biochemistry – MSc, PhD

Collaborative Programs

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

1. **Biomedical Engineering**
    • Biochemistry, MSc, PhD
2. **Biomolecular Structure**
    • Biochemistry, PhD
3. **Developmental Biology**
    • Biochemistry, MSc, PhD
4. **Genome Biology and Bioinformatics**
    • Biochemistry, PhD
5. **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 offers modern facilities for research leading to the **Master of Science** and **Doctor of Philosophy** degrees 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
E-mail: carrie.harber@utoronto.ca
Telephone: (416) 978-2702
Fax: (416) 946-8228

Department of Biochemistry
University of Toronto
Room 5205, Medical Sciences Building
Toronto, Ontario M5S 1A8
Canada

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

Degree Programs

Biochemistry

Master of Science

Minimum Admission Requirements

• 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 International English Language Testing System (IELTS) 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 2021H *Selected Topics in Biochemistry;* BCH 2027H *Membrane Proteins: Structure, Function, and Disease;* BCH 2028H *Protein Quality Control and Trafficking within the Secretory Pathway;* BCH 2029H *Protein Folding and Disease;* BCH 2030H *Molecular Aspects of Cell Signalling;* or BCH 2024H[0] *Focused Topics in Biochemistry.*

• 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.

Normal Program Length: 6 sessions full-time

Time Limit: 3 years full-time

Doctor of Philosophy

Minimum Admission Requirements

- 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 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, a Michigan English Language Arts Battery (MELAB) score of at least 92 is also acceptable
- Students accepted into the PhD program through one of three routes:
  1. via reclassification from the MSc program
  2. on completion of an MSc degree in biochemistry or a cognate discipline
  3. directly from a BSc if, in the opinion of the Biochemistry Graduate Committee, the student has an outstanding academic record
- The latter two categories require the student to successfully complete a qualifying examination within the first 18 months.

Program Requirements

- Complete any courses that were a condition of acceptance.
- Complete 1.5 internal or external (from cognate departments) graduate-level courses, including at least one 0.5 FCE from the following list: BCH 2021H *Selected Topics in Biochemistry;*

BCH 2027H *Membrane Proteins: Structure, Function, and Disease;* BCH 2028H *Protein Quality Control and Trafficking within the Secretory Pathway;* BCH 2029H *Protein Folding and Disease;* BCH 2030H *Molecular Aspects of Cell Signalling;* BCH 2024H^0 *Focused Topics in Biochemistry.* 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.

Normal Program Length: 4 years full-time; 5 years direct-entry

Time Limit: 6 years full-time; 7 years direct-entry

Course List

For course details and availability, consult the department's 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 2021H	Selected Topics in Biochemistry: Advanced lectures to supplement the above lower-numbered courses in Biochemistry
BCH 2027H	Membrane Proteins: Structure, Function, and Disease
BCH 2028H	Protein Quality Control and Trafficking within the Secretory Pathway
BCH 2029H	Protein Folding and Disease
BCH 2030H	Molecular Aspects of Cell Signalling
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

§ 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

JNP 1017H[+]	Molecular and Biochemical Basis of Toxicology
JNP 1018H[+]	Current Topics in Molecular and Biochemical Toxicology
JNR 1444Y	Fundamentals of Neuroscience: Cellular and Molecular—Lectures (PSL 444Y)[§]
JTB 2010H	Proteomics and Functional Genomics
JTB 2020H	Applied Bioinformatics

Graduate Faculty

Full Members

Adeli, Khosrow - DipChem, MSc, PhD
Attisano, Liliana - BSc, PhD *(Coordinator of Graduate Studies)*
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
Clarke, David - 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
Howell, Lynne - BSc, PhD
Ingles, C James - BSc, PhD
Isenman, David - BSc, BSc, PhD
Jorgensen, Annelise - MSc, PhD
Kay, Lewis - PhD
Keeley, Frederick - BSc, PhD
Kim, Peter - PhD
Klip, Amira - ScD
Lewis, Peter - BSc, PhD
Lingwood, Clifford - BSc, PhD
Maclennan, David - BSc, MSc, PhD
Manolson, Morris - PhD
McQuibban, Angus - BSc, MSc, PhD
Melnyk, Roman - PhD
Moran, Laurence - BSc, PhD
Pai, Emil - PhD
Parkinson, John - BS, PhD
Pomes, Regis - PhD
Prive, Gil - BSc, PhD
Pulleyblank, David - BSc, PhD
Rand, Margaret - BSc, PhD
Reithmeier, Reinhart - BSc, PhD *(Chair and Graduate Chair)*
Rini, James - BSc, PhD
Robinson, Brian - BSc, PhD
Rotin, Daniela - BSc, MSc, PhD
Rubinstein, John - BSc, PhD
Rubinstein, John L - BSc, PhD
Segall, Jacqueline - BSc, PhD
Sharpe, Simon J - BSc, PhD
Sicheri, Frank - BSc, PhD

Siu, Chi-Hung - BA, PhD
Smibert, Craig - BSc, PhD
Stagljar, Igor - BS, PhD
Steipe, Boris - MD, PhD
Trimble, William - BSc, PhD
Volchuk, Allen - BSc, PhD
Williams, David - BSc, MSc, PhD
Wodak, Shoshana - LicScChem, PhD
Yip, Christopher - BSc, PhD

Members Emeriti

Anwar, Rashid - BSc, MSc, PhD
Bennick, Anders - DipPerio, MSc, DDS, PhD
Gurd, James - BA, PhD
Lane, Byron - BA, PhD
Marks, Alexander - MD, PhD
Moscarello, Mario - BA, 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

Biomedical Engineering

Faculty Affiliation

Applied Science and Engineering

Degree Programs Offered

Biomedical Engineering – MASc, PhD
Clinical Engineering – MHSc

Collaborative Programs

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

1. **Addiction Studies**
    • Biomedical Engineering, MASc, PhD
2. **Cardiovascular Sciences**
    • Biomedical Engineering, MASc, PhD
3. **Genome Biology and Bioinformatics**
    • Biomedical Engineering, PhD
4. **Health Care, Technology, and Place**
    • Biomedical Engineering, PhD
5. **Neuroscience**
    • Biomedical Engineering, MASc, MSc, PhD
6. **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. Students may be registered in the Biomedical Engineering Program or in the Clinical Engineering Program through the institute. Students interested in the Collaborative Program in Biomedical Engineering may register through one of the collaborating graduate units.

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.

Research themes include diagnostic and therapeutic engineering, technology for health, and cellular and molecular bioengineering. Specific interests include neural and sensory systems engineering, molecular imaging, nanotechnology and microtechnology, biomaterials, rehabilitation engineering, cellular and tissue engineering, regenerative medicine proteomics, and bioinformatics.

Contact and Address

Web: www.ibbme.utoronto.ca

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

Clinical Engineering Office:
E-mail: 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

Degree Programs

Biomedical Engineering

Master of Applied Science

Minimum Admission Requirements

• A bachelor's degree in dentistry, engineering, medicine, or one of the physical or biological sciences.

Program Requirements

• The program normally comprises at least 2.0 full-course equivalents (FCEs), including BME 1450H and an appropriate life science or engineering course. Engineering and physical science students take a life sciences course, such as JPB 1022H (or an equivalent); while life science students take a physical sciences course, such as JPB 1055H (or an equivalent).
• Students participate in two seminar courses: one of BME 1010H or BME 1011H *Graduate Seminar* series, and JDE 1000H Ethics in Research.

- Successful completion of a thesis in the biomedical engineering field.

Normal Program Length: 5 sessions full-time

Time Limit: 3 years full-time

Doctor of Philosophy

Minimum Admission Requirements

- A master's degree in dentistry, engineering, medicine, or one of the physical or biological sciences.
- Direct admission may be considered in exceptional cases.

Program Requirements

- Normally, at least 1.0 full-course equivalent (FCE) and successful completion of a thesis, representing an original investigation in biomedical engineering.
- Within 12 months of registration, students must pass a qualifying examination covering the broad field of biomedical engineering appropriate to their background.
- 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.
- Engineering and physical science students are required to take a life sciences course, such as JPB 1022H (or an equivalent); while life science students are required to take a physical sciences course, such as JPB 1055H (or an equivalent).
- Students pursue a thesis topic relevant to Biomedical Engineering and are expected to take BME 1450H *Bioengineering Science.*
- Students participate in two seminar courses: one of BME 1010H or BME 1011H *Graduate Seminar* series, and JDE 1000H *Ethics in Research.*
- Students in the Clinical Engineering Concentration must complete the following requirements in addition to those listed above. If a student does not have a formal degree in clinical engineering, 0.5 FCE from one of the IBBME clinical engineering courses (BME 1405, BME 1439, BME 1436, or BME4444) is required. A student who possesses protracted professional engineering experience (five or more years) will be exempt from this requirement. Students in the Clinical Engineering Concentration must (1) conduct their research in a clinical environment; (2) normally 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. IBBME's PhD program currently allows for co-supervision from non-IBBME SGS-appointed faculty.

Normal Program Length: 4 years full-time; 5 years direct-entry

Time Limit: 6 years full-time; 7 years direct-entry

Clinical Engineering

Master of Health Science

Minimum Admission Requirements

- Selected students who hold a bachelor of applied science degree in engineering.

Program Requirements

- Normally 4.0 FCEs, including BME 1450H a life science equivalent; and 1.0 FCE of internships in health care facilities, the medical device industry, or health care consulting firms. All students are required to take a life sciences course, such as JPB 1022H (or an equivalent).
- Students participate in two seminar courses: one of BME 1010H or BME 1011H Graduate Seminar series, and JDE 1000H Ethics in Research.
- Successful completion of a thesis in the clinical engineering field.

Normal Program Length: 6 sessions full-time

Time Limit: 3 years full-time

Course List

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	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 4444Y	Practice in Clinical Engineering
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
JPB 1022H	Human Physiology as Related to Biomedical Engineering
JTC 1331H	Biomaterials Science
MBP 1007H	Fundamentals in Molecular and Cell Biology I
MBP 1008H	Fundamentals in Molecular and Cell Biology II
MBP 1022H	Advanced Cell Biology for Physical Scientists
PSL 1052H	Fundamentals of Ion Channel Function
ZOO 1002H	Advanced Research and Reading Course
HAD 5010H	Canada's Health System and Health Policy: Part I

Graduate Faculty

Full Members

Adamson, Susan - BSc, MSc, MD, PhD
Allen, Christine - BSc, PhD, PhD
Aubin, Jane - BSc, PhD
Audet, Julie - MASc, PhD *(Graduate Coordinator, Graduate Programs)*
Bardakjian, Berj - BSc, BEd, MASc, PhD
Benhabib, Bensiyon - BSc, MSc, PhD
Biddiss, Elaine Alisa - MASc, PhD
Black, Sandra - BSc, MD
Bogoch, Earl - BA, MSc, MD
Boynton, Erin - MD
Chan, Warren - BSc, PhD
Chau, Tom - PhD
Cheng, Yu-Ling - SB, PhD
Cheyne, Douglas - BSc, MA, PhD
Courtman, David - BSc, MSc, PhD
Cvitkovitch, Dennis - BSc, MSc, PhD
Davies, John - BSc, BDSc, PhD, DSc
Drake, James - BSE, MSc, MBChB
Easty, Anthony - PhD
Eizenman, Moshe - BASc, MASc, PhD
Ethier, C Ross - BSc, MMath, SM, 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
Johnston, K. Wayne - MD
Joy, Michael - BSc, MASc, PhD
Kandel, Rita - MD
Keating, Armand - BSc, MD

Kelley, Shana - BA, PhD
Keshavjee, Shafique - BA, MSc, LMCC, MD
Kumacheva, Eugenia - MSc, PhD
Levi, Ofer - BSc, MSc, PhD
Li, Ren-Ke - MHSc, MSc, MD, PhD
Mandelis, Andreas - BSc, MA, MSc, PhD
Mihailidis, Alex - BASc, MASc, PhD
Naguib, Hani - BSc, ME, PhD, Reg Professional Engineer
Norwich, Kenneth - MSc, PhD
Popovic, Milos - DIPING, PhD
Pritzker, Kenneth - BSc, MD
Radisic, Milica - BEng, PhD
Reid, Denise - BSc(OT), MEd, PhD
Rocheleau, Jonathan - BSc, PhD
Ryu, William - AB, PhD
Santerre, Paul - BSc, MSc, PhD
Schweizer, Tom - BA, MSc, DPhil
Sefton, Michael - BASc, ScD
Shoichet, Molly - PhD
Silverman, Melvin - BSc, MDCH
Simmons, Craig - BSc, MSc, PhD
Skinner, Frances - PhD
Slutsky, Arthur - BASc, MASc, MD
Stanford, William - BA, PhD
Sun, Yu - BS, MS, MS, PhD
Thompson, Michael - BSc, PhD, DSc, Fell Ryl Inst Chemistry
Thorpe, Steven - BASc, MASc, PhD
Truong, Kien (Kevin) - BASc, PhD
van Lieshout, Pascal - MA, MA, PhD
Wang, Paul - BSc, PhD
Wong, Willy - BSc, MSc, PhD
Yip, Christopher - BSc, PhD
Yoo, Paul - BASc, MASc, PhD
You, Lidan - BS, MS, PhD
Zandstra, Peter - BEng, PhD

Members Emeriti

Cobbold, Richard - PhD
Dolan, Alf - BSc, MSc
Kunov, Hans - MSc, PhD
Pilliar, Robert - BASc, PhD
Watson, Philip - DDS, BDSc, MScD

Associate Members

Andrysek, Jan - BSc, MASc, PhD
Coates, Allan - BEng, MDCM, MDCH
Gemmell, Cynthia - PhD
Howarth, David - LMCC, MD
Islam, Mohammad - PhD
Kim, Peter - MDCM, PhD
Lapinsky, Stephen - MSc, MBChB
McConville, Kristiina - PhD
Shojania, Kaveh - BSc, MD
Sodhi, Rana - BSc, MSc, PhD
Steele, Catriona - BA, MHSc, PhD
Steinman, David - BASc, MASc, PhD
Trbovich, Patricia L - PhD
Woodhouse, Kimberly Ann - BEng, PhD

Cell and Systems Biology

Faculty Affiliation

Arts and Science

Degree Programs Offered

Cell and Systems Biology – MSc, PhD

Programs Closed to Admission

Plant and Microbial Biology – MSc, PhD
Zoology – MSc, PhD

Collaborative Programs

The following collaborative programs 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

Cell and Systems Biology (CSB) offers a master's program leading to the degree of **Master of Science** and a doctoral program leading to the degree of **Doctor of Philosophy** in the fields of cell, molecular, and systems biology. Students undertaking graduate programs in CSB 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: www.csb.utoronto.ca
E-mail: sue.taylor@utoronto.ca
Telephone: (416) 978-8532
Fax: (416) 946-5765

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

Degree Programs

Cell and Systems Biology

Master of Science

Minimum Admission Requirements

- Students are admitted under the General Regulations of the School of Graduate Studies.
- 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 CSB 1000H (0.5 FCE).
- Complete the CSB 1010Y *MSc Seminar Series* (credit only, 24 seminars per year, plus attendance at two CSB PhD proposal/transfer days 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.

Normal Program Length: 6 sessions full-time

Time Limit: 3 years full-time

Doctor of Philosophy

Minimum Admission Requirements

PhD degree students are generally accepted by one of three routes:

- following completion of an **MSc degree** from a recognized university, with a minimum A- average in all work completed in the master's program
- by **transferring from the University of Toronto MSc program:** students may reclassify from the MSc program after 12 months of study
- by **direct entry,** that is, after completing an honours bachelor's degree with an exceptional record and a minimum A- average or equivalent

Program Requirements

- Complete CSB 1000H (0.5 FCE) and one additional CSB 100XH (0.5 FCE) or equivalent.

- Complete the CSB 1011Y *PhD Seminar Series* (credit only, 24 seminars per year, plus attendance at two CSB PhD proposal/transfer days per year).
- Complete a thesis on a research project, give a public presentation of the thesis research, and defend the thesis at the Doctoral Final Oral Examination.
- All PhD students (including MSc students wishing to reclassify as PhD students) must successfully complete a PhD proposal/transfer examination. The PhD proposal/transfer examination involves three components:
  1. preparation of a written research proposal
  2. presentation to the department and questioning by the public at the departmental PhD proposal/transfer day
  3. in-camera questioning by a PhD proposal examination committee within two weeks of the public presentation

  There are two dates available for the proposal/transfer process per year, one in October and the other in February. Students must successfully complete their proposal/transfer examination at either one of these dates, at 13 months or 17 months after the start date of enrolment in their graduate program. Students who transfer from the CSB MSc program to the PhD program may apply course credits earned as CSB MSc students towards their PhD course requirements.

Normal Program Length: 4 years full-time; 5 years direct-entry; 5 years transfer-from-master's

Time Limit: 6 years full-time; 7 years direct-entry; 7 years transfer-from-master's

Course List

Consult the graduate unit regarding course availability.

CSB 1000H[+] Topics in Cell and Systems Biology 1
(Consists of two modules. Detailed information on modules can be found on the Department of Cell and Systems Biology website.)
CSB 1001H[+] Topics in Cell and Systems Biology 2
CSB 1002H[+] Topics in Cell and Systems Biology 3
CSB 1010Y[0] MSc Seminar Series
CSB 1011Y[0] PhD Seminar Series
JBZ 1472H Computational Genomics and Bioinformatics

[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.

Graduate Faculty

Full Members

Aarts, Michelle Marie - BS, MS, PhD
AbouHaidar, Mounir - DipdESup, BSc, PhD, Cert D'aptitude Pedagog
Anderson, James - BA, PhD
Barrett, F Michael - BSc, MSc, PhD
Berleth, Thomas - BSc, MSc, PhD
Boonstra, Rudy - BSc, PhD
Brown, Ian - BSc, PhD
Bruce, Ashley - BA, PhD
Buck, Leslie - BSc, PhD
Campbell, Malcolm - DPhil
Chang, Belinda - AB, PhD
Cheng, Mary - MSc, PhD
Christendat, Dinesh - PhD
Coleman, John - BSc, PhD *(Acting Chair and Acting Graduate Chair)*
Desveaux, Darrell - BSc, MSc, PhD
Edwards, Elizabeth - BEng, PhD
Ensminger, Ingo - PhD
Erb, Suzanne - DPhil
Espie, George - 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
Guttman, David - BS, PhD
Harris, Tony - BSc, PhD
Harrison, Rene - BS, MS, PhD
Hasenkampf, Clare - BSc, MS, PhD
Holmes, Melissa - PhD
Horgen, Paul - BA, MS, PhD
Kanelis, Voula - PhD
Kohn, Linda - BS, PhD
Kronzucker, Herbert - PhD
Lange, Angela - BSc, PhD
Larsen, Ellen - BSc, MSc, PhD
Levine, Joel - BA, PhD
Lovejoy, David - PhD
Lovejoy, Nathan Richard - BSc, MS, PhD
Mason, Andrew - MS, PhD
McCourt, Peter - PhD
McGowan, Patrick - 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
O'Day, Danton - BSc, MSc, PhD
Orchard, Ian - BSc, PhD, DSc
Ouellette, Francis - MSc
Peever, John - MSc, PhD

Peisajovich, Sergio - DSc
Provart, Nicholas - PhD
Reid, Stephen - BS, PhD
Riggs, Charles - BS, PhD
Ringuette, Maurice - BSc, PhD
Romans, Patricia - BSc, MSc, PhD
Ryu, William - AB, PhD
Shapiro, Colin - BSc, PhD
Smith, J.J. Berry - BA, MA, PhD
Sokolowski, Marla - BSc, PhD
Stephenson, Richard - BSc, PhD
Stewart, Bryan - BSc, MS, DPhil
Tepass, Ulrich - MSc, PhD *(Chair and Graduate Chair)*
Terebiznik, Mauricio - BSc, PhD
Tobe, Stephen - BSc, MSc, PhD, FRSC
Treanor, Bebhinn Lucy - BSc, PhD
Tropepe, Vince - BSc, PhD
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
Yang, Guojun - PhD
Yeomans, John - BA, PhD
Yoshioka, Keiko - PhD
Zhao, Rongmin - BSc, PhD

Associate Members

Fernandez-Gonzalez, Rodrigo - BSc, PhD
Kim, Junchul - BSc, MSc, PhD
Revers, Leigh - PhD

Chemical Engineering and Applied Chemistry

Faculty Affiliation

Applied Science and Engineering

Degree Programs Offered

Chemical Engineering and Applied Chemistry – MASc, MEng, PhD

Collaborative Programs

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

1. **Biomedical Engineering**
    - Chemical Engineering and Applied Chemistry, MASc, PhD
2. **Dynamics of Global Change**
    - Chemical Engineering and Applied Chemistry, PhD
3. **Environmental Engineering**
    - Chemical Engineering and Applied Chemistry, MASc, MEng, PhD
4. **Environmental Studies**
    - Chemical Engineering and Applied Chemistry, MASc, MEng, PhD
5. **Genome Biology and Bioinformatics**
    - Chemical Engineering and Applied Chemistry, PhD
6. **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. Graduate programs lead to the degrees of **Master of Applied Science** (MASc), **Master of Engineering** (MEng), and **Doctor of Philosophy** (PhD). The MEng program differs from the MASc and PhD programs in that it is oriented to learning through pre-scribed courses rather than through research.

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 govern-ment and industry, often by means of a consortium of companies. The experience of dealing with real world problems prepares graduates for successful profes-sional 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

A more complete and up-to-date description of graduate programs and enrolment procedures appears on www.chem-eng.utoronto.ca.

Contact and Address

Web: www.chem-eng.utoronto.ca
E-mail:
 Admissions: admissgrad.chemeng@utoronto.ca
 General: gradassist.chemeng@utoronto.ca
Telephone: (416) 946-3987
Fax: (416) 978-8605

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

Degree Programs

Chemical Engineering and Applied Chemistry

Master of Applied Science

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies.

Program Requirements

- Thesis on a research topic.
- At least three graduate half courses (1.5 full-course equivalents [FCEs]), one of which normally must be selected from Category A: Fundamental (see courses below), and at least one of which must be selected in an area outside the student's field of research specialization. Furthermore, only one 500-level course may be taken for credit towards the degree program. Students are also required to complete CHE 2222H and JDE 1000H as well as attend four sessions of the CHE 300xH seminar series. Students are required to take a graduate student seminar, presenting two times during their program, once in the first year and once in the second year of study.

- Each student should discuss possible research projects with several members of the department before selecting a research area and a supervisor.
- The program requires a minimum full-time residence of two sessions (eight months).

Normal Program Length: 6 sessions full-time

Time Limit: 3 years full-time

Master of Engineering

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies.

Program Requirements

- The 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. The project must be defended at an oral examination.
- The MEng program can be completed either through full-time or part-time studies. The full-time program is designed to be completed within 12 months, including the summer session. The part-time program is intended primarily for engineers in full-time professional practice.

Normal Program Length: 3 sessions full-time; 9–12 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

Doctor of Philosophy

Minimum Admission Requirements

- Applicants may enter the program via one of three routes:
  1. 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
  2. **transferring from the University of Toronto MASc program** after completing one year; such students must successfully complete a "bypass" examination
  3. **direct entry** after completing a bachelor's degree may be considered in exceptional cases
- International applicants with a master's degree from outside Canada or the United States in their country of residence may be asked to register in the MASc program and follow entry route 2.

Program Requirements

- Thesis on a research topic.

- **Students with a completed MASc degree**: at least 2.0 full-course equivalents (FCEs).
- **Transfer students**: 3.0 FCEs for students without a master's degree 2.0 FCEs for students with a completed master's degree. Transfer students do not have to take a separate PhD qualifying examination.
- **Direct-entry students**: at least 3.0 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 minor 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 are also required to complete eight sessions of the seminar: attending CHE 300xH series and, if not already completed, CHE 2222H and JDE 1000H. Students are required to take a graduate student seminar: attending course two times in their program, once in the first year and once in the third year of study.
- Within 9–12 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.

Normal Program Length: 4 years full-time; 5 years direct-entry; 5 years transfer-from-master's

Time Limit: 6 years full-time; 7 years direct-entry; 7 years transfer-from-master's

Course List

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
JTC 1135H   Applied Surface Chemistry
CHE 1310H   Chemical Properties of Polymers

Category B: Specialized Courses

CHE 1053H   Electrochemistry
CHE 1118H   Industrial Catalysis
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 1213H   Corrosion
CHE 1314H   The Structure and Properties of Fibrous Materials
JTC 1331H   Biomaterials Science
JCB 1349H   Molecular Assemblies: Structure/Function/Properties
CHE 1400H   Environmental Nuclear Science
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 1533H   Nuclear Chemical Engineering
CHE 1541H   Two-Phase Flow and Heat Transfer
CHE 2504H   Environmental Pollution Prevention
JCC 1313H   Environmental Microbiology
JCI 1321H   Wood Engineering
JNC 2503H   Environmental Pathways Engineering Management Courses
APS 530H   Appropriate Technology and Design for Global Development
APS 1001H   Project Management
APS 1002H   Financial Engineering
APS 1003H   Professional Education and Instruction
APS 1004H   Human Resource Management: An Engineering Perspective
APS 1005H   Operations Research for Engineering Management
APS 1010H   Cognitive and Psychological Foundations of Effective Leadership
APS 1011H   Concepts and Application of Authentic Leadership
APS 1088H   Entrepreneurship and Business for Engineers
APS 1201H   Topics in Engineering and Public Policy 500-level (undergraduate/graduate) Courses
APS 1501H   Leadership and Leading in Groups and Organizations
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

Seminar Courses

CHE 2011H   Graduate Student Seminars (Credit/No Credit)
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.

Graduate Faculty

Full Members

Acosta, Edgar Joel - BS, MS, PhD
Allen, Christine - BSc, PhD, PhD
Allen, D Grant - BASc, MASc, PhD *(Chair)*
Audet, Julie - MASc, PhD
Cheng, Yu-Ling - SB, PhD
Chin, Cathy Ya Huei - BSc, MSc, PhD
Cluett, William - BSc, PhD
Cooper, Paul - BED, BSc, MSc, PhD
Cormack, Donald - BASc, MASc, PhD
Coyle, Thomas - BS, BA, ScD
Diamond, Miriam - MSc, MSc, PhD
Diosady, Levente - BASc, MASc, PhD
Edwards, Elizabeth - BEng, PhD
Evans, Gregory - PhD
Farnood, Ramin - BASc, MASc, PhD
Fulthorpe, Roberta - BSc, MSc, PhD
Gong, Sunling - BASc, MASc, PhD
Grynpas, Marc - MSc, PhD
Jia, Charles - BEng, MEng, PhD *(Graduate Chair)*
Jones, Andrew Kevin - BSE, MASc, PhD
Kawaji, Masahiro - BASc, MSc, PhD
Kirk, Donald - BASc, MASc, PhD
Kortschot, Mark - BASc, MASc, PhD
Kumacheva, Eugenia - MSc, PhD
Lawryshyn, Yuri - DIPING, BASc, MASc, PhD
Mahadevan, Radhakrishnan - BTech, PhD
Master, Emma - BSc, PhD
Mckague, Bruce - BSc, 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
Rizvi, Syed - BS, MEng, MS, PhD
Saville, Bradley - BSc, PhD
Sefton, Michael - BASc, ScD
Shoichet, Molly - PhD
Stanford, William - BA, PhD
Thomson, Murray - BSc, PhD

Thorpe, Steven - BASc, MASc, PhD
Tran, Hoc Nghia (Honghi) - PhD
Wania, Frank - MPH, PhD
Winnik, Mitchell - BA, PhD
Woodhouse, Kimberly Ann - BEng, PhD
Yan, Ning - BSc, PhD, Reg Professional Engineer
Yip, Christopher - BSc, PhD

Members Emeriti

Balke, Stephen - BEng, PhD
Boocock, David - BSc, PhD
Chaffey, Charles - BSc, PhD
Charles, Michael - BSc, MSc, PhD, Fell Chem Inst of
  Canada
Foulkes, Frank - BASc, MASc, PhD
James, David - BSc, MS, MA, PhD
Jervis, Robert - BA, MA, PhD, Reg Professional Engineer,
  Fell Chem Inst of Canada
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

Bidleman, Terry - BSc, PhD
Colcleugh, David - BASc, MASc, PhD
Goodfellow, Howard - BASc, MASc, PhD
Grace, Thomas Michael - BS, PhD
Liss, Steven - BSc, MSc, PhD
Sayad, Saed - MD, PhD
Treiber, Steve - MASc, PhD
Wolfaardt, Gideon - BSc, MSc, PhD

Chemistry

Faculty Affiliation

Arts and Science

Degree Programs Offered

Chemistry – MSc, PhD

Collaborative Programs

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

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

Overview

Modern facilities are available for research leading to the **Master of Science** and **Doctor of Philosophy** degrees. The areas of interest cover a wide variety of topics in analytical, biological, environmental, inorganic, organic, materials, polymers, physical, and theoretical chemistry and their related interdisciplinary areas.

Contact and Address

Web: www.chem.utoronto.ca
E-mail: grad@chem.utoronto.ca
Telephone: (416) 978-3605
Fax: (416) 978-1631

Department of Chemistry
University of Toronto
Room 151, Lash Miller Building
80 St. George Street
Toronto, Ontario M5S 3H6
Canada

Degree Programs

Chemistry

Master of Science

Minimum Admission Requirements

- Appropriate bachelor's degree from a recognized university with an average equivalent to at least a University of Toronto B+.

Program Requirements

- Submission of a thesis, the successful completion of 1.0 graduate full-course equivalent (FCE) including at least 0.5 graduate half-course equivalent in chemistry, and participation in a seminar program.

Normal Program Length: 4 sessions (2 years) full-time

Time Limit: 3 years full-time

Doctor of Philosophy

Minimum Admission Requirements

- 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 the first year in the master's program.

Program Requirements

- The main requirement for the PhD program is the execution of an original investigation that is presented in a thesis. Each program requires successful completion of an oral examination in the area of the major field, as well as participation in a seminar program.
- Students select one of the following as a major field:
  - Analytical Chemistry
  - Environmental Chemistry
  - Inorganic Chemistry
  - Organic and Biological Chemistry
  - Physical Chemistry and Chemical Physics
  - Polymers and Materials Chemistry
  - Interdisciplinary

  The interdisciplinary field allows combinations within 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 and Graduate Studies Committee. 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:

Analytical Chemistry

- 2.0 FCEs to include 0.5 FCEs in analytical chemistry in each of the areas of spectroscopy, separation science/electrochemistry, and advanced instrumentation/data analysis, plus one other 0.5 FCE to

support the research program. Students must also complete 30 Analytical Seminar Plus (ASP) points.

Environmental Chemistry

- At least 2.0 FCEs to include CHM 1401H, at least one other course in environmental chemistry, and 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 second and fourth years of study) and participation in the Environmental Chemistry seminar and colloquia program. A written research proposal, defended orally, on a topic other than the primary research topic delivered prior to the end of the second year of graduate study. Successful completion of an oral examination in the area of Environmental Chemistry, normally completed following coursework and before the end of the second year of graduate study.

Inorganic Chemistry

- 2.0 FCEs including one core half course (either CHM 1261H or CHM 1270H that are offered in alternating years) plus the presentation of one seminar each year starting in their second year (to a total of three) in the Inorganic Chemistry seminar program including one on an original research proposal.

Organic and Biological Chemistry

- At least 2.0 FCEs to include at least two Organic Chemistry graduate half courses selected from CHM 1040H to CHM 1068H (inclusive). Students may take graduate courses from other chemistry fields or cognate departments. All students are expected to be at the level of the fourth-year undergraduate courses offered in physical organic, synthetic organic, and biological chemistry, and if necessary, the cross-listed arts and science courses may be taken. Courses will be selected in consultation with the supervisor and confirmed by the Graduate Studies Committee field representative. Students must also pass seven cumulative exams and present two seminars as a component of their participation in the Organic Chemistry seminar program (normally in the second and fourth years of study). Upon completion of coursework and cumulative exams, students will take an oral exam in the area of Organic and Biological Chemistry.

Physical Chemistry and Chemical Physics Experimental Physical Chemistry

- 2.0 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. Attendance and participation in the Physical Chemistry seminar program are mandatory.

Theoretical Physical Chemistry

- 3.0 FCEs, including two core half courses. Specifics are to be determined by the research director and the student. Attendance and participation in the Physical Chemistry seminar program are mandatory.

Polymers and Materials Chemistry

- 2.0 FCEs, to include at least two 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 two seminars (the first will be an independent research proposal, the second a presentation on research) and participation in the Polymers and Materials Chemistry seminar program. Successful performance in an oral examination in the area of Polymers and Materials Chemistry following the completion of coursework.

Interdisciplinary PhD Program

- 2.0 FCEs, including one core half course from the above fields, and participation in one of the field seminar programs. Acceptance into this program requires a research topic of a truly interdisciplinary nature; a written request must be submitted to the Graduate Coordinator.

Depending upon the area of research, students may also be required to show an adequate ability to translate scientific text in one or two of the following languages: French, German, and Russian.

A student whose major subject is in another department may consult the Department of Chemistry regarding the selection of a minor in chemistry.

Normal Program Length: 4–5 years full-time; 5 years direct-entry; 5 years transfer-from-master's

Time Limit: 6 years full-time; 7 years direct-entry; 7 years transfer-from-master's

Course List

Not all courses are offered every year. Please consult the department each session as to course availability.

Analytical Chemistry

CHM 1102H	Bionsensors 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 1108H	Mass Spectrometry Fundamentals and Instrumentation
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 2014H   Research in Analytical Chemistry
BME 1452H   Signal Processing for Bioengineering
CHE 1144H   Separation Processes
CHM 1410H   Analytical Environmental Chemistry

Environmental Chemistry

CHM 1401H   Transport and Fate of Chemical Species in the Environment (core course)
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 1550H   Topics in Environmental 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
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 1055Y   Organic Chemistry Proposal Writing

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 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 (core course)
CHM 1482H   Laser Spectroscopy and Photophysics
CHM 1486H   Modern Molecular Spectroscopy
IOS 1500H   Selected Topics in Optics Research
CHM 1490Y   Physical Chemistry Seminar (Credit/No Credit)
CHM 2024H   Research in Physical Chemistry

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.

Graduate Faculty

Full Members

Abbatt, Jonathan - BSc, PhD
Allen, Christine - BSc, PhD, PhD
Batey, Robert Alexander - BA, PhD
Bender, Timothy - PhD
Brumer, Paul - BSc, PhD
Chan, Warren - BSc, PhD
Chin, Jik - MS, PhD
Dhirani, Al-Amin - MSc, PhD
Donaldson, D. James - PhD
Dong, Vy - BCH, MC, DChem
Fekl, Ulrich - MSc, PhD
Fraser, Simon John - BA, PhD
Georges, Michael - BS, PhD
Goh, M Cynthia - PhD
Gunning, Patrick - BS, 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 *(Chair and Graduate Chair)*
Murphy, Jennifer - BCH, DChem
Nitz, Mark - BSc, PhD
Ozin, Geoffrey - BSc, PhD
Polanyi, John - MSc, PhD, DSc, FRSC, Fellow Royal Society London
Prosser, Scott - BSc, MSc, DPhil
Schofield, Jeremy - PhD, PhD
Scholes, Greg - MSc, PhD
Seferos, Dwight - BCH, DChem
Segal, Dvira - BSc, DSc
Shin, Jumi - AB, DPhil
Shoichet, Molly - PhD
Simpson, Andre - BSc, PhD
Simpson, Myrna - BS, DPhil
Song, Datong - BSc, PhD
Stephan, Douglas - BSc, PhD
Taylor, Mark - BSc, DSc
Thompson, Michael - BSc, PhD, DSc, Fellow Royal Institute of Chemistry
Walker, Gilbert - BCH, PhD
Wania, Frank - MPH, PhD
Wheeler, Aaron - BS, PhD
Whittington, Stuart - BA, MA, PhD
Winnik, Mitchell - BA, PhD
Woolley, G Andrew - PhD
Yudin, Andrei - MSc, MSc, PhD

Zamble, Deborah - BSc, PhD
Zhang, Xiaoan - MS, PhD

Members Emeriti

Bersohn, Malcolm - BSc, MS, PhD
Brook, Adrian - BA, PhD
Harrison, Alexander - MSc, PhD
Jones, J Bryan - BSc, PhD, DPhil
McLean, Stewart - BSc, PhD
Menzinger, Michael - MS, PhD
Poe, Anthony - DIC, BA, BSc, MA, MA, PhD
Reynolds, William - MD
Still, Ian - BSc, PhD
Tidwell, Thomas - BS, AM, PhD
Valleau, John - PhD

Associate Members

Baranov, Vladimir - PhD
Bidleman, Terry - BSc, PhD
Manners, Ian - BSc, PhD
Muir, Derek - BSc, MSc, PhD
Reiner, Eric - BSc, MSc, PhD
Tanner, Scott - BSc, PhD

Cinema Studies

Faculty Affiliation

Arts and Science

Degree Programs Offered

Cinema Studies – MA, PhD

Collaborative Programs

The following collaborative programs 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 offers a program leading to the **Master of Arts** and **Doctor of Philosophy** degrees in Cinema Studies. Our faculty have expertise in several areas, including film history, film theory, film analysis, and film and cultural practices. The course-based, one-year MA program offers students the option of a professional internship or a major research paper.

Launching in September 2013 (pending final approval), 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 new intermedial formats. Throughout, the synthesis of history and theory, textual analysis, and cultural study is emphasized.

Contact and Address

Web: www.utoronto.ca/cinema
E-mail: 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

Degree Programs

Cinema Studies

Master of Arts

Minimum Admission Requirements

- 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 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, and 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 FCEs over the course of an academic year, normally extending from September until August. Of the 4.0 FCEs:
    - 1.5 FCEs will be mandatory, core courses under the CIN rubric.
    - 1.0 FCE will be devoted to either the writing of a major research paper or pursuing an internship.
    - 1.5 FCEs may be completed in the following way: 0.5 to 1.0 may be 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); the remaining 0.5 to 1.0 may be chosen from film-based courses offered by other units (non-CIN designator) but approved as relevant to the Cinema Studies master's program curriculum.
- All students complete CIN 1100H, CIN 1101H, and CIN 1102H.
    - Additional requirements for students choosing the **major research paper option**:
        - CIN 1006Y
        - 0.5 to 1.0 FCE derived from elective CIN courses
        - 0.5 to 1.0 FCE derived from approved graduate-level courses offered outside CIN
    - Additional requirements for students choosing the **internship option**:
        - CIN 1007Y

- 0.5 to 1.0 FCE derived from elective CIN courses
- 0.5 to 1.0 FCE derived from approved graduate-level courses offered outside CIN

Normal Program Length: 3 sessions full-time

Time Limit: 3 years full-time

Doctor of Philosophy

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies.
- Applicants must have already received an appropriate master's degree in cinema studies or in a related discipline or equivalent from a recognized university. Applicants must have obtained an average of A- or better in the master's program. Incoming students are expected to have a solid grounding in film history, theory, and analysis; any students who do not possess the required background training may be requested to take additional courses.
- In addition to the usual SGS requirements of two letters of recommendation, transcripts from all post-secondary institutions, and language requirements, candidates must also provide a letter of intent outlining the academic goals that the applicant wishes to pursue in the program. In addition, the applicant must also supply a writing sample: this should be a paper prepared for a previous graduate course, as evidence of the applicant's ability to pursue scholarship at the appropriate level.

Program Requirements

- The student's program of study must be approved by the Graduate Coordinator of the Cinema Studies Institute (CSI).
- The following 4.0 full-course equivalents (FCE) are required:
  ○ 1.0 required FCE (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 elective FCE offered in cinema studies or by other graduate units and chosen in consultation with the student's faculty advisor.
  ○ 0.5 FCE (SRD 4444H), a credit/non-credit course, requiring participation in the CSI Research and Methods Seminar.
- All coursework is normally completed by December of the second year of study, except for SRD 4444H which may sometimes extend beyond that date.

- Students must complete two comprehensive examinations: the General Examination and the Special Field Examination. The Special Field Examination has two components: a written examination and an oral examination. Examinations are marked on a pass/fail basis. Students are allowed two attempts to pass a comprehensive examination. Students generally complete the comprehensive examinations by the end of the second year of study.
- Students must have completed all requirements for the degree, exclusive of thesis research, by the end of the third year of study in order to remain in good academic standing and in order to achieve candidacy.
- Students must complete 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 the second year of PhD studies. Each student is required to meet at least annually with a supervisory committee, consisting of 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. The student must successfully defend the thesis at an SGS Doctoral Final Oral Examination.

Normal Program Length: 4 years (full-time)

Time Limit: 6 years (full-time)

Course List

Not all elective courses are offered every year. The department should be consulted each session as to elective and non-CIN course offerings.

Master of Arts Core Courses

CIN 1100H	The Textual Object
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

Doctor of Philosophy Core Courses

CIN 2100H	History and Historiography of Cinematic Media
CIN 2101H	Pressures on the Cinematic

Elective Courses

(subject to change)

CIN 1003H	Women's Cinema and Women's Film Festivals
CIN 1004H	Models of Film Analysis
CIN 1005H	Special Studies in Cinema

CIN 1008H   Independent Research and Reading in Cinema Studies
CIN 1425H   British Social Realism and Cinema
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 5968H   Actuality, Documentary, Reality
CIN 6153H   Race and Cinema
CIN 6156H   Dark Passages: Film and the Geometry of Racial Imagination
CIN 6197H   Eyes Looking, Lips Moving: Theories of the Viewing Subject
CIN 6803H   Intertextuality in Feminist Cinema: The Counter-Cinematic Impulse
CIN 6817H   Text, Context, Intertext: The *Touch of Evil* Project
JFF 1100H   Surrealism and French Cinema

Graduate Faculty

Full Members

Ackerman, Alan - MA, PhD
Ambros, Veronika - MA, PhD
Bai, Ruoyun - BA, MA, PhD
Barton, Bruce - BA, MA, PhD
Boler, Megan - BA, PhD
Brown, Elspeth - MA, PhD
Budde, Antje - PhD
Cazdyn, Eric - BA, MA, PhD
Columpar, Corinn - BA, PhD
Fenner, Angelica - BA, MA, PhD
Jagoe, Eva-Lynn - BA, MA, PhD
Jain, Kajri - PhD
Johnson, Stephen - BA, MA, PhD
Kaplan, Louis - AB, AM, DPhil
Keil, Charles - BA, MA, PhD
King, Robert - AB, MA, PhD
Lahusen, Thomas - MA, PhD
Legge, Elizabeth MM - BA, BA, MA, PhD
Leonard, Garry - BA, MA, PhD
Meng, Yue - BA, MA, MA, PhD
Most, Andrea - BA, MA, PhD
Price, Brian - PhD
Ricco, John - BA, MA, PhD
Sammond, Nicholas - BA, MA, PhD *(Graduate Coordinator)*
Tcheuyap, Alexie - PhD
Walcott, Rinaldo - BA, MA, PhD

Members Emeriti

Armatage, Kay - BA, MA, PhD

Associate Members

Baumann, Shyon - BA, MA, PhD
Cahill, James - PhD
Maurice, Alice - BA, DPhil
Sutherland, Meghan - PhD
Testa, Bart - BA, MA

Civil Engineering

Faculty Affiliation

Applied Science and Engineering

Degree Programs Offered

Civil Engineering – MASc, MEng, PhD

Collaborative Programs

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

Environmental Engineering
- Civil Engineering, MASc, MEng, PhD

Overview

The Department of Civil Engineering offers graduate programs leading to the **Master of Applied Science**, the **Master of Engineering**, and the **Doctor of Philosophy**. Qualified applicants are accepted for advanced studies in one of the following fields: Building Engineering, Environmental Engineering, Structural Engineering, Transportation Engineering, and Geomechanics.

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.

Contact and Address

Admission
Web: www.civil.engineering.utoronto.ca
E-mail: alison.morley@utoronto.ca
Telephone: (416) 946-8028
Fax: (416) 978-6813

Program
Web: www.civil.engineering.utoronto.ca
Fax: (416) 978-6813

MEng Inquiries
E-mail: shayni@civ.utoronto.ca
Telephone: (416) 978-5905

MASc/PhD Inquiries
E-mail: colin@civ.utoronto.ca
Telephone: (416) 978-0945

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

Degree Programs

Civil Engineering

Master of Applied Science

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies.
- 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.
- Normally, a minimum of 2.5 full-course equivalents (FCEs) (five half courses) and a thesis. Some sections may require 3.0 FCEs (six half courses) and a thesis. Consult the supervisor and/or refer to the departmental graduate student handbook for further details.

Normal Program Length: 5 sessions full-time

Time Limit: 3 years full-time

Master of Engineering

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies.
- 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.
- Normally, 5.0 FCEs full-course equivalents (FCEs) (10 half courses) for the coursework-only program. Up to two courses may be replaced by a research/design project.
- There is no formal residence requirement for MEng students; therefore, the program may be completed through part-time studies.

Normal Program Length: 3 sessions full-time; 5 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

Doctor of Philosophy

Minimum Admission Requirements

- Students are admitted under the following departmental regulations, in addition to the SGS General Regulations and Degree Regulations for the PhD:
  - Satisfy the department of the ability to undertake advanced research.
  - Admission directly from a bachelor's degree is not normally permitted.
  - 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

- A major and two minor fields of study, normally consisting of a minimum of 4.5 full-course equivalents (FCEs) (nine half courses) in total beyond the bachelor's degree. More FCEs may be required depending on the student's background preparation. It is normally expected that at least one of the minor fields will be taken outside of the department.
- PhD students with an MASc degree (or equivalent in the same field) must take a minimum of 2.0 FCEs (four half courses) beyond the MASc degree.
- Students enrolled in the MASc degree program who transfer to the PhD program without submitting an MASc thesis must complete a total of 4.5 FCEs (nine half courses) beyond the bachelor's degree program.
- Students with an MEng degree may use up to 3.0 FCEs (six graduate half courses) from the MEng program towards the PhD course requirements.
- 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 Examination and Degree Committee.
- 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 Examination and Degree Committee during the student's first session.
- Supervisors are required to establish a supervisory committee for their PhD students by the end of the second year of the student's program. This committee must include the supervisor and at least two graduate faculty members. Membership approval is not required.

Normal Program Length: 4 years full-time; 5 years direct-entry

Time Limit: 6 years full-time; 7 years direct-entry

Course List

Not all courses are given every year. Some courses may require a prerequisite. Please consult the department.

General Interest

CIV 1001H	M.Eng. Project I
CIV 1002Y	M.Eng. Project II
CIV 1099H	Special Studies in Civil Engineering
CIV 1307H	Life Cycle Assessment of Engineering Activities
CIV 1310H	Infrastructure Economics
CIV 1311H	Advanced and Sustainable Drinking Water Treatment
CIV 1337H	Simulation in Civil Engineering
CIV 1422H	Dynamic Response of Engineering Materials
CIV 1429H	Advanced Rock Engineering: Rock Engineering in Fractured Rock Masses
CIV 1504H	Applied Probability and Statistics for Civil Engineering
CIV 1539H	Evaluation of Civil Engineering Systems
CIV 1600H	Readings in Technology and Modern Society I
CIV 1601H	Readings in Technology and Modern Society II

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 1277H	Construction Estimating and Finance
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 1305H	Water Resources Systems Analysis

CIV 1308H	Physical and Chemical Treatment Processes
CIV 1309H	Biological Treatment Processes
CIV 1319H	Chemistry and Analysis of Water and Wastes
CIV 1335H	Advanced Hydrogeology
CIV 1399H	Special Studies in Civil Engineering

Geomechanics

CIV 523H	Geotechnical Design
CIV 529H	Rock Engineering
CIV 1404H	Material Fracture Dynamics: Experimental Methods
CIV1410H	Satellite Positioning and Remote Sensing
CIV 1419H	Rock Dynamics
CIV 1420H	Soil Properties and Behaviour
CIV 1421H	Continuum Mechanics of Fluids and Solids
CIV 1446H	Slopes and Earthworks
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 1169H	Advanced Topics in Building Design
CIV 1167H	Advanced Structural Dynamics
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 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 1535H	Transportation and Development
CIV 1532H	Fundamentals of ITS and Traffic Management
CIV 1538H	Transportation Demand Analysis
CIV 1540H	Urban Transportation Networks
CIV 1599H	Special Studies in Civil Engineering

Graduate Faculty

Full Members

Abdulhai, Baher - BEng, MEng, PhD, Reg Professional Engineer

Adams, Barry - BSc, MS, PhD, Reg Professional Engineer

Andrews, Robert - BASc, MASc, PhD, Reg Professional Engineer

Andrews, Susan - BSc, MSc, PhD

Bawden, William - BSc, MSc, PhD, Reg Professional Engineer

Bentz, Evan - BASc, PhD, Reg Professional Engineer

Byer, Philip - BS, MS, PhD, Reg Professional Engineer

Christopoulos, Constantin - BE, MASc, PhD, Reg Professional Engineer

Collins, Michael - BE, PhD, Reg Professional Engineer

Crawford, Adrian - BE, MASc, PhD

El-Diraby, Tamer - BSc, MSc, PhD, Reg Professional Engineer

Esmaeili, Kamran - BSc, MSc, PhD

Gauvreau, Douglas Paul - BSc, MSc, PhD, Reg Professional Engineer

Grabinsky, Murray - BASc, MASc, PhD, Reg Professional Engineer

Grasselli, Giovanni - PhD, Reg Professional Engineer

Hadjigeorgiou, Ioannis (John) - DiplGeol, BASc, ME, DPhil, Reg Professional Engineer

Harrison, John Paul - BSc, MSc, PhD

Hofmann, Ronald - BEng, MASc, PhD, Reg Professional Engineer

Hooton, R Douglas - BASc, MASc, PhD, Reg Professional Engineer

Karney, Bryan - BSc, MEng, PhD, Reg Professional Engineer

Kennedy, Christopher - BEng, MEc, MBA, MASc, PhD

Kwon, Oh-Sung - BS, MS, MS, PhD

MacLean, Heather - BASc, MASc, MBA, PhD, Reg Professional Engineer

McCabe, Brenda - BSc, PhD, Reg Professional Engineer *(Chair and Graduate Chair, July–Dec. 2012)*

Mercan, Oya - BS, MS, PhD

Miller, Eric - BASc, MASc, PhD

Nurul Habib, Khandker - MS, PhD, Reg Professional Engineer

Packer, Jeffrey - BE, MSc, DSc, PhD, Reg Professional Engineer

Panesar, Daman - BE, ME, PhD, Reg Professional Engineer

Peterson, Karl - BS, MS, PhD

Pressnail, Kim - BASc, PhD, Reg Professional Engineer

Roorda, Matthew - BEng, MASc, PhD, Reg Professional Engineer

Shalaby, Amer - BSc, MASc, PhD, Reg Professional Engineer

Sheikh, Shamim - BSE, MASc, PhD, Reg Professional Engineer *(Associate Chair, Academic, July–Dec. 2012)*

Sleep, Brent - BSc, MASc, PhD, Reg Professional Engineer

Vanderburg, Willem - BASc, MASc, PhD, Reg Professional Engineer

Vecchio, Frank - BASc, MEng, PhD, Reg Professional Engineer

Xia, Kaiwen - BASc, MS, PhD, Reg Professional Engineer
Young, R. Paul - BSc, MSc, PhD, Chartered Engineer

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

Filion, Yves - BASc, MASc, PhD
Guo, Yiping - BSc, MASc, MSc, PhD
Papa, Fabian - BASc, MASc, MBA

Classics

Faculty Affiliation

Arts and Science

Degree Programs Offered

Classics – MA, PhD

Collaborative Programs

The following collaborative programs 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. **Sexual Diversity Studies**
   • Classics, MA, PhD
7. **Women and Gender Studies**
   • Classics, MA, PhD

Overview

The Department of Classics provides advanced training leading to the **Master of Arts** and **Doctor of Philosophy** degrees in Classics, in a wide range of fields: Greek and Latin Literature, Ancient (Greek and Roman) Philosophy, and Greek and Roman History. Collaborative programs, listed above, are available to students enrolled in the specified participating degree programs. In addition, the Joint Collaborative Program in Ancient Greek and Roman History (see separate entry in this calendar) 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.chass.utoronto.ca
E-mail: 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

Degree Programs

Classics

Master of Arts

Minimum Admission Requirements

• 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.
• Applicants may be admitted to either the one-year or the two-year MA program, depending on their level of preparation.
• 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

Depending on their prior preparation, students complete the MA program in either one year or two years. All students must satisfy the following requirements:

• Completion of the Greek and Latin qualifying examinations (three-hour translation exam in each language, including both prose and poetry) with a grade of at least B-.
• Completion of GRK 1000H and LAT 1000H (intensive advanced language skills) or equivalent, with a grade of at least B-.
• Completion of sight translation exams with a grade of at least B-.
• Graduate Research Paper: Each student is assigned to a faculty advisor for CLA 2000H, the Graduate Research Paper, and works independently on the preparation of a research paper (about 8000 words in length). The Graduate Research Paper is assessed by a committee of two faculty members, including the advisor, and must receive a grade of B or better.
• The MA program may be taken on a part-time basis.
• **Two-Year Master of Arts**
  ○ Year 1: Completion of GRK 1000H and LAT 1000H and a selection of other courses approved by the department, with a grade of at least B-. Students may be exempted from either 1000H course if they have satisfactorily completed comparable work in their undergraduate program (with a B+ or above). 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: 2.5 FCEs (five half courses) from the 1300 and 1800 series of courses chosen in consultation with the Graduate Coordinator.
- Completion of the qualifying examinations and sight translation examinations with a grade of at least B-.
- Completion of the Graduate Research Paper with a grade of at least B.

- **One-Year Master of Arts**
  - 2.5 FCEs (five half-courses) from the 1300 and 1800 series of courses chosen in consultation with the Graduate Coordinator.
  - Students may be required to complete GRK 1000H and/or LAT 1000H (with a minimum grade of B-) to help them prepare for the qualifying examinations.
  - Completion of the qualifying examinations and sight translation examinations with a grade of at least B-.
  - Completion of the Graduate Research Paper with a grade of at least B.

Normal Program Length: 3 sessions full-time 1-year MA; 6 sessions full-time 2-year MA

Time Limit: 3 years full-time; 6 years part-time

Doctor of Philosophy

Minimum Admission Requirements

- Standard conditions: successful completion of either a strong bachelor's program in classics (with at least an A- average in the final year), or 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 each of Latin and Greek and a broad preparation in the reading of ancient texts in the original languages.
- Advanced standing: 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. Applicants must have reading knowledge of one of the modern languages required for the PhD.

Program Requirements

The following program requirements apply to all doctoral students, whether admitted under standard conditions or with advanced standing:

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

- Satisfactory completion of required courses (GRK 1000H, LAT 1000H, and CLA 3000H). At the department's discretion, students who require additional preparation for the qualifying examinations may be required to take a selection of courses approved by the department during their first year 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.
- Satisfactory completion of Graduate Research Paper (CLA 2000H) 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.
- Completion of qualifying examinations with at least B+ in both languages, or equivalent, by September of the third year of the PhD. PhD students must pass all components of these examinations with grades of at least B+. Doctoral students who complete the qualifying examinations at a lower standard which nevertheless satisfies the MA requirement will be granted the MA. However, they may be required either to withdraw from the doctoral program or to retake the examinations. Students admitted with advanced standing are exempt from the qualifying examinations.
- Satisfactory completion of sight translation examinations in both languages by the third year of the PhD.
- Demonstration of adequate reading knowledge of two languages of research other than English, one of which will normally be German, by the third year of the PhD program.
- Eleven seminars, including at least six research seminars, of which two must be outside the student's area of concentration. Students must maintain at least an A- average in the seminars.
- *Major Field* (CLA 4000Y[0]). The major field defines a broad area within which the dissertation topic falls. It is normally established by the third year of the program (second year for students admitted with advanced standing) and is directed by the supervisory committee. Preparation for the examination includes the completion of a satisfactory research essay. The 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 fourth year (third year for students admitted with advanced standing).
- The dissertation should be completed by the end of the fifth year (fourth year for students admitted with advanced standing).

Normal Program Length: 4 years full-time advanced-standing; 5 years full-time; 5 years direct-entry

Time Limit: 6 years full-time; 7 years direct-entry

Course List

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
GRK1807H	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
GRK1811H	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 2000H[0]	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

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 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

Graduate Faculty

Full Members

Barney, Rachel - BA, PhD
Bendlin, Andreas - PhD
Bruun, Christer - BA, MA, PhD
Burgess, Jonathan - BA, MA, PhD
Dewar, Michael - BA, MA, DPhil

Edmondson, Jonathan - PhD
Fantham, Elaine - BA, MA, PhD
Hoeschele, Regina - MA, PhD *(Graduate Coordinator)*
Inwood, Brad - BA, MA, PhD, FRSC
Jones, Alexander - BA, PhD, FRSC
Keith, Alison - BA, MA, PhD *(Chair and Graduate Chair)*
Magee, John - BA, MA, PhD
Mason, Hugh - BA, AM, PhD
Revermann, Martin - PhD
Rubincam, Catherine - BA, BA, PhD
Wohl, Victoria - BA, MA, PhD

Members Emeriti

Barnes, Timothy - BA, MA, DPhil, FRSC
Beck, Roger - BA, MA, PhD
Grant, John - BA, MA, PhD
Irwin, Marjorie - BA, PhD, PhD
McDonough, Christopher - BA, MA, PhD
Rist, John - MA
Traill, John - BA, MA, PhD

Associate Members

Balot, Ryan - BA, AM, PhD
Blouin, Katherine - BA, MA, PhD, PhD
Ewald, Bjorn - AM, PhD
Kloppenborg, John - BA, MA, PhD
Knappett, Carl - MA, PhD
Marshall, John - BA, MA, PhD
Najman, Hindy - AB, MA, PhD
Nakassis, Dimitri - BA, MA, PhD
Orwin, Clifford - AB, AM, PhD
Townsend, David Robert - BA, MA, PhD
Weinrib, Ernest - BA, LLB, PhD

Comparative Literature

Faculty Affiliation

Arts and Science

Degree Programs

Comparative Literature – 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**
   - Comparative Literature, MA, PhD
2. **Diaspora and Transnational Studies**
   - Comparative Literature, MA, PhD
3. **Jewish Studies**
   - Comparative Literature, MA
4. **South Asian Studies**
   - Comparative Literature, MA, PhD
5. **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 several languages. Students pursue research across languages and national literatures, and theoretical issues that cross traditional disciplines.

Applicants interested in graduate study at the centre should consult the centre's website. It provides updated information about requirements, graduate programs, course offerings, and academic profiles of graduate faculty.

Admissions are selective; therefore, applicants with the minimum qualifications cannot be guaranteed admission.

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. Admission to all programs for higher degrees will be based upon the applicant's undergraduate and graduate records and upon the evidence of the references and statement. The deadline for receiving applications to both the MA and PhD programs is January 15.

All incoming students will meet with the Graduate Coordinator to discuss their program and to decide on their course of study before beginning classes.

Contact and Address

Web: http://complit.utoronto.ca/
E-mail: banguyen@chass.utoronto.ca
Telephone: (416) 813-4041
Fax: (416) 813-4040

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

Degree Programs

Comparative Literature

Master of Arts

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 at least 2.0 FCEs in COL courses, among which must be COL 1000H.
- 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 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.

Normal Program Length: 3 sessions (1 year) full-time

Time Limit: 3 years full-time

Doctor of Philosophy

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.
- Students coming directly out of an appropriate undergraduate program 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.
- Preliminary statement of purpose.

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.
- A student with an **MA in Comparative Literature** or its equivalent must take at least 4.5 FCEs, of which 2.5 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, up to 8.0 FCEs. 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 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 the second year of PhD study. The field examination is taken no later than the end of the first session of the third year.

- The Centre for Comparative Literature is not obligated to provide supervision in areas which fall outside the competency, interests, or availability of its graduate faculty.
- 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.
- 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.
- All PhD students are required to enrol in COL 4000Y, a credit/non-credit course, in addition to the agreed upon number of FCEs in their individual program. Normally students enrol in COL 4000Y after completing their coursework. The course has no specific content, but it recognizes the work done in preparation for the field examination.
- 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. Ideally, the PhD program in Comparative Literature should be completed in four years, or in five years for students who were admitted by direct entry.

Normal Program Length: 4 years full-time; 5 years direct-entry

Time Limit: 6 years full-time, 7 years direct-entry

Course List

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 Literary Cityscapes
COL 5044H   A Journey from Petersburg to Los Angeles
COL 5056H   Autobiography, Photography, Narrativity
COL 5081H   Benjamin's Arcades Project
COL 5096H   The Problem of Translation: Historical, Theoretical, and Pragmatic Perspectives
COL 5098H   Imagining State Formation in Postcolonial Literature
COL 5099H   Discourse and Iconography of Revolution
COL 5100H   The Late Barthes: Neutral, Mourning, and Photography
COL 5101H   Diasporic Cities: Itinerant Narratives of Metropoles by Travellers and Expatriates
COL 5103H   The Brechtian Legacy: Sign, Gestus and Feminist Theory
COL 5104H   Dialogue with Poststructuralism
JCD 5102H   Queering Performance: Artaud. Fassbinder. A Feminist Investigation
JFC 5105H   Collections of Knowledge: Encyclopedism and Travel Literature in Early Modern Europe (1500-1800)
JGC 1850H   Derrida, the German, the Jew
JLA 1456H   Japan as Seen by?

Graduate Faculty

Full Members

Ambros, Veronika - MA, PhD
Bai, Ruoyun - BA, MA, PhD
Budde, Antje - 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
Lahusen, Thomas - MA, PhD
Le Huenen, Roland - DESL
LeBlanc, Julie - BA, PhD
Li, Victor - BA, MA, PhD
Meng, Yue - BA, MA, MA, PhD
Ross, Jill - MA, PhD *(Coordinator, Graduate Studies)*
Rupp, Stephen - BA, MA, MPH, MA, PhD
Sakaki, Atsuko - BA, MA, PhD
Sternberg, Ricardo - BA, MA, PhD
Ten Kortenaar, Neil - PhD *(Director)*

Zilcosky, John - BA, MA, MA, PhD

Members Emeriti

Chamberlin, J Edward - BA, PhD
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
Stock, Brian - AB, PhD
Valdes, Mario - BA, MA, PhD

Associate Members

Akbari, Suzanne - BA, MA, MPH, PhD
Bender, Daniel Eric - BA, PhD
Blackmore, Josiah - PhD
Capozzi, Rocco - BA, MA, PhD
Clark, Caryl - BMus, MA, PhD
Cozea, Angela - BA, MA, PhD
Goetschel, Willi - PhD
Hewitt, Marsha - BA, MA, PhD
Holland, Kate - MA, PhD
Jackson, Heather - BA, MA, PhD
Keith, Alison - BA, MA, PhD
Legge, Elizabeth MM - BA, BA, MA, PhD
Leonard, Garry - BA, MA, PhD
Matus, Jill - BA, MA, PhD
Motsch, Andreas - PhD
Noyes, John - BA, MA, PhD
Paterson, Janet - BA, MA, PhD
Patrick, Julian - PhD
Perron, Paul - PhD
Pietropaolo, Domenico - BSc, MA, PhD
Pugliese, Olga - BA, MA, PhD
Quayson, Ato - BA, PhD
Revermann, Martin - PhD
Ricco, John - BA, MA, PhD
Sarabia, Rosa - BA, PhD
Somigli, Luca - PhD
Thomson, David - BA, MA, PhD
Trojanowska, Tamara - MA, PhD
Xie, Ming - PhD

Computer Science

Faculty Affiliation

Arts and Science

Degree Programs Offered

Applied Computing – MScAC
Computer Science – MSc, PhD

Collaborative Programs

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

1. **Dynamics of Global Change**
   • Computer Science, PhD
2. **Genome Biology and Bioinformatics**
   • Computer Science, PhD
3. **Knowledge Media Design**
   • Computer Science, MSc, PhD
4. **Neuroscience**
   • Computer Science, MSc, PhD

Overview

The Department of Computer Science offers a graduate program leading to three degrees: **Master of Science, Master of Science in Applied Computing,** and **Doctor of Philosophy.** The program consists of courses and either research (MSc and PhD) or practicum (MScAC), both of which are conducted under the supervision of a faculty member.

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
E-mail: 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

Degree Programs

Computer Science

Master of Science

Minimum Admission Requirements

• 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

• 2.0 graduate full-course equivalents (FCEs) in computer science. The courses must satisfy a breadth requirement to ensure a broad and well-balanced knowledge of computer science.

• A major research paper (2.0 FCEs) 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.

• This degree is offered on either a full-time or part-time basis.

Normal Program Length: 4 sessions full-time (16 months); 8 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

Doctor of Philosophy

Minimum Admission Requirements

• Successful completion of an appropriate master's degree with a standing equivalent to at least a University of Toronto B+. 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 TOEFL score of at least 580 on the paper-based test and 4 on the TWE; 93/120 on the Internet-based test and 22/30 on the writing and speaking sections.

Program Requirements

- Students entering the PhD program with a computer science master's degree will require 2.0 full-course equivalents (FCEs) and a thesis. Students admitted to the PhD directly from a bachelor's degree will require 4.0 FCEs and a thesis. The courses must satisfy a breadth requirement to ensure a broad and well-balanced knowledge of computer science.
- The most important part of doctoral work is original research conducted under the direction of a faculty member. This research must constitute a significant and original contribution to computer science. The results must be presented in a thesis and defended at the departmental oral examination and the Doctoral Final Oral Examination.

Normal Program Length: 4 years full-time; 5 years direct-entry

Time Limit: 6 years full-time; 7 years direct-entry

Applied Computing

Master of Science in Applied Computing

Minimum Admission Requirements

- 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

- This is a 16-month professional master's program comprising 3.0 full-course equivalents (FCEs) of coursework and an eight-month industrial internship. The internship (3.5 FCEs) is coordinated by the department, and evaluated on a pass/fail basis.
- There is no thesis requirement.

Normal Program Length: 4 sessions full-time

Time Limit: 3 years full-time

Course List

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

Programming Languages and Methodology

CSC 2104H	Formal Methods of Program Design
CSC 2106H	Requirements Engineering
CSC 2107H	Compilers and Interpreters
CSC 2108H	Automated Verification
CSC 2125H	Algorithmic Program Verification
CSC 2130H	Empirical Research Methods in Software Engineering

Computer Systems: Hardware and Software

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 2226H	Topics in Verification
CSC 2227H	Topics in the Design and Implementation of Operating Systems
CSC 2228H	Topics in Mobile and Pervasive Computing
CSC 2229H	Topics in Multiple Access Communications Networks
CSC 2231H	Topics in Computer Systems
CSC 2232H	Topics in Computer System Performance and Reliability

Numerical Analysis and Scientific Computation

CSC 2301H	Numerical Solution of Initial Value Problems for Ordinary Differential Equations
CSC 2305H	Numerical Methods for Optimization Problems
CSC 2306H	High Performance Scientific Computing
CSC 2307H	Numerical Software
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

Computational Complexity

CSC 2401H   Introduction to Computational Complexity
CSC 2404H   Computability and Logic
CSC 2405H   Automata Theory
CSC 2411H   Linear Programming and Combinatorial Optimization
CSC 2415H   Advanced Topics in Distributed Computing
CSC 2416H   Machine Learning Theory
CSC 2426H   Fundamentals of Cryptography
CSC 2429H   Topics in the Theory of Computation

Applied Discrete Mathematics

CSC 2410H   Introduction to Graph Theory
CSC 2413H   Combinatorial Methods and Designs
CSC 2414H   Topics in Applied Discrete Mathematics
CSC 2418H   Computational Structural Biology
CSC 2420H   Algorithm Design, Analysis and Theory
CSC 2421H   Algebraic and Combinatorial Techniques in Complexity Theory
CSC 2422H   Reasoning About Knowledge
CSC 2427H   Topics in Graph Theory

Artificial Intelligence

CSC 2501H   Computational Linguistics
CSC 2502H   Knowledge Representation and Reasoning
CSC 2503H   Foundations of Computer Vision
CSC 2506H   Probabilistic Learning and Reasoning
CSC 2511H   Natural Language Computing
CSC 2512H   Constraint Satisfaction Problems
CSC 2515H   Introduction to Machine Learning
CSC 2517H   Discrete Mathematical Models of Sentence Structure
CSC 2518H   Spoken Language Processing
CSC 2519H   Natural Language Semantics
CSC 2520H   The Computational Lexicon
CSC 2523H   Object Modelling and Recognition
CSC 2528H   Advanced Computational Linguistics
CSC 2530H   Computer Vision for Advanced Digital Photography
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 2539H   Topics in Computer Vision
CSC 2540H   Special Topics in Computational Linguistics
CSC 2541H   Topics in Machine Learning
CSC 2542H   Topics in Knowledge Representation and Reasoning
CSC 2544H   Web Searching and Mining

Computer Graphics and Human-Computer Interaction

CSC 2504H   Computer Graphics

CSC 2505H   Geometric Representations for Computer Graphics
CSC 2514H   Human-Computer Interaction
CSC 2521H   Topics in Computer Graphics
CSC 2522H   Advanced Image Synthesis
CSC 2524H   Topics in Interactive Computing
CSC 2529H   Computer Animation
CSC 2536H   Computer Supported Cooperative Work

Information Systems

CSC 2231H   Special Topics in Computer Systems
CSC 2417H   Algorithms for Genome Sequence Analysis
CSC 2431H   Topics in Computational Molecular Biology
CSC 2508H   Advanced Management Systems
CSC 2510H   Topics in Information Systems
CSC 2525H   Research Topics in Database Management
CSC 2526H   HCI: Topics in Ubiquitous Computing
CSC 2527H   The Business of Software
CSC 2531H   Advanced Topics in Data Management Systems
CSC 2543H   Research Topics in XML Retrieval

Courses for MScAC Only

CSC 2701H   Communication for Computer Scientists
CSC 2702H   Technical Entrepreneurship
CSC 2703H   MScAC Internship

Topics/Reading Courses

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

Graduate Faculty

Full Members

Abdelrahman, Tarek - BSc, MSc, PhD
Amza, Cristiana - BS, MS, PhD
Bacchus, Fahiem - PhD
Bader, Gary - BSc, PhD
Baecker, Ronald - BS, MSc, PhD
Balakrishnan, Ravin - PhD
Bonner, Anthony - BSc, MSc, PhD
Borgida, Alex - MSc, PhD
Borodin, Allan - BA, PhD
Boutilier, Craig - MSc, PhD
Brudno, Michael (Mikhail) - AB, MSc, PhD
Chechik, Marsha - BS, MS, PhD
Christara, Christina - BSc, MSc, PhD
Cook, Stephen - BS, AM, PhD
De Lara, Eyal - BS, MS, PhD
Demke Brown, Angela - PhD

Dickinson, Sven Josef - BASc, MS, PhD *(Chair and Graduate Chair)*
Easterbrook, Stephen Michael - BSc, PhD
Ellen, Faith - BM, MMath, PhD
Enright, Wayne - BSc, MSc, PhD
Fairgrieve, Thomas - MSc, PhD
Fiume, Eugene - BM, MSc, PhD
Fleet, David James - BS, MS, PhD
Frey, Brendan - BSc, MSc, PhD
Ganjali, Yashar - BSc, MSc, PhD
Goel, Ashvin - BTech, MS, PhD
Graham, G Scott - BSc, MSc, MA, PhD
Gruninger, Michael - BSc, MS, PhD
Hadzilacos, Vassos - BSE, PhD
Hehner, Eric - BSc, MSc, PhD
Hertzmann, Aaron - BA, MS, PhD *(Coordinator of Graduate Studies)*
Hinton, Geoffrey - BA, PhD
Hirst, Graeme - BA, BSc, MSc, PhD
Jackson, Kenneth - BSc, MSc, PhD
Jacobsen, Hans-Arno - MCS, PhD
Jepson, Allan - BSc, PhD
Jurisica, Igor - PhD
Koudas, Nick - BS, MS, PhD
Kutulakos, Kiriakos - BS, MSc, PhD
LaMarca, Anthony - BSc, MSc, PhD
Lesperance, Yves - BSc, MSc, PhD
Levesque, Hector - BSc, MSc, PhD
Li, Baochun - BEng, MSc, DPhil
Lie, David - BASc, MS, PhD
Marbach, Peter Josef - BS, MS, PhD
McIlraith, Sheila - BSc, MSc, PhD
Miller, Renee - BS, BM, MS, PhD
Molloy, Michael - BMath, MMath, PhD
Moses, Alan - BA, PhD
Neal, Radford - BSc, MSc, PhD
Penn, Gerald - BS, MSc, PhD
Pitassi, Toniann - PhD
Rackoff, Charles - SB, SM, PhD
Roth, Frederick - PhD
Schroeder, Bianca - MSc, PhD
Singh, Karan - BS, MS, PhD
Steffan, J. Gregory - BASc, MS, MASc, 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
Yu, Eric - BSc, MMath, PhD
Zemel, Richard - PhD

Members Emeriti

Corneil, Derek - BSc, MA, PhD
Gotlieb, Calvin Carl - BA, MA, PhD
Hume, James - BA, MA, PhD
Mathon, Rudolf - MSc, PhD
Mendelsohn, Eric - BSc, MSc, PhD
Mylopoulos, John - BE, MSc, PhD
Urquhart, Alasdair - MA, MA, PhD
Wortman, David - BE, MS, PhD

Associate Members

Aruliah, Dhavide - PhD

Braverman, Mark - BMath, MSc, PhD
Buxton, William - MusB
Danahy, John - BLA, MRP
Johnson, Frederick Ryan - BSc, MSEE, PhD
Kreinin, Alexander - MSc, PhD
Lilien, Ryan - BS, MD, PhD
Moffatt, Karyn - BSc, MSc, PhD
Munteanu, Cosmin - MSc, PhD
Reilly, Derek - BEd, BA, BA, PhD
Salakhutdinov, Ruslan - BS, MS, PhD
Salvini, Paul - BM, MASc, MBA, PhD
Shein, Fraser - PhD
Sminchisescu, Cristian - MSc, PhD
Vaikuntanathan, Vinod - BTech, SM, PhD
Wigdor, Daniel - PhD
Zhang, Zhaolei - BS, PhD

Criminology and Sociolegal Studies

Faculty Affiliation

Arts and Science

Degree Programs Offered

Criminology – MA, JD/MA, PhD

Collaborative Programs

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

1. **Addiction Studies**
   - Criminology, MA, PhD
2. **Diaspora and Transnational Studies**
   - Criminology, MA, PhD
3. **Sexual Diversity Studies**
   - Criminology, MA, PhD
4. **Women and Gender Studies**
   - Criminology, 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 legal 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
E-mail: 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
Toronto, Ontario M5S 3K9
Canada

Degree Programs

Criminology

Master of Arts

Minimum Admission Requirements

- 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.

- The MA program is designed for students familiar with the approaches and methodologies associated with the social sciences. It would be advantageous for applicants to have some background in theories of crime and deviance and a basic knowledge of social science research methods. A student who is admitted without such background may be required to do special work before being enrolled.

- 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. Facility 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 within 12 months
- The degree program includes compulsory and optional courses.
  - ○ The compulsory course is CRI 2010H *Methodological Issues in Criminology*.
  - ○ The optional courses allow students to engage in specialized study of different approaches to, and topics within, criminology and sociolegal studies. The optional 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 optional courses in criminology.

Normal Program Length: 3 sessions full-time; 6 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

Combined Juris Doctor/Master of Arts

Law students who also want to pursue graduate study in criminology may undertake the combined JD/MA in criminology degree program.

Minimum Admission Requirements

- Applicants must gain independent admission to both programs. Applicants may be admitted before they enter the JD program or while they are in the first year.
- Applicants wishing to apply to the Combined JD/MA program in criminology should contact the Admissions Office, Faculty of Law, University of Toronto at (416) 978-3716.

Program Requirements

- **Year 1**: Students take the full first-year law program.
- **Years 2 and 3**: Over the course of the two combined years, students must:
  - ○ take 45 credits in the Faculty of Law;

- ○ satisfy the compulsory requirements of the upper years of the JD; these are a moot, an extended paper, and a perspective course;
- ○ take 3.0 FCEs at the Centre for Criminology and Sociolegal Studies, of which
  - • 0.5 FCE must be the required research methods course (CRI 2010H)
  - • the remaining 2.5 FCEs must be CRI courses and may include the Centre for Criminology and Sociolegal Studies' *Research Paper* (CRI 3360Y).
- ○ Students must take a minimum of 1.0 FCE with CRI designations in each of Years 2 and 3 of the program and may take a maximum of 2.0 FCEs with CRI designations per year. The number of Faculty of Law credits completed each year will be adjusted accordingly, with the only requirement being that 45 are completed over the two years.
- Students must submit their programs for approval by the combined program administrator in each unit.

Normal Program Length: 9 sessions (3 years) full-time

Time Limit: 4 years full-time

Doctor of Philosophy

Minimum Admission Requirements

- 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 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. Facility 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

- **Residency.** PhD students are required to be on campus full-time for the period of their program.

Students are expected to participate in the centre's activities associated with the program.

- **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.
- **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).
- **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. 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 in criminology, with two other members of the graduate faculty serving on the thesis committee.
- Students will normally complete all course requirements for the PhD in the first year of their PhD program. The comprehensive exam will normally be completed by the end of the first session of the second year. It is expected that the dissertation should be completed and successfully defended by the end of the fourth year.

Normal Program Length: 4 years full-time

Time Limit: 6 years full-time

Course List

All courses are half courses (0.5 FCE), with the exception of the *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 2010H   Methodological Issues in Criminology

Optional Courses

CRI 1020H   Law and Society: Theoretical Perspectives
CRI 1050H   Theories of Crime and Social Order
CRI 2020H   Applied Statistics in Criminology
               (Students may take this course or IRE 1002H
               Applied Statistics in Industrial Relations,
               but not both.)
CRI 3010H   Crime, Criminalization, and Victimization
CRI 3120H   Politics and Crime
CRI 3130H   Policing
CRI 3140H   Special Topics in Criminology
CRI 3150H   Crime, Law, and the State in Early Modern
               England, 1650–1850
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
CRI 3320H   The Criminal Process
CRI 3330H   Contemporary Issues in Safety and
               Security
CRI 3340H   Special Topics in Criminology
CRI 3350H   Directed Research in Criminology
CRI 3355H   Sentencing
CRI 3351H   Directed Research in Criminology
CRI 3356H   Youth Crime and Youth Justice
CRI 3357H   Risk, Uncertainty, and Criminal Justice
CRI 3360Y[0] Research Paper

Graduate Faculty

Full Members

Bucerius, Sandra - BA, MA, PhD
Dubber, Markus - AB, JD
Gartner, Rosemary - BA, AA, MS, PhD
Hannah-Moffat, Kelly - BA, MA, PhD
Kruttschnitt, Candace - BA, MA, MPH, PhD
Levi, Ron - BCL, LLB, LLM, SJD
Light, Matthew - BA, MA, JD, PhD *(Coordinator of Graduate Studies)*
Maurutto, Paula - DPhil
Peterson-Badali, Michele - BA, MA, PhD
Phillips, James - LLB, MA, PhD
Roach, Kent - BA, LLB, LLM
Tanner, Julian - DipEd, BSc, MA, PhD
Valverde, Mariana - BA, MA, PhD, FRSC *(Director)*
Wortley, N. Scot - BA, MA, PhD

Members Emeriti

Beattie, John - BS, MA, PhD, FRSC, FRHistS
Doob, Anthony - AB, PhD, FRSC
Friedland, Martin - BCom, LLB, PhD
Solomon, Peter - BA, MA, PhD

Associate Members

Condon, Mary - BA, LLM, MA, SJD

Erickson, Patricia - BA, MA, PhD
Seepersad, Randy - PhD
Skilling, Tracey - BA, MASc, PhD

Curriculum, Teaching and Learning

Faculty Affiliation

Ontario Institute for Studies in Education

Degree Programs Offered

Curriculum Studies and Teacher
 Development – MEd, MA, PhD
Elementary and Secondary Education – MT
Second Language Education – MEd, MA, PhD

Collaborative Programs

The following collaborative programs 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
   - Second Language Education, MA, MEd, PhD
2. **Educational Policy**
   - Curriculum Studies and Teacher Development, MA, MEd, PhD
   - Second Language Education, MA, MEd, PhD
3. **Knowledge Media Design**
   - Curriculum Studies and Teacher Development, MA, MEd, PhD
   - Second Language Education, MA, MEd, PhD
4. **Sexual Diversity Studies**
   - Curriculum Studies and Teacher Development, MA, MEd, PhD
5. **Women and Gender Studies**
   - Curriculum Studies and Teacher Development, MA, MEd, PhD
   - Second Language Education, MA, MEd, PhD

Overview

The Department of Curriculum, Teaching and Learning offers graduate programs in three areas of study:

1. Curriculum Studies and Teacher Development
2. Elementary and Secondary Education
3. Second Language Education

These programs reflect a variety of scholarly interests and are closely linked with the department's strong research base.

Contact and Address

Admission

Initial inquiries regarding admission to graduate studies in the Department of Curriculum, Teaching and Learning (CTL) should be made directly to:

The Ontario Institute for Studies in Education (OISE)
University of Toronto
Registrar's Office
Graduate Studies, Admissions Unit
4th Floor, 252 Bloor Street West
Toronto, Ontario M5S 1V6
Canada

Program

Web: www.oise.utoronto.ca/ctl
E-mail: ctlinquiries@utoronto.ca
Telephone: (416) 978-0040
Fax: (416) 926-4744

Department of Curriculum, Teaching and Learning
The Ontario Institute for Studies in Education (OISE)
University of Toronto
11th Floor, 252 Bloor Street West
Toronto, Ontario M5S 1V6
Canada

Degree Programs

Curriculum Studies and Teacher Development

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.

The three areas of interest, or clusters, below reflect overlapping and intersecting areas of strength in the whole Curriculum Studies and Teacher Development Program. Details on the clusters: http://ro.oise.utoronto.ca/BulPage77.htm.

Critical Studies in Curriculum and Pedagogy

Taking curriculum and pedagogy broadly defined as points of departure, the Critical Studies in Curriculum and Pedagogy cluster is a forum for systematic and interdisciplinary reflection on the myriad of processes and contexts related to educational experience, from schools and local communities, to media and transnational cultural contexts. The cluster encourages a critical exploration of educational phenomena, within and beyond the scope of schools, with a focus on power relations and social justice issues.

Learning, Schools, and Innovations

The Learning, Schools, and Innovations cluster emphasizes scholarship concerning the nature of learning and instruction in formal and informal settings, building on a broad academic literature in educational research,

the learning sciences, evaluation and assessment, and learning and instruction within subject areas. The focus is to achieve a theoretical understanding of learning and instruction, embedding that theory in powerful innovations, and advancing the research.

Teaching and Teacher Education

This cluster focuses on the study of teaching and teacher learning across the curriculum. The term "teacher" is used broadly to include those who work in schools, district and government offices, and diverse settings (e.g., museum studies, outdoor education centres).

Master of Education

The MEd degree program is designed chiefly for the professional development of those who are already engaged in a career related to education.

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.
- 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, www.oise.utoronto.ca/ctl/ Prospective_Students/CTL_Graduate_Programs. 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

- 5.0 full-course equivalents (FCEs), of which at least 2.5 FCEs are normally CTL 1000-level courses undertaken in the Curriculum Studies and Teacher Development program. Students are required to successfully complete CTL 1000H.
- Additional study may be required either within the degree program or prior to admission, depending on previous experience and academic qualifications.
- The MEd may be taken on a full-time or part-time basis.

Normal Program Length: 5 sessions (2 years) full-time; 8 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

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.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. 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 at www.oise.utoronto.ca/ctl/ Prospective_Students/CTL_Graduate_Programs/ Curriculum_Studies_and_Teacher_Development_ (CSTD)/index.html.
- 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

- 4.0 full-course equivalents (FCEs), of which at least 2.0 FCEs are normally CTL 1000-level courses undertaken in the Curriculum Studies and Teacher Development program.
- Additional courses may be required of some applicants, depending on previous experience and academic qualifications. Students are required to successfully complete CTL 1000H, and a course in research methods from an approved course listing. See listing of approved research methods courses at www.oise.utoronto.ca/ctl/UserFiles/File/Poster-Research-Courses-2011_12.pdf.
- Thesis.

- The MA may be taken on a full-time or part-time basis.
- **Note:** Students are responsible for meeting deadlines to complete their course requirements, thesis committee formation, and ethical review.

Normal Program Length: 6 sessions full-time; 10 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

Doctor of Philosophy

The PhD program demands a strong commitment to curriculum research. The Curriculum Studies and Teacher Development program offers both full-time and flexible-time PhD program options. Applicants must declare the option for which they wish to apply.

Minimum Admission Requirements

Full-Time PhD

- Applicants are admitted under the General Regulations of the School of Graduate Studies. 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 www.oise.utoronto.ca/ctl/Prospective_Students
  - 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

Flexible-Time PhD

- 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

- Degree requirements for the full-time and flexible-time options of the PhD are the same. Only the

length of time to completion differs. (See Time Limit, below.)

- The PhD program normally consists of 3.0 full-course equivalents (FCEs), of which at least 2.0 FCEs are ordinarily CTL 1000-level courses. Additional courses may be required of some students.
- Students are expected to take CTL 1000H if they did not complete it at the master's level, and one course in research methods from an approved course listing. This listing is available on the CSTD web page, www.oise.utoronto.ca/ctl/UserFiles/File/Poster-Research-Courses-2011_12.pdf.
- Successful completion of a 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.
- **Note**: Students are responsible for meeting deadlines to complete their course requirements, thesis committee formation, comprehensive examination, and ethical review.

Normal Program Length: 4 years full-time; 8 years flexible-time

Time Limit: 6 years full-time; 8 years flexible-time

Course List

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

Master's Level

CTL 1000H	Fondements du l'etude des programmes scolaires
CTL 1000H	Foundations of Curriculum Studies
CTL 1001H	Values and Schooling
CTL 1002H	Planification de la programmation pour un enseignement efficace
CTL 1002H	Curriculum Development for Effective Teaching
CTL 1003H	Language Arts in Primary Education
CTL 1005H	Language, Literacy, and the School Curriculum
CTL 1007H	Communities of Learning: Teachers Constructing Professional Knowledge
CTL 1008H	Children's Literature as a Foundation of Literate Behaviour Across the Curriculum
CTL 1009H	Theory and Practice in Elementary Literacy Instruction
CTL 1010H	Children's Literature Within a Multicultural Context
CTL 1011H	Anti-discriminatory Education in School Settings
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	Improving Teaching
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 1039H	Teaching Writing in the Classroom
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 1060H	Education and Social Development
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 1112H	Expressive Writing: Practice and Pedagogy
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 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	Experiencing Science Education as a Global Educational and Development Endeavour
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 1400H	Classroom Adaptations and Instructional Strategies
CTL 1402H	Adaptive Instruction in Inclusive Classrooms
CTL 1403H	Special Education and Social Representation of Difference
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 Environment
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 1799H	Special Topics in Curriculum: Master's Level

Doctoral Level

CTL 1801H	Action Research and Professional Practice
CTL 1805H	Advanced Seminar in Language and Learning: Theory and 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	Official Discourses and Minority Education
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 1923H	Technology Supported in Situ Learning
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 1999H	Special Topics in Curriculum: Doctoral Level

Elementary and Secondary Education

Master of Teaching

The Master of Teaching in Elementary and Secondary Education program offers students a unique educational opportunity that 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, educational law, diversity, educational technology, teaching, and learning. This teacher education program offers the opportunity for elementary and secondary student teachers to deepen their knowledge of all aspects of teaching. The high level of academic rigour, combined with increased practice teaching experiences enhances and extends the theoretical and practical knowledge of students preparing to become teachers.

The program includes: formal coursework, teaching and research seminars, practice teaching, internship, and a major research project.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. 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 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. In addition, applicants are requested to list, in chart form, the extent of their experience working with children. The chart should include dates, location of experience, role, and number of hours working with students.

- Given program limitations, not all eligible applicants are guaranteed admission.

- Because applicants are applying to a teacher education program, the following items must be submitted with the application:
  - a photocopy of a Canadian birth certificate, or in the case of a person who was not born in Canada, documents showing the basis upon which the applicant is present in Canada, including date and place of birth
  - a photocopy of a certificate of change of name where applicable

- A police record check is required for certification by the Ontario College of Teachers and is required in both the first and second year of the program.

Program Requirements

- The two-year MT degree requires 8.0 full-course equivalents (FCEs), i.e., 16 half courses.

- Students must successfully complete a major research paper at the end of the program in order to graduate and 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.

- The two-year program is undertaken on a full-time basis. Registration in the second year is contingent upon successful completion of all first-year work.

Core Courses

Primary/Junior Concentration

FIRST-YEAR CORE COURSES

CTL 7000H	Curriculum and Teaching in Literacy
CTL 7001H	Educational Professionalism, Ethics and Law
CTL 7002H	Curriculum and Teaching in Mathematics
CTL 7003H	Curriculum and Teaching in Social Studies and Science
CTL 7004H	Practice Teaching (Year 1)
CTL 7006H	Reflective Teaching and Inquiry into Research in Education
CTL 7007H	Authentic Assessment
CTL 7014H	Fundamentals of Teaching

SECOND-YEAR CORE COURSES

CTL 7001H	Educational Professionalism, Ethics and the Law
CTL 7005H	Practice Teaching (Year 2)
CTL 7008H	Introduction to Special Education and Adaptive Instruction
CTL 7009H	Anti-Discriminatory Education
CTL 7010H	Issues in Numeracy and Literacy
CTL 7011H	Child and Adolescent Development
CTL 7013H	Arts in Education
CTL 7015H	From Student to Professional
CTL 7016H	Integrating Technology Into the Classroom: Issues and Activities

Junior/Intermediate Concentration

FIRST-YEAR CORE COURSES

CTL 7000H	Curriculum and Teaching in Literacy
CTL 7001H	Educational Professionalism, Ethics and the Law
CTL 7002H	Curriculum and Teaching in Mathematics
CTL 7003H	Curriculum and Teaching in Social Studies and Science
CTL 7004H	Practice Teaching (Year 1)
CTL 7006H	Reflective Teaching and Inquiry into Research in Education
CTL 7007H	Authentic Assessment
CTL 7014H	Fundamentals of Teaching

SECOND-YEAR CORE COURSES

CTL 7001H	Educational Professionalism, Ethics and the Law
CTL 7005H	Practice Teaching (Year 2)
CTL 7008H	Introduction to Special Education and Adaptive Instruction
CTL 7009H	Anti-Discriminatory Education
CTL 7010H	Issues in Numeracy and Literacy
CTL 7011H	Child and Adolescent Development
CTL 7013H	Arts in Education
CTL 7015H	From Student to Professional
CTL 7016H	Integrating Technology Into the Classroom

Intermediate/Senior Concentration

FIRST-YEAR CORE COURSES

CTL 7001H	Educational Professionalism, Ethics and the Law
CTL 7004H	Practice Teaching (Year 1)
CTL 7006H	Reflective Teaching and Inquiry into Research in Education
CTL 7007H	Authentic Assessment
CTL 7012H	Issues in Secondary Education
CTL 7014H	Fundamentals of Teaching

SECOND-YEAR CORE COURSES

CTL 7001H	Educational Professionalism, Ethics and the Law
CTL 7005H	Practice Teaching (Year 2)
CTL 7008H	Introduction to Special Education and Adaptive Instruction
CTL 7009H	Anti-Discriminatory Education
CTL 7011H	Child and Adolescent Development
CTL 7015H	From Student to Professional
CTL 7016H	Integrating Technology Into the Classroom

The Intermediate/Senior concentration students must select one teaching subject from the following list as their first teaching subject and one as their second teaching subject:

CTL 7020Y	Curriculum and Teaching in English —Intermediate/Senior
CTL 7021Y	Curriculum and Teaching in History —Intermediate/Senior
CTL 7022Y	Curriculum and Teaching in Mathematics —Secondary
CTL 7023Y	Curriculum and Teaching in Science: Biology—Intermediate/Senior

Prerequisites: Five full university courses in the first teaching subject and two full courses in the second teaching subject. In the case of CTL7023Y: Science —Biology, five full university courses in science, with a minimum of four of them in the area of biology, are required regardless of whether it is the first or second teaching subject.

Normal Program Length: 6 sessions full-time

Time Limit: 3 years full-time

Second Language Education

Studies in Second Language Education (SLE) focus on curriculum, instruction, learning, and policies for education in second, foreign, and minority languages, particularly in reference to English and French in Canada but also other languages and settings, including studies of language learning, methodology and organization of classroom instruction, language education policies and planning, and student and program evaluation as well as issues related to bilingualism, multilingualism, cultural diversity, and literacy.

Master of Education

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.
- 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

- The MEd program consists of 5.0 full-course equivalents (FCEs). A minimum of 2.5 FCEs CTL 3000-level courses must be taken. Of these, 1.0 FCE are required courses and must be selected from the following list:
  - CTL 3000H Bilingual and Multicultural Education
  - CTL 3002H Second Language Teaching Methodologies
  - CTL 3003H Planning and Organizing the Second Language Curriculum
  - CTL 3010H Second Language Learning
- The MEd program of study may be taken on a full- or part-time basis.

Normal Program Length: 4 sessions (2 years) full-time; 6 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

Master of Arts

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.
- Ordinarily, applicants should have teacher certification and at least one year of relevant successful professional experience prior to applying.
- Applicants expecting to pursue a doctorate in the future are advised to enrol in the MA (rather than MEd) program.
- 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 career goals.

Program Requirements

- The MA program may be undertaken on a full-time or part-time basis.
- The program requires 4.0 full-course equivalents (FCEs) or 8.0 half courses plus a thesis.
- Students must take a minimum of 2.0 FCEs CTL 3000-level courses within the SLE program. Courses must include CTL 3001H *Research Colloquium in Second Language Education.* Part-time students are expected to be available to take CTL 3001H during daytime hours (usually Friday afternoons).
- Students must also take a course in research methods relevant to the topic of the thesis. Any of the following courses can fulfil this requirement: CTL 1018H, CTL 1041H, CTL 1306H, CTL 1810H, CTL 1842H, CTL 3019H, CTL 3800H, CTL 3803H, CTL 3807H, AEC 1400H, HDP 1287H, HDP 1288H, or SES 1905H. Students wishing to propose an alternative course to fulfil one of the SLE course requirements will be required to obtain the approval of both the SLE graduate program coordinator and either their faculty advisor or their thesis supervisor.
- Students are responsible for meeting deadlines to complete their course requirements, thesis committee formation, and ethical review.
- Additional courses may be required of some applicants.

Normal Program Length: 6 sessions full-time; 10 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

Doctor of Philosophy

Individuals participating in the PhD program must have a strong commitment to research. The SLE program offers both full-time and flexible-time PhD options. Applicants must declare their preferred option when applying.

Minimum Admission Requirements

Full-Time PhD

- Applicants are admitted under the General Regulations of the School of Graduate Studies. 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.

- 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 career goals.

Flexible-Time PhD

- 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

- Degree requirements for the full-time and the flexible-time PhD programs are the same.
- The PhD requires 3.0 to 4.0 full-course equivalents (FCEs) depending on previous experience and academic qualifications.
- Students must take a minimum of 2.0 FCEs of CTL 3000-level courses within the SLE program, including CTL 3001H *Research Colloquium in Second Language Education.* If CTL 3001H was taken at the master's level, students are not permitted to take it again and should substitute it with another CTL 3000-level course.
- A research methods course relevant to the topic of the thesis is also a requirement of the PhD program unless students have previously taken it at the master's level. Any of the following courses can fulfil this requirement: CTL 1018H, CTL 1041H, CTL 1306H, CTL 1810H, CTL 1842H, CTL 3019H, CTL 3800H, CTL 3803H, CTL 3807H, AEC 1400H, HDP 1287H, HDP 1288H, SES 1905H.
- 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.
- A student wishing to propose an alternative course to fulfil one of the SLE course requirements will be required to obtain the approval of the SLE Program Coordinator and either her or his faculty advisor or thesis supervisor.
- **Full-Time PhD:** A minimum of two consecutive years of full-time study are required at the beginning of the program, during which time students usually complete course requirements, pass the comprehensive examination, prepare a thesis proposal, and form a thesis committee.
- **Flexible-Time PhD:** Students may apply for part-time status after four years of full-time registration.

Normal Program Length: 4 years full-time; 7 years flexible-time

Time Limit: 6 years full-time; 8 years flexible-time

Course List

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

Master's Level

CTL 3000H	Foundations of Bilingual and Multicultural Education
CTL 3001H	Research Colloquium in Second Language 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	Bilingual Education and Bilingualism
CTL 3011H	Bilinguisme et éducation ou membre de la faculté à déterminer
CTL 3013H	Second Language Assessment
CTL 3015H	Seminar in Second-Language Literacy Education
CTL 3018H	Language 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 3023H	Sociolinguistique du français canadien
CTL 3024H	Second Language Teacher Education
CTL 3025H	Applied Sociolinguistics in Second Language Education
CTL 3026H	Pragmatics in Second Language Education
CTL 3797H	Practicum in Second Language Education: Master's Level
CTL 3798H	Individual Reading and Research in Second Language Education: Master's Level
CTL 3799H	Special Topics Second Language Education: Master's Level
JHC 1251H	Reading in a Second Language
JTE 1952H	Language Culture and Education/M. Heller

Doctoral Level

CTL 3800H	Second Language Classroom Research
CTL 3803H	Ethnographic Research in the Language Disciplines
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 3997H	Practicum Second Language: Doctoral Level
CTL 3998H	Individual Reading and Research in Second Language: Doctoral Level
CTL 3999H	Special Topics in Second Language Program: Doctoral Level

Graduate Faculty

Full Members

Bencze, Lawrence - BEd, BSc, MSc, PhD
Bickmore, Kathy - MA, PhD
Brett, M. Clare - BA, MA, PhD *(Associate Chair, Graduate Studies)*
Cameron, Linda - BA, MEd, EdD
Campbell, Elizabeth - BA, BEd, MEd, PhD
Cooper, Karyn – PhD
Cumming, Alister - BA, MA, PhD
Cummins, James - BA, PhD
Danesi, Marcel - BA, MA, PhD
Earl, Lorna – PhD
Evans, Mark - BE, BA, MA, PhD
Feuerverger, Grace - BA, MA, PhD
Gagne, Antoinette - BEd, MEd, PhD
Gallagher, Kathleen Marie - PhD
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)*
Kerekes, Julie - BA, MA, PhD
Kooy, Mary - BA, MA, PhD
Kosnik, Clare - DPhil, DPhil
Labrie, Normand - BA, MA, PhD
Lam, Tony - BA, MA, PhD
Levine, David - BA, MA, PhD
McDougall, Douglas - BM, BEd, MEd, EdD *(Chair and Graduate Chair)*
Miller, John - BA, MAT, PhD
Morgan, Cecilia Louise - BA, BA, MA, PhD
Pedretti, Erminia - BE, MEd, PhD
Piccardo, Enrica - MA, PhD
Rolheiser, N Carol - BEd, MEd, PhD
Sandwell, Ruth - BA, MA, PhD
Scardamalia, Marlene - 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, BE, BE, MEd, EdD
Sykes, Heather - BSc, PhD
Trifonas, Peter - BE, BA, PhD
Troper, Harold - BA, MA, PhD
Wallace, John - BSc, BEd, MSc, PhD

Members Emeriti

Aitken, Johan - BA, MA, PhD
Allen, Patrick - BA, MA, PhD

Beattie, Mary - BA, BA, MA, MEd, EdD
Beck, Clive - PhD
Bennett, Barrie - BPHE, MEd, PhD
Bogdan, Deanne - BA, MA, PhD
Booth, David - BA, MEd
Churchill, Stacy (Jr.) – PhD
Cohen, Rina - MSc, PhD
Conle, Carola - BA, MEd, PhD
Connelly, Michael - BSc, BEd, MSc, PhD
Darroch-Lozowski, Vivian - BSc, MA, PhD
Davie, Lynn - BA, MA, PhD
Diamond, Colin - BA, PhD
Farrell, Joseph - BSc, PhD
Frenette, Normand - BA, MA, MA, MEd, PhD
Hanna, Gila - BA, MA, MEd, PhD
Harley, Birgit - BA, MA, PhD
Hodson, Derek - BSc, MEd, PhD
Jordan, Anne - BA, MA, PhD
Kelly, Brendan - BSc, MSc, PhD
Kilbourn, Brent - BS, 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
Simon, Roger - BS, PhD
Swain, Merrill - BA, PhD
Thiessen, Dennis - AB, MEd, DPhil
Traub, Ross - PhD
Wahlstrom, Merlin - BEd, MEd, PhD
Wolfe, Richard – BA

Associate Members

Allen, Guy - BA, MA, PhD
Broad, Kathy - BEd, BA, MEd, PhD
Burnaby, Barbara - BA, BA, MA, PhD
Connelly, Christine - BA, BEd, MEd, EdD
Gaztambide-Fernandez, Ruben - BM, MEd, EdD
Hundey, Ian - BA, MA
Jang, Eunice - BA, MA, PhD
King, Ruth – PhD
Lancaster, Ron - BEd, BS, MMath
Mandigo, James Loyd - BA, MA, PhD
Marks Krpan, Cathy - BEd, MEd, EdD
McCready, Lance - BA, MA, PhD
Morgan, Brian - BA, MA, PhD
Nasmith, Louise - AB, AB, MDCM
Nayer, Marla - BSc, MEd
Niyozov, Sarfaroz - MEd, MA, PhD
Procter, Margaret - BA, MA, MPH, PhD
Rehner, Katherine - BA, BE, MEd, PhD
Rossi, Miriam Frances - BSc, MSc, MD, MD, MD
Russell, M Lynn - MDCH
Seller, Wayne - BA, MEd
Simon, Robert - BA, MA, MTh, PhD
Steele, Jeffrey - BA, MA, PhD
Stewart Rose, Leslie - BEd, BM, MA, EdD
Stiegelbauer, Suzanne - BS, MA, MA, PhD
Turnbull, Miles - BA, MA
Warner, Mary Jane - MA, PhD
Woodruff, Earl - MA, PhD

Dentistry

Faculty Affiliation

Dentistry

Degree Programs Offered

Dentistry – MSc, PhD

Collaborative Programs

The following collaborative programs 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. **Neuroscience**
   - Dentistry, MSc, PhD
5. **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 leading to qualification in one of 10 dental specialty disciplines; 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.utoronto.ca/dentistry
E-mail: gradstudies@dentistry.utoronto.ca
Telephone*:* (416) 979-4901 ext. 1-4482
Fax: (416) 979-4944

Student Services Office
University of Toronto
Room 104, 124 Edward Street
Toronto, Ontario M5G 1G6
Canada

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

Degree Programs

Dentistry

Master of Science

1. Thesis Option

Minimum Admission Requirements

- An appropriate bachelor of science, doctor of dental surgery, or an equivalent degree, with at least mid-B standing 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 department'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 course DEN 1001Y[0] *Master's Seminars in Oral Health Sciences* 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 defence.

Normal Program Length: 6 sessions full-time; 12 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

2. Specialist Dental Training: Thesis Option

The department offers a master of science degree for dental graduates seeking advanced training in a clinical specialty as well as training in research.

Minimum Admission Requirements

- Doctor of Dental Surgery (DDS) or equivalent degree with at least a mid-B standing 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 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.*

- Course DEN 1001Y[0] *Master's Seminars in Oral Health Sciences* for a minimum of one year.
- Upon completion of all program requirements, students are eligible for the MSc degree and for Specialty, Fellowship, or Board Certification in the chosen dental specialty. For further information, consult the Faculty of Dentistry calendar or website.

Normal Program Length: Varies by graduate specialty program undertaken and must conform to the accreditation requirements of the Commission on Dental Accreditation of Canada.

Time Limit: 3 years full-time

3. Specialist Dental Training: Coursework-Only Option

The department 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

- DDS or an equivalent degree, with at least a mid-B standing 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 requirements as necessary to meet Canadian Dental Association accreditation 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] *Master's Seminars in Oral Health Sciences* for a minimum of one year.
- 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.

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

- Upon successful completion of all program requirements, students are eligible for the graduate degree. Students, with the exception of dental hygienists, are eligible for Specialty, Fellowship, or Board Certification in the chosen dental specialty. For further information, consult the Faculty of Dentistry calendar or website.

Normal Program Length: 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 4 years full-time

Program Transfer: MSc to PhD

MSc students pursuing either of options 1 or 2, who are demonstrating excellent progress in all facets of their program, may apply to transfer from the MSc to the PhD program. Transfer time varies for students in the specialty training thesis option. The transfer examination will take place up to 18 months—and in exceptional circumstances 24 months—after entry into the MSc program for registrants in the MSc thesis option. Regulations governing such transfers are available from the Student Services Office.

Students registered in the specialty training coursework-only option will not be permitted to transfer to the PhD degree, but may apply to the PhD program following completion of the MSc degree.

Doctor of Philosophy

1. Full-Time Research Program

Minimum Admission Requirements

- Students are normally admitted to a four-year PhD program with an appropriate master's degree, or equivalent, with at least an A standing from a recognized university in a discipline appropriate to the intended field of doctoral study. However, under exceptional circumstances, the department may admit a highly qualified student with an appropriate bachelor of science 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 of Graduate and Post-graduate Studies, comprising advanced study and original research culminating in the defence of a thesis.
- Minimum course requirements: completion of the course DEN 1100Y[0] *Doctoral Seminars in Oral Health Sciences,* 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 department'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 of Graduate and Post-graduate Studies, 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 student's supervisor will chair the committee. 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.

Normal Program Length: 4 years sessions full-time; 5 years direct-entry

Time Limit: 6 years full-time; 7 years direct-entry

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

The department 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

- DDS degree with at least an A standing 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.

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

- Completion of the course DEN 1100Y[0] *Doctoral Seminars in Oral Health Sciences,* 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 of Graduate and Post-graduate Studies, 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 student's supervisor will chair the committee. The committee will closely monitor the student's ability to sustain satisfactory performance and will report semi-annually to the Associate Dean of Graduate and Post-graduate Studies 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 for Specialty, Fellowship, or Board Certification in one of the dental specialties. For further information, please consult the Faculty of Dentistry calendar or website.

Normal Program Length: varies by specialty; up to 6 years full-time

Time Limit: 6 years full-time

3. Flexible-Time Option

The department 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

- School of Graduate Studies and Graduate Department of Dentistry admission requirements for entry to the PhD program.
- 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 of Graduate and Post-graduate Studies, 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] *Doctoral 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 12–24 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.

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

- Present at meetings and publish original research findings in timely fashion.
- Participate as members of departmental and student committees as applicable.

Normal Program Length: 5 years flexible-time

Time Limit: 7 years flexible-time

Course List

Not all courses are offered every year. The department should be consulted each session as to course offerings.

Core Courses

DEN 1001Y[0]   Master's Seminars in Oral Health Sciences (Credit/No Credit)
DEN 1100Y[0]   Doctoral Seminars in Oral Health Sciences (Credit/No Credit)
DEN 1015H   Introduction to Biostatistics

General Courses

DEN 1002H   Oral Pathology
DEN 1003H   Preventive Dentistry
DEN 1006Y   Seminars in Dental Public Health
DEN 1007H   Oral Radiology
DEN 1011Y[0]   Advanced Seminars in Oral Pathology
DEN 1012Y[0]   Oral Medicine
DEN 1013Y[0]   Oral Surgical Pathology
DEN 1014H   Clinical Epidemiology and Evidence-Based Care
DEN 1016H   Occlusion: Function and Dysfunction
DEN 1017H   Temporomandibular Disorders
DEN 1022H   Investigating Pathogenic Biofilms
DEN 1024H   Experimental Methods in Caries Research
DEN 1051Y   Oral Epidemiology
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 1097Y   Advanced Oral Radiology
DEN 1098H   Reading Course in Oral Biology

Courses for Students in MSc/PhD Specialist Dental Training Programs

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: Patients with Dentition and Advanced Operative Dentistry Care
DEN 1043Y   Prosthodontics III: The Partially Edentulous Milieu and its Management by Fixed, Removable or Implant Supported Prostheses
DEN 1044Y   Prosthodontics IV: The Edentulous Milieu and its Management by Removable or Implant Supported Prostheses
DEN 1045Y   Prosthodontics V: Introduction to Critical Appraisal of the Dental Literature and Evidence-Based Practice
DEN 1046Y   Clinical Prosthodontics
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 1057Y   Dental Anaesthesia Journal Review 1
DEN 1058Y   Dental Anaesthesia Journal Review 2
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 1073Y   Dental Anaesthesia Graduate Seminars
DEN 1074Y   Foundations of Medicine as Applied to Dental Anaesthesia
DEN 1075Y   General Anaesthesia for Dentistry—Paediatric
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 Maxil-lofacial 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: Endodontics as Applied to Paediatric Disorders
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

Graduate Faculty

Full Members

Agur, Anne - BSc, MSc, PhD
Aubin, Jane - BSc, PhD
Bressmann, Tim - MPH, PhD
Casas, Michael - MSc, DDS
Casper, Robert - MD
Clokie, Cameron - DDS, PhD
Cvitkovitch, Dennis - BSc, MSc, PhD
Davies, John - BSc, BDSc, PhD, DSc
Deporter, Douglas - DipPerio, DDS, PhD
Dostrovsky, Jonathan - BSc, MSc, PhD
El-Mowafy, Omar - BDS, PhD
Finer, Yoav - MSc, MSc, DMD, PhD
Friedman, Shimon - DMD
Glogauer, Michael - PhD
Gong, Siew-Ging - MScD, BDS, PhD, PhD
Grynpas, Marc - MSc, PhD
Haas, Daniel - BSc, BScD, DDS, PhD *(Dean)*
Jokstad, Asbjorn - MS, DDS, PhD
Kenny, David - BSc, DDS
Kishen, Anil - BDS, MDS, PhD
Lam, Ernest - BSc, MSc, DMD, PhD
Lawrence, Herenia - MSc, DDS, PhD
Levesque, Celine - BSc, MSc, PhD
Limeback, Hardy - BSc, DDS, PhD
Manolson, Morris - PhD *(Associate Dean, Graduate and Post-graduate Studies)*
McCulloch, Christopher - BSc, DDS, PhD
Mock, David - DDS, PhD, Fell Ryl Coll Dent Canada
Santerre, Paul - BSc, MSc, PhD
Seltzer, Ze'ev - DMD, BMedSc
Sessle, Barry - BS, MSD, BDS, PhD
Sherman, Philip - MD
Simmons, Craig - BSc, MSc, PhD

Sone, Eli - BSc, MS, PhD
Tenenbaum, Howard - DDS, PhD *(Coordinator of Graduate Studies)*

Members Emeriti

Anderson, James - BSc, DDS
Leake, James - DDPH, MSc, DDS
Mayhall, John - BA, MA, DDS, PhD
Pilliar, Robert - BASc, PhD
Ross, Robert Bruce - MSc, DDS, Fell Ryl Coll Dentistry
Titley, Keith - DDS
Watson, Philip - DDS, BDSc, MScD
Woodside, Donald - BSc, DDS, MScD, Fell Ryl Coll Dent Canada
Zarb, George - BScD, MS, DDS

Associate Members

Andrews, Paul - BSc, MSc, DDS
Arat, Emel - DDS, PhD
Azarpazhooh, Amir - MSc
Baker, Gerald - DDS, MS, Fell Ryl Coll Dentistry
Barrett, Edward - BSc, MSc, DDS
Barzilay, Issac - MS, DDS
Basrani, Bettina - PhD
Bradley, Grace - MSc, DDS
Dao, Thuan - MSc, DMD, PhD
Daskalogiannakis, I. John - DIPORH, MSc, DDS
Dempster, Laura - BScD, MSc, PhD
Diwan, Randa - DDS, PhD
El-Badrawy, Wafa - MSc, DDS
Fenton, Aaron - DipPerio, MS, DDS
Ganss, Bernhard - DrRerNat
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, DrMedDent, MSD, Fell Ryl Coll Dent Canada
Laing Gibbard, Leslie - BSc, BEd, MSc, MS, DDS, PhD
Laporte, Audrey - BA, MA, PhD
Leong, Iona - BSc, MSc, BDS
Main, Patricia - DDPH, MSc, BDS, DDS
McComb, Dorothy - BDS, MScD
McComb, Richard - MSc, BDS
Metaxas, Angelos - DIPORH, MSc, DDS, DDSc
Moriarty, Tara - BA, BSc
Nainar, Hashim - BDS, MScD
Nogueira, Getulio - DDS, PhD
Pharoah, Michael - BSc, DDS
Quinonez, Carlos R. - MS, DMD
Saltzman, Brett - BA, MSc, DDS
Senadheera, Dilani Braziunas - PhD
Sigal, Michael - MSc, DDS
Suri, Sunjay - BDS, MDS
Sutherland, Susan - BScN, MSc, DDS
Talwar, Reena - BSc, DDS, PhD
Tam, Laura - BSc, MSc, DDS
Tompson, Bryan - DDS
Voronov, Irina - MASc, PhD

Doctor of Medicine/Doctor of Philosophy (Combined Program)

Faculty Affiliation

Medicine

Degree Programs Offered

Medicine – MD/PhD

Overview

The **Doctor of Medicine/Doctor of Philosophy (MD/PhD)** program 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.

Contact and Address

Web: www.utoronto.ca/mdphd
E-mail: mdphd.program@utoronto.ca
Telephone: (416) 978-8885
Fax: (416) 971-2132

MD/PhD Program
University of Toronto
Medical Sciences Building
Room 2364, 1 King's College Circle
Toronto, Ontario M5S 1A8
Canada

Degree Programs

Medicine

Combined Doctor of Medicine/ Doctor of Philosophy

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 degree, students return full-time to the medical program.
- **Sequential.** Students with a master's or degree enter the medical program on a full-time basis. After 12–18 months of medical school, they proceed to full-time graduate work until completion of the PhD degree. Students then return to medical school to complete the last 2–3 years.

Normal Program Length: 8 or 9 years full-time

Time Limit: 6 years full-time

Drama, Theatre and Performance Studies

Faculty Affiliation

Arts and Science

Degree Programs Offered

Drama, Theatre and Performance Studies – MA, PhD

Collaborative Programs

The following collaborative programs 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. **Sexual Diversity Studies**
   - Drama, Theatre and Performance Studies, MA, PhD
4. **South Asian Studies**
   - Drama, Theatre and Performance Studies, MA, PhD
5. **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 theatre history, theory of drama, and dramaturgy. Within the parameters of these fields, the centre supports research in such areas as performance analysis and reception; Canadian, American, and intercultural theatre; Elizabethan and Restoration staging practices; historiography and performance; acting and modern staging theories and practices; performance aesthetics; and play development. Through affiliations with other graduate units, students may also take courses in drama, theatre, and performance from the other departments, centres, and institutes across the Faculty.

Graduate students build on the kind of foundation that would normally be laid in undergraduate study 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 and Studio theatres.

Application details are available on the centre's website.

Contact and Address

Web: www.graddrama.utoronto.ca
E-mail: General: graduate.drama@utoronto.ca
       Coordinator 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

Degree Programs

Drama, Theatre and Performance Studies

Master of Arts

Minimum Admission Requirements

- Applicants for admission to the centre are considered under the General Regulations of the School of Graduate Studies. Admissions are selective; possession of minimum qualifications does not guarantee acceptance.
- 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 Graduate Coordinator for further information.

Program Requirements

- A minimum of 4.0 full-course equivalents (FCEs), as approved by the centre, including both DRA 1003H *Introduction to Theatre, Drama, and Performance Studies* and DRA 5000H *Praxis.*
- 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 admitted to a two-year MA program, with additional course requirements.

Normal Program Length: 3 sessions full-time

Time Limit: 3 years full-time

Doctor of Philosophy

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.
- Applications received after January 15 may be too late for consideration. Contact the Graduate Coordinator for further information.
- Applicants may be accepted into the PhD program via one of two routes:
  - **With a master of arts degree:** an MA in Drama, Theatre and Performance Studies or the equivalent from a recognized university, with 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.
  - **With a bachelor of arts degree:** exceptional students may be admitted directly to the PhD program from an appropriate BA from a recognized university with a minimum overall average equivalent to a University of Toronto A-. Students 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 Graduate Coordinator 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

- **Students entering with an MA** must:
  - complete 4.0 approved full-course equivalents (FCEs) with an average standing of at least A-. The courses must include DRA 1011H *Traditions of Performance Theory,* DRA 1012H *Twentieth-Century Theatre and Performance,* and DRA 6000Y *Research Seminar*;
  - satisfy the centre's dramaturgical and performance practice requirement by completing DRA 5001Y;
  - demonstrate reading knowledge of a language other than English by passing an approved language examination not later than the end of the second year of study. Students may also

be asked to qualify in other program-related languages;
  - pass comprehensive examinations;
  - 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.

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

- **Students entering with a BA**:
  - must complete 3.0 full-course equivalents (FCEs) in addition to the PhD requirements listed above, including DRA 1003H for a total of 7.0 FCEs, and satisfy 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;
  - may, with approval, elect to transfer to the MA after the first year of study. Work completed in the PhD program will be credited towards the MA.

Normal Program Length: 4 years full-time; 5 years direct-entry

Time Limit: 6 years full-time; 7 years direct-entry

Course List

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 Graduate Coordinator.

Core Program

DRA 1001H	History of the Theatre I
DRA 1002H	History of the Theatre II
DRA 1003H	Introduction to Theatre, Drama, and Performance Studies
DRA 1011H	Traditions of Performance Theory
DRA 1012H	Twentieth-Century Theatre and Performance
DRA 1021H	Dramaturgy
DRA 1032H	"Liveness": Performance, Mediation, and Virtuality
DRA 1105H	Performing History
DRA 3019H	Shakespeare in Modern Production
DRA 3021H	Elizabethan Performance: History and Practice
DRA 3120H	The Way of the Actress
DRA 3211H	The Performing Body
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 4057H   Women Script History
DRA 4063H   Topics in Performance and Popular Culture
DRA 4090Y   Directed Reading/Theatre Research
DRA 4091H   Directed Reading/Theatre Research
DRA 5000H   Praxis
DRA 5001Y   Theatre Practice II (Credit/No Credit)
DRA 6000Y   Research Seminar (Credit/No Credit)

Cross-Listed Courses

The Centre for Drama, Theatre and Performance Studies also cross-lists courses offered by other graduate units of the University of Toronto.

A listing of approved courses, available during the academic year, appears on the centre's website, which is updated in mid-summer. Students requesting courses from other units may be subjected to quotas and/or wait lists. Language and literature departments do not always provide courses in English translation. Confirm all course information—including date, time, location—with the appropriate unit as well as with the centre's Graduate Coordinator.

Graduate Faculty

Full Members

Ackerman, Alan - MA, PhD
Ambros, Veronika - MA, PhD
Astington, John - BA, MA, PhD
Bancheri, Salvatore - BA, MA, PhD
Barton, Bruce - BA, MA, PhD *(Coordinator of Graduate Studies)*
Brown, Elspeth - MA, PhD
Budde, Antje - PhD
Clark, Caryl - BMus, MA, PhD
Clarke, George Elliott - PhD
Cobb, Michael - BA, MA, AM, PhD
Columpar, Corinn - BA, PhD
Copeland, Nancy - BA, MA, PhD
Corman, Brian - AB, AM, PhD
De Kerckhove, Derrick - BA, MA, PhD
Eisenbichler, Konrad - BA, MA, PhD
Esonwanne, Uzoma - BA, MA, PhD
Fenner, Angelica - BA, MA, PhD
Gallagher, Kathleen Marie - PhD
Johnson, Stephen - BA, MA, PhD *(Director)*
Justice, Daniel - BA, MA, PhD
Kanaganayakam, Chelvanayakam - PhD
Keil, Charles - BA, MA, PhD
Kingwell, Mark - AB, BA, AM, MPH, PhD
Kleber, Pia - BA, MA, MA, PhD
Lancashire, D Ian - BA, MA, PhD
Legge, Elizabeth MM - BA, BA, MA, PhD
Lettieri, Michael - BA, MA, PhD
Lopez, Jeremy - BA, MA, DPhil
Michelucci, Pascal - BA, MA, PhD
Most, Andrea - BA, MA, PhD
Parker, Mary Ann - BA, MM, PhD, ARCT
Pietropaolo, Domenico - BSc, MA, PhD
Quayson, Ato - BA, PhD

Rankin, Katharine - BA, MA, PhD
Revermann, Martin - PhD
Rodriguez, Nestor - BA, PhD
Ross, Jill - MA, PhD
Rupp, Stephen - BA, MA, MPH, MA, PhD
Sammond, Nicholas - BA, MA, PhD
Soldovieri, Stefan - AB, AM, DPhil
Somigli, Luca - PhD
Sperdakos, Paula - BA, MA, PhD
Syme, Holger Schott - BA, AM, PhD
Ten Kortenaar, Neil - PhD
Thomson, H. Leslie - BA, MA, PhD
Trojanowska, Tamara - MA, PhD

Members Emeriti

Armatage, Kay - BA, MA, PhD
Hutcheon, Linda - BA, MA, PhD
Klausner, David - AB, PhD
Lancashire, Anne - BA, AM, PhD
Levenson, Jill - PhD
Plant, Richard - PhD
Schonberg, Michal - BA, MA, PhD
Sidnell, Michael - BA, MA, PhD

Associate Members

Antebi, Susan - AM, PhD
Bhatia, Nandi - PhD
Di Paolantonio, Mario - AM, PhD, PhD
Filewod, Alan - PhD
Freeman, Barry - BA, MA, PhD
Georgis, Dina - PhD
Goldstein, Tara - BA, PhD
Hill, Colin - BA, MA, PhD
Houston, Andrew - DPhil
King, Robert - AB, MA, PhD
Knowles, Richard - DPhil
Lindgren, Allana - PhD
MacLean, Sarah - BA, MA, PhD
Odom, Selma - PhD
Rubright, Marjorie - AB, MA, DLitt
Ruti, Marjut - BA, MA, PhD
Schotzko, T. Nikki - PhD
Solga, Kimberly - PhD
Switzky, Lawrence - BA, MA, PhD
Taylor, David - MA, MPH, PhD
Testa, Bart - BA, MA
Warner, Mary Jane - MA, PhD

Earth Sciences

Faculty Affiliation

Arts and Science

Degree Programs Offered

Earth Sciences – MASc, MSc, PhD

Collaborative Programs

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

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

Overview

The Department of Earth Sciences accepts students for advanced degrees—**Master of Applied Science** (MASc), **Master of Science** (MSc)**,** and **Doctor of Philosophy** (PhD)—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 Civil Engineering, Ecology and Evolutionary Biology, Centre for Environment, Physics, Chemistry, and Materials Science and Engineering.

In recent years, research by staff and graduate students has been carried out in all parts of North America and other parts of the world, both on land and at sea. In addition to field-based studies, the department has a wide range of modern laboratories; advanced studies are encouraged in a broad spectrum of geological problems. Further details of research emphases, facilities, detailed degree requirements, and graduate courses are available on the departmental website.

Contact and Address

Web: www.geology.utoronto.ca
E-mail: grad@geology.utoronto.ca
Telephone: (416) 978-1240
Fax: (416) 978-3938

Department of Earth Sciences
University of Toronto
Earth Sciences Centre
Room 1066, 22 Russell Street
Toronto, Ontario M5S 3B1
Canada

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

Degree Programs

Earth Sciences

Master of Applied Science

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School Graduate Studies.
- 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

- Normally, complete the graduate seminar (GLG 1101H), one of the six breadth courses, and 1.0 FCE of elective courses, for a total of 2.0 FCEs.
- A research thesis.
- Minimum full-time residence is one academic session.

Normal Program Length: 6 sessions full-time

Time Limit: 3 years full-time

Master of Science

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies.
- 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

- Students in the all-coursework option are normally required to complete the graduate seminar (GLG 1101H), the all-course research project (GLG 3608H), one of the six breadth courses, and 3.5 FCEs of elective courses for a total of 5.0 graduate full-course equivalents (FCEs).
- Students in the doctoral-stream option are normally required to complete the graduate seminar (GLG 1101H), the research project (GLG 3603Y[+]), research presentation (GLG 3601Y[+]), one of the six breadth courses, and 1.0 FCE of elective courses, for a total of 4.0 FCEs.
- To encourage breadth, the department will permit students to substitute electives with equivalent non-earth science courses.
- Students may proceed on a part-time basis.

Normal Program Length: 3 sessions full-time; 6 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

Doctor of Philosophy

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies.
- 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 knowledge of the earth.
- Students normally complete the graduate seminar course, one of the six breadth courses and an additional half course, for a total of 1.5 full-course equivalents (FCEs). The additional half course 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 fields. Recommendations must be made by a student's advisory committee for consideration and approval by the department's Graduate Affairs Committee.
- Students who begin the PhD program directly from the department's research-based MSc are required to take one of the six breadth courses and an additional half course. 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.
- 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 departmental website).

Normal Program Length: 4 years full-time; 5 years direct-entry; 5 years transfer-from-master's

Time Limit: 6 years full-time; 7 years direct-entry; 7 years transfer-from-master's

Course List

Check with the department for the current year's offerings.

GLG 1100Y	Seminars in Geology Y
GLG 1101H	Graduate Seminars in Geology
GLG 1423H	Mineralogy
GLG 1430H	Basin Analysis
GLG 1436H	Paleoecological Assessment of Environmental Change
GLG 1440H	Petrology
GLG 1441H	Remote Sensing of Earth and the Terrestrial Planets
GLG 1442H	Introductory Mineral Deposits I
GLG 1443H	Introductory Mineral Deposits II
GLG 1450H	Contaminant Fate and Transport in Subsurface Environments
GLG 1465H	Geodynamics
GLG 2222H	Tectonics and Planetary Dynamics
GLG 2302H	Mineral Resources
GLG 2303H	Earth Systems Evolution
GLG 2304H	Geochemistry
GLG 2608H	Advanced Glacial Sedimentology
GLG 2704H	Isotope Geochemistry
GLG 2708H	Characterization of Geological Materials
GLG 3601Y[+]	Research Presentation
GLG 3602H	Seminars in Geology
GLG 3603Y[+]	Research Project
GLG 3604H	Selected Topics in Geology
GLG 3605H	Selected Topics in Geochemistry
GLG 3606H	Selected Topics Earth System Evolution
GLG 3607H	Selected Topics in Geodynamics
GLG 3608H	All-Course Research Project
JGN 2607H	Advanced Techniques in Hydrogeology

Additional related courses can be found in the Geophysics section of the Graduate Department of Physics course listings.

Graduate Faculty

Full Members

Bailey, Richard - BSc, PhD
Bergquist, Bridget - BS, PhD
Bollmann, Jorg - DPhil
Brenan, James - BSc, PhD
Cowling, Sharon - BSc, MSc, PhD
Davis, Donald - BSc, 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
Gorton, Michael - BSc, BSc, PhD
Halfar, Jochen - PhD
Halls, Henry - BSc, MSc, PhD
Hamilton, Michael - BSc, PhD
Head, Martin - BSc
Henderson, Grant - PhD
Howard, Kenneth - BSc, MSc, PhD
Miall, Andrew - BSc, PhD
Mungall, James - BSc, MSc, PhD
Pysklywec, Russell - BSc, MSc, PhD *(Chair and Graduate Chair)*
Schoenbohm, Lindsay - PhD
Schulze, Daniel - PhD
Sherwood Lollar, Barbara - PhD

Simpson, Myrna - BS, DPhil
Spooner, Edward - BA, PhD *(Associate Chair)*
Tait, Kimberly - BSc, MSc, PhD
Wells, Mathew - BS, DPhil
Wicks, Frederick - PhD
Wortmann, Ulrich - BSc, MSc, PhD
Young, R. Paul - BSc, MSc, PhD, Chartered Engineer

Members Emeriti

Anderson, Gregor - BEng, MASc, PhD
Naldrett, Anthony - BA, MSc, PhD
Norris, Geoffrey - BA, MA, PhD
Robin, Pierre-Yves F - MSc, PhD
Rucklidge, John - BA, PhD
Schwerdtner, Walfried - DiplGeol, BSc, DrRerNat
Scott, Steven - BSc, MSc, PhD
Von Bitter, Peter - PhD
Westgate, John - PhD

Associate Members

Liu, Qinya - PhD
Lowman, Julian - BSc, MS, DPhil

East Asian Studies

Faculty Affiliation

Arts and Science

Degree Programs Offered

East Asian Studies – MA, PhD

Collaborative Programs

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

1. **Asia-Pacific Studies**
   - East Asian Studies, MA
2. **Book History and Print Culture**
   - East Asian Studies, MA, PhD
3. **Sexual Diversity Studies**
   - East Asian Studies, MA, PhD
4. **South Asian Studies**
   - East Asian Studies, MA, PhD

Overview

The Department of East Asian Studies offers programs in two fields: classical East Asian and modern East Asian.

Contact and Address

Web: www.eas.utoronto.ca
E-mail: natasja.vanderberg@utoronto.ca
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

Degree Programs

East Asian Studies

Master of Arts

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies and the regulations of the department.
- 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 a knowledge of the relevant languages.
- A sample of the applicant's writing in English.
- Non-native speakers of English are required to take the TOEFL (Test of English as a Foreign Language). Applicants taking the paper-based TOEFL exam must achieve a minimum score of 600 and 5 on the TWE (Test of Written English). Applicants taking the Internet-based TOEFL exam 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 either through non-language courses or through a combination of non-language courses and a thesis written with the guidance of a supervisor; normally 4.0 full-course equivalents (FCEs), including at least 2.0 FCEs in EAS courses, are required for students not writing a thesis, and 2.0 FCEs, including at least 1.0 FCE in EAS courses, are required for students writing a thesis.
- Students are permitted to take *some* of their courses in other departments.
- Courses are selected in consultation with the Coordinator of Graduate Studies.

Normal Program Length: 3 sessions (1 year) full-time

Time Limit: 3 years full-time

Doctor of Philosophy

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies and the regulations of the department.
- 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-. 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 15- to 20-page sample of the applicant's writing in English.
- Non-native speakers of English are required to take the TOEFL (Test of English as a Foreign Language). Applicants taking the paper-based TOEFL exam must achieve a minimum score of 600 and 5 on the TWE (Test of Written English). Applicants taking the Internet-based TOEFL exam 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

- 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 the first year of the program, with an average grade of at least A-. The remaining courses must be completed by the end of the second year of the program, maintaining an average of at least A-.
- Students are permitted to take *some* of their courses in other departments.
- A comprehensive qualifying examination is normally undertaken, with the guidance of a supervisory committee, within three months of completion of coursework and must be taken by November 30 of the third year of study.
- 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 the third year of study; 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.
- After completing the comprehensive examination, 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.

Normal Program Length: 4 years full-time; 5 years direct-entry

Time Limit: 6 years full-time; 7 years direct-entry

Course List

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 1118H	Translation and Modernity
EAS 1155H	Book Culture in Pre-modern East Asia
EAS 1335H	Violence, Justice, the Human
EAS 1339H	Topics in Chinese Art Theories
EAS 1424H	Multitude, Labour Power, Population
EAS 1432H	Korean Cultural Studies Seminar
EAS 2020H	Beyond Orientalism
EAS 2323H	Rethinking Chinese Cultural History
COL 3380Y	Globalization and Culture
JLA 5097H	Ecocriticism

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 1297H	Texts, Images, and Objects in East Asia
EAS 1411H	Art and Archaeology of Early China
EAS 1412H	Special Topics in Archaeology of Ancient China
EAS 1143Y	Civilization in Medieval China
EAS 1173H,Y	Modern Korean History Seminar
EAS 1174H,Y	Rethinking Empire in East Asia
EAS 1425H	Critique of Everyday Life and Capitalism
EAS 1427H	On Contingency and Capitalism
EAS 1428Y	Foucault and Marx
EAS 1429H	Topics in Marxism and Japan
EAS 1430H	Introduction to the Countryside
EAS 1431H	Mass Culture, Capitalist Crisis, Fascism in Modern Japan
EAS 1675Y	Topics in Chinese Social and Intellectual History 1500–1950
EAS 2008H	Japan's Imperial System

Language

EAS 1101Y	Introduction to Classical Chinese
EAS 1115Y	Reading Japanese for Graduate Purposes (Credit/No Credit)
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 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 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 2001Y	Introduction to Classical Japanese
EAS 2002Y	Intermediate Classical Chinese

Literature

EAS 1137H,Y	Chinese Poetics
EAS 1151H	Chinese Poetry I
EAS 1152H	Chinese Poetry II
EAS 1344Y	Classical Japanese Poetry
EAS 1345H	Readings in Japanese Literary Criticism
EAS 1408H	Identity and Diaspora in Modern Taiwanese Literature
EAS 1444H	The City, Body, and Text in Modern Japanese Literature
JLA 1456H	Japan As Seen By ?: Reference, Apparatus, Operation
JLA 5082H	The Rhetoric of Photography
COL 5101H	Diasporic Cities: Itinerant Narratives of Metropoles by Travellers and Expatriates

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 1228H	Topics in Chinese Ethical Theories
EAS 1229H	Topics in Chinese Aesthetics
EAS 1438H	New Approaches to Classical Daoism
EAS 1601Y	Seminar in East Asian Buddhism
EAS 1602Y	Topics in Korean Thought

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 1150H,Y	Reading and Major Research Paper
EAS 1160H,Y	Basic Topics in Chinese Culture
EAS 1163H,Y	Special Topics in Korean Studies
EAS 1300H,Y	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

Graduate Faculty

Full Members

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

Members Emeriti

Arntzen, Sonja - BA, MA, PhD
Dolezelova, Milena - MA, PhD
Donnelly, Michael - BSc, MA, PhD
Falkenheim, Victor - AB, MA, PhD
Guisso, Richard W L - DPhil
Hoff, Frank - BA, 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

Feng, Linda Rui - BA, MA, MPH, DPhil
Peng, Ito - BSW, BSc, MA, PhD
Rupprecht, Hsiao-Wei - BA, MA, MLS, PhD
Virag, Curie - AB, MA, PhD
Wong, Joseph - BA, MA, PhD, Canada Research Chair
Wu, Yiching - BA, MA, MA, PhD

Ecology and Evolutionary Biology

Faculty Affiliation

Arts and Science

Degree Programs Offered

Ecology and Evolutionary Biology – MSc, PhD

Programs Closed to Admission

Plant and Microbial Biology – MSc, PhD
Zoology – MSc, PhD

Collaborative Programs

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

1. **Biomedical Toxicology**
   • Ecology and Evolutionary Biology, MSc, PhD
2. **Environmental Studies**
   • Ecology and Evolutionary Biology, PhD
3. **Genome Biology and Bioinformatics**
   • Ecology and Evolutionary Biology, PhD

Overview

The disciplines of ecology and evolutionary biology involve complementary perspectives on biological systems. Individual and collaborative research within the department covers the range of both disciplines and often involves study and synthesis across multiple levels of organization. Professors' research interests include anatomy/physiology, behaviour, behaviour genetics, bioinformatics, community/population/ecosystem/landscape/evolutionary ecology, conservation biology, developmental biology, genetics/genomics, microbiology, molecular evolution, plant biology, taxonomy/systematics, and theoretical biology. Professors who supervise 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
E-mail: grad.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

Degree Programs

Ecology and Evolutionary Biology

Master of Science

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies.
- 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.
- Students will not be admitted until they have made arrangements to secure a research supervisor by contacting professors in the department.

Program Requirements

- Students must complete a 0.5 graduate full-course equivalent (FCE) chosen from courses offered. The *Faculty Research Course* is recommended; however, other courses are also acceptable on the advice of supervisory faculty.
- A thesis is completed under the direction of the student's supervisor, assisted by an advisory committee, and defended at a departmental oral examination.

Normal Program Length: 4 sessions (16 months) full-time

Time Limit: 3 years full-time

Doctor of Philosophy

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies.
- Students will not be admitted until they have made arrangements to secure a research supervisor by contacting professors in the department.
- There are three routes of entry to the PhD program:
  ○ Applicants already holding 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 may be accepted.
  ○ 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.

○ 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

- Exceptional students admitted to the PhD program without an MSc degree will be required to complete coursework equivalent to the master's program in addition to the PhD course requirements.
- Students must complete 1.5 graduate FCEs chosen from courses offered (2.0 graduate FCEs for students entering without an MSc degree). Students transferring into the PhD program from the MSc may apply 0.5 graduate FCE towards the PhD course requirement.
- Students with an MSc degree will be subject to an appraisal examination 18–20 months into the program. The examination will focus on their mastery of concepts in ecology and evolutionary biology and the quality of a submitted research proposal. Students entering directly from a bachelor's or transferring to the PhD program from an MSc should schedule their appraisal exam 18–26 months from their first date of registration.
- 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.

Normal Program Length: 4 years full-time; 5 years direct-entry

Time Limit: 6 years full-time; 7 years direct-entry

Course List

Not all courses are offered every year. Please refer to the Ecology and Evolutionary Biology website for a current list of course offerings.

Courses Offered at the Graduate Level Only

EEB 1002H	Advanced Research and Reading Course (This course may be taken only once for credit, and is only available to students who were admitted to the old Zoology, Plant and Microbial Biology, or Botany programs)
EEB 1100H	Faculty Research Course
EEB 1210H	Advanced Statistics
EEB 1230H	Multivariate Statistics
EEB 1250H	Spatial Statistics
EEB 1310H	Philosophy and Methods
EEB 1320H	Ecology
EEB 1350H	Evolution
EEB 1360H	Behaviour
EEB 1420H	Special Topics in Ecology

EEB 1440H	Special Topics in Evolution
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 1004H	Vertebrate Paleontology
EEB 1328H	Physiological Ecology
EEB 1330H	Systematic Botany
EEB 1337H	Families of Vascular Plants
EEB 1340H	Comparative Plant Morphology
EEB 1341H	Plant Anatomy
EEB 1443H	Phylogenetic Principles
EEB 1459H	Population Genetics
EEB 1460H	Molecular Evolution

Graduate Faculty

Full Members

Abrams, Peter - BSc, PhD
Andrade, Maydianne - BSc, MS, PhD
Archontitsis, Georgios - BSc, MSc, DSCA
Baker, Robert - BSc, MSc, PhD
Barrett, Spencer - BSc, PhD, Canada Research Chair
Boonstra, Rudy - BSc, PhD
Buck, Leslie - BSc, PhD
Cadotte, Marc W. - BS, MS, PhD
Campbell, Malcolm - DPhil
Carleton, Terence - BSc, MSc, PhD
Chang, Belinda - AB, PhD
Collins, Nicholas - BA, PhD *(Associate Chair, Graduate Studies)*
Cutter, Asher - PhD
Cyr, Helene - BSc, MSc, PhD
Eckenwalder, James - BA, PhD
Fitzpatrick, Mark - BS, MS, PhD
Fortin, Marie-Josee - MSc, PhD
Fulthorpe, Roberta - BSc, MSc, PhD
Gibo, David - BA, PhD
Gilbert, Benjamin - BSc, MSc, PhD
Gross, Mart - BSc, PhD
Guttman, David - BS, PhD
Gwynne, Darryl - BSc, PhD
Irwin, David - BSc, PhD
Jackson, Donald - BSc, MSc, PhD
Johnson, Marc - BSc, PhD
Kohn, Linda - BS, PhD
Kotanen, Peter - BSc, MSc, PhD
Kronzucker, Herbert - PhD
Levine, Joel - BA, PhD
Lopez-Fernandez, Hernan - BS, PhD
Lovejoy, Nathan Richard - BSc, MS, PhD
Mason, Andrew - MS, PhD
McLennan, Deborah - BSc, PhD
Moncalvo, Jean-Marc - PhD
Reisz, Robert - BSc, MSc, PhD
Rodd, F. Helen - MSc, PhD
Rowe, Locke - BSc, MS, PhD *(Chair and Graduate Chair)*

Sage, Rowan - PhD
Sage, Tammy - BA, MS, PhD
Short, Steven - BSc, PhD
Smith, Sandy - BAgrSc, MSc, PhD
Sokolowski, Marla - BSc, PhD
Stefanovic, Sasa - MSc, PhD
Stinchcombe, John - BA, PhD
Thomas, Sean - BA, PhD
Thomson, James - MS, PhD
Wagner, Helene - MSc, MSc, PhD
Weir, Jason Tyler - AB, PhD
Weis, Arthur - BPhil, PhD
Welch Jr., Kenneth Collins - BS, MA, PhD
Wright, Stephen - BSc, MS, PhD

Members Emeriti

Brooks, Daniel - BS, MS, PhD
Dengler, Nancy - BA, MS, PhD
Harvey, Harold - MSc, PhD
Morris, Glenn - BSA, MS, PhD
Mrosovsky, Nicholas - BA, PhD
Rising, James - BA, PhD
Sprules, W Gary - BSc, MA, PhD
Williams, D Dudley - DipEd, BSc, MSc, PhD, DSc
Zimmerman, Ann - BA, PhD

Associate Members

Dunlop, Erin - BSc, PhD
Lester, Nigel Paul - BA, MSc, PhD
Moses, Alan - BA, PhD
Ridgway, Mark - MSc, PhD
Shuter, Brian - BSc, MSc, PhD
Somers, Keith - MSc, PhD
Walsh, Denis - BA, MPH, PhD

Economics

Faculty Affiliation

Arts and Science

Degree Programs Offered

Economics – MA, PhD, MA/JD, PhD/JD

Collaborative Programs

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

1. **Asia-Pacific Studies**
   - Economics, MA
2. **Dynamics of Global Change**
   - Economics, PhD
3. **Environmental Studies**
   - Economics, MA
4. **Management and Economics**
   - Economics, PhD

Overview

The Department of Economics offers degree programs leading to the **Master of Arts**, **Combined Juris Doctor/Master of Arts**, and **Doctor of Philosophy.** Graduate program details appear on the department's website. For information on the program in Financial Economics, consult the separate entry in the Joint Programs section of this calendar.

Contact and Address

Web: www.economics.utoronto.ca
E-mail: www.economics.utoronto.ca/index.php/index/index/contact
Telephone: (416) 978-4544
Fax: (416) 978-5277

Department of Economics
Max Gluskin House
University of Toronto
150 St. George Street
Toronto, Ontario M5S 3G7
Canada

Degree Programs

Economics

Master of Arts

Minimum Admission Requirements

- 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 www.economics.utoronto.ca/index.php/index/graduate/gre for details.

Program Requirements

- For the MA regular stream, successful completion of the mathematics and statistics course (ECO 1010H) and 4.0 full-course equivalents (FCEs) including the core courses micro (ECO 2060H), macro (ECO 2061H), and econometrics (ECO 2408H).
- For the MA doctoral stream, successful completion of the mathematics and statistics course (ECO 1011H) and 4.0 FCEs, including the core courses micro, macro, and econometrics. Of the three core courses, one sequence must be taken at the PhD level. The corresponding courses at the PhD level are ECO 2020H and ECO 2030H (micro), ECO 2021H and ECO 2031H (macro), and ECO 2400H and ECO 2401H (econometrics), along with the respective associated tutorial (ECO 2050H, ECO 2051H, or ECO 2410H).

Normal Program Length: 2 sessions full-time; 6 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

Doctor of Philosophy

Minimum Admission Requirements

- 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 www.economics.utoronto.ca/index.php/index/graduate/gre 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 microeconomics (ECO 2020H and ECO 2030H), macroeconomics (ECO 2021H and ECO 2031H), and econometrics (ECO 2400H and ECO 2401H).
- Year 2: students choose six half courses, including the required courses for a major field and a minor field.
- Second-year and third-year students must also participate in the full-year *Graduate Research Seminar* (ECO 4060Y[0]).
- 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.
- Successful completion of comprehensive examinations in micro, macro, and the major field by the end of the second year of study.
- An original paper must be written in the second year and presented in the relevant workshop in the fall of the third year.
- By the spring of the third year, students must submit a proposal to a formal dissertation committee.
- A thesis based on original research.

Normal Program Length: 4 years full-time

Time Limit: 6 years full-time

Combined Master of Arts/Juris Doctor

The MA/JD in Economics permits the completion of both degrees in three years rather than the four years it would take to acquire them independently.

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

Minimum Admission Requirements

- Applicants must gain independent admission to the JD program and the MA program in Economics before they may be considered for admission to the Combined MA/JD program.

Program Requirements

- Successful completion of *Mathematics and Statistics for MA Regular Stream Students* (ECO 1010H).
- Six half courses in economics including the core courses, and 45 credits in law to satisfy the requirements as established for each degree program.

Time Limit: 4 years full-time

Combined Doctor of Philosophy/Juris Doctor

The Combined PhD/JD program is designed to attract highly qualified students who can benefit from the interaction between law and economics. This program allows students to complete the requirements of the JD degree and to reach all but the dissertation stage of the PhD at the end of four years.

Minimum Admission Requirements

- Applicants must gain independent admission to the JD program and the PhD program in Economics before they may be considered for admission to the Combined PhD/JD program.

Program Requirements

- Year 1: students are admitted to the Faculty of Law and receive a deferred acceptance to the PhD program.
- Years 2 and 3: students are registered in the Department of Economics and complete the requirements of the first two years of the PhD program.
- Year 4: students complete their JD requirements and thereafter are registered full-time in the PhD program in the Department of Economics.
- A thesis based on original research.

Time Limit: 6 years full-time

Course List

Not all courses are offered every year. Please refer to the department's website for a current list.

Preliminary Courses

ECO 1010H   Mathematics and Statistics for MA Regular Stream 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
ECO 2031H   Macroeconomic Theory II
ECO 2050H   Applied Microeconomics
ECO 2051H   Applied Macroeconomics
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
ECO 2101H   Advanced Microeconomic Theory II
ECO 2102H   Topics in Microeconomic Theory

History of Economic Thought

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

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
ECO 2305H   Topics in International Finance
ECO 2310H   Topics in International Trade

Econometrics

ECO 2400H   Econometrics I
ECO 2401H   Econometrics II
ECO 2402H   Advanced Econometrics
ECO 2403H   Topics in Econometrics
ECO 2404H   Empirical Applications of Economic Theory
ECO 2408H   Econometrics (for MA students only)
ECO 2410H   Applied Econometrics
ECO 2411H   Financial Econometrics

Macroeconomics and Monetary Economics

ECO 2103H   Topics in Macroeconomic Theory
ECO 2104H   Quantitative Macroeconomics
ECO 2500H   Monetary Theory I
ECO 2501H   Monetary Theory II
ECO 2502H   Advanced Monetary Theory

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

ECO 2503H   Financial Economics I
ECO 2504H   Financial Economics II
ECO 2505H   Macroeconometric Models for Policy Analysis and Forecasting
ECO 2506H   Economics of Risk Management
      (Prerequisite: ECO 358H [70%]/ECO 460H [70%]; Exclusion: ACT 349H, MGT 331Y, MGT 337Y, MGT 438H, RSM 332H, RSM 333H, RSM 435H)
ECO 2507H   International Financial Markets
ECO 2508H   Risk Management for Financial Managers
ECO 2512H   Topics in Business Cycles

Public Economics

ECO 2600H   Public Economics I
ECO 2601H   Public Economics II
ECO 2606H   Topics in Public Economics
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 2703H   Development Economics II
ECO 2704H   Topics in Growth and Development
ECO 2738H   Economic Development of China
JPE 2408Y   The Political Economy of Development

Labour Economics

ECO 2800H   Labour Economics I
ECO 2801H   Labour Economics II
ECO 2802H   Economics Inside Organizations
ECO 2803H   Methods for Empirical Microeconomics
ECO 2808H   Topics in Economics of the Family

Industrial Organization

ECO 2900H   Industrial Organization I
ECO 2901H   Industrial Organization II

Law and Economics

ECO 3501H   Economic Analysis of Law
ECO 3502H   Energy and Regulation
ECO 3504H   International Trade Regulation (also LAW 285)

Other Courses

ECO 2908H   Environmental and Resource Economics
ECO 3202H   Urban and Regional Economics
ECO 3300H   Political Economy
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 4060Y0   Graduate Research Seminar (Credit/No Credit)

Graduate Faculty

Full Members

Aguirregabiria, Victor - BA, MSc, PhD
Aivazian, Varouj - BS, MA, PhD
Alexopoulos, Michelle - BSc, MA, PhD
Anderson, Gordon - BA, MSc, PhD
Armstrong, Lawrin - BA, MA, MA, MDiv, PhD
Baker, Michael - BComm, MA, PhD
Benjamin, Dwayne - BSc, MA, PhD
Bobonis, Gustavo - BA, PhD
Brandt, Loren - BS, MS, PhD
Carr, Jack - BCom, MA, PhD
Damiano, Ettore Vincenzo - AB, MA, MPH, PhD
Duarte, Margarida - MEc, PhD
Duranton, Gilles - BSc, MSc, MA, PhD
Faig, Miquel - MEc, PhD
Gourieroux, Christian - PhD
Gunderson, Morley - BA, MA, PhD
Hamilton, Gillian - MEc, PhD
Horstmann, Ignatius - BA, PhD
Hosios, Arthur - BEng, MEng, MA, PhD *(Chair and Graduate Chair)*
Howson, Susan - BA, MSc, MA, PhD
Kambourov, Gueorgui - BA, MA, DPhil
Kuruscu, Burhanettin - BSc, MA, PhD
Maheu, John - BA, MEc, DPhil
McMillan, Robert - AB, DPhil
Melino, Angelo - BA, PhD
Oreopoulos, Philip - BA, MA, PhD
Osborne, Martin - BA, PhD *(Associate Chair, Graduate Studies, July 2012–Jan. 2013)*
Park, Andreas - MEc, MPH, PhD
Pesando, James - BA, MA, PhD
Pitchik, Carolyn - BA, MSc, PhD
Restuccia, Diego - BA, MA, PhD
Shi, Shouyong - BSc, MA, PhD
Siow, Aloysius - BA, PhD
Smart, Michael - BA, BA, PhD
Stabile, Mark - BS, MA, PhD
Trebilcock, Michael - LLB, LLM
Trefler, Daniel - BA, MPH, PhD
Turner, Matthew - BA, AM, PhD
Yatchew, Adonis - BA, MA, PhD
Zhu, Xiaodong - PhD

Members Emeriti

Berry, R Albert - BA, PhD
Cohen, Jon - BA, MA, PhD
Denny, Michael - BSc, PhD
Dewees, Donald - LLB, BScEE, PhD
Eddie, Scott - BS, PhD
Floyd, John - BComm, MA, PhD
Fuss, Melvyn - BSc, MA, PhD
Helleiner, Gerald - BA, PhD
Hollander, Samuel - BSc, PhD
Hynes, J Allan - BA
Jump, Gregory - BA, PhD
Mathewson, Gilbert - BCom, PhD
Moggridge, Donald - BA, MA, PhD
Munro, John - BA, MA, PhD
Reid, Frank - BA, MSc, PhD

Rotstein, Abraham - BA, PhD
Watson, Andrew - BComm, BA, MA
Wilson, Thomas - BA, AM, PhD

Associate Members

Burda, Martin - BSc, MA, PhD
Dasgupta, Kunal - BS, MA, MS, PhD
Deb, Rahul - MA, MPH, PhD
Halberstam, Yosh - BA, MA, PhD
Indart, Gustavo - BA, MA, PhD
Kroft, Kory - BA, MA, PhD
Malinova, Ekaterina - BS, MA, PhD
Mondria, Jordi - BA, MA, PhD
Morrow, Peter - BA, MA, PhD
Peski, Marcin - BA, MA, MA, PhD
Serrano, Carlos - BS, MA, MS, PhD
Shi, Xianwen - PhD
Stewart, Colin - BSc, MPH, MA, MSc, PhD
Suzuki, Junichi - BA, MA, PhD
Turner, Laura - PhD
Wolthoff, Ronald - PhD

Electrical and Computer Engineering

Faculty Affiliation

Applied Science and Engineering

Degree Programs Offered

Electrical and Computer Engineering – MASc, MEng, PhD

Collaborative Programs

The following collaborative programs 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

The Edward S. Rogers Sr. Department of Electrical and Computer Engineering offers graduate courses and research opportunities in four programs of study. The Master of Applied Science and Doctor of Philosophy are research-based degree programs and require the completion of a thesis. The Master of Engineering is a course-based degree program and may be taken on a full-time or part-time basis.

The **Master of Applied Science** program provides students with an opportunity to pursue advanced studies in the particular field of major interest and an opportunity to engage in research. The program requires full-time study for a minimum of one year, coursework, and a thesis on a research project.

The **Master of Engineering** 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 degree requirements, consisting of courses and an optional MEng project, are structured to be completed in one year by a full-time student.

The **Doctor of Philosophy** program is designed for those exceptional individuals who intend to pursue a career in fundamental or applied research. The program requires coursework and the successful completion of a research thesis.

The department offers research in the following areas:

1. Biomedical Engineering
2. Communications
3. Computer Engineering
4. Electromagnetics
5. Electronics
6. Energy Systems
7. Photonics
8. Systems Control

Details are available on the department's website at www.ece.utoronto.ca/research.htm.

Contact and Address

Web: www.ece.utoronto.ca
E-mail: darlene.gorzo@utoronto.ca
Telephone: (416) 978-3122
Fax: (416) 971-2993

The Edward S. Rogers Sr. Department of Electrical and Computer Engineering
University of Toronto
Sandford Fleming Building
Room 1107, 10 King's College Road
Toronto, Ontario M5S 3G4
Canada

Degree Programs

Electrical and Computer Engineering

Master of Applied Science

Minimum Admission Requirements

- 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

- Normally, 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 field will be required to complete additional courses.
- 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.
- 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.

- During the first year of registration, students are required to attend the ECE Colloquium and complete JDE 1000H *Ethics in Research.*

Normal Program Length: 6 sessions (2 years) full-time

Time Limit: 3 years full-time

Master of Engineering

Minimum Admission Requirements

- 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

- Normally comprise 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.
- All 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.
- The MEng degree program may be taken on a full-time or part-time basis.

Normal Program Length: 3 sessions (1 year) full-time

Time Limit: 3 years full-time; 6 years part-time

Doctor of Philosophy

Minimum Admission Requirements

- Admission may be granted by one of three routes:
  - 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
  - direct-entry for exceptionally qualified students with an appropriate bachelor's degree from a recognized university
  - transfer from the MASc to the PhD may be considered upon completion of 2.5 graduate full-course equivalents (FCEs) with an overall average of at least B+
- The department must be satisfied of the student's ability to do advanced research before admission may be granted.

Program Requirements

- 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.
- Direct-entry students will complete 4.0 graduate FCEs.
- 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 the first year of PhD registration, each student must pass a qualifying oral examination in the area of research.
- During the first year of PhD registration, students are required to attend the ECE Colloquium.
- During the first year of PhD registration, students are required to complete JDE 1000H *Ethics in Research* if they have not already done so in a previous University of Toronto master's program.
- Thesis.

Normal Program Length: 4 years full-time; 5 years direct-entry

Time Limit: 6 years full-time; 7 years direct-entry; 7 years transfer-from-master's

Course List

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 1041H	Numerical Solution of Field Problems
ECE 1042H	High-Voltage Engineering

ECE 1049H Special Topics in Power Devices and Systems
ECE 1055H Dynamics of HVdc/ac Transmission Systems
ECE 1057H Static Power Converters I—Principles of Operation and Applications
ECE 1058H Static Power Converters II—Dynamics and Control
ECE 1059H Special Topics in Power Systems
ECE 1063H Application of Power Devices
ECE 1065H Custom Power Controllers
ECE 1066H Design of High-Frequency Switch-Mode Power Supplies (SMPS)
ECE 1067H Switch-Mode Power Supplies (SMPS)
ECE 1068H Introduction to EMC
ECE 1072H AC Drive System Dynamics
ECE 1081H Application of the Finite Element Method to Field Problems
ECE 1082H Mathematics for Advanced Electromagnetics
ECE 1083H Harmonic Balance and the Finite Element Method
ECE 1084H Design of Advanced High-Efficiency Switched Mode Power Supplies
ECE 1085H Power System Optimization
ECE 1086H Power Management for Photovoltaic Systems
ECE 1089H Special Topics in Electromagnetics

Electromagnetics

ECE 524H   Microwave Circuits
ECE 1228H Electromagnetic Theory
ECE 1229H Advanced Antenna Theory
ECE 1236H Microwave and Millimetre-wave Techniques
ECE 1243H Topics in Electromagnetic Waves
ECE 1247H Nonlinear Optics
ECE 1251H Matter Wave Interaction
ECE 1252H Introduction to Computational Electrodynamics
ECE 1253H Active Microwave Circuits
ECE 1254H Modeling of Multiphysics Systems

Electronics

ECE 512H   Analog Filters
ECE 530H   Analog 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 1362H Filter Theory and Design
ECE 1364H Selected Topics in Solid State Circuit Design
ECE 1365H High Frequency Integrated Circuits
JEB 1365H Ultrasound: Theory and Applications in Biology and Medicine

ECE 1371H Advanced Topics in Analog Circuits
ECE 1373H VLSI Systems Design
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 1394H Technical Management of Modern IC Design

Biomedical Engineering

JEB 1365H Ultrasound Theory and Applications in Biology and Medicine
JEB 1375H Practical Optimization
JEB 1433H Medical Imaging
JEB 1444H Neural Engineering
JEB 1447H Sensory Communications
JEB 1451H Cellular Bioelectricity
BME 1452H Signal Processing for Bioengineering

Photonics

ECE 525H   Lasers and Detectors
ECE 527H   Passive Photonic Devices
ECE 1435H Applied Optics
ECE 1448H Quantum Mechanics for Engineers
ECE 1449H Photonics I (Exclusion: students who have taken ECE 527H cannot take ECE 1449H)
ECE 1450H Ultrafast Photonics
ECE 1460H Special Topics in Photonics
ECE 1461H Advanced Laser Processing
ECE 1467H Integrated Optical Circuit Design
ECE 1468H Electronic and Optical Properties of Quantum Dots
ECE 1469H Amorphous Semiconductors: Fundamentals and Applications
ECE 1470H Nanocomposite Materials for Luminescence, Detection, Modulation, and Switching
ECE 1471H Erbium-doped Fiber Amplifiers: Design and Characterizations
ECE 1472H Photonic Fabrication and Packaging
ECE 1473H Micro and Nano Fabrication Technologies for Compound Semiconductors
ECE 1474H Fibre Lasers and Amplifiers
ECE 1475H Bio Photonics
ECE 1476H High-efficiency Photovoltaics

Communications

ECE 1500H Stochastic Processes
ECE 1501H Error Control Codes
ECE 1502H Information Theory
ECE 1505H Convex Optimization

ECE 1506H	Communications and Signal Processing—Seminar I
ECE 1507H	Communications and Signal Processing—Seminar II
ECE 1508H	Special Topics in Communications
ECE 1510H	Advanced Inference Algorithms
ECE 1511H	Signal Processing
ECE 1515H	Smart Antennas
ECE 1516H	Visual Data Engineering
ECE 1517H	Biometric Systems
ECE 1518H	Seminar in Identity, Privacy, and Security
ECE 1520H	Data Communications I
ECE 1521H	Statistical Communication Theory
ECE 1522H	Data Communications II
ECE 1523H	Coded Modulation
ECE 1524H	Service Provider Networks
ECE 1528H	Special Topics in Data Communications
ECE 1529H	Adaptive Systems for Signal Processing and Communications
ECE 1530H	Multi-User Detection
ECE 1531H	Quantum Information Theory
ECE 1540H	Digital Telephony
ECE 1541H	Communication Networks I
ECE 1542H	Communication Networks II
ECE 1543H	Mobile Communications Systems
ECE 1544H	Optical Communication Networks
ECE 1545H	Bridges and Routers
ECE 1546H	Broadband Integrated Networks
ECE 1547H	Content-Based and Network Security
ECE 1548H	Advanced Network Architectures

Systems Control

ECE 557H	Systems Control
ECE 1617H	Large Scale System Theory and Control I
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 1640H	Analysis and Control of Stochastic Systems II
ECE 1641H	Multivariable Control Design
ECE 1643H	Special Topics in Control II
ECE 1644H	Large Scale System Theory and Control II
ECE 1646H	Digital Control
ECE 1647H	Introduction to Nonlinear Control Systems
ECE 1648H	Nonlinear Control Systems
ECE 1649H	Adaptive Control
ECE 1651H	Adaptive Signal Processing and Control
ECE 1652H	Stochastic Processes with Applications
ECE 1653H	Hybrid Systems and Control Applications
ECE 1654H	Optical Networks: A Systems Control Perspective
ECE 1655H	Optimal Control

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 1746H	Distributed Systems
ECE 1747H	Parallel Programming
ECE 1749H	Interconnection Networks for Parallel Computer Architectures
ECE 1752H	Real Time Systems and Software
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 1761H	Advanced Topics in Digital Hardware
ECE 1762H	Algorithms and Data Structures
ECE 1765H	File Structures and Storage Systems
ECE 1767H	Design for Test and Testability
ECE 1768H	Reliability of Integrated Circuits
ECE 1769H	Behavioural Synthesis of Digital Integrated Circuits
ECE 1770H	Trends in Middleware Systems—Selected Topics and Concepts
ECE 1771H	Quality of Service
ECE 1772H	Motion Analysis in Computer Vision
ECE 1773H	Advanced Computer Architecture
ECE 1774H	Sensory Cybernetics
ECE 1775H	Microphone Arrays: Theory and Applications
ECE 1776H	Computer Security, Cryptography and Privacy
ECE 1777H	Computer Methods for Circuit Simulation
ECE 1778H	Creativity and Programming of Mobile Devices
ECE 1779H	Introduction to Cloud Computing

Master of Engineering

ECE 2500Y	Master of Engineering Project

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
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
Chau, Tom - PhD
Chow, Paul - BASc, MASc, PhD
Dawson, Francis - BSc, BASc, MASc, 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
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
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 *(Associate Chair, Graduate Studies)*
Liebeherr, Jorg - DIPING, PhD
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
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
Steffan, J. Gregory - BASc, MS, 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
Zaky, Safwat - BSc, BSc, MSc, 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
Francis, Bruce - BASc, MEng, PhD
Iizuka, Keigo - BS, ME, MS, PhD
Joy, Michael - BSc, MASc, PhD
Kunov, Hans - MSc, PhD
Lee, E Stewart - BEng, MEng, 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
Venetsanopoulos, Anastasios - BE, MASc, MPH, PhD
Vranesic, Zvonko - BASc, MASc, PhD
Wonham, Walter - BEng, PhD
Zukotynski, Stefan - MASc, PhD

Associate Members

Anders, George - MSc, MMath, MEng, PhD
Apkarian, Jacob - BE, MASc, PhD
Demke Brown, Angela - PhD
Eckford, Andrew - BE, MASc, PhD
Hussein, Ali - BSc, BSc, MSc, PhD
Lostanlen, Yves - MSc, PhD
Maljevic, Ivo - PhD
Martin, Kenneth - BASc, MASc, PhD
Pagiamtzis, Kostas - PhD
Paul, Narinder - BM
Savor, Tony - PhD
Shahbazpanahi, Shahram - PhD
Stergiopoulos, Stergios - BSc, MSc, PhD
Tizghadam, Ali - PhD
Yang, Victor - BASc, MASc, MD, PhD

English

Faculty Affiliation

Arts and Science

Degree Programs Offered

English – MA, JD/MA, PhD
Fields (MA, PhD):
    American Literature
    Aspects of Theory
    Canadian Literature
    Medieval Literature
    Renaissance Literature
    Restoration and Eighteenth-Century Literature
    Romantic and Victorian Literature
    Twentieth-Century British and Irish Literature
    World Literatures in English
Field (MA only):
    Creative Writing

Collaborative Programs

The following collaborative programs 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. **Health Care, Technology and Place**
    • English, PhD
5. **Jewish Studies**
    • English, MA, PhD
6. **Sexual Diversity Studies**
    • English, MA, PhD
7. **South Asian Studies**
    • English, MA, PhD
8. **Women and Gender Studies**
    • English, MA, PhD
9. **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 programs. The **Master of Arts** and **Doctor of Philosophy** programs offer a broad background in British, Canadian, Aboriginal, American, and post-colonial literatures, a sophisticated command of current theoretical approaches, and exceptional support for significant research projects.

Contact and Address

Web: www.english.utoronto.ca
E-mail: deptofenglish.graduate@utoronto.ca
Telephone: (416) 978-2526
Fax: (416) 978-2836

Department of English
University of Toronto
Jackman Humanities Building
6th Floor, 170 St. George Street
Toronto, Ontario M5R 2M8
Canada

Degree Programs

English

Master of Arts

Fields

The MA in English degree is offered in 10 fields:

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

Minimum Admission Requirements

See additional requirements for Creative Writing field below.

- Applicants are admitted under the General Regulations of the School of Graduate Studies.
- 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 12–15 pages. The writing sample should be an accomplished piece of the applicant's own academic writing, such as an advanced undergraduate seminar paper. Details appear on the department's website.
- 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

See program requirements for Creative Writing field below.

- Students are required to complete ENG 6999Y *Critical Topographies: Theory and Practice of Contemporary Literary Studies in English* and 3.0 approved graduate full-course equivalents (FCEs) in English.
- Students must attain a B standing in each graduate course.
- The MA program may be taken on a part-time basis.

Field Creative Writing

Admission Requirements

- In addition to the above admission requirements for the MA program in fields pertaining to literature and theory, applicants wishing to enter the program in the field of Creative Writing must also submit a portfolio consisting of 20–25 pages of prose (drama, fiction, or creative non-fiction), and/or poetry. Details appear on the department's website.

Program Requirements

- Completion of 2.0 full-course equivalents (FCEs) in English, ENG 6950Y *Workshop in Creative Writing,* and a supervised Writing Project (the equivalent of a thesis). All students must complete *Workshop in Creative Writing* in the first year of their program.
- Upon completion of coursework, students undertake a book-length Writing Project in a genre of choice: poetry, drama, fiction, or creative nonfiction. 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 program may be taken on a part-time basis.

Normal Program Length: 3 sessions full-time all fields except Creative Writing; 5 sessions full-time Creative Writing field

Time Limit: 3 years full-time; 6 years part-time

Combined Juris Doctor/Master of Arts in English and Law

The Combined Juris Doctor/Master of Arts in Law and English is designed for students interested in studying the intersections of law and literature. The combined program 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 combined JD/MA program. Students are registered in the Faculty of Law for all three years of the program and in the Department of English as well for the last two years. The MA in English must be completed by coursework, not by thesis.

Minimum Admission Requirements

- Students are considered for the combined program after they have secured independent admission to the JD and MA programs.

Program Requirements

- Complete all requirements for the MA in English (coursework) during their two years of registration in the Department of English, i.e., ENG 6999Y *Critical Topographies,* and 2.0 approved full-course equivalents (FCEs) in English, including 1.0 from a set of designated Law and Literature program courses.
- Complete 44 credits at the Faculty of Law, including Law and Literature or a designated alternative, and satisfy all other requirements of the JD program.
- Complete a Directed Research Project or Independent Study Course on a topic related to law and literature that may count toward either the law or English requirements of the program.

Time Limit: 4 years full-time

Doctor of Philosophy

Fields

The PhD in English degree is offered in nine fields:

- American Literature
- Aspects of Theory
- Canadian Literature
- Medieval Literature
- Renaissance Literature
- Restoration and Eighteenth-Century Literature
- Romantic and Victorian Literature
- Twentieth-Century British and Irish Literature
- World Literatures in English

Minimum Admission Requirements

- General Regulations of the School of Graduate Studies.
- Admission by one of two routes:
  - normally, 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, or
  - in exceptional cases, 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.
- 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 15–20 pages).
- A statement of purpose.
- 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.
  - **Students admitted directly from a bachelor's degree** must take a total of 8.0 FCEs: 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,* and 5.0 additional FCEs in English, as approved by the department. The student must complete ENG 6999Y plus 2.0 FCEs in the first year 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 the third year 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.
  - **Students admitted with a master's degree** must take ENG 8000H *Texts, Theories, and Archives,* unless this or an equivalent course has already been taken; ENG 9500H *Professional Development*; ENG 9900H *Professing Literature;* and 3.0 additional FCEs in English, as approved by the department. In order to maintain good academic standing, and to continue in the PhD program, the student must complete all coursework by the end of the second year of the program, maintaining an average of at least an A-. A student who receives a final grade for a course lower than a B will no longer be in good academic standing.
  - **Every student** must take at least 2.0 FCEs outside the field of specialization. The student is encouraged to combine these courses in 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 either 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,* or ENG 6365H *Diasporic Englishes.* The requirement can also be satisfied by taking a special examination in Old English.

Language Requirement

- Demonstrated reading knowledge of French by May 31 of the third year of registration, in the case of a student admitted on the basis of a master's degree; otherwise, by May 31 of the fourth year 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 three-hour 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 August of their second year. Students entering the program directly from a bachelor's degree take the examination in August of their third year. 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 their third year. Students entering the program directly from a bachelor's degree generally take the examination no later than the end of the first session of the fourth year. 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 the third year (fourth year for students admitted directly from a bachelor's degree) 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 the second year of registration, in the case of a student admitted on the basis of a master's degree; otherwise, by November 1 of the third year 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 the second year of registration, in the case of a student admitted on the basis of a master's degree; otherwise, by February 15 of the third year 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 ten weeks from submission of the thesis for the department to complete the arrangements for the oral examination.

Normal Program Length: 4 years full-time; 5 years direct-entry

Time Limit: 6 years full-time; 7 years direct-entry

Course List

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 1081H	The Anglo-Saxon Riddle Tradition
ENG 1324H	The Figure of the Saint
ENG 1551H	The Canterbury Tales
ENG 2001H	Animal/Human Interfaces in Early Modern Culture
ENG 2002H	Early Modern Ecologies
ENG 2007H	Gender and Song in the Early Modern Context
JEH 2020H	Early Modern Diaspora: A Cross-disciplinary Seminar on the Literature and History of Exile
ENG 2021H	The Global Renaissance
ENG 2225H	Renaissance Lyric, in Theory
ENG 2235H	"1594"
ENG 2429H	Gender, Courtesy, and Civility in Early Modern England
ENG 2467H	Milton's Early Modern Nation
ENG 2485H	London Drama 1190–1590
ENG 2533H	Historicizing Shakespeare's Language: Discourse Analysis and Early Modern Studies
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 2653H	Renaissance Tragedy
ENG 2699H	Shakespeare's Sonnets
ENG 3044H	English Comedy, 1660–1737
ENG 3303H	Henry Fielding
ENG 3403H	Literature of the Seven Years War
ENG 3702H	A History of Violence: Eighteenth-Century Literature and the Politics of Pain
ENG 4216H	Romanticism and the Literature of Mobility
ENG 4503H	Darwin and Darwinism
ENG 4664H	Romantic Pastoral Revisited
ENG 4665H	Romantic Cities
ENG 4670H	Romanticism: Local and Global
ENG 4875H	George Eliot
ENG 4881H	Victorian Realism and the Victorian Realist Novel: Studies in Narrative
ENG 4883H	Rereading Victorian Realism
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 4947H	Studies in Victorian Poetry (Ballads and Romances)
ENG 5024H	Anglo-Jewish Fiction and Poetry of the Twentieth Century
ENG 5040H	Pathological Forgetting in Canadian Literature
ENG 5050H	Literature, Law and Liberal Culture in the United States 1776–1865
ENG 5058H	Magical Realism(s): Postcolonialism and Postmodernism
ENG 5206H	"Sir Beelzebub's Syllabub": The Poetry of Edith Sitwell
ENG 5275H	Elizabeth Bishop and Marianne Moore Studies in Poetics
ENG 5276H	The Vietnam War Era and Canadian Literature
ENG 5280H	American Realism and Reform
ENG 5282H	American Modernity
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 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 5608H	Modernist Narrative, and Embodied Cognition
ENG 5751H	Novelists and Terrorists
ENG 5795H	Canadian Literature at the Border
ENG 5787H	The Poetics of Haunting in Canadian Fiction
ENG 5810H	Rethinking Literary History: South Asian Writing in English
ENG 5905H	Introduction to African-Canadian Literature
ENG 5963H	James Joyce: Modernism, Modernity, Mythology
ENG 5966H	English Literature of the Second World War
ENG 5977H	Wallace Stevens in Context
ENG 6043H	Introduction to Contemporary Literary Theory
ENG 6044H	The Literature of Protection
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 6154H	Race and Cinema
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 6192H	Literature as History/History as Literature
ENG 6193H	Communities of Readers
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 6368H	Inventing Homes and Spaces in Diasporic South Asian Writing
ENG 6496H	Spatializing Marxism: the Postmodern "Spatial Turn"
ENG 6522H	Transnational Masculinity in Literature and Culture
ENG 6525H	Environmental Criticism and Postcolonial Discourse
ENG 6546H	Literature and the Resistance to Being
ENG 6530H	Death in Theory
ENG 6554H	Race and Gender in Indigenous Law and Literature
ENG 6817H	Text, Context, Intertext: the Touch of Evil Project
ENG 6825H	Fair Use, Fair Dealing, and Critical Reading Across Media
ENG 6842H	The Culture and Politics of Emotion Theory
ENG 6860H	Authoring
ENG 6950Y	Workshop in Creative Writing
ENG 6951H	The Pragmatics of Writing Biography
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

Graduate Faculty

Full Members

Ackerman, Alan - MA, PhD
Akbari, Suzanne - BA, MA, MPH, PhD
Astington, John - BA, MA, PhD
Bewell, Alan - MA, PhD *(Chair and Graduate Chair)*
Bolus-Reichert, Christine - BPhil, AM, PhD
Clarke, George Elliott - PhD
Cobb, Michael - BA, MA, AM, PhD
Columpar, Corinn - BA, PhD
Corman, Brian - AB, AM, PhD
DeLombard, Jeannine - AB, AM, AM, DPhil
Dickie, Simon - BA, MA, PhD
Dolan, Neal - BA, PhD
Downes, Paul - PhD
Dubois, Andrew - BA, PhD
Esch, Deborah - PhD
Esonwanne, Uzoma - BA, MA, PhD
Fenwick, Gillian - PhD
Galbraith, David - MA, PhD
Gillespie, Alexandra - BA, BSc, PhD
Goldman, Marlene Beth - BFA, MA, PhD
Greene, Richard - PhD
Harvey, Elizabeth - PhD
Healey, Antonette - BA, MA, PhD
Henderson, Greig - BA, MA, PhD
Hill, Colin - BA, MA, PhD

Jackson, Heather - BA, MA, PhD
Jaffe, Audrey - BA, PhD
Justice, Daniel - BA, MA, PhD
Kanaganayakam, Chelvanayakam - PhD
Keymer, Thomas - BA, MA, PhD
Lamb, Susan - BA, AM, DA
Leonard, Garry - BA, MA, PhD
Levene, Mark - BA, MA, PhD
Li, Hao - BA, PhD
Li, Victor - BA, MA, PhD
Lopez, Jeremy - BA, MA, DPhil
Lynch, Deidre - BA, PhD
Magnusson, Lynne - BA, MA, PhD
Matus, Jill - BA, MA, PhD
Morgenstern, Naomi - BA, MA, PhD
Most, Andrea - BA, MA, PhD
Mount, Nick - AM, PhD
Murray, Heather - BA, MA, PhD *(Director of Graduate Studies)*
Nyquist, Mary - BA, MA, PhD
Orchard, Andrew - DPhil, PhD
Patrick, Julian - PhD
Percy, Carol - BA, MA, DPhil
Quayson, Ato - BA, PhD
Reibetanz, John - PhD
Robins, William - BA, MPH, PhD
Ruti, Marjut - BA, MA, PhD
Salih, Sara - BA, DPhil
Sammond, Nicholas - BA, MA, PhD
Schmitt, Emmett - BA, MA, PhD
Seitler, Dana - BA, MA, PhD
Stevens, Paul - BA, MA, PhD
Sullivan, Rosemary - BA, MA, PhD
Syme, Holger Schott - BA, AM, PhD
Ten Kortenaar, Neil - PhD
Thomson, H. Leslie - BA, MA, PhD
Townsend, David Robert - 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 - PhD

Members Emeriti

Adamowski, Thomas - PhD
Allen, Peter - BA, MA, PhD
Asals, Frederick - AB, MA, PhD
Auster, Henry - BA, MA, PhD
Baird, John - PhD
Bentley (Jr), Gerald - BA, BLitt, DPhil
Brown, Russell - BA, MA, PhD
Bruckmann, Patricia - PhD
Cameron, Elspeth - BA, MA, PhD
Chamberlin, J Edward - BA, PhD
Chambers, Douglas - PhD
Cook, Eleanor - 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
Flahiff, Frederick - BA, PhD

Graziani, Rene' Ic - BA, MA, PhD
Halewood, William - AB, MA, PhD
Harvey, Elisabeth Ruth - PhD
Hayne, Barrie - BA, AM, PhD
Howard, William - BA, PhD
Hutcheon, Linda - BA, MA, PhD
Johnston, Alexandra - PhD
Kirkham, Michael - BA, MPH
Klausner, David - AB, PhD
Lancashire, Anne - BA, AM, PhD
Lancashire, D Ian - BA, MA, PhD
Leggatt, Alexander - BA, MA, PhD
Levenson, Jill - PhD
Macpherson, Jay - PhD
Marker, Frederick - AB, DFA
McLeod, Randall - AB, MA, PhD
Millgate, Jane - PhD
Millgate, Michael - BA, MA, PhD
Parker, Brian - PhD
Redekop, Magdalene - BA, MA, PhD
Rigg, Arthur George - BA, MA, DPhil
Saddlemyer, Ann - PhD, DLitt
Sidnell, Michael - BA, MA, PhD
Stock, Brian - AB, PhD
Vicari, E Patricia - BA, MA, PhD
Visser, Colin - BA, BLitt, PhD
Warkentin, Germaine - PhD

Associate Members

Baker, Deirdre - BA, MA, PhD
Blayney, Peter - BA, PhD
Campbell, Christian - BA, MPH, PhD
Dooley, Ann - BA, MA, PhD
Knight, Mark - BA, PhD
Larson, Katherine - BMus, AB, MPH, PhD
MacLean, Sarah - BA, MA, PhD
Maurice, Alice - BA, DPhil
McGill, Robert - PhD
Radovic, Stanka - PhD
Rubright, Marjorie - AB, MA, DLitt
Stern, Simon - BA, PhD, JD
Suzack, Cheryl - PhD
Switzky, Lawrence - BA, MA, PhD
Taylor, David - MA, MPH, PhD
Vernon, Karina Joan - BA, MA, PhD

European, Russian, and Eurasian Studies

Faculty Affiliation

Arts and Science

Degree Programs Offered

European, Russian, and Eurasian Studies – MA, JD/MA

Collaborative Programs

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

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

Overview

The **Master of Arts** program in European, Russian, and Eurasian Studies (MA ERES) 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, Russian, and Eurasian area.

The combined **Juris Doctor/Master of Arts** program provides specialized professional training for those seeking a career in law in the changing environment of the post-communist world. Firms selling or manufacturing in the region need 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, Russian, and Eurasian Studies.

Contact and Address

Web: www.utoronto.ca/ceres
E-mail: ceres.admin@utoronto.ca
Telephone: (416) 946-8938
Fax: (416) 946-8939

Centre for European, Russian, and Eurasian Studies
Munk School of Global Affairs
University of Toronto
Room 125N, 1 Devonshire Place
Toronto, Ontario M5S 3K7
Canada

Degree Programs

European, Russian, and Eurasian Studies

Master of Arts

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies.
- 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 sessions of full-time graduate study.
- Students will be required to take 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, taken in the first year of the program.
  - ERE 2000Y, the interdisciplinary core course. As part of ERE 2000Y, each student must write a 30- to 40-page master's essay, based on original research.
  - The remaining 1.0 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 internship or in an approved academic exchange abroad.

Normal Program Length: 6 sessions full-time

Time Limit: 3 years full-time

Combined Juris Doctor/Master of Arts (European, Russian, and Eurasian Studies)

Minimum Admission Requirements

- Applicants must separately apply to and be accepted by both the JD program and the MA (European, Russian, and Eurasian Studies) programs. They must satisfy the normal admission requirements for each program.

- Applicants who have completed a year in the European, Russian, and Eurasian Studies master's program or the first year of the JD can apply for admission to the combined program.

Program Requirements

- Year 1: Students are admitted to the Faculty of Law and receive deferred admission to the MA program in European, Russian, and Eurasian Studies. The first year of study will consist of requirements for the first year of the JD.
- Years 2, 3, and 4: Students pursue credits in Law as well as in European, Russian, and Eurasian Studies.
- The program allows students to receive the combined degree in four years of study instead of the five years needed to take the degrees separately.

Time Limit: 4 years full-time

Course List

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 Pro-Seminar to European, Russian, and Eurasian Studies

Optional

Anthropology

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

ANT 5146H	Colonial and Postcolonial Discourses
ANT 6020H	The Political Economy of Global/Local Dialectics
JSA 5147H	Language, Nationalism and Post-Nationalism

Comparative Literature

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

COL 5027H	Memory, Trauma, and History
COL 5031H	Russian Avant-garde Concepts in Art and Literature: Symbolism, Futurism, Constructivism, Formalism

Economics

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

ERE 1198H	Europe's Eastward Enlargement

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	Soviet and Kosher: Jewish Popular Culture in the Soviet Union 1917–1991
GER 1470H	Goethe in Context
GER 1661H	Modernism in Context
GER 1772H	The Politics of the Non-fiction Film
GER 1780H	Topics in German Visual Culture
GER 1830H	Topics in German Intellectual History
JGC 1660H	Modernism and the Other
JGC 1750H	Modernity and Its Discontents

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 1279H	World War II in East Central Europe (joint graduate/undergraduate)
HIS 1280Y	History and Soviet Cinema (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 1284H	The Baltic World
HIS 1285Y	The Ukrainian National Revival
HIS 1287H	Polish Jews Since the Partitions of Poland
HIS 1288H	Age of Experiments
HIS 1291H	Topics in Russian and Soviet Social History
HIS 1292H	The Russian Revolution
HIS 1293Y	Kievan Rus'
HIS 1294H	In the Soviet Archives: Text and History (joint graduate/undergraduate)
HIS 1295H	Soviet History Seminar
HIS 1297H	Problems of Political Survival in Eastern Europe Since 1848
HIS 1298H	Problems in the Social and Cultural History of Imperial Russia
HIS 1299H	Topics in Russian Intellectual History
JHP 1289Y	Twentieth-Century Ukraine
JHP 2301Y	Linguistic and Cultural Minorities in Europe (joint graduate/undergraduate)

Political Science

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

ERE 1184H	Polls and Public Opinion in Post-Communist Countries
ERE 1188H	European Identities: Ethnicity, Citizenship, and Culture

ERE 1192H   Majorities and Minorities in Southeastern Europe
ERE 1194H   State and Society in Post-Soviet Central Asia
ERE 1195H   Topics in Ukraine and Eastern Europe
ERE 1199H   Security, Sovereignty, and Great Power Politics in Central Asia
ERE 2001H   Gateway Pro-Seminar to European, Russian and Eurasian Studies
JHP 1289Y   Twentieth-Century Ukraine
JHP 2301Y   Linguistic and Cultural Minorities in Europe
POL 2004Y   Marxism
POL 2304Y   Soviet and Post-Soviet Politics
POL 2308Y   Politics and Government of Eastern Europe
POL 2324H   Ethnonationalism and State-Building: The Communist and Post-Communist Experience
POL 2325Y   The Politics of Post-Communism

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 1507H   Modern Croatian Bards
SLA 1517H   Modern Serbian Bards
SLA 1520H   Bosnia in Literature and Culture: Between Croats and Serbs
SLA 1521H   Topics in Modern Croatian Literature
SLA 1522Y   The Modern Serbian Novel
SLA 1537H   Political Drama from Dubrovnik to the Danube
SLA 1547H   South Slavic Folklore

Czech and Slovak Literatures

SLA 1600Y   Studies in Czech and Slovak Literatures
SLA 1601Y   Modern Czech Fiction
SLA 1603Y   Readings in Czech/Russian Literary Theory
SLA 1604Y   History of the Czech Literary Language
SLA 1605Y   Modern Czech Drama and Theatre
SLA 1606H   Czech Short Story

Estonian Literature

SLA 1420Y   Estonian National Identity
SLA 1421Y   Women in East European Fiction

Polish Literature

SLA 1304H   Staging God, Man, and History: Polish Drama and Theatre in Context
SLA 1305Y   Polish Fiction or A Disrupted Funeral of the Novel
SLA 1306H   Polish Poetry: Shaping the National Canon
SLA 1307H   Studies in Polish Poetry: Twentieth Century
SLA 1308Y   Topics in Polish Literature
SLA 1310H   Revolutions in the Theatre: Slanislavski, Meyerhold, Grotowski, and Kantor
SLA 1312Y   Modernism and Postmodernism in Polish Literature in the Twentieth Century and Beyond

SLA 1331H   Imagining "The Other" in Polish Literature and Culture

Russian Literature

SLA 1201Y   Studies in the Russian Novel
SLA 1203Y   Studies in Russian Modernism
SLA 1204H   Contemporary Russian Literature
SLA 1205H   Literary Scandals in Twentieth-Century Russia
SLA 1210H   Studies in Medieval Russian Literature
SLA 1211Y   Studies in the Russian Drama: Eighteenth to Twentieth Centuries
SLA 1212H   Gogol
SLA 1215H   Studies in Russian Literature of the Eighteenth Century
SLA 1225H   Russian Literature and Criticism in the 1860s
SLA 1230Y   Russian Emigré Literature, 1917–1945
SLA 1231H   Twentieth Century Russian Prose I: Modernism, Avant-garde, Totalitarianism
SLA 1232H   Russian Symbolism
SLA 1233H   Studies in Modern Russian Poets
SLA 1234H   Dostoevsky
SLA 1235H   Pasternak
SLA 1236Y   Pushkin
SLA 1237H   Twentieth-Century Russian Prose II: Internal and External Exile
SLA 1238H   Chekhov
SLA 1239H   Vladimir Nabokov's American Novels
SLA 1240H   L. Tolstoy
SLA 1243H   Leskov
SLA 1250H   Russian Journalism: 1830–1860, The Formative Decades
SLA 1251H   Pushkin and His Age
SLA 1900Y   Russian Poetry (for MA students only)

Ukrainian Literature

SLA 1039Y   Kyiv-Kiev-Kijow: A City Through Cultures and Centuries
SLA 1402Y   Studies in Ukrainian Modernism
SLA 1403Y   Studies in 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
SLA 1408H   Taras Shevchenko
SLA 1409H   Ukrainian Literature of the Seventeenth and Eighteenth Centuries

Slavic Linguistics

SLA 1101Y   History of the Russian Language (PR)
SLA 1102Y   Advanced Russian Language Skills
SLA 1103H   Comparative South Slavic Linguistics
SLA 1104Y   Old Church Slavonic
SLA 1105Y   Structure of Russian
SLA 1106H   Proseminar in Diachronic Slavic Linguistics
SLA 1107H   Comparative West Slavic Linguistics
SLA 1108H   Slavic Dialectology
SLA 1109H   Old Church Slavonic Translation Technique

SLA 1110H   Comparative Historical Slavic Linguistics
SLA 1112H   Tense, Aspect, and Mood in Slavic
SLA 1141H   History of the Ukrainian Language
SLA 1142H   Style and Structure of Ukrainian
SLA 1150H   Russian Since the Revolution
SLA 1160H   Proseminar in Synchronic Slavic
             Linguistics
SLA 1161H   An Introduction to Areal Linguistics: The
             Balkan Sprachbund

General Slavic

SLA 1036H   Metamorphosis of Modernity in Central
             Europe
SLA 1037Y   Theatre and Cinema *in Extremis*: Staging
             Twentieth-Century Aesthetics and Politics
SLA 1038H   Magic Prague

Reading and Research Courses

ERE 1997Y   Reading and Research III
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.

Graduate Faculty

Full Members

Ambros, Veronika - MA, PhD
Austin, Robert - BA, MA, PhD
Barnes, Christopher - BA, MA, PhD
Bathelt, Harald - MA, PhD
Bergen, Doris - MA, PhD
Bodemann, Michal - MA, PhD
Braun, Aurel - BA, MA, PhD
Brym, Robert - BA, MA, PhD
Day, Richard - BA, MA, PhD
Dimnik, Martin - BA, MA, MDiv, DPhil
Fenner, Angelica - BA, MA, PhD
Friedmann, Harriet - AB, MA, PhD
Goetschel, Willi - PhD
Hansen, Randall - BA, MPH, PhD, Canada Research
 Chair *(Director)*
Johnson, Robert - BA, PhD
Kivimae, Juri - AM, PhD
Knop, Karen - BSc, LLB, LLM, SJD
Kopstein, Jeffrey - BA, MA, PhD
Koznarsky, Taras - MA, PhD
Kramer, Christina - BA, MA, PhD
Krementsov, Nikolai - PhD
Lahusen, Thomas - MA, PhD
Livak, Leonid - BA, AM, PhD
Magocsi, Paul - BA, MA, MA, PhD, FRSC
Noyes, John - BA, MA, PhD
Orwin, Donna - PhD
Ostapchuk, Victor - BA, PhD
Penslar, Derek - BA, MA, PhD
Pruessen, Ronald - BA, MA, PhD
Retallack, James - BA, DPhil
Rossos, Andrew - BA, MA, PhD
Schallert, Joseph - PhD

Schwartz, Donald - BA, MA, PhD
Smith, Alison - AM, PhD *(Graduate Coordinator)*
Soldovieri, Stefan - AB, AM, DPhil
Solecki, Samuel - BA, MA, PhD
Stock, Markus - MA, PhD
Subtelny, Maria - BA, PhD
Tarnawsky, Maxim - BA, PhD
Trojanowska, Tamara - MA, PhD
Viola, Lynne - BA, MA, PhD
Wellman, Barry - BA, MA, PhD, PhD
Wittmann, Rebecca - AB, MA, PhD
Wrobel, Piotr Jan - MA, PhD
Zilcosky, John - BA, MA, MA, PhD

Members Emeriti

Bisztray, George - PhD
Dowler, E Wayne - BA, AM, PhD
Eddie, Scott - BS, PhD
Gregor, Richard - BA, MA, PhD
Griffiths, Franklyn Jc - BA, MIA, PhD
Lantz, Kenneth - BA, MA, PhD
Lindheim, Ralph - BA, MA
Solomon, Peter - BA, MA, PhD
Solomon, Susan - BA, MA, PhD

Associate Members

Jenkins, Jennifer - BA, MA, PhD
Korteweg, Anna - BA, MA, PhD
Schatz, Edward - PhD
Schonberg, Michal - BA, MA, PhD
Way, Lucan Alan - BA, PhD

Exercise Sciences

Faculty Affiliation

Kinesiology and Physical Education

Degree Programs Offered

Exercise Sciences – MSc, PhD

Collaborative Programs

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

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

Overview

The field of exercise sciences is interdisciplinary. The Graduate Department of Exercise Sciences offers **Master of Science** and **Doctor of Philosophy** programs for students interested in research, academic, and professional careers relating to:

1. Applied/exercise/environmental physiology
2. Metabolic and endocrinological aspects of physical activity
3. Motor control and motor learning
4. Muscle physiology
5. Physical fitness
6. Psychological aspects of sport and physical activity
7. Psychophysiological aspects of exercise and stress
8. Sociocultural aspects of sport and physical activity
9. Women's health and physical activity

Contact and Address

Web: http://physical.utoronto.ca/Graduate.aspx
E-mail: 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

Degree Programs

Exercise Sciences

Master of Science

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies.
- Applications must be received by February 1.
- An appropriate bachelor's degree with high academic standing from a recognized university, in physical education and health or a related discipline.

Program Requirements

- Successful completion of 2.5 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 from the student's area of study
  - 0.5 FCE from the Exercise Sciences offerings
  - 0.5 FCE from another department
  - 0.5 FCE from either Exercise Sciences or another department
  - 0.5 FCE in an appropriate methodology
- 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.
- The Master of Science program may be taken part-time.

Normal Program Length: 6 sessions full-time; 12 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

Doctor of Philosophy

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies.

- Completion of an MA or MSc with high academic standing from a recognized university, with a thesis in a related field.
- Provide satisfactory references pertaining to academic and research abilities.
- Applications must be received by February 1.

Program Requirements

Full-Time PhD

- Full-time registration (fall, spring, summer sessions) throughout the entire doctoral program.
- Successful completion of 3.0 full-course equivalents (FCEs) as follows:
  - 0.5 FCE in Exercise Sciences from the student's area of study
  - 1.0 FCE from the Exercise Sciences offerings
  - 0.5 FCE from another department
  - 0.5 FCE from either Exercise Sciences or another department
  - 0.5 FCE in an appropriate methodology
- All courses must be approved in advance by the student's 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 appointed by the School of Graduate Studies.
- The student's annual program plan must be approved by the supervisor and the Graduate Department of Exercise Sciences.

Flexible-Time PhD

- With the approval of the Associate Dean, Graduate Education and Research, 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.
- A flexible-time student is required to 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.

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

Normal Program Length: 4 years full-time; 6 years flexible-time

Time Limit: 6 years full-time; 8 years flexible-time

Course List

EXS 1150H	Safeguarding Youth in Sport
EXS 1152H	Psychological Factors in Sport-Related Concussion
EXS 5502H	Aging and Functional Capacity: an Integrative Approach
EXS 5503H	Adaptations to Habitual Activity
EXS 5505H	Neuromotor Behaviour: Sensory Information Utilization During Goal-Directed Movements
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	Theoretical Issues in the Sociocultural Study of Physical Activity and Health
EXS 5520H	Positive Psychology: Psychosocial Factors in Optimal Health and Wellness
EXS 5521H	Stress and Coping
EXS 7001H	Directed Reading in Exercise Sciences
EXS 7002H+	Directed Research Project in Exercise Sciences
JXP 5807H	Health Communications

Graduate Faculty

Full Members

Allison, Kenneth - MHSc, MSc, PhD
Atkinson, Michael - 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
Hamilton, Robert - BSc, MD, PhD
Heslegrave, Ronald - PhD
Jacobs, Ira - MD, PhD *(Dean)*
Kerr, Gretchen - BPHE, MA, PhD
Kidd, Bruce - BA, AM, MA, PhD
Leith, Larry - BA, MA, PhD
Lenskyj, Helen - BA, MA, PhD
Locke, Marius - BA, BSc, PhD
MacNeill, Margaret - BPHE, MA, PhD
Mainwaring, Lynda - BA, MHK, PhD

McKee, Nancy - MD
Plyley, Michael - PhD
Shek, Pang - BSc, MSc, PhD
Silverman, Frances - PhD
Thomas, Scott - BSc, MSc, PhD *(Associate Dean, Graduate Studies)*
Tremblay, Luc - BSc, MSc, PhD
Welsh, Timothy - BPHE

Members Emeriti

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

Associate Members

Amara, Catherine - BSc, MSc, PhD

Forestry

Faculty Affiliation

Forestry

Degree Programs Offered

Forest Conservation – MFC
Forestry – MScF, PhD

Collaborative Programs

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

Environmental Studies
- Forest Conservation, MFC
- Forestry, MScF, PhD

Overview

The Faculty of Forestry offers degree programs leading to the Master of Forest Conservation (MFC), Master of Science in Forestry (MScF), and the Doctor of Philosophy (PhD).

The **Master of Forest Conservation,** the Faculty's professionally oriented master's degree, 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 **Master of Science in Forestry** and **Doctor of Philosophy** programs are research/thesis-based degrees in areas of specialization relevant to faculty expertise and funding including, but not limited to, 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.

Contact and Address

Web: www.forestry.utoronto.ca
E-mail: gradprog@forestry.utoronto.ca
Telephone: (416) 946-7952
Fax: (416) 978-3834

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

Degree Programs

Forest Conservation

Master of Forest Conservation

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies.
- 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 but may be advised to take some appropriate background courses prior to admission.
- Additional documentation must be submitted to the department with completed application form, including transcripts, three references, a letter of interest in the MFC program, and a resumé. Full instructions and forms are available via the Faculty's website.

Program Requirements

- The program starts in September and requires full-time intensive involvement throughout. It is also possible to complete the MFC degree through part-time studies. Information on specific course requirements is included on the Faculty's website.
- A total of 7.5 full-course equivalents (FCEs) as follows: 5.5 FCEs in FOR courses plus 2.0 elective FCEs. Elective course selection will include the successful completion of one field course (0.5 FCE) from either FOR 3011H, FOR 1585H, or another related field course appropriate to the program and approved by the Graduate Coordinator. Students may take the remaining 1.5 elective FCEs in any session of their program.
- MFC Requirements and 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 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*
  alternate eligible field course
  - ○ **Year 2: Fall**
- • FOR 3006H Case Study Analysis in Forest Management
- • FOR 3008H Research Paper in Forest Conservation
- • Students may take the remaining 1.5 elective FCEs in any session of their program for a total program requirement of 7.5 FCEs.

Normal Program Length: 4 sessions full-time

Time Limit: 3 years full-time; 6 years part-time

Master of Science in Forestry

Minimum Admission Requirements

- • Applicants are admitted under the General Regulations of the School of Graduate Studies.
- • 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 program.
- • 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. Full instructions and forms are available via the Faculty's website.

Program Requirements

- • The program is prepared by the student in consultation with a supervisory committee and must be approved in sequence by the supervisory committee, the Graduate Committee of the Faculty of Forestry, and the School of Graduate Studies.
- • Under exceptional circumstances, a part-time program may be arranged on application to and approval by the Faculty of Forestry and the School of Graduate Studies.
- • Minimal requirements for this degree are:

- ○ 12 months of residence including two academic sessions.
- ○ 1.0 FCE, of which at least 0.5 FCE is taken within the Faculty. Depending on the student's background, additional or alternative coursework may be required.
- ○ Credit in FOR 1000H and FOR 1001H.
- ○ The preparation of a research thesis of acceptable quality and its oral defence.

Normal Program Length: 6 sessions full-time

Time Limit: 3 years full-time

Doctor of Philosophy

Minimum Admission Requirements

- • Students are admitted to the four-year PhD program via one of three routes:
  - ○ **Master's degree:** 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.
  - ○ **Direct entry:** in exceptional circumstances, an extraordinarily strong applicant with an appropriate bachelor's degree from a recognized university.
  - ○ **Transfer from MScF to PhD:** under certain specific conditions, outstanding registered MScF students may be considered by the end of their first year in the MScF program for transfer to the PhD program.
- • 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. Full instructions and forms are available via the Faculty's website.

Program Requirements

- • Minimum PhD program requirements (master's degree, direct entry, and transfer admission categories listed above):
  - ○ A minimum of three half courses (1.5 FCEs) must be taken. Transfer students can use courses completed towards meeting MScF program requirements to meet this requirement. 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.
  - ○ Credit in FOR 1000H and FOR 1001H. Transfer students require credit for FOR 1000H and FOR 1001H only once.
  - ○ Successful completion of a qualifying appraisal examination. This will ordinarily be taken prior to the completion of 16 months in the program.

○ Preparation and defence of a thesis that is an original and independent research work adding significantly to the existing body of knowledge.

○ A full-time commitment is expected for a minimum of the first two years in the forestry program.

Normal Program Length: 4 years full-time; 5 years direct-entry; 5 years transfer-from-master's

Time Limit: 6 years full-time; 7 years direct-entry; 7 years transfer-from-master's

Course List

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 brochure 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 1000H	Research Methods in Forestry (Credit/No Credit)
FOR 1001H[0]	Graduate Seminar (Credit/No Credit)
FOR 1280H	Wood Products and Processing
FOR 1282H	Green Process Chemistry
FOR 1284H	Adhesion Sciences and Applications
FOR 1288H	Design and Manufacturing of Biomaterials
FOR 1294H	Bioenergy and Biorefinery Technology
FOR 1321H	Stand Structure and Dynamics
FOR 1331H	Advanced Forest Entomology
FOR 1412H	Natural Resource Management I (Directed Studies Course)
FOR 1413H	Natural Resource Management II (Directed Studies Course)
FOR 1414H	Forest Fire Management Systems
FOR 1415H	Decision-Making in Forest Management
FOR 1416H	Forest Fire Danger Rating
JFS 1460H	Community Based Natural Resource Management
FOR 1555H	Wildlife Ecology and Conservation
FOR 1570H	Ecological Principles of Agroforestry
FOR 1575H	Urban Forest Conservation
FOR 1585H	Urban Forest Conservation Field Camp
FOR 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)

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.

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	Research Paper 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

Graduate Faculty

Full Members

Carleton, Terence - BSc, MSc, PhD
Caspersen, John - BA, PhD
Cooper, Paul - BEd, BSc, MSc, PhD
Kant, Shashi - BE, MA, PhD
Malcolm, Jay - BSc, MSc, PhD *(Graduate Coordinator)*
Martell, David - BASc, MASc, PhD
Price, Anthony - BSc, MSc, PhD
Sain, Mohini - PhD *(Dean)*
Singh, Neera - BSc, MF, PhD
Smith, C.Tattersall - BA, MS, PhD
Smith, Sandy - BAgrSc, MSc, PhD
Thomas, Sean - BA, PhD
Yan, Ning - BSc, PhD, Reg Professional Engineer

Members Emeriti

Aird, Paul - BSc, MS, PhD
Balatinecz, John - BSF, MF, PhD
Blake, Terence - DipFor, BScF, STB, MF, PhD
Bryan, Rorke - BA, PhD
Hubbes, Martin - PhD
Nautiyal, Jagdish - BSc, MF, PhD
Roy, Dibyendu - BSc, MA, DPhil
Timmer, Victor - BScF, MScF, PhD

Associate Members

Bellocq, Isabel - BSc, MSc, PhD
Burgess, Darwin - BScF, PhD
Burke, Dawn - BSc, PhD
Chen, Jiaxin - MASc, PhD
Cole, William - BScF, MScF, PhD
Colombo, Stephen - BScF, MScF, PhD
de Groot, W.J. - BSc, PhD
Dumas, Michael - BSc, MScF, PhD
Flannigan, Mike - BSc, MS, PhD
Fleming, Richard - BSc, PhD
Gordon, Andrew - PhD

Heyd, Darrick V - BSc, PhD
Jones, Trevor A - BSc, MSc, PhD
Kayahara, Gordon John - MSc, PhD
Kenney, Andrew - BSc, MSc, PhD
Krigstin, Sally - MSc, PhD
Kuhlberg, Mark - MA, PhD
Laaksonen-Craig, Susanna - MSc, PhD
Man, Rongzhou - MSc, PhD
Maynard, Alex - BA, MA, MPH, PhD
McKenney, Daniel - BSc, MSc, PhD
McLaughlin, James W. - BS, MSc, PhD
Moola, Faisal - BSc, MSc, PhD
Morris, Dave - BScF, MSc, PhD
Nanang, David - BSc, MScF, PhD
Navar, Jose de Jesus - BScF, MScF, PhD
Naylor, Brian - BScF, PhD
Nol, Erica - BS, MSc, PhD
Noland, Thomas L. - BScF, MScF, PhD
Oksman, Kristiina - MSc, PhD
Parker, William C. - BScF, MScF, PhD
Peng, Changhui - BSc, PhD
Ray, Justina - BS, MS, PhD
Regniere, Jacques - BSc, PhD
Richards, Evelyn - BSc, MSc, PhD
Sastry, Cherla - BSc, MSc, PhD
Schleifenbaum, Peter C. - PhD
Smith, Margaret Anne (Peggy) - BSc, PhD
Spiecker, Heinrich - MSc, PhD
Stocks, Brian - BScF, MScF
Thompson, Ian D. - BSc, MSc, PhD
Tjong, Jimi - BASc, MASc, PhD
Wang, Sen - BA, MSc, PhD
Webster, Kara L. - BSc, MSc, PhD
Wotton, Brian Michael - BSc, PhD
Wylie, Stephen - BSc, PhD
Zimmerman, Barbara - BSc, MSc, PhD

French Language and Literature

Faculty Affiliation

Arts and Science

Degree Programs Offered

French Language and Literature – 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**
   • French Language and Literature, MA, PhD
2. **Women and Gender Studies**
   • French Language and Literature, MA, PhD

Overview

The **Master of Arts** program is both a self-contained program and the first stage towards doctoral studies. It has two objectives: (a) to allow the student to develop a thorough knowledge of the discipline through a program of coursework in French literary studies or linguistics and (b) 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.

The **Doctor of Philosophy** 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 either the Associate Chair or Graduate Coordinator 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.

Contact and Address

Web: www.french.utoronto.ca
E-mail: french.graduate@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

Degree Programs

French Language and Literature

Master of Arts

Minimum Admission Requirements

Applicants are admitted under the General Regulations of the School of Graduate Studies in addition to the following departmental regulations:

- 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** take the three graduate seminars in literature (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** take the graduate seminars in linguistics (FRE 1103H, FRE 1104H, and FRE 1125H) 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 1125H).

- Up to 1.0 FCE may be taken outside the department.
- Normally, part-time students take the graduate seminars in literature or the graduate seminars in linguistics during the first year of their programs.

Normal Program Length: 4 sessions full-time; 5 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

Doctor of Philosophy

Minimum Admission Requirements

Students are admitted under the General Regulations of the School of Graduate Studies, in addition to the following departmental regulations:

- Admission to the PhD program is available via one of two routes:
  - 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 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.
- A student admitted on the basis of an appropriate **bachelor's degree** must complete 4.0 FCEs during the first year of the program and 3.5 additional FCEs during the second year. With the department's permission, the student may take up to 1.0 FCE in the first year of the program, and

1.0 FCE in the second year, outside the department. Students in literature take FRE 1202H, FRE 1203H, FRE 1204H, and FRE 1201H as part of their program; students in linguistics take FRE 1103H, FRE 1104H, FRE 1125H, and FRE 1201H as part of their program. To remain in good academic standing and to continue in the PhD program, a student must complete 4.0 FCEs, with an average grade of at least an A-, by the end of the first year of the program and complete the remaining 3.5 FCEs, maintaining an average of at least an A-, by the end of the second year.

- A student admitted on the basis of an appropriate **master's degree** must complete 3.5 FCEs during the first year of the program. With the department's permission, the student may take 1.0 FCE outside the department. Students in literature take FRE 1202H, FRE 1203H, and FRE 1204H, unless these courses or their equivalents have already been completed, and FRE 1201H as part of their program; students in linguistics take FRE 1103H, FRE 1104H, and FRE 1125H unless already completed, and FRE 1201H as part of their program. To remain in good academic standing and to continue in the PhD program, a student must complete 3.5 FCEs, with an average grade of at least an A-, by the end of the first year of the program.

- Thesis topic. By September 15 of the second year of registration, in the case of a student admitted to the PhD program on the basis of a master's degree, otherwise by September 15 of the third year of registration, a student 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.

- Language requirements. By the end of the first year of the PhD program, in the case of a student admitted on the basis of a master's degree, otherwise by the end of the second year of the PhD program, the student must demonstrate a reading knowledge of Old French or of another language (excluding French or English), as approved by the department.

- Field examination. No later than the second session of the second year of registration in the PhD program, in the case of a student admitted on the basis of a master's degree, otherwise, no later than the second session of the third year of registration, a student must pass the two parts of the field examination:
  - A written examination (to be taken by March 15) designed to test the student's knowledge of the general area in which his or her research is located; the questions for the examination are given to the student a week in advance of the examination.
  - An oral examination (to be taken by April 30) based on a written thesis proposal of 15–20

pages, plus bibliography, designed to test the student's readiness to proceed with thesis research.

- Between the completion of the field examination components and the oral examination on the thesis, the student 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.

Normal Program Length: 4 years full-time; 5 years direct-entry

Time Limit: 6 years full-time; 7 years direct-entry

Course List

Linguistics Courses

FRE 1103H	Séminaire de linguistique I : Phonétique et phonologie
FRE 1104H	Séminaire de linguistique II : Syntaxe
FRE 1124H	Syntaxe de l'ergativité : le français dans tous les cas
FRE 1125H	Séminaire de linguistique III : Morphologie et sémantique
FRE 1129H	Didactique du français langue seconde: quelle(s) méthode(s) pour quel(s) apprentissage(s)?
FRE 1133H	L'acquisition du français langue première
FRE 1137H	Les mots complexes : études de cas en morphologie
FRE 1140H	La syllabe : études expérimentales et théoriques

Linguistic and Literature Courses

| FRE 1201H | Méthodes de recherche (Credit/No Credit) |

Literature Courses

FRE 1202H	Séminaire de littérature 1 : théorie
FRE 1203H	Séminaire de littérature 2 : période
FRE 1204H	Séminaire de littérature 3 : genre
FRE 1306H	Chanson de Roland
FRE 1311H	Sexe, mensonge et littérature: le *Roman de Renart*
FRE 1612H	Satire et parole libre dans la littérature des XVI˚ et XVII˚ siècles
FRE 1813H	Littérature de contact et pensée anthropologique en France du XVI˚ au XVIII˚ siècle
FRE 1901H	Le récit de voyage au XIX˚ siècle
FRE 2004H	Formes et voies romanesques de l'extrême contemporain
FRE 2035H	Autour de l'intime en France: les écrits contemporains des femmes

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

FRE 2037H	Écriture et folie
FRE 2039H	Roman et critique sociale aux XX˚ et XXI˚ siècles
FRE 2078H	Altérité : formes et significations
FRE 2107H	Le récit fantastique québécois : formes et transformations
FRE 3004H	Rencontres et compagnonnages au cœur de l'œuvre
FRE 3005H	Méthodologie de l'analyse du dialogue romanesque
JFF 1100H	Surrealism and French Cinema

Other Courses

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

Cross-Listed Courses

Book History and Print Culture

| BKS 1000Y | Book History and Print Culture |
| BKS 2000H | Advanced Seminar in Book History and Print Culture |

Medieval Studies

| MST 3154H | British History in French: Wace, Brut |
| MST 3155H | Chrétien de Troyes, Perceval |

Graduate Faculty

Full Members

Bhatt, Parth - BA, MA, PhD
Brousseau, Anne-Marie - PhD
Clandfield, David - BA, MA, PhD
Cozea, Angela - BA, MA, PhD
Danesi, Marcel - BA, MA, PhD
De Kerckhove, Derrick - BA, MA, PhD
Elkabas, Charles - BA, MA, PhD
Havercroft, Barbara - BA, MA, PhD *(Associate Chair and Coordinator of Graduate Studies)*
Kullmann, Dorothea - PhD
Le Huenen, Roland - DESL
LeBlanc, Julie - BA, PhD
Lord, Michel - BA, MA, PhD
Massam, Diane - BA, MA, PhD
Michelucci, Pascal - BA, MA, PhD *(Chair and Graduate Chair)*
Motsch, Andreas - PhD
Ndayiragije, Juvenal - PhD
Nikiema, Emmanuel - PhD
O'Neill-Karch, Mariel - BA, MA
Paterson, Janet - BA, MA, PhD
Pirvulescu, Mihaela - MA, PhD *(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 - PhD

Members Emeriti

Bertrand-Jennings, Chantal - LESL, PhD
Boursier, Nicole - BLitt, DESL, PhD
Cloutier-Wojciechowska, Cecile - BA, MA, LESL, DUP
Dainard, Alan - BA, MA, PhD
Falconer, Alexander - MA, DDELUN
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
McClelland, John Alan - PhD
Merrilees, Brian - PhD, FRSC
Nesselroth, Peter - BA, MA, PhD
Perron, Paul - PhD
Smith, David - BA, PhD, PhD
Taylor, Robert - PhD
Tolton, Cameron - PhD
Wooldridge, Terence - BA, DDELUN

Associate Members

Ahmed, Maroussia - MA, LESL, DDELUN
Auger, Julie - BA, MA, PhD
Baudot, Alain - DipdESup, LESL
Berube, Georges - BA, MA, PhD
Cahill, James - PhD
Cobb, Michael - BA, MA, AM, PhD
Cochelin, Isabelle - DipdESup, BA, MA, PhD
Colantoni, Laura - MA, PhD
Crosta, Suzanne - BA, MA, PhD
Cuervo, Maria Cristina - PhD
Glinoer, Anthony - BA, MA, PhD
Holtz, Gregoire - LESL, MA, DLitt
Irvine, Margot - MA, PhD
Jennings, Eric - BA, PhD
Labrie, Normand - BA, MA, PhD
Liakin, Denis - BA, MA, PhD
Mavrikakis, Catherine - BA, MA, PhD
Nagy, Naomi - BA, PhD
Perez-Leroux, Ana Teresa - MA, PhD
Pioffet, Marie-Christine - BLitt, MA, DLitt
Rosienski-Pellerin, Sylvie - BA, MA, MA, PhD
Roulston, Christine - BA, MA, PhD
Sarabia, Rosa - BA, PhD
Schallert, Joseph - PhD
Spada, Nina - BA, BA, MA
Ten Kortenaar, Neil - PhD
Thomson, Clive - BA, MA, PhD

Geography

Faculty Affiliation

Arts and Science

Degree Programs Offered

Geography – MA, MSc, PhD
Fields:
    Urban/Economic Geography
    Physical Geography and Natural Systems
    Environmental Geography and Resource
    Management
    Historical, Social, and Cultural Geography
    Spatial Information Systems
Planning – MScPl, PhD
Fields (MScPl):
    Urban Planning and Development
    Environmental Planning
    Social Planning and Policy
    Economic Planning and Policy
    Urban Design
Fields (PhD):
    Cities in Global Context: Economic Development
    and Social Planning
    Environmental and Sustainability Planning
    Urban Development, Design, and the Built
    Environment
Urban Design Studies – MUDS

Collaborative Programs

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

1. **Aboriginal Health**
   - Geography, MA, PhD
2. **Asia-Pacific Studies**
   - Geography, MA
   - Planning, MScPl
3. **Community Development**
   - Planning, MScPl
4. **Diaspora and Transnational Studies**
   - Geography, MA, MSc, PhD
5. **Dynamics of Global Change**
   - Geography, PhD
6. **Environment and Health**
   - Geography, MA, MSc, PhD
   - Planning, MScPl, PhD
7. **Environmental Studies**
   - Geography, MA, MSc, PhD
   - Planning, MScPl, PhD
8. **Ethnic and Pluralism Studies**
   - Geography, MA, PhD
9. **South Asian Studies**
   - Geography, MA, PhD
10. **Women and Gender Studies**
    - Geography, MA, MSc, PhD

Overview

The Department of Geography, which includes the program in Planning, offers facilities for research leading to the degrees of **Master of Arts** (MA), **Master of Science** (MSc), **Master of Science in Planning** (MScPl), and **Doctor of Philosophy** (PhD) in either Geography or Planning. The PhD program prepares students for academic careers in teaching and research. Some may also pursue an advanced career in the public or non-profit sectors, given the rising demand outside of academia for people with a PhD credential.

In Geography, faculty conduct research in the following areas: geomorphology, climatology, hydrology, biogeography, pedology, environmental assessment and sustainable natural resource management, international development, industrial innovation, urban and economic geography, cultural and historical geography, gender studies, social geography, regional analysis, the history and philosophy of geography, remote sensing, computer cartography, spatial statistics, topics in land/geographic information systems, and quantitative analysis. The territories of special concern are Canada, the United States, Latin America, the Caribbean, Northwestern and Central Europe, East Asia, South Asia, and the former Soviet Union.

In Planning, faculty work involves social, economic, cultural, and other vital considerations. In spatial scale, it ranges from the design of individual communities to policy planning at the national level to international development. Planning specializations include land use, transportation, urban design, social policy, public health, economic development, international development, and the environment.

Contact and Address

Web: www.geog.utoronto.ca
E-mail:
    Geography and PhD programs:
      geograd@geog.utoronto.ca;
    MSc Planning and MUDS programs:
      planning.msc@geog.utoronto.ca
Telephone:
    Geography and PhD programs: (416) 978-3377
    MSc Planning and MUDS programs:
      (416) 946-0269
Fax: (416) 946-3886

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

Degree Programs

Geography

Master of Arts and Master of Science

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies.
- 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

- Two geography programs and various collaborative programs are available; selection is made with the approval of the department. Within most of these programs, students may receive a master of science degree if their research contains a substantial physical science component and if two-thirds of their coursework comprises Geography courses accepted by the department as physical science courses.
- 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.
- **Option I: Thesis**. 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 the core course (0.5 FCE in GGR 1105H for MA students, GGR 1200H for MSc students), 0.5 FCE elective in geography or from an approved list of courses available from the department, and an additional 0.5 FCE in elective courses that may be taken inside or outside the department.
- **Option II: Research Paper**. Students will undertake research leading to the preparation of a major research paper (GGR 1100Y), in conjunction with the equivalent of 3.0 graduate FCEs in coursework including the core course (0.5 FCE in GGR 1105H for MA students, GGR 1200H for MSc students), 1.5 FCE elective courses in geography or from an approved list of courses available from the

department, and an additional 1.0 FCE elective courses, 0.5 FCE of which must be taken outside the department.
- **Environmental Studies Research Paper (Collaborative MA/MSc Program):** 2.5 FCEs, of which 1.5 FCEs must be taken in the Department of Geography (including the core course) and 1.0 at the Centre for Environment (0.5 FCE must be the CFE core course). Students are also required to undergo a three-month internship and to prepare and defend a research paper (GGR 1100Y). The program is normally completed in 12 months. See the Environmental Studies (collaborative program) entry in this calendar.
- **Environmental Studies Thesis (Collaborative MA/MSc Program)** 2.0 FCEs, of which 1.0 FCE must be taken in the Department of Geography (including the core course) and 1.0 FCE at the Centre for Environment. Students are also required to prepare and defend a thesis. See the Environmental Studies (collaborative program) entry in this calendar.
- **Asia Pacific Studies Thesis (Collaborative MA Program)** 2.0 FCEs, of which 1.0 FCE must be taken in the Department of Geography (including the core course) and 1.0 FCE at Asia Pacific Studies. Students are also required to prepare and defend a thesis.
- **Ethnic and Pluralism Studies Thesis (Collaborative MA Program)** 2.0 FCEs, of which 1.0 FCE must be taken in the Department of Geography, which includes the core course GGR1105H and 0.5 FCE on a topic in ethnicity. Students are also required to complete the Ethnic and Pluralism Studies core course and an additional 0.5 FCE course on a topic in ethnicity from outside of geography. Students are also required to prepare and defend a thesis.

Normal Program Length: 3 sessions full-time; 6 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

Doctor of Philosophy

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies.
- An appropriate master's degree from a recognized university, with a minimum standing equivalent to at least a University of Toronto A-. 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

- 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.
- All students in PhD programs must:
  - Complete a minimum of 2.0 FCEs in coursework and, depending on the field of specialization, up to an additional 1.0 FCE. Students who enter the PhD program from a bachelor's degree must complete 1.5 FCEs in addition to the minimum requirement of 2.0 FCEs. Students who hold an appropriate master's degree but are changing disciplines or require further preparatory work may be required to complete additional coursework. Coursework requirements for each specialization are detailed below:
    - Physical Geography and Natural Systems and Spatial Information Sytems fields of specialization: 2.0 FCEs, including the 0.5 FCE core course GGR 1200H, 0.5 FCE in geography courses or from a list of approved courses available from the department, and an additional 1.0 FCE in elective courses, at least 0.5 FCE of which must be taken in other departments. Students who have taken the core course (GGR 1200H) at the master's level may take an alternative geography course.
    - Environmental Geography/Resource Management, Urban/Economic Geography, Historical/Social/Cultural Geography: 3.0 FCEs, including the 0.5 FCE core course GGR 1110H, 1.0 FCE in geography courses or from a list of approved courses available from the department, and at least 0.5 FCE but no more than 1.5 FCE courses in other departments.
    - In exceptional cases, at the discretion of the department, graduate courses completed at the master's level at the University of Toronto may be counted towards meeting some course requirements. However, all PhD students must complete a minimum of 2.0 FCEs after entering the PhD program.
  - Submit a research statement concerning the proposed PhD topic and the scope of the PhD examination by the end of April in year one.
  - Pass a PhD examination in the general field in which research is being undertaken by the end of year one.
  - Upon the recommendation of their committee, be required to acquire a knowledge of a foreign language necessary for their research.
  - Submit a research proposal that is acceptable to their research committee by the end of the first session in year two.
- Unless otherwise specified, two years of residence are required, 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.
- PhD degree program requirements are fully described in the Graduate Geography Handbook and the department's website.

Normal Program Length: 4 years full-time; 5 years direct-entry

Time Limit: 6 years full-time; 7 years direct-entry

Course List

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 1200H	Physical Geography Core Course
GGR 1110H	Issues in Geographic Thought and Practice
JPG 1111H	Research Design

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

Physical Geography

GGR 1202H	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 1302H	Advanced Hydrology and Water Quality
GGR 1303H	Paleoecology and Paleoclimatology
GGR 1305H	Biogeography
GGR 1306H	Field Experimental Techniques in Hydroclimatology
GGR 1314H	Topics in Physical Oceanography

Environmental and Resource Geography

JPG 1402H	Environment and Development
JPG 1403H	Political Ecology of African Environments
JPG 1404H	Issues in Global Warming
JPG 1406H	Sustainable Building Energy Use and Supply
JPG 1407H	Efficient Use of Energy
JPG 1408H	Carbon-Free Energy
JPG 1410H	Institutional and Organizational Ecology
JGE 1413H	Workshop in Environmental Impact Assessment

JPG 1414H   Cities as Ecosystems
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 1508H   Planning for the Urban Poor in Developing Countries

Urban and Economic Geography

JPG 1501H   The Political Economy of Cities
JPG 1502H   Global Urbanism and Cities of the Global South
JPG 1507H   The Geography of Housing and Housing Policy
JPG 1509H   Feminism, Postcoloniality and Development
JPG 1510H   Recent Debates on Urban Form
JPG 1512H   Place, Politics and the Urban
JPG 1514H   The Role of the Planner: Making a Difference
JPG 1516H   Declining Cities
JPG 1518H   Sustainability and Urban Communities
JPG 1554H   Transportation and Urban Form
JPG 1556H   Transportation Systems Analysis: An Exploration of Concepts, Methods, Applications, and Emerging Issues
JPG 1607H   Geography of Competition
JGE 1609H   Cities, Industry and the Environment
JPG 1614H   Regional Development and Policy
JPG 1615H   Planning and the Social Economy
JPG 1616H   The Cultural Economy
JPG 1670H   Regional Economic Analysis
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 1672H   Land and Justice
JPG 1702H   Historical Urban Geography and Planning
GGR 1705H   Historical Geographies of Modernity
JPG 1706H   Violence & Security
JPG 1710H   Historic Preservation Planning
JPG 1713H   Place, Design, and Landscape
GGR 1714H   Cultural and Critical Geographies
JPG 1802H   Political Spaces I

JPG 1804H   Space, Power and Geography: Understanding Spatiality
JPG 1805H   Transnationalism, Diaspora and Gender
JPG 1812H   Planning for Change: Community Development in Practice
JPG 1815H   Political Economy, the Body, and Health

Geographical Information Analysis

JPG 1906H   Geographic Information Systems
GGR 1907H   Advanced Geographic Information Systems
GGR 1911H   Remote Sensing
GGR 1912H   Advanced Remote Sensing
JPG 1914H   Spatial Information Systems
GGR 1922H   Topics in Geographical Information Science

Planning

Master of Science in Planning

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies.
- 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

- 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.
- Progress into the second year 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.
- Students are required to pursue a planning internship (PLA 4444H) between the first and second years 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.
- The program consists of 8.0 FCEs, taken over two years. This includes the required 3.5 FCEs in core courses. A further 4.5 FCEs (exclusive of PLA 4444H) are 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 specialization in one of the following five fields: Urban Planning and Development, Environmental Planning, Social

Planning and Policy, Economic Planning and Policy, and Urban Design.

Normal Program Length: 6 sessions full-time; 12 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

Doctor of Philosophy

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies, in addition to the following departmental regulations.
- 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

- Successful completion of coursework, a comprehensive examination, a thesis proposal, and a thesis.
- Students with a master's degree in planning comparable to the University of Toronto MSc in Planning are required to take 3.0 full-course equivalents (FCEs) of which 1.5 FCEs are core courses and 1.5 FCEs are 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.
- Visit the Planning website, www.geog.utoronto.ca, for more details.

Normal Program Length: 4 years full-time; 5 years direct-entry

Time Limit: 6 years full-time; 7 years direct-entry

Course List

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 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

Core Courses for PhD 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

PLA 1149H	Independent Study
PLA 1150H	Planning Field Trip Course
JPG 1402H	Environment and Development
JPG 1403H	Political Ecology of African Environments
JPG 1404H	Issues in Global Warming
JPG 1406H	Sustainable Building Energy Use and Supply
JPG 1407H	Efficient Use of Energy
JPG 1408H	Carbon-Free Energy
JPG 1410H	Institutional and Organizational Ecology
JGE 1413H	Workshop in Environmental Impact Assessment
JPG 1414H	Cities as Ecosystems
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 1501H	The Political Economy of Cities
JPG 1502H	Global Urbanism and Cities of the Global South
JPG 1503H	Space, Time, Revolution
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 1507H	Housing and Housing Policy
JPG 1508H	Planning for the Urban Poor in Developing Countries
JPG 1509H	Feminism, Postcoloniality and Development
JPG 1510H	Recent Debates on Urban Form
JPG 1512H	Place, Politics and the Urban
JPG 1514H	The Role of the Planner: Making a Difference
JPG 1516H	Declining Cities
PLA 1516H	Special Topics in Planning II
PLA 1517H	Special Topics in Planning III (Credit/No Credit)
JPG 1518H	Sustainability and Urban Communities
PLA 1551H	Policy Analysis
PLA 1552H	City Planning and Management

JPG 1554H	Transportation and Urban Form
JPG 1556H	Transportation Systems Analysis
PLA 1601H	Environmental Planning and Policy
JPG 1607H	Geography of Competition
JGE 1609H	Cities, Industry and the Environment
JPG 1614H	Regional Development and Policy
JPG 1615H	Planning the Social Economy
JPG 1616H	The Cultural Economy
PLA 1650H	Urban Design: History Theory Criticism
PLA 1651H	Planning and Real Estate Development
PLA 1652H	Introductory Studio in Urban Design and Planning
PLA 1653Y	Advanced Studio in Urban Design and Planning
PLA 1654H	Urban Design Research Methods
PLA 1655H	Urban Design and Development Controls
JPG 1670H	Regional Economic Analysis
JPG 1672H	Land and Justice
JPG 1702H	Historical Urban Geography and Planning
JPG 1706H	Geographies of Violence
JPG 1710H	Historic Preservation Planning
JPG 1713H	Place, Design, and Landscape
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
JPG 1810H	Globalization and Postmodernism
JPG 1812Y	Planning for Change: Community Development in Practice
PLA 1904H	Law and Planning
JPG 1906H	Geographic Information Systems
JPG 1909H	Social Survey Methods
JPG 1914H	Spatial Information Systems
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.)

Urban Design Studies

The Master of Urban Design Studies (MUDS) is a one-year professional degree program which provides intensive, advanced education in the principles and practices of urban design. It aims to encourage an understanding of the interdependence of the economic, social, and political forces that shape the character, physical structure, and dynamic properties of cities. The MUDS program coincided with the launch of the Master of Urban Design (MUD) degree program in the Faculty of Architecture, Landscape, and Design. Consult the separate calendar entry under Architecture, Landscape, and Design for more details.

Master of Urban Design Studies

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies.

- 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

- 4.0 full-course equivalents (FCEs). Students entering with significant prior design workshop/studio experience (as determined by the admissions committee) must complete a core program of 2.5 FCEs plus a further 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 without significant prior design workshop/studio experience must complete the above core program and PLA 1652H, plus a further 1.0 elective FCE.
- The MUDS program may be taken on a part-time basis. Part-time students are expected to participate in the same class meetings as full-time students.

Normal Program Length: 3 sessions full-time; 6 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

Course List

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
or
JPG 1713H   Place, Design and Landscape

PLA 1654H   Urban Design Research Methods
PLA 1652H   Introductory Studio in Urban Design
                and Planning (students without significant
                design workshop/studio experience must take
                PLA 1652H)

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 1554H   Transportation and Urban Form
PLA 1651H   Planning and Real Estate Development
JPG 1501H   The Political Economy of Cities
JPG 1510H   Recent Debates on Urban Form
JPG 1512H   Place, Politics and the Urban
JPG 1615H   Planning and the Social Economy
JPG 1702H   Historical Urban Geography and Planning
JPG 1710H   Historic Preservation Planning
JPG 1713H   Place, Design and Landscape
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

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.

Graduate Faculty

Full Members

Abizaid, Christian - MA, PhD
Archontitsis, Georgios - BSc, MSc, DSCA
Basiliko, Nathan - PhD
Bathelt, Harald - MA, PhD
Boland, Alana - BA, MA, PhD
Buliung, Ronald - MA, PhD
Bunce, Michael - BA, PhD
Bunce, Susannah - BA, MES, PhD
Caspersen, John - BA, PhD

Chen, Jing - BSc, PhD
Conway, Tenley - BS, MS, PhD
Cowen, Deborah - BA, MCP, PhD
Cowling, Sharon - BSc, MSc, PhD
Daniere, Amrita - AB, PhD
Desloges, Joseph - BES, MSc, PhD
Desrochers, Pierre - AB, MA, PhD
Diamond, Miriam - MSc, MSc, PhD
DiFrancesco, Richard - PhD
Dunn, James - AB, AM, PhD
Duval, Timothy - BSc, MSc, PhD
Farish, Matthew - BA, PhD
Finkelstein, Sarah - AB, MPH, PhD
Florida, Richard - BA, PhD
Friedmann, Harriet - AB, MA, PhD
Gertler, Meric - AB, MCP, PhD
Gilbert, Emily - PhD
Goonewardena, Kanishka - BSc, MCP, PhD
Gough, William - BSc, MSc, PhD
Hackworth, Jason - BA, MA, MCP, PhD
Harvey, Leslie - BSc, MSc, PhD
He, Yuhong - PhD
Hess, Paul - BA, MA, PhD *(Director, Program in Planning)*
Hunter, Mark - BA, MSS, PhD
Isaac, Marney Elizabeth - BS, MES, PhD
Isakson, Ryan - BEc, BA, PhD
Kepe, Thembela - MS, PhD
Leslie, Deborah - BA, MA, PhD
Lewis, Robert - BA, MA, PhD
MacDonald, Ken - BA, MA, PhD
Maclaren, Virginia - BA, MRP, MSc, PhD *(Chair)*
Mahtani, Minelle - BA, PhD
Malcolm, Jay - BSc, MSc, PhD
McGregor, Deborah - BSc, MES, PhD
Miller, Eric - BASc, MASc, PhD
Miron, John - BA, MA, MSc, PhD
Mitchell, Carl - PhD
Munro, D Scott - BSc, MSc, PhD
Narayana Reddy, Rajyashree - BA, MEc, MS, PhD
Price, Anthony - BSc, MSc, PhD
Prudham, Scott - BASc, BA, MA, PhD
Rankin, Katharine - BA, MA, PhD
Relph, Edward - BA, MPH, PhD
Robinson, Vincent - BSc, MSc, PhD
Ruddick, Susan - PhD
Siemiatycki, Matthew - BA, MSc, PhD
Silvey, Rachel - BA, MA, PhD
Simpson, Myrna - BS, DPhil
Sorensen, Andre - BFA, MSc, PhD
Wakefield, Sarah - BA, MA, PhD
Walks, Alan - BA, MA, PhD
Wells, Mathew - BS, DPhil
Wilson, Kathleen - AB, AM, PhD

Members Emeriti

Bourne, Larry - BA, MA, PhD
Britton, John - BA, MA, PhD
Gad, Gunter - DPhil, PhD
Galloway, John - BA, MA, PhD
Greenwood, Brian - BSc, PhD
Lemon, James - BA, BD, MS, PhD
Roweis, Shoukry - MSc, PhD

Simmons, James - BSc, MA, PhD
Whitney, Joseph - BA, PhD

Associate Members

Boyes, Donald - BS, MA, PhD
Brail, Shauna - BA, MA, PhD
Feldman, Maryann - BA, MS, PhD
Grima, Angelo - BA, MA, PhD
Leydon, Joseph - BA, MA, PhD
Murck, Barbara - AB, PhD
Poland, Blake - BA, PhD
Roorda, Matthew - BEng, MASc, PhD, Reg Professional
 Engineer
Valverde, Mariana - BA, MA, PhD, FRSC

Germanic Languages and Literatures

Faculty Affiliation

Arts and Science

Degree Programs Offered

German Literature, Culture and Theory – 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**
   - German Literature, Culture and Theory, MA, PhD
2. **Diaspora and Transnational Studies**
   - German Literature, Culture and Theory, MA, PhD
3. **Jewish Studies**
   - German Literature, Culture and Theory, MA, PhD
4. **Women and Gender Studies**
   - German Literature, Culture and Theory, MA, PhD

Overview

The Department of Germanic Languages and Literatures at the University of Toronto is the oldest and largest department of German in Canada. In addition to our traditional strength in literary and intellectual history, faculty and students are conducting research in German cinema, critical theory, language pedagogy, medieval studies, travel literature, as well as post-colonial, psychoanalytic, and transnational studies.

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
E-mail: 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

Degree Programs

German Literature, Culture and Theory

Master of Arts

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies and must satisfy the department's program requirements stated below.
- Applicants to the one-year MA program 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 from other universities should arrange for three supporting letters to be sent to the Coordinator 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

- Complete 3.5 full-course equivalents (FCEs), including GER 1000H *German Studies Seminar: Culture, Theory, Text.* Course selection is made in consultation with the Coordinator of Graduate Studies of the department and must be approved by the department.
- Pass a German language competence test.

Normal Program Length: 2 sessions full-time; 5 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

Doctor of Philosophy

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies and must satisfy the department's program requirements stated below.
- Admission to the PhD program requires either:
  ○ 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; or

○ 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 from other universities should arrange for three supporting letters to be sent to the Coordinator 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

- 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* 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 the first year of the program. The student is required to complete the remaining courses required for the degree, with an A- average by the end of the second year.
- Applicants admitted on the basis of a master's degree must take a minimum of 4.0 FCEs including GER 1000H *German Studies Seminar: Culture, Theory, Text* with an average grade of at least an A-. The student is required to complete at least 3.5 FCEs by the end of the first year of registration and any remaining courses required for the degree by the end of the second year.
- Course selection may include 1.5 FCEs in a department other than Germanic Languages and Literatures.
- Course selection is made in consultation with the Coordinator of Graduate Studies of the department and must be approved by the department.
- Students must:
  ○ give evidence of reading knowledge of French, or, in exceptional circumstances, of another language approved by the department;
  ○ pass a general examination in German literature;
  ○ pass a thesis field review;
  ○ make an oral presentation of their thesis; and
  ○ submit a thesis on an approved subject and pass a Doctoral Final Oral Examination on this subject.
- 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 Thesis section in Degree Regulations, Doctor of Philosophy).

Normal Program Length: 4 years full-time; 5 years direct-entry

Time Limit: 6 years full-time; 7 years part-time

Course List

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 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 1490H	Bildung und der Roman der Spätaufklärung
GER 1505H	Romanticism
GER 1530H	Heine and Critical Theory
GER 1540H	Revolutions
GER 1550H	Origins: Myths of Beginning in German Literature and Thought
GER 1580H	Vienna at the Turn of the Century
GER 1615H	The Early Theatre of Bertolt Brecht
GER 1661H	Modernism in Context
GER 1665H	Modernism and the Other
GER 1690H	Theatre in the Weimar Republic
GER 1710H	Weimar Cinema
GER 1730H	Travel Writing
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 1830H	Topics in German Intellectual History
GER 1860H	Introduction to Critical Theory
GER 2000H,Y	Reading Course in Approved Field
GER 3000H	Current Trends in German Literature
GER 6000H	Reading German for Graduate Students
JGC 1660H	Modernism and the Other
JGC 1750H	Modernity and Its Discontents
JGC 1850H	Derrida, the German, the Jew
MST 2010Y	Old Norse
MST 2015Y	Studies in Old Norse Texts
MST 2019H	Icelandic Family Sagas

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 - AB, AM, DPhil
Stock, Markus - MA, PhD *(Associate Chair, Graduate Studies)*
Zilcosky, John - BA, MA, MA, PhD *(Chair and Graduate Chair)*

Members Emeriti

Dierick, Augustinus - BA, MA, PhD
Genno, Charles - PhD
Hempel, Wolfgang - PhD
Mayer, Hartwig - PhD, PhD
Saas, Christa - BA, MA, PhD
Seliger, Helfried - PhD
Wetzel, Heinz - DPhil

Associate Members

Retallack, James - BA, DPhil

Global Affairs

Faculty Affiliation

Arts and Science

Degree Programs Offered

Global Affairs – MGA, JD/MGA, MGA/MBA

Overview

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. The MGA 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. Students lacking backgrounds in basic economics will be required to take courses in micro- and macroeconomics for policy analysis.

Contact and Address

Web: http://www.munkschool.utoronto.ca/mga/
E-mail: mga@utoronto.ca
Telephone: (416) 946-8917
Fax: (416) 946-8915

Munk School of Global Affairs
University of Toronto
315 Bloor Street West
Toronto, Ontario M5S 0A7
Canada

Degree Programs

Global Affairs

Master of Global Affairs

Minimum Admission Requirements

- Applicants are required to meet the General Regulations of the School of Graduate Studies.
- 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.
- Applicants must demonstrate basic competencies in statistics and economics.

Program Requirements

- This is a two-year program taken on a full-time basis over 20 consecutive months.
- 8.0 full-course equivalents (FCEs), as follows:
    - 4.0 FCE core courses in first year (eight half-course equivalents)
    - 0.5 FCE Internship in the summer session between first and second years
    - 1.0 FCE *Capstone Seminar* in second year
    - 2.5 additional FCEs in second year (five half courses)
- Students lacking a background in economics must take courses in micro- and macroeconomics in first year (PPG 1002H and GLA 1008H; 0.5 FCE each). They must also take GLA 1001H *International Economics* in second year (replacing a second-year elective course) instead of first year (making a total of 4.5 FCEs in first year).

Normal Program Length: 6 sessions full-time

Time Limit: 3 years full-time

Course List

First-Year Core Courses (required)

GLA 1000Y	Introduction to the Development of the Global System	
GLA 1001H	International Economics	
GLA 1002H	Global Civil Society	
GLA 1003H	Global Security	
GLA 1004H	Global Policy Analysis	
GLA 1005H	Decision Making and Strategic Thinking in the Global System	
GLA 1006H	Public International Law	
GLA 1007H	Global Internship (Summer)	

Second-Year Core Course (required)

GLA 2000Y	Capstone Seminar

Second-Year Elective Courses
(subject to change)

GLA 2001H	Global Capital Markets and Global Strategies
GLA 2002H	Development Policy and Change
GLA 2003H	Global Governance
GLA 2005H	Negotiating Internationally
GLA 2006H	The Politics of Money and Trade
GLA 2009H	The Political Economy of Global Cities
GLA 2010H	Geopolitics of Cyberspace

GLA 2090H   Topics in Global Affairs I
GLA 2091H   Topics in Global Affairs II

Combined Juris Doctor/ Master of Global Affairs

The Combined Juris Doctor/Master of Global Affairs is designed for students interested in studying the intersections of law and global affairs. The combined program permits the completion of both degrees in four years rather than the five 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 Combined JD/MGA program. Students are registered in the Faculty of Law in year one of the program, the Munk School of Global Affairs for year two of the program, and in both for years three and four.

Minimum Admission Requirements

Each student in the program shall meet the respective admission requirements of both the Faculty of Law JD program and Master of Global Affairs program. Students may be admitted to the combined program either at the time of their first application or they can apply to the MGA program during the first year of their JD studies. Whether admitted at the outset or after the first year of the JD program, however, all students will register in the Munk School of Global Affairs only after their first year in the JD program.

Program Requirements

Year 1: full-time in Faculty of Law
Year 2: full-time in Munk School of Global Affairs
Summer between Years 2 and 3: full-time in Munk School of Global Affairs
Year 3: full-time in Faculty of Law and part-time in Munk School of Global Affairs
Year 4: full-time in Faculty of Law and part-time in Munk School of Global Affairs

Within this combined four-year program, students must meet all the respective degree requirements of both the MGA and the JD program at the Faculty of Law, including:

- In the first year, successfully complete all first-year courses of the JD program at the Faculty of Law with at least a B standing.
- In the second year, successfully complete all the first-year requirements of the MGA with at least a B+ standing, with the exception of *Public International Law* (GLA 1006H). JD/MGA students must take *Public International Law* (LAW 252H, worth 4 law credits [1 MGA credit]) during the second year and obtain at least a B+ standing in the course. *Public International Law* will be counted towards the fulfillment of a student's MGA degree requirements, rather than the fulfillment of the JD requirements. Students register through the MGA

program for this course, and it will be graded on the MGA/SGS scale.

- In the summer between the second and third years, complete a summer global internship (GLA 1007H) with MGA worth 0.5 full-course equivalents (FCEs).
- In the third and fourth years, successfully complete:
  a) a further 3.5 FCEs at the 2000 level from the Munk School of Global Affairs (including the MGA *Capstone Seminar* GLA 2000Y or graduate-level courses approved by the Director of the MGA)
  b) 41–45 credits at the Faculty of Law, including a perspectives course, a moot (compulsory or competitive), and an international law, comparative law, or transnational law course. At least 9 of the 41–45 credits must be in the area of international law, which could include the following courses:
  - International Environmental Law (LAW 225H)
  - Law, Institutions, and Development (LAW 278H)
  - International Trade Regulation (LAW 285H)
  - International Human Rights Law (LAW 294H)

Time Limit: 4 years full-time

Combined Master of Global Affairs/ Master of Business Administration

The Combined Master of Global Affairs and Master of Business Administration is designed for students interested in studying the intersections of business and global affairs. The combined program 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 Combined MGA/MBA program. Students are registered in the Munk School of Global Affairs in Year 1 of the program, the Rotman School of Management for Year 2 of the program, and in both for Year 3 of the program.

Minimum Admission Requirements

Each student in the program shall meet all the respective admission requirements of both the MGA and MBA. Students may be admitted to the combined program either at the time of their first application or during their first year of their MGA studies. Whether admitted at the outset or after the first year of the MGA program, however, all students will register in Management only after their first year in the MGA program.

Program Requirements

The student shall have registration as follows:

Year 1: full-time in Munk School of Global Affairs
Summer between Years 1 and 2: full-time in Munk School of Global Affairs
Year 2: full-time in Management

Year 3: full-time in Management and part-time in Munk School of Global Affairs

Within this combined three-year degree:

1. In the first year, students must successfully complete all first-year courses at the Munk School of Global Affairs, with at least a B+ standing to continue in the program. Students who lack an economics background will be required to delay taking GLA 1001H *International Economics* until their second year and will be required to take micro- and macroeconomics in their first year.

2. In the summer between the first and second years, students must successfully complete a summer global internship with the MGA (GLA 1007H).

3. In the second year, students must successfully complete all first-year requirements of the MBA, with at least a B+ standing, in order to continue in the combined program.

4. In the third year, students must successfully complete 2.5 FCEs (five electives) in Management and 1.5 FCEs (three electives) in the MGA program or other graduate courses in cognate units approved by the Director, plus the required MGA *Capstone Seminar* (GLA 2000Y).

5. To participate in the Rotman Student Exchange Program, students must get permission from both programs. Students in the Combined MGA/MBA 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.

Students enrolled in combined programs **must** complete the requirements of both programs in order to graduate in each program. No diplomas will be awarded until the requirements for each program are fulfilled.

Time Limit: 4 years full-time

Graduate Faculty

Full Members

Bernstein, Steven - PhD *(Director, MGA Program)*
Bertoldi, Nancy - BA, MA, PhD
Brunnee, Jutta - LLM, SJD
Cameron, David - PhD, FRSC
Deibert, Ronald - BA, MA, DrRerPol
Duranton, Gilles - BSc, MSc, MA, PhD
Friedmann, Harriet - AB, MA, PhD
Gertler, Meric - AB, MCP, PhD
Goh, M Cynthia - PhD
Hoffmann, Matthew - BSc, PhD
Kirton, John - BA, MA, PhD
Kohler, Jillian - BA, MA, PhD
Kopstein, Jeffrey - BA, MA, PhD
Levi, Ron - BCL, LLB, LLM, SJD

McGahan, Anita - BA, MA, MBA, PhD
Mundy, Karen - AB, MA, PhD
Nevitte, Neil - BA, MA, PhD, FRSC
Orbinski, James - MA, MD
Pauly, Louis - BA, MA, MSc, MSc, PhD, Canada Research Chair
Polanyi, John - MSc, PhD, DSc, FRSC, Fell Royal Society London
Pruessen, Ronald - BA, MA, PhD
Reitz, Jeffrey - PhD
Shachar, Ayelet - LLB, BA, LLM, SJD
Stein, Janice - BA, MA, PhD *(Director)*
Vipond, Robert - BA, MA, AM, PhD
Wark, Wesley - BA, BA, MA, PhD
Wolfe, David - BA, MA, PhD
Wong, Joseph - BA, MA, PhD, Canada Research Chair

Members Emeriti

Bird, Richard - BA, MA, PhD
Clarkson, Stephen - BA, BA, MA, PhD, FRSC
Griffiths, Franklyn Jc - BA, MIA, PhD

Associate Members

Hejazi, Walid - BA, MA, PhD
Morrow, Peter - BA, MA, PhD

Health Policy, Management and Evaluation

Faculty Affiliation

Medicine

Degree Programs Offered

Health Policy, Management and Evaluation
 – MSc, PhD
Concentrations (MSc):
    Clinical Epidemiology and Health Care Research
    Health Services Research
    Health Technology Assessment and Management
    Quality Improvement and Patient Safety
Concentrations (PhD):
    Clinical Epidemiology and Health Care Research
    Health Services Research
Health Administration – MHSc, MHSc/MN, MHSc/
 MSW
Health Informatics – MHI
Management of Innovation – MMI

Collaborative Programs

The following collaborative programs 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. **Cardiovascular Sciences**
   - Health Policy, Management and Evaluation, MSc, PhD
4. **Dynamics of Global Change**
   - Health Policy, Management and Evaluation, PhD
5. **Global Health**
   - Health Policy, Management and Evaluation, PhD
6. **Health Care, Technology, and Place**
   - Health Policy, Management and Evaluation, PhD
7. **Health Services and Policy Research**
   - 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) is training Canada's future health leaders and researchers through its outstanding **degree programs:**

1. **Doctor of Philosophy** in Health Policy, Management and Evaluation
2. **Master of Science** in Health Policy, Management and Evaluation
3. **Master of Health Science** in Health Administration
4. **Master of Health Informatics**
5. **Master of Management of Innovation**
   IHPME also offers two **combined programs** which allow students to complete two degrees in less time than it would take to complete the programs separately:
1. Combined Master of Health Science (Health Administration)/Master of Nursing program
2. Combined Master of Health Science (Health Administration)/Master of Social Work program
   Multidisciplinary **collaborative programs** with other University of Toronto graduate departments allow further specialization.

A complete description of all IHPME programs is available on the website www.ihpme.utoronto.ca. 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 Services Research

February 1

MHSc in Health Administration

MHSc in Health Administration/MSW Combined Degree Program

MHSc in Health Administration/MN Combined Degree Program

November 15 (closing February 15)

Master of Management of Innovation

March 1

Master of Health Informatics

April 1 (every other year)

MSc in Health Policy, Management and Evaluation
    Concentration: Health Technology Assessment and Management

Contact and Address

Health Policy, Management and Evaluation

Web: www.ihpme.utoronto.ca
E-mail: 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

Management of Innovation

Web: www.utm.utoronto.ca/mmi
E-mail: mmi.utm@utoronto.ca
Telephone: (905) 569-4743
Fax: (905) 569-4397

Master of Management of Innovation
University of Toronto Mississauga
Kaneff Centre
Room 207, 3359 Mississauga Road North
Mississauga, Ontario L5L 1C6
Canada

Degree Programs

Health Policy, Management and Evaluation

Master of Science

The Health Policy, Management and Evaluation graduate program offers four concentrations leading to the Master of Science: Clinical Epidemiology and Health Care Research; Health Services Research; Health Technology Assessment and Management; and Quality Improvement and Patient Safety.

Minimum Admission Requirements

- Students require an overall B+ average or higher in the last two years of an appropriate bachelor's degree from a recognized university. For applicants to Clinical Epidemiology and Health Care Research, a degree in a health profession (e.g., MD, BScN, BScOT, BScPT, DDM, MScN) from a recognized university with a B+ average in the final two years is required.

Program Requirements

Concentration Clinical Epidemiology and Health Care Research
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 optional
- 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 optional

Concentration Health Services Research

- 3.0 FCEs, of which 1.0 FCE must be research methodology courses and 1.0 FCE must be in an area of specialization.
- A thesis written under the supervision of a thesis committee and its defence before an examination committee.

Concentration Health Technology Assessment and Management

- 3.0 FCEs (HAD 5308H, HAD 5730H, HAD 5760H, HAD 5763H, and either HAD 5727H or HAD 5771, and either and HAD 5301H or HAD 5304H) and participate 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.

Normal Program Length: 6 sessions (2 years) full-time; 8 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

Concentration Quality Improvement and Patient Safety

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 optional

Doctor of Philosophy

Minimum Admission Requirements

- 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

Full-Time

- Completion of a comprehensive course in the area of specialization.
- Completion of 5.0 FCEs from those 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.
- 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.
- Full-time registration (fall, spring, summer sessions) for the first four years of the doctoral program.

Flexible-Time

- 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 are required to register full-time for the first four years of their program; thereafter, they may register part-time.

Normal Program Length: 4 years full-time; 5 years direct-entry; 5–6 years flexible-time

Time Limit: 6 years full-time; 7 years direct-entry; 8 years flexible-time

Course List

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)
MSC 1060H	Biostatistics for Health Sciences

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	Non-Experimental Design for the Clinical Researcher
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 6360H	Required Research Practicum in Clinical Epidemiology (Credit/No Credit)
HAD 6361H	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.

Concentration: Health Services Research

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   External Practicum—Optional
HAD 3050H   Leading and Managing Change
HAD 3060H   Quality Improvement in Health Systems
HAD 3070H   Legal and Regulatory Environment and Risk Management
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 5726H   Design and Evaluation in eHealth Innovation and Information
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 5745H   Where Health Economics Hits the Road: Practical Applications of Economics to Real Health Care Problems
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 5780H   Program Planning and Evaluation for Health Services and Policy Research
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
JNH 5001H   Health Care Settings, Site and Human Well Being

JNH 5003H   Home and Community Care Knowledge Translation
HAD 7001H   Reading Course

Cross-Listed Courses

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

BME 1456H   Changing Health Care Technologies, People, and Places
HSR 1000H   Health Services Research Practicum
HSR 1001H   Introduction to Qualitative Methods for Health Services and Policy Research
HSR 1002H   Health Services and Policy Research Summer Institute
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
JHM 1000H   Issue Analysis in Interdisciplinary, International Health Research
LAW 465H   Conflicts of Interest in Medicine: Evidence, Public Policy, and the Law
LAW 404H   Health System Law and Policy

Health Administration

Master of Health Science

The Master of Health Science 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

- 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), of which 8.5 FCEs are required subjects and which includes a minimum of 1.0 FCE in a field placement.

Normal Program Length: 6 sessions full-time

Time Limit: 3 years full-time

Course List

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   Advanced Cases in Health Management
HAD 5733H   Health Services Finance
HAD 5741H   Health Law
HAD 5761H   Information and Knowledge Management in Health Service Organizations
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)

Elective Courses

Non-modular electives may be taken subject to program approval.

HAD 5735H   Commercialization of Health Research
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

Combined Master of Health Science (Health Administration)/ Master of Nursing Program

The Combined Master of Health Science (Health Administration)/Master of Nursing Program provides students with a strong interest in both nursing and health administration an opportunity to engage in an integrated program leading to the concurrent receipt of the MHSc and MN degrees.

Minimum Admission Requirements

- Applicants gain independent admission to the Institute of Health Policy, Management and Evaluation and to the Faculty of Nursing. Meeting the minimum requirements does not guarantee admission.
- University of Toronto BSc degree in Nursing or a degree from an equivalent program in a recognized university. Minimum B+ standing over the last two years of undergraduate study. The applicant is expected to have good academic standing in non-nursing as well as nursing subjects.
- Successful completion of an introductory course in statistics prior to admission.
- At least three years of work experience in the health care field.

Program Requirements

- Year 1: Students enrol in Nursing and complete 4.0 full-course equivalents (FCEs) for the MN degree.
- Year 2: Students enrol in IHPME and complete a total of 6.5 FCEs: 5.5 FCEs in MHSc in Health Administration courses plus 1.0 FCE in electives that can be taken from IHPME or Nursing.
- Year 3: 1.0 FCE taken in IHPME.

Time Limit: 6 years full-time

Combined Master of Health Science (Health Administration)/ Master of Social Work Program

The Combined Master of Health Science (Health Administration)/Master of Social Work Program allows students with a strong interest in both social work and health/social sciences management the opportunity to engage in an integrated program leading to the concurrent receipt of the MHSc and MSW degrees.

Minimum Admission Requirements

- Applicants gain independent admission to the Institute of Health Policy, Management and Evaluation and to the Faculty of Social Work. 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.

Program Requirements

- There are two full-time streams of study:
  - three-year program for students admitted with an appropriate bachelor's degree.
  - 2.5-year program for students with a Bachelor of Social Work degree
- Further details are available at www.ihpme.uto-ronto.ca/about/pp/combined/mhsc-msw.htm.

Time Limit: 6 years full-time

Health Informatics

Master of Health Informatics

The Master of Health Informatics 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.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies.
- Appropriate bachelor's degree from a recognized university, and demonstrated English-language proficiency. Eligible undergraduate degrees include those in a health sciences or social sciences speciality, Regulated Health Professions in Ontario, or a computer science or information science speciality with the equivalent of a minimum mid-B average in the last academic year. 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 FCEs consisting of required coursework (7.5 FCEs), elective coursework (0.5 FCEs), and a four-month full-time practicum or field placement (2.0 FCEs).
- Degree requirements will be completed in 16 months across four consecutive sessions.

Normal Program Length: 4 sessions full-time

Time Limit: 3 years full-time

Course List

Required Courses

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
INF 1003H	Information Systems, Services and Design
INF 1341H	Analyzing Information Systems
INF 2183H	Knowledge Management and Systems
MHI 2003H	Consumer and Public Health Informatics
MHI 2004H	Human Factors and Change Management
MHI 2005Y	Practicum Placement
MHI 2006H	Advanced Topics in Health Informatics
MHI 2007H	Quantitative Skills in Health Informatics
MHI 2008H	Project Management for Health Informatics
HAD 5010H	Canada's Health System and Health Policy I
HAD 5728H	Performance Measurement in Health Care

Elective Course

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 3000H	Independent Reading for Health Informatics

Management of Innovation

Master of Management of Innovation

The Master of Management of Innovation (MMI), designed for students with a background in science and engineering, is an accelerated 12-month professional degree for individuals pursuing management careers in technology-focused organizations.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies.
- 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.
- A resumé, a letter of intent, and at least two academic letters of reference must be submitted by the applicant. 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 arrange for GMAT or GRE (General) examination results to be sent to the department.
- An on-site written personal statement.
- Attend an interview where evaluative problem-solving capabilities and communication skills are assessed.

Program Requirements

- The 12-month program consists of an intensive 8-month core academic curriculum consisting of:
  - 4.0 FCEs (see list below)
  - 2.0 FCEs electives (1.0 FCE per session in each of the fall and winter sessions)

○ MMI 1100H, a final capstone course (Group Project, equivalent to 0.5 FCE) during the final four months of the program
- All requirements must be completed within a minimum of one year of study and a maximum of five years from the date of first enrolment.

Normal Program Length: 3 sessions full-time

Time Limit: 5 years full-time

Course List

Required Core Courses

MMI 1010H   Prices and Markets
MMI 1020H   Applied Econometrics for Managers
MMI 1030H   Marketing Science
MMI 1050H   Accounting and Negotiations
MMI 1060H   Finance
MMI 1070H   Economics of Business Strategy
MMI 1080H   Management of Technology
MMI 1090H   Technology, Strategy and Policy
MMI 1100H   Capstone Course - Final Group Project

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.

Graduate Faculty

Full Members

Anderson, Geoff - MD
Baker, G. Ross - AB, MA, PhD
Barnsley, Janet M - BSc, MSc, PhD
Baxter, Nancy - DrMed, PhD
Bayoumi, Ahmed - MD
Beaton, Dorcas - BSc(OT), MSc, PhD
Bierman, Arlene - MS, MD
Bombardier, Claire - MA, MD
Brown, Adalsteinn - AB, PhD *(Director)*
Bull, Shelley - BMath, MMath, PhD
Cheung, Angela - BA, MD, PhD
Cockerill, Rhonda W - BA, MA, PhD *(Coordinator of Graduate Studies)*
Cohen, Marsha - BSc, BSc, MSc, MHSc, MD
Corey, Mary - BSc, PhD
Coyte, Peter C - BA, MA, PhD
Davis, Aileen - BSc(PT), MSc, PhD
Davis, David - BA, MD
Deber, Raisa - BS, MS, PhD
Detsky, Allan - BS, MD, PhD
Donnelly, Sandra - BSc, MSc, MDCM
Einarson, Thomas - BScPhm, MSc, MPharm, MEd, PhD
Etchells, Edward - MSc, MD
Eysenbach, Gunther - MD

Feldman, Brian - MD
Flood, Colleen - LLB, LLM, SJD
Fortin, Paul - MPH, MD
Fremes, Stephen - BA, MSc, MD
Glazier, Richard - MPH, MD
Goel, Vivek - BSc, MSc, SM, MD
Goering, Paula - BSc, MSc, PhD
Golden, Brian - BS, MS, PhD
Goodwin, Pamela - MD
Grunfeld, Eva - MD, PhD
Hannah, Mary - BSc, MDCM, MS
Hawker, Gillian - MD
Hoch, Jeffrey - BA, MA, PhD
Hogg-Johnson, Sheilah - BMath, MMath, PhD
Holness, D Linn - MHSc, MD
Jadad, Alejandro - MD, DPhil
Jaglal, Susan - BSc, MSc, PhD
Krahn, Murray - BA, MSc, MD
Laporte, Audrey - BA, MA, PhD
Laupacis, Andreas - MD
Law, Calvin - CSPO, LMCC, MPH, MD
Lemieux-Charles, Louise - PhD *(Chair and Graduate Chair)*
Leonard, Kevin - BCom, MBA, PhD
Lin, Elizabeth - PhD
Llewellyn-Thomas, Hilary - BSN, MSc, PhD
Logan, Alexander - MD
Macarthur, Colin - BS, MSc, MBChB, PhD
Maclean, Heather - BSc, EdD
Mamdani, Muhammad - DP
McCrindle, Brian - MD
McGeer, Allison - BSc, MSc, MD
McLaughlin, John Ross - BSc, MSc, PhD
McLeod, Robin - BSc, LMCC, MD
Miller, Fiona - BIS, MA, DPhil
Morrison, Laurie - BSc
Myers, Ted - BA, MSW, MSc, PhD
Naglie, I. Gary - BSc, MDCM
Nathens, Avery - MPH, MD, PhD
Naylor, C. David - MD, PhD
Ohlsson, Arne - MD, MD
Rabeneck, Linda - MD
Redelmeier, Donald - MS, MD
Reeves, Scott - BSc, MSc
Rochon, Paula - MD
Sale, Joanna
Sass-Kortsak, Andrea - BSc, MHSc, PhD
Shachak, Aviv - DPhil
Straus, Sharon Elizabeth - MSc, MD
Stukel, Therese - BS, PhD
Sung, Lillian - MD
Talbot, Yves - BA, MD
To, Teresa - BA, MA, PhD
Tolomiczenko, George - PhD
Tomlinson, George - PhD
Tu, Jack Ven - MD, PhD
Upshur, Ross Edward - BSc, BA, MA, MD
Urbach, David - MSc, MD
Walmsley, Sharon - BSc, MSc, MD
Wasylenki, Donald - BA, MD
Williams, Paul - PhD
Wodchis, Walter - MA, PhD
Wright, James - BA, LMCC, CSPO, MPH, MD
Young, Lionel Trevor - MSc, MD, PhD

Zwarenstein, Merrick - MPH, MMed, MBChB

Members Emeriti

Bliss, J Michael - BA, MA, PhD
Dickens, Bernard - LLB, LLM, PhD
Hastings, John Ef - DPH, MD
Vayda, Eugene - BS, MD, MBChB, DrMed

Associate Members

Alibhai, Shabbir - MD
Allen, Upton - MSc, MSc, MBBS
Ammendolia, Carlo - MEDSCD
Angle, Pamela - MD
Ashbury, Fredrick D - BA, MA, PhD
Austin, Peter - PhD
Baranek, Patricia - BS, MA, MA, PhD, PhD
Barbera, Lisa - MD
Basinski, Antoni s - BM, MSc, MD, PhD
Bell, Chaim - MD
Berger, Howard - BSc, MD
Berta, Whitney - BS, MBA, PhD
Beyene, Joseph - BSc, MSc, PhD
Bezjak, Andrea - MS, MDCM
Bhattacharyya, Onil - MD
Birken, Catherine - MD
Boehm, Leslie A - BA, MA, MA
Bohnen, John - LMCC, MD
Boon, Heather - PhD
Booth, Gillian - MD
Booth, Richard - MSN
Bronskill, Susan - MSc
Browne, Janis Lynne - BSc, MD
Bryant, Sally - LLB
Cafazzo, Joseph - DPhil
Cassidy, David - BSc, MSc, PhD
Chan, Adrienne - MPH, MD
Chan, An-Wen - BSc, MD, DPhil
Chan, Benjamin - MPH, MPH, MD, MD
Chan, Christopher - MD
Charach, Alice - MD
Coburn, Natalie - BSc, MSc, DrMed
Corbin, Ruth Mw - BSc, MSc, PhD
Craven, Beverley Catharine - MD
Dewa, Carolyn - BA, MPH, PhD
Dhalla, Irfan - BAA, MSc, MD
Dick, Paul - MDCM
Dobrow, Mark - PhD
Doria, Andrea - MSc, MD, PhD
Durbin, Janet - MSc
Easson, Alexandra - MSc, MD
Fehlings, Darcy - MD
Feig, Denice - MD
Fowler, Robert - MDCM
Freedman, Stephen - MD
Gagliardi, Anna - BSc, BE, MSc, MLS, PhD
Gamble, Brenda - BA, MS, PhD
Gamble, Paul - BSc, BA, MHSA
Gershon, Andrea - MSc, MD
Gibson, Jennifer - PhD
Gill, Sudeep - DrMed
Glouberman, Sholom - PhD
Gnam, William - MD
Guerriere, Denise - PhD

Gunz, Hugh - DPhil, PhD
Guttman, Mark - MD
Hodgson, David - MD
Howard, Andrew - BA, CSPO, MSc, LMCC, MD
Hux, Janet - MD
Hwang, Stephen - MPH, MD
Ivanov, Joan - MSc, PhD, RN
Jackevicius, Cynthia - BS, MSc
Jamal, Abida - MD, PhD
Jassal, Sarbjit Vanita - MD
Juurlink, David - BSc, MD, PhD
Kapral, Moira - MD
Karkouti, Keyvan - MD
Kennedy, Erin - CSPO, MD, PhD
Khan, Kamran - MPH, MD
Kim, Joseph - MHSc, MD, PhD
Ko, Dennis - MD
Kreder, Hans - MPH, MD
Kreiger, Nancy - BA, MPH, PhD
Kulkarni, Abhaya - BSc, MD, PhD
Kurdyak, Paul - BSc, MSc, MD
Ladak, Nizar - BA, MEd
Landry, Michel - BSc(PT), MSc(PT), PhD
Lee, Douglas - DrMed, PhD
Lehoux, Pascale - BS, MASc, PhD
Lipscombe, Lorraine - MSc, MD
Loblaw, Andrew - MD
Lok, Charmaine - MSc, MD
Loutfy, Mona - MPH, MD
Macfarlane, P Dianne - BA
MacIntosh-Murray, Anu - BA, LLB, MPH
Maetzel, Andreas - MSc, PhD
Maguire, Jonathon - BSc, MSc, MSc, MD
Mahomed, Nizar - MPH, MD, ScD
Malach, Faith - MHSA
Markel, Frank - BA, MSc, PhD
Marras, Connie - MD
Marshall, Debra - AA
Mitchell, Leslie - MSc
Moore, Aideen - MBChB
Moore, Lynn - MHSA
Murphy, Kellie - MD
Murray, Michael A - BA, MA, PhD
Naimark, David - MD
Nam, Robert - MSc, MD
Nauenberg, Eric - AB, MPH, PhD
Nestman, Lawrence - BComm, MHSA
Nguyen, Geoffrey - MD
O'Connor, Paul - MD
Oliver, Matthew - MD
Pace, Kenneth - DrMed
Palda, Valerie - MD
Parker, Diane - DPM
Parkin, Patricia - BSc, MD, MD
Paszat, Lawrence - MS, MD
Paterson, Michael - MS
Pink, George Harry - BCom, MHSA
Pritchard, Kathleen - BA, MD
Pron, Gaylene - BSc, MSc, PhD
Pullenayegum, Eleanor - PhD
Quan, May Lynn - BSc, MSc, LMCC, MD
Rachlis, Michael - MSc, MD
Rakovitch, Eileen - MD
Rath, Darlyne - MSc

Ray, Joel - MSc, MD
Ringash, Jolie - MSc, MD
Saposnik, Gustavo - MSc, MD
Sawka, Anna - MD
Sawka, Carol - MD
Schull, Michael - MD
Scolnik, Dennis - MBChB
Seto, Winnie - BScPhm, MSc, DP
Shah, Baiju - MD
Shah, Prakeshkumar - MD
Shah, Vibhuti - MD
Sharkey, Shirlee - BA, BSN, MHSc
Shehata, Nadine - MEd, MD
Shojania, Kaveh - BSc, MD
Simmons, Christine - BSc, MD
Singer, Lianne - MD
Smith, Tina - BSc, MHSc
Sridharan, Sanjeev
Stanbrook, Matthew - MSc, MD
Steinhart, A. Hillary - MD
Stergiopoulos, Vicky - MD
Subbarao, Padmaj - MD
Sullivan, Terrence - BS, MA, PhD
Szold, John - MBA
Teare, Gary - MSc, DrMedVet, PhD
Tinmouth, Jill - MD, PhD
Tombak, Mihkel - BS, MBA, AM, PhD
Trbovich, Patricia L - PhD
Ungar, Wendy - BA, MSc, PhD
Urowitz, Sara - PhD
Verma, Sunil - MD
Wales, Paul - BSc, MSc, MD
Webster, Fiona - BA, MA, PhD
Wei, Alice - BSc, MSc, MSc, MD
Whyte, Hilary - MBChB
Wijeysundera, Duminda - MSc, MD
Wijeysundera, Harindra - BSc, MD, PhD
Wiljer, David - PhD
Willison, Donald - MSc, MSc, ScD
Windrim, Rory - MB
Wobeser, Wendy - MSc, DrMed
Wong, Rebecca - MBChB
Worthington, Catherine - MSc
Wright, Frances - BSc, LMCC, MEd, MD
Yeung, Latifa - MD
Young, Nancy - BSc(PT), MSc

History

Faculty Affiliation

Arts and Science

Degree Programs Offered

History – MA, PhD

Collaborative Programs

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

1. **Asia-Pacific Studies**
   - History, MA
2. **Book History and Print Culture**
   - History, MA, PhD
3. **Diaspora and Transnational Studies**
   - History, MA, PhD
4. **Editing Medieval Texts**
   - History, PhD
5. **Ethnic and Pluralism Studies**
   - History, MA, PhD
6. **Jewish Studies**
   - History, MA, PhD
7. **Sexual Diversity Studies**
   - History, MA, PhD
8. **South Asian Studies**
   - History, MA, PhD
9. **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. The department has a special strength in gender history, medieval history, transnational history, colonialism, the Americas, Europe, and Russia. Courses are offered in the history of Canada; the United States; Medieval, Early Modern, and Modern Europe and Britain; Eastern Europe; Russia; Latin America; Africa; South Asia; East Asia; Southeast Asia; International Relations; the History of Medicine and Women's History.

The University of Toronto also offers rich resources outside the department to support the study of history. The Robarts Research Library, unrivaled 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 me-

dieval 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 programs.

Contact and Address

Web: www.history.utoronto.ca
E-mail: histgrad@chass.utoronto.ca
Telephone: (416) 978-3369
Fax: 416-978-6647

Department of History
University of Toronto
Sidney Smith Hall
Room 2074, 100 St. George Street
Toronto, Ontario M5S 3G3
Canada

Degree Programs

History

Master of Arts

Minimum Admission Requirements

- 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 facility 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 usually complete the MA by coursework and the HIS 2000Y paper. Some students may elect to complete the MA by coursework and thesis.
- After consulting with the Graduate Coordinator, all MA students are required to take either HIS 1997H or HIS 1201H.
- 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.
- The MA may be undertaken on a part-time basis.

Coursework and Paper

- 2.5 full-course equivalents (FCEs)—of which 0.5 must be either HIS 1997H or HIS 1201H—and the MA essay. 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—of which 0.5 must be either HIS 1997H or HIS 1201H—and present an MA thesis.
- The thesis MA might take longer than the course MA. The thesis must be presented within three years of entering the program (six years for the part-time MA).

Normal Program Length: 3 sessions full-time; 6 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

Doctor of Philosophy

Minimum Admission Requirements

- The closing date for applications to the PhD program is January 15. Later applications will be considered only in exceptional circumstances.
- Applicants may enter the PhD program via one of two routes:
  - Normally, with an **MA degree** in history or its equivalent with an A- average or better.
  - Exceptional students may be admitted by direct entry to the **PhD program** 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 facility in the English language through the successful completion of the Test of English as a Foreign Language (TOEFL) with scores of at least:
  - paper-based TOEFL exam: 600 with 5 on the Test of Written English (TWE)
  - Internet-based TOEFL exam: 100/120 with 22/30 on the writing and speaking sections

Program Requirements

- **Coursework**
  - With **MA degree in history:** 2.0 full-course equivalents (FCEs) with a B+ average throughout coursework.
  - By **direct entry:** 4.5 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.** PhD students are required to be in residence until they have passed their field examinations but no longer than a period of two years. 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.
- **Comprehensive examinations** in three approved fields of history. At the beginning of their programs, students consult with the Associate Chair, Graduate to determine their fields, and students will be assigned advisors. Three fields are required: a major and two minors. The major should coincide with the subject area that the student has chosen for the thesis, and the two 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 three fields. Students are required to take their field examinations by the spring of their second year in the program, 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 the second year without permission of the Associate Chair, Graduate. The department's website contains a list of 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 the second year and may be asked to qualify in other program-related languages.
- **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 (within seven years of first enrolment in the direct-entry PhD).

Normal Program Length: 4 years full-time; 5 years direct-entry

Time Limit: 6 years full-time; 7 years direct-entry

Course List

Not all courses are offered every year. Please consult the department's list of current course offerings.

HIS 1004H	History and Biopolitics
HIS 1006H	Historiography "From Below": Comparative and Critical Perspectives
HIS 1009H	Colonial Governmentality: Governing Economy and Culture
HIS 1020H	Cultural Theory/Cultural History
HIS 1026H	Modernity and Its Others: History and Postcolonial (joint graduate/undergraduate)
HIS 1037H	Populism in American Film and Media
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 1114H	Indigenous Histories in North America
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 1142Y	Canadian Foreign Relations, 1940–2003 (joint graduate/undergraduate)
HIS 1201H	The Materials of Medieval History (Credit/No Credit)
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 1235H	History in/of the Mediterranean: From Braudel to Post-Colonialism
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 1277H	Topics in Jewish History
HIS 1278H	Topics in Twentieth-Century 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 1290H	Topics in Imperial Russian History
HIS 1291H	Topics in Russian and Soviet Social History (joint graduate/undergraduate)
HIS 1293Y	Kievan Rus' (joint graduate/undergraduate)

HIS 1295H	Soviet History Seminar
HIS 1296H	Stalinism and After: Beyond Cold War History
HIS 1297H	National Survival in Eastern Europe
HIS 1411H	Theory and Practice in Early Modern British History
HIS 1419H	Science and Society in Britain, 1600–1800
HIS 1425H	British Social Realism and Cinema
HIS 1435H	Studies in Victorian Society
HIS 1440H	Irish Nationalism in Canada and the United States (joint graduate/undergraduate)
HIS 1510H	Readings in American History to 1877
HIS 1519H	Thinking of Diversity: Historical Perspectives on American and Canadian Pluralisms
HIS 1522H	Topics in Twentieth-Century U.S. History: Transnational Commodity Culture
HIS 1524H	Topics in the History of Black America
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 1540H	Cultures of American Capitalism
HIS 1541H	Cultural History and the American Empire
HIS 1543H	Topics in Material Culture
HIS 1555H	Gender and Slavery in the Atlantic World, Seventeenth to Nineteenth Century
HIS 1663H	Gender in East and Southeast Asia
HIS 1664H	Religion and Society in Southeast Asia
HIS 1667H	Transnational Gender Histories
HIS 1668H	Topics in Early Modern Asian History
HIS 1673H	Critical Historiography of Late Imperial and Modern China
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 1705H	Africa: Writing, Colonialism and Memory
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 1710H	Comparative Slavery in the Caribbean and Latin America
HIS 1720H	Emancipate Yourselves from Mental Slavery? Historical Narratives of Caribbean Decolonization
HIS 1784H	The Islamic Revolution
HIS 1785H	International Relations in the Middle East
HIS 1997H	The Practice of History (Credit/No Credit)
HIS 1998H,Y	Reading Course

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

HIS 1999H,Y	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

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 3201H	Medieval Social History
MST 3205H	Violence in Medieval Society (joint graduate/undergraduate)
MST 3225Y	Jews and Christians in Medieval and Renaissance Europe (joint graduate/undergraduate)
MST 3242H	The Carolingians and the Birth of Europe
MST 3243H	Dark Age Italy
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.

Graduate Faculty

Full Members

Abray, L Jane - BA, MA, MPH, PhD
Aster, Sidney - BA, MA, PhD
Austin, Robert - BA, MA, PhD
Bartlett, Kenneth - BA, MA, PhD
Bender, Daniel Eric - BA, PhD
Bergen, Doris - MA, PhD
Birla, Ritu - BA, MPH, PhD
Blanchard, Peter - BA, PhD
Bohaker, Heidi - BA, BEd, MA, DPhil
Bothwell, Robert - BA, AM, PhD
Brown, Elspeth - MA, PhD
Chin, Carol - BA, MA, PhD
Cochelin, Isabelle - DipdESup, BA, MA, PhD
Cohen, Paul - AM, PhD
Dowler, E Wayne - BA, AM, PhD
Eksteins, Modris - BPhil, BA, DPhil
English, John - AM, PhD
Everett, Nicholas - BA, MA, PhD
Fujitani, Takashi - BA, MA, PhD
Gervers, Michael - BA, MA, PhD
Goering, Joseph - BA, MA, MSL, PhD
Greer, Allan - BA, MA, PhD
Hall, Bert - BA, PhD
Halpern, Eric (Rick) - PhD
Hawkins, Sean - MA, PhD
Hood, Adrienne - PhD *(Acting Chair)*

Iacovetta, Franca - AB, AM, PhD
Ingham, John - BA, MA, PhD
Jenkins, Jennifer - BA, MA, PhD
Jennings, Eric - BA, PhD
Kasturi, Malavika - DPhil
Kawashima, Ken - BA, MA, PhD
Kazal, Russell - AB, MA, PhD *(Associate Chair, Graduate)*
Keil, Charles - BA, MA, PhD
Kidd, Bruce - BA, AM, MA, PhD
King, Robert - AB, MA, PhD
Kivimae, Juri - AM, PhD
Lahusen, Thomas - MA, PhD
Lam, Tong - BSC, 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
Marrus, Michael - BA, MA, LLM, PhD
McGowan, Mark - BA, MA, PhD
Meyerson, Mark - BA, PhD
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
Pruessen, Ronald - BA, MA, PhD
Radforth, Ian - BA, MA, PhD
Retallack, James - BA, DPhil
Rockel, Stephen - AM, DPhil
Ross, Jill - MA, PhD
Rothman, Ella Natalie - MA, DPhil
Rutherford, Paul - BA, MA, PhD
Schmid, Andre - BA, BA, MA, PhD
Sharma, Jayeeta - BA, MPH, MA, PhD
Shorter, Edward - BA, MA, PhD
Silano, Giulio - BA, LLB, BEd, MA, PhD
Smith, Alison - AM, PhD
Smyth, Denis - BA, PhD
Tambe, Ashwini - BA, MA, PhD
Tavakoli-Targhi, Mohamad - BA, MA, PhD
Terpstra, Nicholas - BA, MA, PhD
Todd, Barbara - BA, MA, DPhil
Tran, Nhung - MA, PhD
Troper, Harold - BA, MA, PhD
Viola, Lynne - BA, MA, PhD
Wark, Wesley - BA, BA, MA, PhD
Williams, Derek - DPhil
Wilson, David - BA, MA, PhD
Wittmann, Rebecca - AB, MA, PhD
Wrobel, Piotr Jan - MA, PhD

Members Emeriti

Accinelli, Robert - BA, MA, PhD
Beattie, John - BS, MA, PhD, FRSC, FRHistS
Berger, Carl - BA, MA, PhD

Berman, William - BA, MA, PhD
Bliss, J Michael - BA, MA, PhD
Brown, Robert Craig - MA, PhD
Brownlee, John - BA, MA, MPH
Callahan, William - AB, MA, PhD
Cook, Ramsay - MA, PhD
Davis, Natalie - BA, MA, PhD
Dent, Julian - BA, MA, PhD
Dyck, Harvey - BA, MA, PhD
Estes, James - MA, PhD
Finlayson, Michael - BA, PhD
Goffart, Walter - AB, AM, PhD
Grendler, Paul - BA, MA, PhD
Helmstadter, Richard - BA, MA, PhD
Higgs, David - 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
Murray, Alexander - BA, 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

Associate Members

Hanssen, Jens - BPhil, DPhil
Kwee, Hui Kian - BA, MA, PhD
Virani, Shafique - PhD
Young, William - MA, PhD

History and Philosophy of Science and Technology

Faculty Affiliation

Arts and Science

Degree Programs Offered

History and Philosophy of Science and
 Technology – MA, PhD
Fields:
> Philosophy of Science
> History of Mathematics and Physical Sciences
> History of Medicine and Life Sciences
> History of Technology

Collaborative Programs

The following collaborative programs 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) offers two degree programs: **Master of Arts** and **Doctor of Philosophy**. 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 participate in the IHPST colloquia, which are open to the University of Toronto community.

Admission 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 the institute'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 of no more than 3,000 words. Application deadline is February 1. Applicants who wish to take one or more of the courses offered by the institute 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.

Contact and Address

Web: www.hps.utoronto.ca
E-mail: ihpst.info@utoronto.ca
Telephone: (416) 978-5397
Fax: (416) 978-3003

Institute for the History and Philosophy of Science and Technology
University of Toronto
Old Victoria College
Room 316, 91 Charles Street West
Toronto, Ontario M5S 1K7
Canada

Degree Programs

History and Philosophy of Science and Technology

Master of Arts

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies.
- 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 by which applicants are judged.
- Applications must be accompanied by a statement of interest of approximately 300–500 words, 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.
- Application deadline is February 1.
- 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

- Minimum of 3.5 full-course equivalents (FCEs). Among these, each student must take either:

- 1.5 FCE history of science fundamentals courses (HPS 5000 series) and 1.0 FCE philosophy of science courses (History of Science stream); **or**
- 1.5 FCEs philosophy of science courses and 1.0 FCE history of science fundamentals courses (HPS 5000 series) (Philosophy of Science stream).
- The balance of the curriculum is arranged in consultation with the student's faculty instructors and the guidance of the Director of Graduate Studies. Students make choices consistent with a commitment to either a History of Science stream or a Philosophy of Science stream.
- For students in the History fields, reading knowledge of French or German is required. Language instruction courses are not counted in the 3.5 FCEs required for the degree.
- For students in the Philosophy field, one of the following is required: proficiency in introductory logic, reading knowledge of French, or reading knowledge of German. Logic and language instruction courses are not counted in the 3.5 FCEs required for the degree.

Normal Program Length: 3 sessions full-time; 15 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

Doctor of Philosophy

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies.
- One of the following:
  - 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
  - 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 by which applicants are judged.
- Applications must be accompanied by a statement of interest of approximately 300–500 words, 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.
- Application deadline is February 1.

- 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** must complete 6.5 full-course equivalents (FCEs).
- Students admitted on the basis of a **master's degree** in history and philosophy of science and technology must take a minimum of 3.0 FCEs. A student whose MA degree does not exhibit sufficient breadth is required to take additional courses.
- All students must include at least 0.5 FCE from each of the following three historical periods: pre-Renaissance (Classical Antiquity to AD 1400); Renaissance (AD 1400) to end of the eighteenth century; beginning of the nineteenth century to the present. The breadth requirement may be met with courses in either the History of Science stream or the Philosophy of Science stream.
- The balance of the student's curriculum is arranged in consultation with the student's faculty instructors and is subject to the overall guidance of the Director of Graduate Studies. Students make choices consistent with a commitment to either a History of Science stream or a Philosophy of Science stream.
- For students in the History fields, reading knowledge of French or German is required. Language instruction courses are not counted among the 6.5 FCEs required for the PhD.
- For students in the Philosophy field, one of the following is required: proficiency in introductory logic, reading knowledge of French, or reading knowledge of German. Logic and language instruction courses are not counted among the 6.5 FCEs required for the PhD.
- Proposal for an extended research paper (required for HPS 2000Y). 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.
- All required courses, including HPS 2000Y, should be completed by the end of the student's second post-bachelor year. In general, all students should 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 2000Y research paper. Students falling below these standards may be recommended for termination from the program.

- 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, a science, or sociology.
- 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.
- Thesis proposal approved by the student's thesis Supervisory Committee and the Director of Graduate Studies.

Normal Program Length: 4 years full-time; 5 years direct-entry

Time Limit: 6 years full-time; 7 years direct-entry

Course List

Not all courses are offered every year. Consult the institute regarding course offerings.

History and Philosophy of Science and Technology

HPS 1000Y	Individual Reading and Research in the History and/or Philosophy of Science and Technology
HPS 1001H	Individual Reading and Research in the History and/or Philosophy of Science and Technology
HPS 1002H	Individual Reading and Research in the History and/or Philosophy of Science and Technology
HPS 1003H	Individual Reading and Research in the History and/or Philosophy of Science and Technology
HPS 1005H	Historical Topics in Scientific Methodology
HPS 1006H	Historical Introduction to the Sociology of Scientific Knowledge
HPS 1015H	The Scientific Revolution: Galileo to Newton
HPS 1017H	Topics in the History of Physics in the Eighteenth and Nineteenth Centuries
HPS 1018H,Y	Topics in the History of Technology
HPS 1019H	History of Systematics
HPS 1020H	History of Evolutionary Biology
HPS 1021H	The Intellectual Context of Nineteenth-Century Science
HPS 1022H	Religion and Science on Human Sexuality
HPS 1024H	History of Physiology
HPS 1025H	History of Immunology

HPS 1026H	Body, Medicine, and Society in Early Modern Europe
HPS 1027H	Chemistry from Lavoisier to Mendeleev
HPS 1029H	The Invention of Modern Biology
HPS 1030H	Newton and Mechanics
HPS 1036H	History of Engineering
HPS 1037H	Science in Canadian History
HPS 1038H	Topics in the History of Chemistry, 1600–1950
HPS 1041H	History of Medical Microbiology
HPS 1042H	The Biology of Death: Experimental Biology and Experimental Medicine, 1860–1940
HPS 1043H	Science in the Renaissance
HPS 1044H	Biology and Human Nature
HPS 1045H	Human Genetics and the Eugenics Movement
HPS 1046H	Teleology, Adaptation and Design
HPS 1047H	The Rise of Eugenics: A Comparative History
HPS 1050H	Topics in Ancient Greek and Scientific Revolution Mathematics
HPS 1052H	The Emergence of Modern Mathematics in the Eighteenth and Nineteenth Centuries
HPS 1101H	Philosophy Applied to History of Science
HPS 1102H	Laws of Nature
HPS 1103H	Complexity, Reduction and Emergence in Contemporary Biology
HPS 1104H	Topics in the Philosophy of Science: Models, Truth, and Representation
HPS 1105H	Philosophy of Medicine
HPS 1107H	Topics in Philosophy of Science: Empiricism
HPS 1108H	Philosophy of Physics
HPS 1109H	Philosophy of Probability
HPS 1110H	Philosophy of Economics
HPS 1111H	Philosophy of Science and Religion
HPS 1112H	Thought Experiments
HPS 1113H	Topics in the History of the Social and Behavioural Sciences
HPS 1214H	Studies in Ancient and Medieval Science
HPS 1215H	Medieval Technology and Society
HPS 1217H	Technology and War: 1090–1918
HPS 1500H+	Research Paper
HPS 2000Y	Research Paper
HPS 3000H	Historical Research: Methods, Sources, Approaches
HPS 3001H	The Marxist Theory of Knowledge and History
HPS 3002H	Conceptual and Theoretical Foundations of Historiography
HPS 5001H	Fundamentals of the History of Mathematics
HPS 5002H	Fundamentals of the History of Physics
HPS 5004H	Fundamentals of the History of Chemistry
HPS 5005H	Fundamentals of the History of Biology
HPS 5006H	Fundamentals of the History of Medicine
HPS 5007H	Fundamentals of the History of Technology I

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

HPS 5008H	Fundamentals of the History of Technology II
HPS 5009H	Fundamentals of the History of Astronomy
HPS 5010H	Fundamentals of the Philosophy of Science
HPS 5011H	Fundamentals of the History and Philosophy of Science and Technology
HPS 5012H	Fundamentals of the History of Psychology
HPS 5013H	Fundamentals of the History and Philosophy of the Social Sciences
HPS 5014H	Fundamentals of the Philosophy of Biology
JPH 2192H	Philosophy of Science
JPH 2194H	Topics in History of the Philosophy of Science

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

Classics

| CLA 5013H | Studies in Ancient Science |

History

| HIS 1269H | The Social History of Medicine in the Nineteenth and Twentieth Centuries |
| HIS 1270H | History of Psychiatry and Psychiatric Illness |

See the Department of History entry for more course offerings.

McLuhan Program in Culture and Technology

(C&T courses offered only if there is sufficient enrolment)

| C&T 1004H | Communications in History, Theory, Technology |

Philosophy

PHL 2010H	Late Greek Philosophy: Plotinus
PHL 2096H	Seminar in Analytic Philosophy: Early Analytic Philosophy
PHL 2131H	Ethics
PHL 2132H	Seminar in Ethics
PHL 2133H	Topics in Ethics: Theories of the Good
PHL 2145H	Bioethics
PHL 2051H	The Rationalists: Spinoza's Metaphysics
PHL 2171H	Philosophy of Mind: Embodied and Extended Mind Theories
PHL 2172H	Seminar in Philosophy of Mind: Conscious Life
PHL 2190H	Philosophy of Language
PHL 2191H	Seminar in the Philosophy of Language: Contextualism
PHL 2196H	Topics in the Philosophy of Science

| PHL 2199H | Seminar in Philosophy of Science |

Graduate Faculty

Full Members

Baigrie, Brian - BA, MA, PhD
Berkovitz, Joseph - BSc, MA, PhD
Brown, James - BA, MA, PhD
Castle, David - BA, BSc, MA, PhD
Chazan, Michael - BA, MA, PhD
Dacome, Lucia - BA, MPH, PhD
Fehige, Yiftach - MA, PhD, DTh
Fraser, Craig - BA, MA, PhD *(Interim Director)*
Gayon, Jean - MA, MPH, PhD
Gingras, Yves - BSc, MSc, PhD
Griffin, Nicholas - BA, PhD
Hehmeyer, Ingrid - MSc, MSA, PhD
Howson, Colin - BSc, PhD
Hull, James - BSc, MA, PhD
Huneman, Philippe - BM, MMath, PhD
Jones, Alexander - BA, PhD, FRSC
Krementsov, Nikolai - PhD
Langins, Janis - BEng, MEng, MA, PhD
Morrison, Margaret - BA, MA, PhD
Murphy, Michelle - BA, PhD
Penfold, Steven - MA, PhD
Seager, William Edward - BA, MA, PhD
Snobelen, Stephen - BA, MA, MPH, PhD
Solovey, Mark - BA, MA, AM, PhD
Thompson, Paul - BA, MA, PhD
Upshur, Ross Edward - BSc, BA, MA, MD
Vicedo Castello, Maria - BA, MA, PhD, PhD
Walsh, Denis - BA, MPH, PhD
Warner, Jessica - BA, PhD
Wolfe, David - BA, MA, PhD
Yeang, Chen-Pang - BS, SM, PhD, ScD
Zeller, Suzanne - BA, MA, PhD

Members Emeriti

De Sousa, Ronald - BA, PhD
Goldstick, Daniel - BA, BPhil, DPhil
Hall, Bert - BA, PhD
Levere, Trevor - BA, MA, DPhil
Mazumdar, Pauline - MSc, MD, PhD
Winsor, Mary - AB, MPH, PhD

Humanities, Social Sciences and Social Justice Education

Faculty Affiliation

Ontario Institute for Studies in Education

Degree Programs Offered

History and Philosophy of Education – MA, MEd
Sociology in Education – MA, MEd, EdD, PhD

Collaborative Programs

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

1. **Aboriginal Health**
   - Sociology in Education, MA, MEd, EdD, PhD
2. **Comparative, International and Development Education**
   - History and Philosophy of Education, MA, MEd
   - Sociology in Education, MA, MEd, EdD, PhD
3. **Diaspora and Transnational Studies**
   - Sociology in Education, MA, MEd, EdD, PhD
4. **Educational Policy**
   - History and Philosophy of Education, MA, MEd
   - Sociology in Education, MA, MEd, EdD, PhD
5. **Environmental Studies**
   - Sociology in Education, MA, MEd, EdD, PhD
6. **Ethnic and Pluralism Studies**
   - History and Philosophy of Education, MA, MEd
   - Sociology in Education, MA, MEd, EdD, PhD
7. **Knowledge Media Design**
   - History and Philosophy of Education, MA, MEd
8. **Sexual Diversity Studies**
   - History and Philosophy of Education, MA, MEd
   - Sociology in Education, MA, MEd, EdD, PhD
9. **South Asian Studies**
   - Sociology in Education, MA, MEd, EdD, PhD
10. **Women and Gender Studies**
    - History and Philosophy of Education, MA, MEd
    - Sociology in Education, MA, MEd, EdD, PhD
11. **Workplace Learning and Social Change**
    - Sociology in Education, MA, MEd, EdD, PhD

Overview

The Department of Humanities, Social Sciences and Social Justice Education provides students with critical understandings of the social, historical, cultural, political, economic, and ethical contexts of education, broadly conceived. Based on the diverse intellectual traditions of the humanities and social sciences, the department is committed to multi- and interdisciplinary studies in education, with a focus on history, philosophy, sociology, and social justice education.

Through humanities, social sciences, and/or social justice education, faculty teaching and research includes anti-racism, critical race theory and Indigenous studies; aesthetics, media, and communication; feminist and gender studies; class and poverty studies; francophone studies; post-colonial, diaspora, and transnational studies; queer and disability studies; and/or may follow traditional disciplinary inquiry.

The department aims to provide graduate students and initial teacher education students with the disciplinary background, substantive knowledge, and theoretical language necessary to raise questions of critical importance to educational theory, practices, and society.

Contact and Address

Web: www.oise.utoronto.ca

Department of Humanities, Social Sciences and Social Justice Education
The Ontario Institute for Studies in Education (OISE)
University of Toronto
12th Floor North, 252 Bloor Street West
Toronto, Ontario M5S 1V6
Canada

Degree Programs

History and Philosophy of Education

Admissions have ceased for the MA and MEd programs in the History and Philosophy of Education.

Each degree in the History and Philosophy of Education program is available in two fields:

- History of Education
- Philosophy of Education

Master of Arts

Admissions have ceased for the MA program in the History and Philosophy of Education.
Applicants who would normally apply to the History and Philosophy of Education program are encouraged to apply to the Sociology in Education program in the new department of Humanities, Social Sciences and Social Justice Education instead. Please e-mail the Program Coordinator, Dr. Megan Boler, at megan.boler@utoronto.ca.

Minimum Admission Requirements

- The department welcomes applicants with diverse but relevant backgrounds.

- Applicants are admitted under the General Regulations of the School of Graduate Studies.
- An appropriate bachelor's degree from a recognized university, with high academic standing. A history major is required for applicants to the History of Education field; a philosophy major is required for applicants to the Philosophy of Education field.

Program Requirements

Field History of Education

- A total of 3.0 FCEs (full-course equivalents), including:
  - TPS 1419H *Historiography and the History of Education* (0.5 FCEs) and TPS 1440H *An Introduction to Philosophy of Education* (0.5 FCE).
  - Normally, 1.5 of the remaining 2.0 FCEs must be selected from the History of Education course menu. In cases where a student has already taken a course deemed equivalent to TPS 1440H, another philosophy course may be substituted. In consultation with the faculty advisor, this course should be chosen to complement the student's primary focus in history.

Field Philosophy of Education

- A total of 3.0 FCEs, including:
  - Completion of TPS 1440H *An Introduction to Philosophy of Education* (0.5 FCE), unless a course deemed equivalent has already been taken.
  - One course in history, normally TPS 1419H *Historiography and the History of Education* (0.5 FCE). In cases where a student has already taken a course deemed equivalent to TPS 1419H, another history course may be substituted. In consultation with the faculty advisor, this course should be chosen to complement the student's primary focus in philosophy.
  - Normally, 1.5 of the remaining 2.0 FCEs must be selected from the Philosophy of Education course menu. (Consult the department for details.) Upon approval, courses from other departments, including the Graduate Department of Philosophy, may be substituted for Philosophy of Education courses.
  - Applicants with undergraduate majors in related social science and humanities disciplines are normally required to take some additional courses.

Normal Program Length: 3 sessions full-time; 12 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

Master of Education

Admissions have ceased for the MEd program in the History and Philosophy of Education.

Applicants who would normally apply to the History and Philosophy of Education program are encouraged to apply to the Sociology in Education program in the new department of Humanities, Social Sciences and Social Justice Education instead. Please e-mail the Program Coordinator, Dr. Megan Boler, at megan.boler@utoronto.ca.

Minimum Admission Requirements

- The department welcomes applicants with diverse but relevant backgrounds.
- Applicants are admitted under the General Regulations of the School of Graduate Studies.

Program Requirements

Field History of Education

- The MEd degree in the History of Education field may be pursued under either Option II (4.0 full-course equivalents [FCEs] plus a major research project/paper) or Option IV (5.0 FCEs).
  - Students enrolled in **Option II** are expected to complete at least 2.0 FCEs from the History of Education course menu.
  - Students enrolled in **Option IV** are expected to complete at least 2.5 FCEs from the History of Education course menu. (Consult the department for a list of History of Education courses.)
- Completion of TPS 1460H *History and Educational Research* and TPS 1440H *An Introduction to Philosophy of Education* is mandatory in both options. In cases where a student has already taken a course deemed equivalent to TPS 1440H, another philosophy course may be substituted. In consultation with the faculty advisor, this course should be chosen to complement the student's primary focus in history.

Field Philosophy of Education

- The MEd degree in the History and Philosophy of Education program, Philosophy of Education field may be pursued under either Option II (4.0 full-course equivalents [FCEs] plus a major research project/paper) or Option IV (5.0 FCEs).
  - Students enrolled in **Option II** are expected to complete at least 2.0 FCEs from the Philosophy of Education course menu.
  - Students enrolled in **Option IV** are expected to complete at least 2.5 FCEs from the Philosophy of Education course menu. (Consult the department for a list of Philosophy of Education courses.)
- Completion of TPS 1440H *An Introduction to Philosophy of Education* is mandatory in both

options (unless a course deemed equivalent has already been taken).

- In addition, for both options one course in history is also mandatory, normally TPS 1419H *Historiography and the History of Education*. In cases where a student has already taken a course deemed equivalent to TPS 1419H, another history course may be substituted. In consultation with the faculty advisor, the substituted course should be chosen to complement the student's primary focus in philosophy.

Normal Program Length: 5 sessions full-time; 10 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

Doctor of Education

Admissions have ceased for the EdD program in the History and Philosophy of Education.

Applicants who would normally apply to the History and Philosophy of Education program are encouraged to apply to the Sociology in Education program in the new department of Humanities, Social Sciences and Social Justice Education instead. Please e-mail the Program Coordinator, Dr. Megan Boler, at megan.boler@utoronto.ca.

The EdD degree is designed for career educators who wish to engage in the in-depth study of a problem or topic related to professional practice.

Minimum Admission Requirements

- The department welcomes applicants with diverse but relevant backgrounds.
- Applicants are admitted under the General Regulations of the School of Graduate Studies.

Program Requirements

Field History of Education

- Students who have completed a master's degree (MEd or MA) in the History and Philosophy of Education program, History of Education field must complete 4.0 full-course equivalents (FCEs), a year of full-time study on campus, and a thesis. Preferably, the year of full-time study should occur late in the degree program and should be devoted primarily to thesis research and writing.
- Students who have not completed a master's (MEd or MA) degree in the History and Philosophy of Education program, History of Education field must complete TPS 1440H *An Introduction to the Philosophy of Education* as part of their 4.0 FCEs. In cases where a student has already taken a course deemed equivalent to TPS 1440H, another philosophy course may be substituted. In consultation with the faculty advisor, this course should be chosen to complement the student's primary focus in history.

- The core program includes two mandatory EdD seminars (TPS 3490H *EdD Seminar in the History of Education I* and TPS 3491H *EdD Seminar in the History of Education II*), normally taken during the year of full-time study. The course TPS 1419H *Historiography and the History of Education* is a requirement for students in this program. The remaining courses are selected by the student in consultation with the faculty advisor and may be taken before or after the year of required full-time study. Students are strongly encouraged, though not required, to take at least 1.0 FCE before the year of full-time study.
- All EdD students are required to take a comprehensive examination.

Field Philosophy of Education

- Applicants with specializations in their master's degree programs other than Philosophy of Education are required to take additional courses either as prerequisites to admission or as part of their program.
- Applicants without a master's thesis or equivalent must submit a Qualifying Research Paper (QRP), which must be approved by two faculty members prior to registration in the program.
- Students who have completed a master's degree (MEd or MA) in the History and Philosophy of Education program, Philosophy of Education field must complete 4.0 full-course equivalents (FCEs) (some or all of which may be taken part-time), a year of required full-time study on campus, and a thesis. Preferably, the year of full-time study should occur late in the degree program and should be devoted primarily to thesis research and writing.
- All EdD students are required to take a comprehensive examination.
- The core program includes two mandatory EdD seminars (TPS 3480H *EdD Seminar in the Philosophy of Education I* and TPS 3481H *EdD Seminar in the Philosophy of Education II*), normally taken during the year of required full-time study, and the course TPS 1440H *An Introduction to Philosophy of Education*, unless it, or an equivalent, has been taken previously.
- Students who have not completed a master's (MEd or MA) degree in the History and Philosophy of Education program, Philosophy of Education field must complete TPS 1419H *Historiography and the History of Education* as part of their required 4.0 FCEs. In cases where a student has already taken a course deemed equivalent to TPS 1419H, another history course may be substituted. In consultation with the faculty advisor, this course should be chosen to complement the student's primary focus in philosophy.
- A minimum of 2.5 FCEs should normally be taken from the Philosophy of Education course menu,

selected in consultation with the faculty advisor. (Consult the department for a list of Philosophy of Education courses.) Courses from other departments, including the Graduate Department of Philosophy, may, upon approval, be substituted for Philosophy of Education courses. Students are strongly encouraged, though not required, to take at least 1.0 FCE before the year of required full-time study.

Normal Program Length: 4 years full-time; 6 years part-time

Time Limit: 6 years full-time; 8 years part-time

Doctor of Philosophy

Admissions have ceased for the PhD program in the History and Philosophy of Education.
Applicants who would normally apply to the History and Philosophy of Education program are encouraged to apply to the Sociology in Education program in the new department of Humanities, Social Sciences and Social Justice Education instead. Please e-mail the Program Coordinator, Dr. Megan Boler, at megan.boler@utoronto.ca.

Minimum Admission Requirements

- The department welcomes applicants with diverse but relevant backgrounds.
- Applicants are admitted under the General Regulations of the School of Graduate Studies.
- Applicants to the PhD program must have an appropriate master's degree in history and philosophy of education, or its equivalent, with high academic standing from a recognized university. Work at the master's level must include a thesis or equivalent major research paper and must be in the same subject area as the intended field of PhD study.

Program Requirements

Field History of Education

- 3.0 full-course equivalents (FCEs) plus a thesis.
- If the master's degree did not include a thesis (or equivalent), a Qualifying Research Paper (QRP) must be submitted and approved by two faculty members before registration in the degree program.
- Applicants who do not hold a University of Toronto MA degree in the History and Philosophy of Education program, History of Education field or its equivalent will be required to establish equivalency with the OISE master's program. Usually this entails completion of TPS 1419H *Historiography and the History of Education* and TPS 1440H *An Introduction to the Philosophy of Education* within the minimum 3.0 FCEs requirement for the PhD. In cases where a student has already taken a course deemed equivalent to TPS 1440H, another philosophy course may be substituted. In consultation with

the faculty advisor, this course should be chosen to complement the student's primary focus in history.
- All PhD students are required to write a comprehensive examination.

Field Philosophy of Education

- 3.0 full-course equivalents (FCEs) plus a thesis.
- If the master's degree did not include a thesis (or equivalent), a Qualifying Research Paper (QRP) must be submitted and approved by two faculty members before registration in the degree program.
- Applicants who do not hold a University of Toronto master's degree in the History and Philosophy of Education program, Philosophy of Education field or its equivalent will be required to establish equivalency with the OISE master's program. Usually this entails completion of TPS 1440H *An Introduction to Philosophy of Education* (unless a course deemed equivalent has already been taken previously) and TPS 1419H *Historiography and the History of Education* within the minimum 3.0-FCE requirement for the PhD. In cases where a student has already taken a course deemed equivalent to TPS 1419H, another history course may be substituted. In consultation with the faculty advisor, this course should be chosen to complement the students' primary focus in philosophy.
- All students must complete at least 2.0 FCEs from the Philosophy of Education course menu, including TPS 1440H. (Consult the department for a list of Philosophy of Education courses.) Courses should be selected in consultation with the faculty advisor. Courses from other departments, including the Graduate Department of Philosophy, may, upon approval, be substituted for Philosophy of Education courses.
- All PhD students are required to write a comprehensive examination.

Normal Program Length: 4 years full-time

Time Limit: 6 years full-time

Course List

Not all courses are offered every year. Please consult OISE's Graduate Studies Course Schedule which lists the courses the department will offer this year as well as those offered by other departments that may be taken for credit in your program.

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.

History of Education

TPS 1400H   The Origins of Modern Schooling I: Problems in Education Before the Industrial Revolution

TPS 1401H	The Origins of Modern Schooling II: Problems in Nineteenth- and Twentieth-Century Educational History, Focus on Canada and the U.S.A.
TPS 1403H	History of Education in Canada
TPS 1404H	History of Rural Education in Canada
TPS 1405H	History of Education and Society: Selected Topics
TPS 1406H	Sexuality and the History of Education
TPS 1410H	Schooling in the Movies: Education as Reflected in Hollywood Films
TPS 1415H	The History of the Teaching Profession
TPS 1416H	Ontario Education
TPS 1416H	L'education en Ontario
TPS 1419H	Historiography and the History of Education
TPS 1420H	European Popular Culture and the Social History of Education I
TPS 1422H	Education and Family Life in the Modern World I
TPS 1423H	The History of the Family in Canada
TPS 1424H	Religion, Ideology, and Social Movements in the History of North American Education
TPS 1426H	The History of Gender and Education in Canada
TPS 1427H	History and Commemoration: Canada and Beyond, 1800s-1900s
TPS 1428H	Immigration and the History of Canadian Education
TPS 1429H	Ethnicity and the History of Canadian Education
TPS 1430H	Gendered Colonialisms, Imperialisms and Nationalisms in History
TPS 1448H	Popular Culture and the Social History of Education II
TPS 1452H	Individual Reading and Research in the History of Education: Master's Level
TPS 1454H	The Battle Over History Education in Canada
TPS 1460H	History and Educational Research
TPS 1461H	Special Topics in History of Education
TPS 3423H	Education and Family Life in the Modern World: II
TPS 3428H	Minority Concerns and Education in Canadian History: Selected Topics
TPS 3452H	Individual Reading and Research in the History of Education: Doctoral Level
TPS 3461H	Special Topics in History of Education
TPS 3490H	EdD Seminar in the History of Education I
TPS 3491H	EdD Seminar in the History of Education II
TPS 3494H	Doctoral Practicum in the History of Education I
TPS 3495H	Doctoral Practicum in the History of Education II

Philosophy of Education

TPS 1432H	Knowledge, Mind, and Human Beings
TPS 1433H	Freedom and Authority in Education
TPS 1435H	Democracy and Education

TPS 1436H	Modernity and Postmodernity in Social Thought and Education
TPS 1438H	Democratic Approaches to Pedagogy
TPS 1439H	Gender, Ethics, and Education: Philosophical Issues
TPS 1440H	An Introduction to Philosophy of Education
TPS 1441H	Philosophical Dimensions of Moral Education
TPS 1442H	Cultural and Racial Difference in Education: Philosophical Perspectives
TPS 1443H	'Troubling' Knowledges in Education: the Politics of Claiming Truths
TPS 1446H	The Teacher as Philosopher
TPS 1447H	Technology in Education: Philosophical Issues
TPS 1453H	Individual Reading and Research in the Philosophy of Education: Master's Level
TPS 1462H	Women, Literature, and Education
TPS 1465H	Special Topics in Philosophy of Education
TPS 1471H	Critical Issues in Education: Philosophical Perspectives
TPS 1472Y	Philosophical Questions about the Teaching of Philosophy
TPS 1482H	The Nature and Development of Religious Knowledge in Education
TPS 1484H	Philosophy of Literature and Literature Education
TPS 1485H	Literature and Values in Education
TPS 1487H	Critical Discourses of Musical Experience and Education
TPS 1488H	Feminist Theory, Musical Experience, and Music Education
TPS 3417H	Research Seminar in Feminist Criticism, Aesthetics, and Pedagogy
TPS 3436H	Aesthetics and Education
TPS 3441H	Research Seminar in Moral Education: Part I
TPS 3443H	Research Seminar in Moral Education: Part II
TPS 3447H	Theories of Modernity and Education: I
TPS 3453H	Individual Reading and Research in the Philosophy of Education: Doctoral Level
TPS 3465H	Special Topics in Philosophy of Education
TPS 3480H	EdD Seminar in the Philosophy of Education I
TPS 3481H	EdD Seminar in the Philosophy of Education II
TPS 3484H	Doctoral Practicum in the Philosophy of Education I
TPS 3485H	Doctoral Practicum in the Philosophy of Education II

Sociology in Education

Master of Arts

Minimum Admission Requirements

- The Sociology in Education program welcomes applicants with diverse but relevant backgrounds.

- Applicants are admitted under the General Regulations of the School of Graduate Studies.
- Admission to the MA program requires an appropriate bachelor's degree in sociology or a related 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 sociology 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 in the social sciences

Program Requirements

- The MA is a research-based degree program which can be taken on a full-time or part-time basis.
- 3.0 full-course equivalents (FCEs), of which at least 2.0 must be Humanities, Social Sciences and Social Justice Education (HSSSJE) courses. Students who are registered in a collaborative program may apply to have their HSSSJE 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 HSSSJE credit.
- Additional courses may be required of some students, and some students may be required to take specified courses in research methods and/or sociological theory.
- Students complete a thesis which may lay the groundwork for doctoral research.

Normal Program Length: 4 sessions (2 years) full-time; 5 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

Master of Education

Minimum Admission Requirements

- The department welcomes applicants with diverse but relevant backgrounds to the Sociology in Education MEd program.
- Applicants are admitted under the General Regulations of the School of Graduate Studies.
- Admission to the MEd program requires an appropriate bachelor's degree from a recognized

university, with standing equivalent to a University of Toronto mid-B or better in the final year.
- Applicants must have the equivalent of 12 months' professional experience.
- 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 sociology 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 in the social sciences

Program Requirements

- Students may complete the MEd program by one of three options:
  - Option II: 4.0 full-course equivalents (FCEs) plus a Major Research Paper (MRP)
  - Option III: 3.0 FCEs plus a thesis
  - Option IV: 5.0 FCEs
- At least half of the FCEs in an MEd program must be Humanities, Social Sciences and Social Justice Education (HSSSJE) courses. Students who are registered in a collaborative program may apply to have their HSSSJE 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 HSSSJE credit.
- The degree may be completed on a full-time or part-time basis.

Normal Program Length: Options II and III: 5 sessions full-time; 6 sessions part-time. Option IV: 8 sessions part-time.

Time Limit: 3 years full-time; 6 years part-time

Course List

Not all courses are offered every year. Please consult OISE's Graduate Studies Course Schedule.

Master's Level

SES 1900H	Introduction à la sociologie de l'éducation
SES 1900H	Introduction to Sociology in Education
SES 1902H	Introductory Sociological Research Methods in Education
SES 1905H	Qualitative Approaches to Sociological Research in Education
SES 1909H	Environmental Sustainability and Social Justice 1

SES 1911H   Sociologie de l'éducation spécialisée
SES 1912H   Foucault and Research in Education and Culture: Discourse, Power and the Subject
SES 1915H   Education and Popular Culture
SES 1919H   Environmental Sustainability and Social Justice 2
SES 1921Y   The Principles of Anti-Racism Education
SES 1922H   Sociology of Race and Ethnicity
SES 1923H   Racism, Violence, and the Law: Issues for Researchers and Educators
SES 1924H   Modernization, Development, and Education in African Contexts
SES 1925H   Indigenous Knowledge and Decolonization: Pedagogical Implications
SES 1925H   Savoir indigène et décolonization
SES 1926H   Race, Space and Citizenship: Research Methods
SES 1927H   Migration and Globalization
SES 1929H   Theorizing Asian Canada
SES 1930H   Race, Indigenous Citizenship and Self-Determination: Decolonizing Perspec-tives
SES 1951H   L'École, la participation parentale et la communauté
SES 1951H   The School and the Community
SES 1954H   Marginality and the Politics of Resistance
SES 1956H   Social Relations of Cultural Production in Education
SES 1957H   Doing Disability in Theory and Everyday Life
SES 1959H   Theoretical Frameworks in Culture, Communications and Education
SES 1961H   Spirituality and Schooling: Sociological and Pedagogical Implications in Education
SES 1982H   Women, Diversity, and the Educational System
SES 1989H   Black Feminist Thought
SES 1992H   Feminism and Poststructuralism in Education
SES 2910H   Changes in Families and Policy Consequences for Government and Education
SES 2941H   Social Inequities and Education: Theoretical Implications
SES 2942H   Education and Work
SES 2998H   Individual Reading and Research in Sociology and Equity Studies in Education: Master's Level
SES 2999H   Special Topics in Sociological Research in Education
JHS 1916H   Studying the Graduate Student Experience
JTE 1952H   Language, Culture, and Education
JTE 1952H   Langue, culture et éducation
JTE 2912H   Teacher's Work: Classrooms, Careers, Cultures, and Change

Doctor of Education

The 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.

Minimum Admission Requirements

- The department welcomes applicants with diverse but relevant backgrounds to the Sociology in Education EdD program.
- Applicants are admitted under the General Regulations of the School of Graduate Studies.
- Admission to the EdD program requires a University of Toronto MEd or MA in education, or its equiva-lent from a recognized university, in the same field of specialization proposed at the doctoral level, completed with standing equivalent to a University of Toronto B+ or better in master's courses.
- Applicants must have the equivalent of 12 months' professional experience.
- Applicants are required to submit the following; incomplete applications may be subject to process-ing delays or rejection:
  - a careful statement of intellectual interests and concerns relevant to sociology 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 re-search is best matched to the student's research interests
  - two letters of reference, preferably from univer-sity instructors with whom the applicant has studied or worked
  - at least one sample of written work in the social sciences

Program Requirements

- The EdD degree may be pursued on a full-time or part-time basis.
- 4.0 full-course equivalents (FCEs), of which at least 2.0 FCEs must be Humanities, Social Sciences and Social Justice Education (HSSSJE) courses. Students who are registered in a collaborative program may apply to have their HSSSJE 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 HSSSJE credit.
- EdD students may begin their studies on a part-time basis. However, they must register full-time for a minimum of two consecutive sessions, not includ-ing summer, of on-campus study and then maintain continuous registration full-time subsequently until all degree requirements, including the thesis, are completed.

Normal Program Length: 4 years full-time; 6 years part-time

Time Limit: 6 years full-time; 8 years part-time

Doctor of Philosophy

The PhD degree program is designed to provide opportunities for advanced study, original research, and theoretical analysis.

Minimum Admission Requirements

- The department welcomes applicants with diverse but relevant backgrounds to the Sociology in Education PhD program.
- Applicants are admitted under the General Regulations of the School of Graduate Studies.
- PhD students who are admitted without sufficient previous study in sociology 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 sociology 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 in the social sciences

Flexible-Time PhD

- 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

- PhD students have the option of undertaking the program on a full-time or flexible-time basis.
  - **Full-time PhD students** must maintain full-time status throughout their program of study. Students take 3.0 full-course equivalents (FCEs), though additional courses may be required, and some students may be required to take specified courses in research methods and/or sociological theory. At least ¾ of students' PhD coursework must be taken within HSSSJE. Students who are registered in a collaborative program may apply to have their HSSSJE 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 HSSSJE credit.
  - **Flexible-time PhD students** register full-time during the first four years and part-time during subsequent years of the program. The flexible-time PhD degree is designed to accommodate demand by practicing professionals for a PhD degree that permits continued employment in areas related to their fields of research. Degree requirements for the flexible-time PhD programs are the same as for full-time PhD studies: at least 3.0 FCEs, of which at least 2.0 FCEs must be taken in HSSSJE, with the possibility to apply for a reduction of 0.5 FCE in the HSSSJE course requirement if the student is also registered in a collaborative program. Students would normally take at least one specialized research methods course.
- All PhD students must also successfully complete the non-credit course SES 3903H *SESE Learning to Succeed in Graduate School*.
- All PhD students must complete a comprehensive examination.
- All PhD 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 the third year of registration, and must have completed all other program requirements.

Normal Program Length: 4 years full-time; 6 years flexible-time

Time Limit: 6 years full-time; 8 years flexible-time

Course List

Not all courses are offered every year. Please consult OISE's Graduate Studies Course Schedule.

Doctoral Level

SES 3903H	SESE Learning to Succeed in Graduate School (Credit/No Credit)
SES 3904H	Advanced Sociological Theory in Education
SES 3910H	Advanced Seminar on Race and Anti-Racism Research Methodology in Education
SES 3911H	Cultural Knowledges, Representation and Colonial Education
SES 3912H	Race and Knowledge Production: Research Methods
SES 3915H	Franz Fanon and Education
SES 3929H	Advanced Disability Studies: Interpretive Methods, Interpreted Bodies—Research Methods

SES 3930H	Methods to Avoid Sexist, Racist and Ableist Biases in Research
SES 3933H	Globalisation and Transnationality: Feminist Perspectives
SES 3943H	Sociology of State Formation and Genealogies of Government
SES 3949H	Advanced Studies in Learning and Work: Class Conflict, Labour and Learning in the Information Age
SES 3997H	Practicum in Sociology and Equity Studies in Education
SES 3998H	Individual Reading and Research in Sociology and Equity Studies in Education: Doctoral Level
SES 3999H	Special Topics in Advanced Sociological Research in Education
JHS 3932H	Women and Higher Education
JSA 5147H	Language, Nationalism and Post-Nationalism

Larkin, June - PhD
Michalko, Rod - BA, MA, PhD
Norris, Trevor - PhD
Quarter, Jack - PhD
Tarc, Aparna - BA, BE, MEd, PhD
Trotz, Alissa - AB, MPH, PhD
Waldron, Ingrid - BA, MA, PhD
Walton, Fiona - BE, BA, MEd, EdD
Wiebe, Donald - BTh, BA, MA, PhD

Graduate Faculty

The complete list of graduate faculty is unavailable at the time of publication.

Full Members

Boler, Megan – BA, MA, PhD
Bredo, Eric - PhD
Cannon, Martin - BA, MA, PhD
Coloma, Roland Sintos - TD, BA, MA, MA, PhD
Dehli, Kari - BA, MA, PhD
Dei, George JS - BA, MA, PhD
Farmer, Diane - BA, MSS, PhD
Gaskell, Jane - BA, EdD
Heller, Monica - BA, MA, PhD
Ng, Roxana - BA, MA, PhD
Portelli, John P - BA, MA, PhD
Olson, Paul - BA, MA
Razack, Sherene - BA, MA, PhD
Titchkosky, Tanya - BA, MA, PhD
Walcott, Rinaldo - BA, MA, PhD *(Chair and Graduate Chair)*
Wane, Njoki - BE, MSc, MEd, PhD

Members Emeriti

Acker, Sandra - BA, MA, PhD
Bogdan, Deanne - BA, MA, PhD
Boyd, Dwight - BA, MEd, EdD
Eichler, Margrit - MA, PhD, LLD
Kilbourn, Brent - BS, PhD
Lenskyj, Helen - BA, MA, PhD
Livingstone, David - BA, PhD
Misgeld, Dieter - BA, PhD
Simon, Roger - BS, PhD
Pierson, Ruth - BA, MA, PhD

Associate Members

Baines, Donna - BSW, MSW, DSW
DeYoung, Alan J. - BA, MA, PhD
Farley, Lisa - BA, BEd, MEd, PhD
Hsiung, Ping-Chun - PhD

Immunology

Faculty Affiliation

Medicine

Degree Programs Offered

Immunology – MSc, PhD

Collaborative Programs

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

1. **Developmental Biology**
   • Immunology, MSc, PhD
2. **Resuscitation Sciences**
   • Immunology, MSc, PhD
3. **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, at the Ontario Cancer Institute, and at the Research Institutes of Mt. Sinai Hospital, Toronto General Hospital, Toronto Western Hospital, the Hospital for Sick Children, and Sunnybrook Hospital.

The department offers study programs towards the **Master of Science** and **Doctor of Philosophy** degrees in a wide range of immunological disciplines. These disciplines include molecular mechanisms of lymphocyte development and selection, T-cell and B-cell receptors, cell interactions, growth factor receptors, cytokine networks, antigen processing and presentation, signal transduction in lymphocytes, V(D)J recombination, anergy, apoptosis, transgenic and knock-out models, immuno-targeting and vaccine design, autoimmunity, AIDS, diabetes, and transplantation.

For more detailed information, see the graduate handbook available from the department or consult the Immunology home page on the website listed below.

Contact and Address

Web: www.immunology.utoronto.ca
E-mail: graduate.immunology@utoronto.ca
Telephone: (416) 978-6382
Fax: (416) 978-1938

Department of Immunology
University of Toronto
Medical Sciences Building
Room 7207, 1 King's College Circle
Toronto, Ontario M5S 1A8
Canada

Degree Programs

Immunology

Master of Science

Minimum Admission Requirements

- 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 from outside North America are required to provide Graduate Record Examination (GRE) (general) scores with their application.

Program Requirements

- Successful completion of IMM 1016H, IMM 1019H and IMM 2021H.
- A satisfactory thesis embodying the student's research.
- Pass an oral examination based on research.

Normal Program Length: 6 sessions full-time

Time Limit: 3 years full-time

Doctor of Philosophy

Minimum Admission Requirements

There are three admission routes to the PhD program:

- Applicants may be accepted for direct entry with a BSc degree, with at least an A- average in their final year.
- Applicants may be accepted first into the MSc program from a bachelor's program with at least a B+ average and, conditional on excellent performance in the first year, may reclassify into the PhD program.
- Applicants already holding an MSc with at least a B+ average may be accepted directly into the PhD program.

Program Requirements

- The PhD program emphasizes research. In addition, the program requirements include completion of IMM 1016H, IMM 1017H, IMM 1100H, IMM 2100H, and an additional 0.5 full-course equivalent (FCE) from either Immunology or outside the department in a subject relevant to the thesis topic.
- Students are required to be on campus and participating full-time until the program requirements of research and coursework have been completed.
- All students are examined in the second year of the program on a submitted research proposal and on relevant course material.
- Candidates must submit a thesis and defend it at a Doctoral Final Oral Examination conducted by the School of Graduate Studies.

Normal Program Length: 4 years full-time; 5 years direct-entry

Time Limit: 6 years full-time; 7 years direct-entry

Course List

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

IMM 1016H	Recent Advances in Basic Immunology: Part I (Fall)
IMM 1017H[+]	Recent Advances in Basic Immunology: Part II (Spring)
IMM 1019H[0]	Master's Seminar Course (Credit/No Credit)
IMM 1020H	Recent Advances in Clinical Immunology (Spring)
IMM 1100H	Doctoral Seminar Course (Credit/No Credit)
IMM 1429H	Developmental Immunology (Fall)
IMM 1430H	Advanced Immunobiology (Spring)
IMM 2021H[0]	Special Topics in Immunology I (Credit/No Credit)
IMM 2100H[0]	Special Topics in Immunology II (Credit/No Credit)
IMM 1428H	Molecular Immunology (Fall)

Graduate Faculty

Full Members

Anderson, Michele - BS, PhD
Barber, Brian - BSc, MSc, PhD
Berger, Stuart - BSc, MSc, PhD *(Coordinator of Graduate Studies)*
Berinstein, Neil - MD
Booth, James - BSc, PhD

Carlyle, James - PhD
Danska, Jayne - AB, PhD
Dosch, Hans - MD
Fish, Eleanor - BSc, MPH, PhD
Gommerman, Jennifer - BSc, PhD
Gorczynski, Reginald - BSc, BA, MA, MD, PhD
Guidos, Cynthia - BSc, PhD
Hakem, Razqallah - PhD
Inman, Robert - BA, MD
Iscove, Norman - MD, PhD
Isenman, David - BSc, BSc, PhD
Jongstra, Jan - MSc, PhD
Julius, Michael - BSc, PhD
Kaul, Rupert - MD, PhD
Kelvin, David - MASc, PhD
Letarte, Michelle - BSc, PhD
Levy, Gary - BSc, MD
MacDonald, Kelly - MD
Mak, Tak - BSc, MSc, PhD
Martin, Alberto - BSc, MSc, PhD
Ohashi, Pam - BSc, PhD
Ostrowski, Mario - MD
Paige, Christopher - BSc, PhD
Penninger, Josef - MD
Philpott, Dana - BS, PhD
Poussier, Philippe - MD
Ratcliffe, Michael - PhD
Roifman, Chaim - MD
Rottapel, Robert - BA, MD
Rubin, Laurence - MD
Schuh, Andre - MD
Silverman, Earl - MD
Siminovitch, Katherine - MD
Tsui, Florence - BSc, MSc, PhD
Watts, Tania - BSc, PhD
Williams, David - BSc, MSc, PhD
Wither, Joan - MD, PhD
Wu, Gillian - BSc, MSc, PhD
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
Painter, Robert - BSc, PhD
Shulman, Marc - AB, PhD

Associate Members

Dunn, Shannon - BSc, MSc, PhD
Ehrhardt, Rudolf - MS, PhD
Hirano, Naoto - MD, PhD
Jongstra-Bilen, Jenny - BSc, MSc, PhD
Keystone, Edward - BSc, MD
Mallevaey, Thierry - MSc, PhD
Rast, Jonathan - MS, PhD

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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.

Industrial Relations and Human Resources

Faculty Affiliation

Arts and Science

Degree Programs Offered

Industrial Relations and Human Resources – MIRHR, PhD

Collaborative Programs

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

Ethnic and Pluralism Studies

- Industrial Relations and Human Resources – MIRHR, PhD

Overview

The **Master of Industrial Relations and Human Resources** (MIRHR) and **Doctor of Philosophy** (PhD) degree programs benefit 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 degree may be taken on a full-time or part-time basis.

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 degree provides specialized study of the employment relationship using an interdisciplinary approach.

The **PhD** in Industrial Relations and Human Resources 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.

Contact and Address

Web: www.cirhr.utoronto.ca
E-mail: 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

Degree Programs

Industrial Relations and Human Resources

Master of Industrial Relations and Human Resources

Minimum Admission Requirements

- 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.
- Applicants to the 12-month MIRHR advanced-standing option require an appropriate bachelor's degree from a recognized university. The degree major or specialization must be in one of the following areas: employment relations, industrial relations, or labour studies; or administration or commerce with a major in industrial relations or human resources. A minimum grade average of B+ in each of the final two years of the degree is required.
- Applicants whose degrees are not from Canadian universities are required to submit results from the Graduate Record Examination (GRE). The Graduate Management Admission Test (GMAT) scores will be accepted as a substitute. Although there is no minimum score requirement, performance on either the GRE or GMAT 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 the writing and speaking sections
- Note: Space in the program is limited. Applicants meeting the minimum admission requirements are not guaranteed admission. The Centre for Industrial Relations and Human Resources 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.

Two-Year MIRHR Program

- Year 1 of the two-year program is spent acquiring a foundation in industrial relations and human resources and includes courses in economics, law, quantitative methods, organizational behaviour, and sociology. **Courses marked (PR) require prerequisites; further information may be obtained from the Centre for Industrial Relations and Human Resources.**

  Year 1: Foundation Courses
  Students must take 5.0 full-course equivalents (FCEs), of which 4.0 are required courses, as follows:
  - IRE 1002H *Applied Statistics in Industrial Relations*
  - IRE 1010H *Economic Environment of Industrial Relations and Human Resources*
  - IRE 1126H *Labour Market Policy* (PR)
  - IRE 1362H *Organizational Behaviour*
  - IRE 1609H *Strategic Human Resources Management* (Exclusion: RSM 2609H *Aligning People and Strategy*)
  - IRE 1610H *Industrial Relations*
  - IRE 1611H *Sociology of Industrial Relations*

  Plus one of the following law courses:
  - IRE 1270H *Law of Labour Relations* (PR)
  - IRE 1338H *Law in the Workplace* (PR)

  ○ 1.0 FCE is an elective course that is chosen from the list below to fill the requisite 5.0 FCEs in the first year of the program.
  ○ Students admitted into the two-year MIRHR program may apply to take IRE 4000H, a non-credit course designed to assist 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 the first year of the program (or in the first 5.0 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* (PR)
  - IRE 2002Y *Research Methods 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 the second year of the program.

Advanced-Standing Option: 12-Month MIRHR Program

- 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 7.0 full-course equivalents (FCEs), of which 3.5 are required courses, as follows:
  - IRE 1010H *Economic Environment of Industrial Relations and Human Resources*
  - IRE 1126H *Labour Market Policy (PR)*
  - IRE 1611H *Sociology of Industrial Relations*
  - IRE 2001H *Foundations and Current Issues in Industrial Relations and Human Resources (PR)*
  - IRE 2002Y *Research Methods in Industrial Relations and Human Resources (PR)*

  Plus one of the following law courses:
  - IRE 1270H *Law of Labour Relations (PR)*
  - IRE 1338H *Law in the Workplace (PR)*

  ○ 3.5 FCEs are elective courses that are chosen from the list below to fill the requisite 7.0 FCEs in the program.
- Students in the MIRHR program are required to achieve a mid-B average in the first two sessions of the program (or in the first 5.0 FCEs) in order to continue into the third session.

Normal Program Length: 3 sessions advanced-standing MIRHR; 6 sessions two-year MIRHR

Time Limit: 3 years full-time; 6 years part-time

Doctor of Philosophy

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies and require a Master of Industrial Relations and Human Resources (MIRHR) degree from the University of Toronto, or its equivalent. Other students who meet the admission requirements may be required to enrol in a preparatory year consisting of courses from the MIRHR program. Students with a bachelor's degree in industrial relations and human resources, or in a related field of study, may be considered for admission to the PhD (direct entry) 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). The Graduate Management Admission Test (GMAT) will be accepted as a substitute. Although there is no minimum score requirement, performance on either the GRE or GMAT 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

- Requirements that are normally met in the first two years 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 the student's second year in the program.
- Intensive work on the dissertation will also begin in the second year of the PhD program. The thesis topic and name of supervisor must be submitted no later than March 31 of the second year.
- Students who are in their third and fourth years of study 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 the third year of study (or fourth year for direct-entry PhD students).
- Proficiency in French and/or other languages will be required when the student's supervisor deems it necessary for dissertation research or when the centre deems it necessary for the student's field.
- 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.

Normal Program Length: 4 years full-time; 5 years direct-entry

Time Limit: 6 years full-time; 7 years direct-entry

Course List

Not all courses are offered every year. Please consult the Centre for Industrial Relations and Human Resources timetable which lists available courses in each session.

The notation (PR) following a course indicates the course has a prerequisite.

Elective Courses

The centre offers key required and elective courses in Industrial Relations and Human Resources. MIRHR students are not permitted to take more than a total of 1.5 FCEs of electives in any one unit outside the Centre for Industrial Relations and Human Resources without the permission of the Graduate Coordinator. Graduate units give preference to their own students, so MIRHR 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 the centre. Some courses are offered only in alternate years, and 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.

Courses marked (PR) require prerequisites; additional information may be obtained from the Centre for Industrial Relations and Human Resources.

Further details concerning specific courses and brief course descriptions are available on the centre's website.

Industrial Relations and Human Resources

IRE 1002H	Applied Statistics in Industrial Relations
IRE 1260H	Seminar on Labour Arbitration (PR)
IRE 1270H	Law of Labour Relations
IRE 1338H	Law in the Workplace
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	Advanced Negotiations: Theory and Process (PR)
IRE 1640H	Contemporary Trade Unionism: Issues, Challenges, Strategy (PR)
IRE 1645H	Alternative Dispute Resolution in the Workplace: Theory and Practice (PR)
IRE 1650H	Designing Systems for Managing Workplace Conflict (PR)
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 2021H	Financial Information for IR/HR
IRE 2715H	Special Topics in Industrial Relations and Human Resources
IRE 3615H	Creating High Performance Reward Systems (PR)
IRE 3620H	Consulting in Compensation (PR)
IRE 3630H	Diversity and Inclusiveness in the Workplace (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

AEC 1101H	Program Planning in Adult Education
AEC 1148H	An Introduction to Workplace and Organizational Democracy
AEC 1268H	Career Counselling and Development: Transition in Adulthood

Economics

ECO 2800H	Labour Economics I
ECO 2801H	Labour Economics II (PR)

Management

RSM 2027H	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

Social Work

SWK 4403H	Women and Social Policy in Canada

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

Graduate Faculty

Full Members

Amernic, Joel - BSc, MBA, CA
Campolieti, Michele - BSc, MA, PhD
Gunderson, Morley - BA, MA, PhD *(PhD Coordinator)*
Holness, D Linn - MHSc, MD
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
Quarter, Jack - PhD
Reitz, Jeffrey - PhD
Rotundo, Maria - BA, MA, PhD
Saks, Alan - BA, MSc, PhD *(Coordinator of Graduate Studies)*
Verma, Anil - BTech, MBA, DPhil *(Director)*
Welsh, Sandy - BA, MA, PhD
Whyte, Glen - LLB, MA, MPH, MBA, PhD
Xie, Jia Lin - BA, MBA, PhD

Members Emeriti

Reid, Frank - BA, MSc, PhD

Associate Members

Dhuey, Elizabeth Ann - BA, MEc, PhD
Heathcote, Joanna - BA, MA, PhD
Radhakrishnan, Phanikiran - DPhil
Rittich, Kerry - BMus, LLB, SJD
Riznek, Lori - BA, MA, DA
Sawchuk, Peter - BSc, BEd, PhD

Information

Faculty Affiliation

Information

Degree Programs Offered

Information – MI, JD/MI, Concurrent Registration
  Option (MI/MMSt)
Information Studies – PhD
Museum Studies – MMSt, Concurrent Registration
  Option (MMSt/MI)

Diploma Programs Offered

Information Studies – Graduate Diploma of
  Advanced Study in Information Studies (a post-
  master's diploma)

Collaborative Programs

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

1. **Addiction Studies**
   - Information, MI
   - Information Studies, PhD
2. **Aging, Palliative and Supportive Care Across the
   Life Course**
   - Information, MI
   - Information Studies, PhD
3. **Book History and Print Culture**
   - Information, MI
   - Information Studies, PhD
   - Museum Studies, MMSt
4. **Environmental Studies**
   - Information, MI
   - Information Studies, PhD
5. **Jewish Studies**
   - Museum Studies, MMSt
6. **Knowledge Media Design**
   - Information, MI
   - Information Studies, PhD
7. **Sexual Diversity Studies**
   - Information, MI
   - Information Studies, PhD
   - Museum Studies, MMSt
8. **Women and Gender Studies**
   - Information, MI
   - Information Studies, PhD
9. **Women's Health**
   - Information, MI
   - Information Studies, PhD

For more information, please visit our website,
www.ischool.utoronto.ca.

Overview

The Faculty of Information combines strengths
in the stewardship and curation of cultural heritage
(libraries, archives, and museums) with leadership in the
future of information practice as society is transformed
by the rise of digital technologies.

The **Master of Information** (MI) program allows
students to explore the breadth of information and to
focus on one or more areas of study.

The **Combined Juris Doctor/Master of
Information** (JD/MI) program is offered jointly by the
Faculty of Law and the Faculty of Information. Students
receive two degrees, information and law.

The **Doctor of Philosophy** program in Information
Studies provides opportunities for advanced scholarly
inquiry into theoretical aspects of information and in
the empirical investigations of information in various
contexts.

The **Master of Museum Studies** (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 provides a Concurrent
Registration Option whereby students may register
concurrently in the Master of Information and Master of
Museum Studies programs.

A post-master's **Graduate Diploma of Advanced
Study in Information Studies** is also offered.

Contact and Address

Web: www.ischool.utoronto.ca
E-mail: inquire@ischool.utoronto.ca
Telephone: (416) 978-3234
Fax: (416) 978-5762

Faculty of Information
University of Toronto
140 St. George Street
Toronto, Ontario M5S 3G6
Canada

Degree Programs

Information

Master of Information

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.

- 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 wishing to focus on information systems must also have completed the equivalent of 2.0 approved full-course equivalents (FCEs) in computer science and 1.0 approved FCE in mathematics.*
- 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 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 facility 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: 100/120 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.
- **Concurrent Registration Option (CRO)**
  - Master of Information/Master of Museum Studies degree programs. Applicants interested in completing the Master of Information and the Master of Museum Studies degree programs concurrently must apply to and be accepted into each program separately and receive approval from the Graduate Coordinator in each program. Applicants should indicate interest in the concurrent registration option at the time of application to the second of the two programs.

Program Requirements

- The Faculty expects students to be competent in their use of information and communication technologies as appropriate to their programs of study.
- 8.0 FCEs as follows:
  - **Course option:** All students must complete four core courses (2.0 FCEs) plus 6.0 FCEs in electives and have their program of study approved by the Program Director. A number of examples of pre-established programs of study is available to students.
  - **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. Students must complete 16 half courses (8.0 FCEs) as follows: four core courses (2.0 FCEs), a research methods course (0.5 FCE) appropriate to their program of study with a final grade of at least A-, five additional courses (2.5 FCEs), and a thesis (3.0 FCEs). The five additional courses may include up to four graduate courses (2.0 FCEs) taken outside the MI program. 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.
- Total time from original registration, including lapsed time, is counted as the time allowed to complete the degree requirements.

Normal Program Length: 4 sessions (2 years) full-time; 8 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

Concurrent Registration Option (CRO)

- Students who have been accepted into both participating programs, with the permission of each

Graduate Coordinator, may register concurrently in the Master of Information (MI) and Master of Museum Studies (MMSt) programs. The minimum period of registration required to complete both degrees in the concurrent registration option is three years.

- Students in the CRO must complete a total of 13.0 FCEs (26 half courses) as follows:
  - 2.0 FCEs in core courses (four half courses) in the MI program, counted towards the MI degree.
  - 2.0 FCEs in required courses (four half courses) in the MMSt program, counted towards the MMSt degree.
  - At least 3.0 FCEs in elective courses in the MI program, to be counted towards the MI degree.
  - At least 3.0 FCEs in elective courses in the MMSt program, to be counted towards the MMSt degree.
  - An additional 3.0 FCEs in elective courses chosen from the MI program, the MMSt program, or elsewhere (maximum 2.0 FCEs) to be counted towards both the MI and the MMSt degree.
  - Registration in a CRO may affect eligibility for external and internal graduate awards and bursaries.
- Path to completion—Students complete their first year in one of the programs (taking all of the core/required courses), their second year in the other program (again taking all of the core courses), and their third year taking courses from both programs to complete the requirements. It does not matter which program is taken first, MI or MMSt.
  - Suggested Registration Schedule (example):
    - Year 1: Full-time in MI program.
      - Core courses plus electives (4.0 FCEs).
    - Year 2: Full-time in MMSt program.
      - Required courses plus electives (4.0 FCEs).
      - For students wishing to do MSL 3000Y *Internship*, this schedule is highly desirable as it allows them to do the internship during their last summer before convocation.
    - Year 3: Full-time in the MI program and part-time in the MMSt program.
      - MI elective courses (1.0 FCE); MMSt elective courses (1.0 FCE); additional elective courses (3.0 FCEs).
  - Students may also elect to enrol full-time in the MMSt program in the first year and full-time in the MI program in the second year.

Normal Program Length: 8 sessions (3 years) full-time

Time Limit: 4 years full-time

Combined Juris Doctor/ Master of Information

Minimum 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 Admission Test (LSAT) and all admission requirements of the Faculty of Information. A separate application to each Faculty must also be submitted. 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 combined JD/MI program by meeting the normal application and admission requirements of the other Faculty and notifying their Faculty Registrar.

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.

Time Limit: 4 years full-time

Diploma Programs

Graduate Diploma of Advanced Study in Information Studies

Minimum Admission Requirements

- The Graduate Diploma of Advanced Study in Information Studies is a post-master's diploma. Applicants must have a University of Toronto MI, MLS, MIS, or MISt degree or equivalent. The graduate diploma program, which may be taken on a full-time or part-time basis, will be tailored to the individual's needs and interests with courses selected in consultation with the Associate Dean (FI). Complete details are available on the Information website at www.ischool.utoronto.ca.

Program Requirements

- 4.0 full-course equivalents (FCEs) (24 credit hours) as follows:
  - At least 3.0 FCEs (six half courses) of these 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.

Normal Program Lenth: 2 sessions full-time; 4 sessions part-time

Time Limit: 2 years full-time; 3 years part-time

Course List

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	Introduction to Bibliographic Control
INF 1325H	Online Information Retrieval
INF 1330H	Archives Concepts and Issues
INF 1331H	Archival Arrangement and Description
INF 1341H	Systems Analysis and Process Innovation
INF 1342H	System Requirements and Architectural Design
INF 1343H	Data Modeling and Database Design
INF 2010H	Reading Course
INF 2011H	Reading Course
INF 2020H	Ethnographic Field Methods for Exploratory Research
INF 2040H	Project Management
INF 2103H	Advanced Records Management: Understanding Forms and Functions of Records in Contemporary Organizations
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 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 2130H	History of Libraries and Librarianship
INF 2131H	The Literature of the Humanities and Social Sciences

INF 2133H	Legal Literature and Librarianship
INF 2134H	Business Information Resources
INF 2135H	Health Sciences Information Resources
INF 2136H	Government Information and Publications
INF 2137H	International Organizations: Their Documents and Publications
INF 2141H	Children's Cultural Texts and Artifacts
INF 2142H	Theories of Classification and Knowledge Organization
INF 2143H	Issues in Children's and Young Adults' Services
INF 2145H	Creation and Organization of Bibliographic Records
INF 2149H	Administrative Decision-Making in Information Organizations
INF 2150H	Legal Issues in Archives
INF 2152H	Advocacy and Library Issues
INF 2153H	Technical Services: Organization and Administration
INF 2155H	The Public Library in the Community: Developing a Critical Practice
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 I
INF 2161H	History of Books and Printing
INF 2162H	Rare Books and Manuscripts
INF 2164H	Authority and Credibility in Online Communities
INF 2165H	Social Issues in Information and Communication Technologies
INF 2167H	Community Informatics
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
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 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 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 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 2330H	Information Ethnography
INF 2331H	The Future of the Book
INF 2332H	Information Behaviour

Information Studies

Doctor of Philosophy

Minimum Admission Requirements

- 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.
- Applicants whose first language is not English should consult the English-Language Facility section of the Faculty's calendar.
- 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 of SGS does not guarantee admission.

Program Requirements

- PhD students come to advanced research in Information 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.
- To achieve candidacy, students must:
  - complete the following 6.0 FCEs:
    - INF 3001H *Research in Information: Foundations*
    - INF 3002H *Research in Information: Contemporary Issues*
    - INF 3003H *Research in Information: Frameworks and Methods*
    - INF 3006Y *Thesis Proposal Preparation*
    - INF 3007Y *Colloquium I*
    - INF 3008Y *Colloquium II*
  - complete 1.5 FCEs in elective courses
  - pass a qualifying exam
  - present and defend a thesis research proposal
  - complete a thesis and pass a Doctoral Final Oral Examination
- Other courses appropriate for the student's research may also be required.

Full-Time PhD Program

All requirements must be completed within six years from first enrolment. PhD students must be regularly registered in SGS during each year of the program.

Flexible-Time PhD Program

The flexible-time PhD program is intended for practising professionals whose employment is related to their intended field of research interest. The flexible-time PhD differs from the full-time PhD only in design and delivery, not in requirements. Students must 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. All degree requirements must be completed within eight years of first enrolment in the program.

Normal Program Length: 4 years full-time; 6 years flexible-time

Time Limit: 6 years full-time; 8 years flexible-time

Course List

INF 3001H	Research in Information: Foundations
INF 3002H	Research in Information: Contemporary Issues
INF 3003H	Research in Information: Frameworks and Methods
INF 3006Y	Thesis Proposal Preparation

INF 3007Y   Colloquium I
INF 3008Y   Colloquium II

Museum Studies

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 Faculty of Information website www.ischool.utoronto.ca.
- 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.
- Applicants are admitted as students for the Master of Museum Studies (MMSt) under the General Regulations of the School of Graduate Studies.

Concurrent Registration Option (CRO)

- Master of Information (MI)/Master of Museum Studies degree programs. Applicants interested in completing the Master of Information and the Master of Museum Studies degree programs concurrently must apply to and be accepted into each program separately and receive approval of the Graduate Coordinator in each program. Applicants should indicate interest in the concurrent registration option at the time of application to the second of the two programs.

Program Requirements

- Minimum requirement is 7.5 full-course equivalents (FCEs) including five required half courses (2.5 FCEs) and 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; or the thesis option.
- **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. Students must complete 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), and five additional courses (2.5 FCEs), of which up to four graduate half courses (2.0 FCEs) may be taken outside the MMSt program. Faculty approval is required to enter the thesis op-

tion. 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.

- 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%.

Concurrent Registration Option (CRO)

- Students who have been accepted into both participating programs, with the permission of each Graduate Coordinator, may register concurrently in the MI and MMSt programs. The minimum period of registration required to complete both degrees in the concurrent registration option is three years.
- Students in the CRO must complete a total of 13.0 FCEs (26 half courses) as follows:
  - 2.0 FCE core courses (four half courses) in the MI program, counted towards the MI degree.
  - 3.5 FCE required courses (five half courses plus one full course) in the MMSt program, counted towards the MMSt degree.
  - At least 3.0 FCE elective courses in the MI program, counted towards the MI degree.
  - At least 1.5 FCE elective courses in the MMSt program, counted towards the MMSt degree.
  - An additional 3.0 FCE elective courses chosen from the MI program, the MMSt program, or elsewhere (maximum 2.0 FCEs), counted towards both the MI and the MMSt degree.
  - Registration in a CRO may affect eligibility for external and internal graduate awards and bursaries.

Normal Program Length: 5 sessions full-time

Time Limit: 3 years full-time

Course List

Not all courses are offered every year. Please consult the Museum Studies 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 I: Context and Critical Issues

either

MSL 2350H   Museum Planning and Management Projects, Fundraising and Human Resources

or
INF 2040H   Project Management

either
MSL 4000Y   Exhibition Project
or
Thesis option

MMSt Elective Courses

Internal (Museum Studies) Elective Courses
MSL 1100H   Museology and Theory
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 2225H   Architecture and Museums
MSL 2240H   The Photographic Record
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 2371H   Museums and Cultural Heritage II: Society, Responsibility, and Cultural Change
MSL 2500H   Museums and Information
MSL 3000Y   Internship
MSL 5050H   Special Studies

External Elective Courses
Courses relevant to the Museum Studies program and student interests are available on the Faculty of Information website www.ischool.utoronto.ca.

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 1003H   Comparative Orality and Literacy
C&T 1006H   Media, Mind, and Society I
C&T 1008H   Media, Mind, and Society II
C&T 1009H   New Media and Policy
C&T 1100H   Special Topics in Communication and Culture

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.

Graduate Faculty

Full Members
Caidi, Nadia - PhD
Cherry, Joan - BSc, MLS, PhD
Choo, Chun Wei - BA, MSc, PhD *(Coordinator of Graduate Studies)*
Clement, Andrew - BSc, MSc, PhD
De Kerckhove, Derrick - BA, MA, PhD
Dilevko, Juris - MLIS, MA, PhD, PhD
Duff, Wendy - BA, BA, MLS, PhD
Howarth, Lynne - BA, MLS, PhD
MacNeil, Heather - PhD
Mai, Jens-Erik - PhD
Phillips, David - PhD
Ross, Seamus - BA, MA, DPhil *(Dean)*
Smith, Brian Cantwell - BS, MS, PhD
Teather, Lynne - BA, MA, PhD
Yu, Eric - BSc, MMath, PhD

Members Emeriti
Craig, Barbara - AM, PhD
Fleming, E Patricia - BA, BLS, MLS
Williamson, Nancy - BA, BLS, MLS

Associate Members
Atkinson, Leslie - PhD
Cox, Joseph - BA, MLS
Galey, Alan - PhD
Grimes, Sara - PhD
Hartel, Jenna - PhD
Krmpotich, Cara - PhD
Ratto, Matthew - PhD

Italian Studies

Faculty Affiliation

Arts and Science

Degree Programs Offered

Italian Studies – MA, PhD
Field (MA only):
Italian Literature
Fields (PhD only):
Middle Ages and Renaissance
Seventeenth and Eighteenth Centuries
Nineteenth and Twentieth Centuries

Collaborative Programs

The following collaborative programs 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

The **Master of Arts** program offers advanced education in Italian literature and provides training in research techniques.

The **Doctor of Philosophy** 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 poised 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.

Contact and Address

Web: www.utoronto.ca/italian
E-mail: 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

Degree Programs

Italian Studies

Master of Arts

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies, provided that they also satisfy the department's 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 twentieth 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

- Successful completion of ITA 1000H *Methodologies for the Teaching and Study of Italian* and 4.0 additional graduate FCEs.
- A student's program of study must be approved by the department.

Normal Program Length: 3 sessions full-time; 15 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

Doctor of Philosophy

Minimum Admission Requirements

- Applicants are admitted via one of two routes:
  ○ Successful completion of the University of Toronto MA or its equivalent with an overall average of at least A- in courses.
  ○ 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.

Note: Applicants with a degree equivalent to a PhD in Italian studies (e.g., an Italian *dottorato di ricerca*) cannot be accepted into the PhD program.

Program Requirements

- Students entering with an MA degree will normally complete 4.0 graduate full-course equivalents (FCEs) for a total of 8.0 FCEs, including those taken in the MA program. With the department's approval, students may choose one graduate course outside the department in an area cognate with the student's area of specialization. Students must also complete the 0.5-FCE ITA 1000H *Methodologies for the Teaching and Study of Italian*; 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 of one other language approved by the department.
- Students entering with a BA degree will normally complete 4.0 FCEs in addition to the PhD requirements for a total of 8.0 FCEs plus the required 0.5-FCE ITA 1000H.
- 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.

Normal Program Length: 4 years full-time; 5 years direct-entry

Time Limit: 6 years full-time; 7 years direct-entry

Course List

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 1026H	Italian Dialectology
ITA 1029H	History of Italian Religious Language
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 1203H	Boccaccio
ITA 1330H	Petrarch and Petrarchism
ITA 1520H	Renaissance Humanism
ITA 1525H	Renaissance Dialogue
ITA 1530H	Machiavelli
ITA 1535H	Topics in Italian Literature
ITA 1540H	Renaissance Italian Theatre
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 1729H	Contemporary Literary Criticism in Italy
ITA 1730Y	Aspects of Semiotic Theory and Practice in Italy
ITA 1735H	Topics in Italian Studies I
ITA 1736H	Topics in Italian Studies II
ITA 1755H	Italian Modernism
ITA 1760H	From Futurism to Novecentismo: The Rise and Fall of the Italian Avant-Garde
ITA 1810H	Studies in Italian Literature and Film
ITA 1815H	Issues in Italian Film Historiography
ITA 2011H	Directed Research in Italian Linguistics
ITA 2041H	Directed Research Topics 1
ITA 2042H	Directed Research Topics 2
ITA 2043H	Directed Research Topics 3
ITA 2044H	Directed Research Topics 4
ITA 2051H	Lecture Series Research 1
ITA 2052H	Lecture Series Research 2
ITA 2053H	Lecture Series Research 3
ITA 2054H	Lecture Series Research 4
JIC 5000H	Narrativity and Intertextuality in Italian Fiction
JIF 1000H	Romance Philology I
JIF 1001H	Romance Philology II
JMI 1951H	Italian Musical Theatre of the Baroque and Classic Periods
JRL 1100Y	Introduction to Romance Philology

MST 3162H   Boccaccio and Chaucer

Graduate Faculty

Full Members

Bancheri, Salvatore - BA, MA, PhD *(Chair and Graduate Chair)*
Capozzi, Rocco - BA, MA, PhD
Eisenbichler, Konrad - BA, MA, PhD
Guardiani, Francesco - MA, PhD
Lettieri, Michael - BA, MA, PhD
Pietropaolo, Domenico - BSc, MA, PhD
Pugliese, Olga - BA, MA, PhD
Somigli, Luca - PhD

Members Emeriti

Franceschetti, Antonio - LittD, PhD

Associate Members

Lepschy, Anna Laura - MA
Lepschy, Giulio - PhD
Pierno, Franco - BA, MA, PhD *(Coordinator, Graduate Studies)*

Laboratory Medicine and Pathobiology

Faculty Affiliation

Medicine

Degree Programs Offered

Laboratory Medicine and Pathobiology –
 MSc, PhD

Collaborative Programs

The following collaborative programs 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. **Neuroscience**
    • Laboratory Medicine and Pathobiology, MSc, PhD
7. **Resuscitation Sciences**
    • Laboratory Medicine and Pathobiology, MSc, PhD

Overview

The graduate program in Laboratory Medicine and Pathobiology provides a curriculum of courses and a broad-based multidisciplinary approach to research in mechanisms of human disease leading to **Master of Science** and **Doctor of Philosophy** degrees. The program emphasizes:

1. Bone and Matrix Pathobiology
2. Cancer
3. Vascular and Cardiovascular Pathobiology
4. Immunopathology, Lymphatics, and Transplantation
5. Neuropathobiology and Endocrine Disorders
6. Microbiology and Infectious Disease

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, www.lmp.facmed.utoronto.ca.

Contact and Address

Admission

Web: www.lmp.facmed.utoronto.ca
E-mail: r.ponda@utoronto.ca
Telephone: (416) 978-2550
Fax: (416) 978-7361

Program

Web: www.lmp.facmed.utoronto.ca
E-mail: f.dharas@utoronto.ca
Telephone: (416) 978-2663
Fax: (416) 978-7361

Department of Laboratory Medicine and Pathobiology
University of Toronto
Medical Sciences Building
Room 6243, 1 King's College Circle
Toronto, Ontario M5S 1A8
Canada

Degree Programs

Laboratory Medicine and Pathobiology

Master of Science

Minimum Admission Requirements

• 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

- Students must be on campus and participating for the duration of their registration in the program.

- Students who have not previously completed LMP 1404H *Molecular and Cellular Mechanisms of Disease,* or an approved equivalent, will be required to take this course in the first year of their program. Students exempted from LMP 1404H will take a departmental half course 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,* which must be taken throughout the program.

- Students are required to attend the departmental guest lecture series, *Seminars in Molecular Pathobiology,* 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 12–18 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.

Normal Program Length: 5 sessions (2 years) full-time

Time Limit: 3 years full-time

Doctor of Philosophy

Minimum Admission Requirements

- Two routes of entry are available:
  ○ **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.
  ○ **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 12–18 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

- Students must be on campus and participating for the duration of their registration in the program.
- Students must enrol and participate in a credit/no credit course, LMP 1001Y *Graduate Seminars in Laboratory Medicine and Pathobiology,* which must be taken throughout the program. Students are required to present at least twice in LMP 1001Y prior to defending their thesis. Students are required to 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* or an approved equivalent are required to take this course in the first year of their PhD program. The student's advisory committee may recommend additional courses. Students exempted from LMP 1404H take a departmental half course as a substitute.
- In addition to this, students are required to take three half-course equivalents, 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. 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 the third year of the PhD program, 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.

Normal Program Length: 4 years full-time; 5 years direct-entry

Time Limit: 6 years full-time; 7 years direct-entry

Course List

Not all courses are offered every year. Please check the departmental website, www.lmp.facmed.utoronto.ca, 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 1015H	Vascular Pathobiology
LMP 1016H	The Pathology of Connective Tissue
LMP 1018H	Molecular Biology and Applications to Human Disease
LMP 1019H	Research Techniques in Molecular Biology and Pathobiology
LMP 1020H	Inflammation, Immunity, and Immunopathology
LMP 1401Y	Clinical Biochemistry (For Residents and Diploma students only)
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 1515H	Cell Death in Development and Disease
LMP 1520H	Translational Research in Pathobiology
LMP 1525H	The Role of Genomics in the Era of Personalized Medicine
LMP 2115H	Selected Topics in Medical Microbiology
RST 9999Y	Research Project

Graduate Faculty

Full Members

Abdelhaleem, Mohamed - MSc, 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
Bendeck, Michelle - BSc, PhD
Bergeron, Catherine - MD
Boggs, Joan - MSc, PhD
Bognar, Andrew - BSc, PhD
Branch, Donald - BA, BSc, PhD
Bremner, Roderick Angus - BSc, PhD
Brown, Martha - BSc, MSc, PhD
Brunton, James - BSc, MD
Buchan, Alison - BSc, MASc, PhD
Cole, David - BSc, MD, PhD
Connelly, Philip - BA, PhD
Courtman, David - BSc, MSc, PhD
Cutz, Ernest - MD
Cybulsky, Myron - MD
Dennis, James - PhD
Denomme, Gregory - BSc, 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
Gallinger, Steven - MSc, MD
Girardin, Stephen - BSc, PhD
Gotlieb, Avrum - BSc, MDCM *(Acting Vice-Dean, Graduate Affairs, July–Dec. 2012)*
Grynpas, Marc - MSc, PhD
Gupta, Neeru - BM
Hamel, Paul - BSc, PhD
Harrison, Rene - BS, MS, PhD
Hawkins, Cynthia - MD, PhD
Hedley, David - MD
Hegele, Richard - MD *(Chair and Graduate Chair)*
Hinek, Aleksander - MD, PhD
Hu, Jim - BSc, PhD
Huang, Annie - MD
Husain, Mansoor - MB, MD
Hwang, David - BSc, MD, PhD
Irwin, David - BSc, PhD
Irwin, Meredith - MD
Jin, Tianru - PhD
Johnston, Miles - BSc, PhD
Joshi-Sukhwal, Sadhna - BSc, MSc, PhD, DSc
Jothy, Serge - MSc, MD, PhD
Kain, Kevin - MD
Kamel-Reid, Suzanne - BA, MA, PhD
Kandel, Rita - MD
Keeley, Frederick - BSc, PhD
Khokha, Rama - BSc, MSc, PhD
Lazarus, Alan - PhD
Lee, Jeffrey - BSc, PhD
Levy, Gary - BSc, MD
Lingwood, Clifford - BSc, PhD
Low, Donald - BSc, MD
Mahuran, Don - BA, PhD
Marsden, Philip - MD

Mazzulli, Tony - MD
McCulloch, Christopher - BSc, DDS, PhD
McKerlie, Colin - DVSM, DVM
McLaurin, Joanne - BSc, MSc, PhD
Mekhail, Karim - BSc, PhD
Minta, Joe - BSc, MBA, MSc, PhD
Mogridge, Jeremy - BSc, PhD
Ni, Heyu - MSc, MD, PhD
Ohh, Michael - BSc, PhD
Opas, Michal - MSc, PhD
Ostrowski, Mario - MD
Ozcelik, Hilmi - BSc, MSc, PhD
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
Rowe-Magnus, Dean - BSc, MSc, PhD
Rozakis-Adcock, Maria - BSc, PhD
Rutka, James - BSc, LMCC, MD, PhD
Schmitt-Ulms, Gerold - BSc, MSc, DrRerNat
Semple, John Wesley - PhD
Seth, Arun - MS, PhD
Shaw, Patricia - SB, MD
Shek, Pang - BSc, MSc, PhD
Sherman, Philip - MD
Squire, Jeremy - BSc, MSc, PhD
Stewart, Duncan - MDCH
Strauss, Bradley - MD
Swallow, Carol - BA, MD, PhD
Taylor, Michael - BSc, DrMed, PhD
Templeton, Douglas - BSc, MD, PhD
Tenenbaum, Howard - DDS, PhD
Thorner, Paul - MD, DPhil
Tsao, Ming-Sound - BSc, MD
van der Kwast, Theodorus - MD, PhD
Vieth, Reinhold - BSc, MSc, 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
Zielenska, Maria - MSc, PhD

Members Emeriti

Marks, Alexander - MD, PhD
Moscarello, Mario - BA, MD, PhD

Associate Members

Berman, Hal K. - MD, PhD
Blasutig, Ivan M. - BSc, PhD
Chang, Hong - MSc, MD, PhD
Clarke, Blaise - MBChB
Croul, Sidney - MD

Drews, Steven - BA, BSc, MSc, PhD
Fernandes, Bernard - MBChB
Guyard, Cyril - MSc, PhD
Kapur, Bhushan - BSc, PhD
Katz, Kevin - MSc, MDCM
Keating, Sarah - MSc, MD
Kingdom, John - DCH, MB, MD
Kulasingam, Vathany - BSc, PhD
Leytin, Valery - MSc, PhD, DSc
Li, Ren-Ke - MHSc, MSc, MD, PhD
Licht, Christoph - MD
MacMillan, Christina - BSc, MD
Melano, Roberto - MSc, PhD
Moraes, Theo - MD
Mubareka, Samira - MD
Muller, Matthew - MD
Ng, Dominic - MD
Pollanen, Michael - BSc, MD, PhD
Riddell, Robert - LMCC, LRCP, MBBS
Romaschin, Alexander - DipChem, BSc, PhD
Somers, Gino - MBBS, BMedSc, PhD
Tein, Ingrid - MD

Law

Faculty Affiliation

Law

Degree Programs Offered

Law – LLM, GPLLM, MSL, SJD

Collaborative Programs

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

1. **Bioethics**
   - Law, LLM, SJD
2. **Dynamics of Global Change**
   - Law, SJD
3. **Global Health**
   - Law, SJD
4. **Sexual Diversity Studies**
   - Law, LLM, MSL, SJD
5. **Women and Gender Studies**
   - Law, LLM, SJD

Overview

The Faculty of Law offers the following graduate programs.

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 either a shorter or longer thesis) or coursework-only. The longer thesis option is for law students who have demonstrated a strong potential for advanced research and writing in a common law system. The shorter thesis option and coursework-only formats are for law students who wish to specialize in a specific area of law or explore common law at an advanced level.

The **Global Professional Master of Laws (GPLLM)** is designed for lawyers, business executives, and government professionals. It is completed through an intensive 12-month delivery model with classes offered in the evenings and on weekends.

The **Master of Studies in Law (MSL)** is designed for scholars with no prior training in law who wish to acquire knowledge of law in order to add a legal dimension to scholarship in their own discipline.

The **Doctor of Juridical Science (SJD),** a thesis degree program which normally takes three years to complete, is for outstanding law students seeking to pursue careers in teaching, policy, and research.

Inquiries should be directed to the Graduate Program Coordinator, Graduate Program, Faculty of Law at the address below.

Contact and Address

Web: www.law.utoronto.ca/graduate
E-mail: law.graduate@utoronto.ca
Telephone: (416) 978-0213
Fax: (416) 978-2648

Faculty of Law
University of Toronto
78 Queen's Park
Toronto, Ontario M5S 2C5
Canada

Degree Programs

Law

Master of Laws

Minimum Admission Requirements

- Bachelor of Laws or Juris Doctor degree from a recognized university, or possess equivalent qualifications, with demonstrated proficiency in the study of law. A minimum B+ average 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 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

  No offers of admission conditional upon successful completion of an English language test will be offered.

Program Requirements

- For students writing a thesis, a course of studies and a thesis which, combined, are valued at 24 credit hours (equivalent to 6.0 full-course equivalents [FCEs]). For these students, the course of studies shall involve a minimum of 8 credit hours (equivalent to 2.0 FCEs) of coursework and a maximum of 20 credit hours (equivalent to 5.0 FCEs) of coursework.
- For students undertaking the coursework-only option, a course of studies valued at 28 credit hours (equivalent to 7.0 FCEs). In addition, students pursuing this option must choose 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 (not including LAW 245Y or LAW 535H1F).

- For students writing a thesis, the thesis shall involve a minimum of 4 credit hours, equivalent to 1.0 FCE (in which case the thesis will generally be expected to be 50–60 pages double-spaced, approximately 15,000–18,000 words) and a maximum of 16 credit hours, equivalent to 4.0 FCEs (in which case the thesis will generally be expected to be 100–150 pages double-spaced, approximately 30,000–45,000 words).

- Mandatory graduate seminar for all students in the program, whether or not they are writing a thesis: LAW 245Y *Alternative Approaches to Legal Scholarship*.

- All coursework and the thesis shall be graded using the SGS grading scale.

- In determining the composition of the course of studies and the weight to be given to a thesis, the Faculty will endeavour to structure a program designed to accommodate an individual student and the subject matter of the thesis. However, such course of studies and the weight of the thesis shall at all times be determined by the Faculty.

- The program may be completed on a full-time or part-time basis. In the full-time LLM program, for those writing a thesis, the coursework requirements must be completed by May 31 of the academic year of attendance, and the thesis must be completed by August 31 of the academic year of attendance. For those not writing a thesis, the coursework requirements for all courses apart from the designated writing requirement course must be completed by May 31 of the academic year of attendance, and the writing requirement must be fulfilled by August 31 of the academic year of attendance. Students must be in attendance for at least two academic sessions (eight months, September to April).

- With approval of the Associate Dean, Graduate Studies, Law, the program may be taken on a part-time basis over two years, in which case the coursework requirements must be completed by May 31 of the second academic year of attendance, and the thesis must be completed by August 31 of the second academic year of attendance. For those pursuing the coursework-only option on a part-time basis, the writing requirement must be fulfilled by August 31 of the second academic year, with all other course assignments being due by May 31 of the second academic year. Continuation in the second year of the part-time LLM program is subject to the Faculty's determination that the student has made satisfactory progress in the first year of the part-time LLM studies.

Normal Program Length: 3 sessions full-time; 6 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

Course List

LAW 245Y Alternative Approaches to Legal Scholarship

Global Professional Master of Laws

Minimum Admission Requirements

- There are two paths of admission to this program:
  - Bachelor of Laws (LLB) or Juris Doctor (JD) with a minimum B+ standing from a recognized university, or equivalent, plus a minimum of three years of substantive legal work experience at a law firm, government, or public-interest organization.
  - Bachelor's degree in any other discipline with a minimum B+ standing from a recognized university, or equivalent, plus a minimum of five years of leadership experience in government, a public institution, a bank, a corporation with international exposure, or other complex organization.

- Applicants are expected to meet the SGS language requirements.

- Interactive eLearning option: applicants living outside the Greater Toronto Area may apply for the interactive eLearning option at the time of application.

Program Requirements

The program is available as a regular campus-based program or as an interactive eLearning option (for students living outside the Greater Toronto Area).

- 24 credits (equivalent to 6.0 full-course equivalents [FCEs]), as follows:
  - 18 credits (equivalent to 4.5 FCEs), consisting of six core seminar courses (as set out below) worth 3 credits each. Each 3-credit core seminar course will entail 24–36 hours of instruction time.
  - 6 credits (equivalent to 1.5 FCEs) consisting of three intensive weekend seminar elective courses (as set out below) worth 2 credits each (equivalent to 0.5 FCE) and entailing 16 hours of instruction. Three seminar elective courses will be chosen from six options as follows: LAW 4011H, LAW 4012H, LAW 4013H, LAW 4014H, LAW 4015H, LAW 4016H. Not all elective courses will necessarily be available every year.

- eLearning option:
  - Students in the eLearning option are required to complete the same FCE requirements as regular program students (see above).
  - Students must have an Internet-enabled computer with a microphone and webcam.

- Students are required to actively participate in the classroom in "real time."
- Not all of the courses described below will be available via interactive eLearning, and all students are required to attend at least three of the weekend courses in person at the University of Toronto St. George campus (see website for further details).
- The course requirements include a number of group assignments; students in the eLearning option will complete these together with other students via e-mail and web conferencing on students' own time, using available technologies.

Normal Program Length: 3 sessions full-time (evenings and weekends; or interactive eLearning option which includes mandatory three weekends of in-person attendance at the University of Toronto campus)

Time Limit: 3 years full-time (evenings and weekends; or interactive eLearning option which includes mandatory three weekends of in-person attendance at the University of Toronto campus)

Course List

Weeknight courses:

The following core course is required:

LAW 4001H   Law and Business in a Global Economy

Students must take three of the following **weeknight** core courses:

LAW 4002H   Comparative Corporate Governance
LAW 4003H   Securities Regulation and Corporate Finance
LAW 4004H   Mergers and Acquisitions
LAW 4007H   Canadian Administrative Law
LAW 4008H   Canadian Constitutional Law
LAW 4009H   Canadian Criminal Law

Weekend courses:

Students must take two of the following four intensive **weekend** core courses (three days):

LAW 4005H   Canadian and Cross-Border Issues in Corporate Tax
LAW 4006H   International Dispute Resolution
LAW 4010H   Foundations of Canadian Law
LAW 4017H   Professional Responsibility

Students must take three of the following six intensive **weekend** seminar elective courses (two days). Note that not all elective courses will necessarily be offered every year.

LAW 4011H   Law and Policy of Public Private Partnerships
LAW 4012H   Intellectual Property Law
LAW 4013H   Regulated Industries and Competition Law

LAW 4014H   International Insolvency Law
LAW 4015H   Organization of Transactional Legal Practice
LAW 4016H   Corporate Social Responsibility, Ethics and the Law

Note: All courses are offered in modules. A module will consist of either (a) weeknight courses: an 11- or 12-week unit with a minimum of three contact hours per week, or (b) weekend courses: two- or three-day modules 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.

Master of Studies in Law

Minimum Admission Requirements

- At least a bachelor's degree, and preferably a doctorate, from a recognized university with a demonstrated high level of scholarship in a discipline related to law.
- 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 22/30 on the writing and speaking sections
  No offers of admission conditional upon successful completion of an English language test will be offered.

Program Requirements

- The student must pursue a course of studies approved by the Faculty and by the SGS Admissions and Programs Committee. The course of studies will comprise at least 28, and not more than 32, course hours and will include at least three of the following subjects: contracts, torts, property, criminal law, constitutional law, and civil procedure.
- The program will also include a research project of an interdisciplinary nature.
- The student must be in full-time attendance for two academic sessions (eight months).
Note: In no circumstance will courses taken in an MSL program be accredited for the JD program.

Normal Program Length: 3 sessions full-time

Time Limit: 3 years full-time

Course List

LAW 245Y   Alternative Approaches to Legal Scholarship

Doctor of Juridical Science

Minimum Admission Requirements

- Bachelor of Laws or Juris Doctor degree (with a minimum average equivalent to a University of Toronto B+) from a recognized university and a Master of Laws (with a minimum average equivalent to a University of Toronto B+) from a recognized university or possess equivalent qualifications. The Associate Dean, Graduate Studies, 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 22/30 on the writing and speaking sections

  No offers of admission conditional upon successful completion of an English language test will be offered.

Program Requirements

SJD

- A student must remain in attendance for at least two academic sessions (eight months, September to April).
- Complete the graduate seminar, LAW 245Y *Alternative Approaches to Legal Scholarship.*
- 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. An Individual Area Committee (established by the student and approved by the Associate Dean, Graduate Studies, 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 else consists of 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 the first year of registration.
- 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.
- 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 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.

Direct-Entry SJD

- A student must be in attendance for at least four academic sessions (two periods of eight months each, September to April).
- Complete at least eight credit hours (equivalent to 2.0 FCEs), including the graduate seminar, LAW 245Y *Alternative Approaches to Legal Scholarship.*
- 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. An Individual Area Committee (established by the student and approved by the Associate Dean, Graduate Studies, 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 else consists of 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 the first year of registration.
- 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.
- Following completion of the area requirements, a thesis must be prepared which, in the opinion of the Faculty of Law, will constitute a distinct contribution to legal research or scholarship, and the candidate 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.

Normal Program Length: 3 years full-time; 5 years direct-entry

Time Limit: 5 years full-time; 6 years direct-entry

Course List

LAW 245Y   Alternative Approaches to Legal Scholarship

Graduate Faculty

Full Members

Alarie, Benjamin - LLB, AB, LLM, MA
Anand, Anita - BA, LLB, MA, LLM
Austin, Lisa - BA, BSc, LLB, MA
Benson, Peter - LLB, LLM, PhD
Brudner, Alan S - BA, MA, PhD
Brunnee, Jutta - LLM, SJD *(Associate Dean, Graduate Studies)*
Chapman, Bruce - BA, LLB, PhD
Choudhry, Sujit - LLB, LLM
Cook, Rebecca - BA, LLM, MA, MPA, JD, SJD
Cossman, Brenda - LLB, LLM
Dawood, Yasmin - BA, MA, JD, PhD
Dewees, Donald - LLB, BScEE, PhD
Drassinower, Abraham - BPhil, LLB, MA, PhD
Dubber, Markus - AB, JD
Duggan, Anthony - BA, LLB, LLM, LLD
Dyzenhaus, David - BA, LLB, PhD
Emon, Anver - LLB, BA, LLM, MA, PhD, SJD
Fadel, Mohammad - BA, JD, PhD
Fernandez, Angela - LLB, BA, BCL, LLM, MA, SJD
Flood, Colleen - LLB, LLM, SJD
Green, Andrew - LLB, BA, LLM, MA, PhD
Iacobucci, Edward - LLB, MPH
Katz, Ariel - LLB, LLM, SJD
Knop, Karen - BSc, LLB, LLM, SJD
Langille, Brian A - LLB, BCL, BA
Lee, Ian - LLB, BCom, LLM
Lemmens, Trudo - LLM, DCL
Macintosh, Jeffrey - BSc, LLB, LLM
Macklem, Patrick - BA, LLB, LLM
Macklin, Audrey - BSc, LLB, LLM
Moran, Mayo - BA, LLB, LLM, SJD *(Dean)*
Moreau, Stephanie Sophia - BPhil, BA, JD, PhD
Morgan, Edward - LLB, BA, LLM
Nedelsky, Jennifer R - BA, MA, PhD
Phillips, James - LLB, MA, PhD
Prado, Mariana - LLB, LLM, SJD
Reaume, Denise - BA, LLB, BCL
Ripstein, Arthur S - BA, Phm, LLM, PhD
Rittich, Kerry - BMus, LLB, SJD
Roach, Kent - BA, LLB, LLM
Rogerson, Carol - BA, LLB, MA, LLM
Schneiderman, David - BA, LLB, LLM

Shachar, Ayelet - LLB, BA, LLM, SJD
Shaffer, Martha - LLB, LLM, MACCT
Stewart, Hamish - BA, LLB, MA, PhD
Trebilcock, Michael - LLB, LLM
Valcke, Catherine - BCL, LLB, LLM, SJD
Valverde, Mariana - BA, MA, PhD, FRSC
Waddams, Stephen - BA, LLB, BA, LLM, PhD, SJD
Weinrib, Ernest - BA, LLB, PhD
Weinrib, Lorraine - BA, LLB, LLM
Yoon, Albert - BA, LLB, MA, PhD

Members Emeriti

Dickens, Bernard - LLB, LLM, PhD
Friedland, Martin - BCom, LLB, PhD

Associate Members

Hirschl, Ran - BA, LLB, MA, MPH, PhD, Canada Research Chair
Regehr, Cheryl - AB, MA, PhD
Sanderson, Douglas - BA, LLM, JD
Stern, Simon - BA, PhD, JD

Leadership, Higher and Adult Education

Faculty Affiliation

Ontario Institute for Studies in Education

Degree Programs Offered

Adult Education and Community Development – MA, MEd, PhD
Educational Administration – MA, MEd, EdD, PhD
Higher Education – MA, MEd, EdD, PhD

Collaborative Programs

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

1. **Aboriginal Health**
   - Adult Education and Community Development, MA, MEd, PhD
2. **Aging, Palliative and Supportive Care Across the Life Course**
   - Adult Education and Community Development, MA, MEd, PhD
3. **Community Development**
   - Adult Education and Community Development, MA, MEd
4. **Comparative, International and Development Education**
   - Adult Education and Community Development, MA, MEd, PhD
   - Educational Administration, MA, MEd, EdD, PhD
   - Higher Education, MA, MEd, EdD, PhD
5. **Dynamics of Global Change**
   - Adult Education and Community Development, PhD
   - Educational Administration, PhD
   - Higher Education, PhD
6. **Educational Policy**
   - Adult Education and Community Development, MA, MEd, PhD
   - Educational Administration, MA, MEd, EdD, PhD
   - Higher Education, MA, MEd, EdD, PhD
7. **Environmental Studies**
   - Adult Education and Community Development, MA, MEd, PhD
8. **Ethnic and Pluralism Studies**
   - Educational Administration, MA, MEd, EdD, PhD
9. **Sexual Diversity Studies**
   - Educational Administration, MA, MEd, EdD, PhD
   - Higher Education, MA, MEd, EdD, PhD
10. **Women and Gender Studies**
    - Adult Education and Community Development, MA, MEd, PhD
    - Educational Administration, 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 are engaged in a range of theoretical and practical fields: leadership and administration, policy and change, social diversity and community engagement. Themes running through our research and teaching include equity and social justice, professional education, policy studies, educational leadership and organizations, and adult learning within institutions and settings. We develop and organize collaborative programs in support of particular research areas of interest including those in policy, international development education, and workplace learning. This field ties into work at multiple levels, elementary, secondary, and higher education systems of colleges and universities, and extends into larger communities, both locally and internationally.

The Department of Leadership, Higher and Adult Education (LHAE) consists of three graduate programs representing the application of cognate scholarship to domains of practice. All programs offer courses of study leading to **Master of Arts**, **Master of Education**, and **Doctor of Philosophy** degrees; Educational Administration and Higher Education also offer courses of study leading to **Doctor of Education** degrees. Applications must be made to one of the three specializations: Educational Administration, Higher Education, or Adult Education.

For information about application procedures and forms, contact the OISE Registrar's Office by e-mailing gradstudy.oise@utoronto.ca.

For general admission and program requirements, visit www.oise.utoronto.ca/oise/Prospective_Students/Graduate_Studies.html.

Contact and Address

Web: www.oise.utoronto.ca

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

Degree Programs

Adult Education and Community Development

Master of Arts

The MA is a research-based degree and can be taken on a full-time or part-time basis. During their program of study, MA students are expected to have exposure to both qualitative and quantitative approaches to research.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies.
- An appropriate bachelor degree in a relevant discipline or professional program from a recognized university, with a grade equivalent to a University of Toronto B+ or better in the final year.

Program Requirements

- 4.0 full-course equivalents (FCEs) plus a thesis based on original research.
- Coursework taken is mainly at the 1000 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. Students must take either AEC 1100H *Introduction to Adult Education* or AEC 1102H *Community Development: Innovative Models*, and AEC 1183H *Master's Thesis Seminar*. 0.5 FCE in research methods is required.
- MA students complete a thesis, which may lay the groundwork for doctoral research.

Normal Program Length: 6 sessions full-time; 10 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

Master of Education

The MEd is a non-thesis degree program which can be taken on either a full-time or part-time basis.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies.
- From a recognized university, an appropriate bachelor's degree in a relevant discipline or professional program with a grade equivalent to a University of Toronto mid-B or better in the final year.

Program Requirements

- Normally 5.0 full-course equivalents (FCEs), usually at the 1000 level. At least half of the courses must be from the Adult Education and Community Development program. Students are required to

take either course AEC 1100H *Introduction to Adult Education* or AEC 1102H *Community Development: Innovative Models*, as well as one research methods course.

Normal Program Length: 5 sessions full-time; 10 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

Doctor of Philosophy

The PhD degree program is 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 Adult Education and Community Development program offers both full-time and flexible-time PhD options.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies.
- An MA in Education from a recognized university, in the same field of specialization at the doctoral level.
- A standing equivalent to a University of Toronto B+ or better in master's courses.

Program Requirements

- Full-time and flexible-time PhD students begin as a cohort. Except for the time to completion, requirements for both programs are the same.
- It is recommended that students take AEC 3102H *Doctoral Thesis Course in Adult Education* in the first session of their program.
- All students must complete 3.0 full-course equivalents (FCEs), of which at least 2.0 FCEs must be from the Adult Education and Community Development program. Students with little background in the field of Adult Education and Community Development will be required to do an additional 0.5 FCE providing such background. A minimum of 2.0 FCEs must be at the doctoral/3000 level, normally including course AEC 3102H. Students also normally take at least 0.5 FCE specialized research methods course.
- All students are expected to complete a comprehensive requirement and a thesis.

Normal Program Length: 4 years full-time; 6 years flexible-time

Time Limit: 6 years full-time; 8 years flexible-time

Course List

Not all courses are given each year. Please consult the course schedules available from the Registrar's Office.

AEC 1100H   Introduction to Adult Education

AEC 1101H	Approaches to Teaching Adults
AEC 1102H	Community Development: Innovative Models
AEC 1103H	Introduction to Research Methods in Adult Education
AEC 1104H	Community Education and Organizing
AEC 1107H	Developing and Leading High Performing Teams: Theory and Practice
AEC 1108H	Adult Learning (Credit/No Credit)
AEC 1110H	Basic Processes in Teaching Adults
AEC 1113H	Gender and Race at Work
AEC 1114H	Comparative and International Perspectives in Adult Education
AEC 1117H	Consulting Skills for Adult Educators
AEC 1119H	Creating a Learning Organization
AEC 1122H	Practicum in Adult Education and Community Development (Credit/No Credit)
AEC 1131H	Special Topics in Adult Education (Master's)
AEC 1132H	Special Topics in Women in Development and Community Transformation (Master's Level)
AEC 1135H	Practicum in Action Research for Organizational Change (Credit/No Credit)
AEC 1141H	Organizations and the Adult Educator: Historical and Theoretical Perspectives on Organization Development
AEC 1143H	Introduction to Feminist Perspectives on Society and Education
AEC 1145H	Participatory Research in the Community and the Workplace
AEC 1146H	Women, War, and Learning
AEC 1148H	Introduction to Workplace, Organizational, and Economic Democracy
AEC 1150H	Critical Perspectives on Organizational Theory, Development and Practice
AEC 1152H	Individual Reading and Research in Adult Education: Master's Level
AEC 1156H	Power and Difference in Teams and Small Groups
AEC 1160H	Introduction to Transformative Learning Studies
AEC 1170H	Practitioners' Experienced Knowledge
AEC 1171H	Foundations of Aboriginal Education in Canada
AEC 1173H	Creativity and Wellness: Learning to Thrive
AEC 1178H	Practitioner/Ecological Identity and Reflexive Inquiry
AEC 1180H	Aboriginal World Views: Implications for Education
AEC 1181H	Embodied Learning and Qi Gong
AEC 1182H	Nonprofits, Co-operatives and the Social Economy
AEC 1183H[+]	Master's Thesis Seminar (Credit/No Credit)

AEC 1184H	Aboriginal Knowledge: Implications for Education
AEC 1185H	Leadership in Organizations: Changing Perspectives
AEC 1186H	Perspectives On Organizational Change
AEC 1187H	Alternative Ways of Researching Aging, Illness and Health
AEC 1188H	Understanding Research Traditions
AEC 1189H	Workplace Literacies: Theory, Policy and Practice
AEC 1190H	Community Healing and Peacebuilding
AEC 1191H	Research Support Seminar
AEC 1192H	Adult Literacies in Social Justice Perspective
AEC 1193H	Adult Education for Sustainability
AEC 3102H[+]	Doctoral Thesis Seminar (Credit/No Credit)
AEC 3103H	Teaching about Global and Social Issues
AEC 3104H	Adult Education and Marxism
AEC 3119H	Global Perspectives on Feminist Education, Community Development, and Community Transformation
AEC 3131H	Special Topics in Adult Education (Doctoral)
AEC 3132H	Special Topics in Women in Development and Community Transformation
AEC 3133H	Special Topics in Aboriginal Community Learning: Current Issues and Practices
AEC 3140H	Post-Colonial Relations and Transformative Education
AEC 3152H	Individual Reading and Research in Adult Education: Doctoral Level
AEC 3153H	Individual Reading and Research in Women in Development and Community Transformation: Doctoral Level
AEC 3170H	Perspectives on Qualitative Research: Part I
AEC 3171H	Perspectives on Qualitative Research: Part II
AEC 3173H	Effecting Change: Creating Wellness
AEC 3177H	Arts-Informed Perspectives in Educational Research
AEC 3180H	Global Governance and Educational Change: the Politics of International Cooperation in Education
AEC 3181H	Feminist Standpoints: Critical and Post-Structural Approaches
AEC 3182H	Citizenship Learning and Participatory Democracy
AEC 3183H	Mapping Social and Organizational Relations in Adult Education
CIE 1001H	Introduction to Comparative, International and Development Education
CIE 1002H	Practicum in Comparative, International and Development Education
WPL 1131H	Workplace Learning and Social Change—Master's

Interprogram Courses

The following courses are accepted for credit in the Adult Education program and will satisfy that program's

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

specialization requirement. For descriptions, see the relevant programs.

AEC 1400H	Special Topics in Adult Education and Counselling Psychology
AEC 1405H	Introduction to Qualitative Research: Part I
AEC 1406H	Introduction to Qualitative Research: Part II
AEC 1407H	Narrative as a Vehicle for Personal Change
AEC 1408H	Working with Survivors of Trauma
AEC 1409H	Creative Empowerment Work with the Disenfranchised
SES 1925H	Indigenous Knowledge and Decolonization: Pedagogical Implications
SES 2942H	Education and Work
SES 2970H	Countering Myths about Aboriginal Peoples through Multiple Medias
SES 3951H	Canadian Political Economy and Education

Educational Administration

Master of Arts

The MA program in Educational Administration fosters the study of problems in the administration and leadership of educational programs. It will best serve students who have a commitment to scholarship and research as a means of deepening their understanding of administrative action in schools or in other educational and service institutions. While experience in teaching and administration is not an essential prerequisite for admission, such experience provides a desirable background. The MA is available through both full-time and part-time studies.

Minimum Admission Requirements

- The department welcomes applicants with diverse but relevant backgrounds.
- Applicants are admitted under the General Regulations of the School of Graduate Studies.
- An appropriate bachelor's degree from a recognized university in a relevant discipline or professional program, with high academic standing (equivalent to at least a University of Toronto B+ in the final year).

Program Requirements

- 4.0 full-course equivalents (FCEs) plus a thesis. Additional courses may be required of some applicants.

Normal Program Length: 5 sessions (2 years) full-time; 12 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

Master of Education

The MEd program in Educational Administration 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. The MEd degree may be pursued either part-time or full-time.

Minimum Admission Requirements

- The department welcomes applicants with diverse but relevant backgrounds.
- Applicants are admitted under the General Regulations of the School of Graduate Studies.
- An appropriate bachelor's degree from a recognized university in a relevant discipline with high academic standing (equivalent to at least a University of Toronto mid-B or better in the final year), preferably with a concentration and focus in an area relevant to the type of educational administration the applicant wishes to enter.
- An interest in the study and practice of administration.
- Academic qualifications beyond the first degree.
- Two letters of reference. Whenever possible, one should be written by an educational administrator for whom the applicant has worked; the second by a professional colleague.

Program Requirements

- There are three options available to all students within the MEd program in Educational Administration.
- **Option II** comprises:
  - 1.5 required full-course equivalents (FCEs): TPS 1003H *Conducting Research in Educational Administration*; TPS 1040H *Educational Administration I: Introduction to Educational Administration: Policy, Leadership, and Change*; TPS 1041H *Educational Administration II: Social and Policy Contexts of Schooling*. TPS 1040H and TPS 1041H should be taken first; TPS 1003H should be taken towards the end of the program.
  - 2.5 other FCEs, of which at least 1.0 FCE must be in Educational Administration; TPS 1004H *Research Literacy in Educational Administration* is strongly recommended and should be taken at the beginning of the program. Students may choose to focus on one of the four program strands: policy, leadership, change, or social diversity.
  - A Major Research Paper (MRP) to be carried out under the guidance of a faculty member.
- **Option III** comprises:
  - 1.5 required FCEs: TPS 1003H *Conducting Research in Educational Administration*; TPS 1040H *Educational Administration I: Introduction to Educational Administration: Policy, Leadership, and Change*; TPS 1041H *Educational Administration II: Social and Policy Contexts of Schooling*. TPS 1040H and TPS

1041H should be taken first; TPS 1003H should be taken towards the end of the program.

○ 1.5 other FCEs, of which at least one must be in Educational Administration; TPS 1004H *Research Literacy in Educational Administration* is strongly recommended and should be taken at the beginning of the program;

○ A comprehensive thesis to be developed under the guidance of a faculty member.

- **Option IV** comprises:

○ 2.0 required FCEs: TPS 1004H *Research Literacy in Educational Administration*; TPS 1040H *Educational Administration I: Introduction to Educational Administration: Policy, Leadership, and Change*; TPS 1041H *Educational Administration II: Social and Policy Contexts of Schooling*; TPS 1050H *Themes and Issues in Policy, Leadership, Change, and Diversity*. TPS 1004H, TPS 1040H, and TPS 1041H should preferably be the first courses taken in the student's program of study. TPS 1050H should normally be taken as the final course in the student's program.

○ 3.0 other FCEs, of which at least 1.0 FCE must be in Educational Administration. Students may choose to focus on one of the four research areas: policy, leadership, change, or social diversity.

Normal Program Length: 5 sessions (2 years) full-time; 10 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

Doctor of Education

The EdD program in Educational Administration is intended to develop highly competent leaders for administrative positions in school systems, colleges, universities, and other educational institutions. The program is specifically designed to help working professional educators develop the intellectual and research skills to refine their practice as leaders in school systems and in higher education.

Minimum Admission Requirements

- The department welcomes applicants with diverse but relevant backgrounds.
- Applicants are admitted under the General Regulations of the School of Graduate Studies.
- Master's degree with specialization in Educational Administration or an equivalent degree with a B+ average. Additional coursework may be required from those who do not have a background in administrative studies. A Qualifying Research Paper (QRP) will be required.
- The applicant must be in a successful leadership position in education, or must have held a leadership position successfully, or must demonstrate potential for leadership.

- There are two EdD streams:
  ○ **Regular EdD stream:** regular-stream students are accepted every year and can register on a full-time or part-time basis.
  ○ **Cohort-based stream:** Cohorts are accepted every three years. Students move through the program as a cohort or unit.

Program Requirements

Regular EdD Stream

- 4.0 core full-course equivalents (FCEs) as follows:
  ○ TPS 3040H *Administrative Theory and Educational Problems I: People and Power in Organizations*
  ○ TPS 3041H *Administrative Theory and Educational Problems II: Doctoral Seminar on Policy Issues in Education*
  ○ TPS 3042H *Field Research in Educational Administration* and TPS 3044H *Internship/Practicum in Educational Administration* or equivalent.
  ○ 2.0 additional FCEs, 0.5 of which must be at the 3000 level.
- Successful completion of a portfolio that emphasizes reflective practice.
- A thesis proposal hearing.
- A doctoral thesis, one component of which may be a document of the kind used in the field, such as a policy document or policy handbook, white paper, or restructuring plan or another approved undertaking.

Cohort-Based Stream

- 4.0 core full-course equivalents (FCEs) as follows:
  ○ TPS 3025H *Personal and Professional Values of Educational Leadership*
  ○ TPS 3040H *Administrative Theory and Educational Problems I: People and Power in Organizations*
  ○ TPS 3041H *Administrative Theory and Educational Problems II: Doctoral Seminar on Policy Issues in Education*
  ○ TPS 3042H *Field Research in Educational Administration*
  ○ TPS 3044H *Internship/Practicum in Educational Administration*
  ○ TPS 3047H *Research Seminar on Leadership and Educational Change*
  ○ 1.0 other FCE, of which 0.5 FCE which must be at the 3000 level
- Successful completion of a portfolio that emphasizes reflective practice.
- A thesis proposal hearing.
- A doctoral thesis.

Normal Program Length: 4 years full-time; 6 years part-time

Time Limit: 6 years full-time; 8 years part-time

Doctor of Philosophy

The PhD program in Educational Administration 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 administrative action in schools or in other educational and service institutions. While experience in teaching and administration is not an essential prerequisite for admission, such experience provides a desirable background.

The Educational Administration program offers both full-time and flexible-time PhD options. To be admitted to the flexible-time option, 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.

Minimum Admission Requirements

- The department welcomes applicants with diverse but relevant backgrounds.
- Applicants are admitted under the General Regulations of the School of Graduate Studies.
- An appropriate master's degree, with standing equivalent to a University of Toronto A-. Students 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 PhD Admissions Committee. Before undertaking a qualifying research project, students should first consult the Program Coordinator.

Program Requirements

- Minimum 3.0 full-course equivalents (FCEs), of which 2.0 FCEs normally must be TPS 3040H, TPS 3042H, TPS 3043H, and one elective advanced-level (3000) course in Educational Administration.
- 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 specialization.
- PhD students are required to pass a comprehensive examination and a thesis proposal hearing.
- A thesis is required.

Normal Program Length: 4 years full-time; 6 years flexible-time

Time Limit: 6 years full-time; 6 years flexible-time

Course List

Not all courses are offered every year. Please consult OISE's Graduate Studies Course Schedule which lists the courses the department will offer this year as well as those offered by other departments that may be taken for credit.

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.

Educational Administration

TPS 1003H	Conducting Research in Educational Administration
TPS 1004H	Research Literacy in Educational Administration
TPS 1005H	The Computer in Educational Administration
TPS 1012H	Organizational Culture and Decision Making
TPS 1016H	School Program Development and Implementation
TPS 1018H	Political Skill in the Education Arena
TPS 1019H	Diversity and the Ethics of Educational Administration
TPS 1020H	Teachers and Educational Change
TPS 1024H	Critical Conversations: Philosophy, Educational Administration, and Educational Policy Studies
TPS 1025H	School Effectiveness and School Improvement
TPS 1026H	Evaluation of Professional Personnel in Education
TPS 1027H	The Search for Educational Quality and Excellence in a Global Economy
TPS 1028H	Policy Delivery and Schools
TPS 1029H	Special Applications of the Administrative Process
TPS 1030H	The Legal Context of Education
TPS 1036H	Planning in Educational Organizations
TPS 1040H	Educational Administration I: Introduction to Educational Administration: Policy, Leadership and Change
TPS 1041H	Educational Administration II: Social and Policy Context of Schooling
TPS 1042H	Educational Leadership and Cultural Diversity
TPS 1045H	Language Policy Across the Curriculum
TPS 1047H	Managing Changes in Classroom Practice
TPS 1048H	Educational Leadership and School Improvement
TPS 1050H	Themes and Issues in Policy, Leadership, Change, and Diversity
TPS 1052H	Individual Reading and Research in Educational Administration: Master's Level
TPS 1060H	School Leadership Seminar 1
TPS 1061H	School Leadership Seminar 2

TPS 2006H   Educational Finance and Economics
             (Exclusion: Students who have taken TPS 1017H,
             TPS 1841H are not eligible to take TPS 2006H)
TPS 3022H   The Investigation of School Culture: An
             Examination of the Daily Life of Schools
TPS 3024H   Field Studies in Educational Leadership
TPS 3025H   Personal and Professional Values of
             Educational Leadership
TPS 3028H   Project Development Studies
TPS 3029H   Special Topics in Educational
             Administration
TPS 3030H   Advanced Legal Issues in Education
TPS 3037H   Strategic Planning in Educational
             Organizations
TPS 3040H   Administrative Theory and Educational
             Problems I: People and Power in
             Organizations
TPS 3041H   Administrative Theory and Educational
             Problems II: Doctoral Seminar on Policy
             Issues in Education
TPS 3042H   Field Research in Educational
             Administration
TPS 3043H   Survey Research in Educational
             Administration
TPS 3044H   Internship/Practicum in Educational
             Administration
TPS 3045H   Educational Policy and Program Evaluation
TPS 3046H   Gender Issues in Educational Leadership
TPS 3047H   Research Seminar on Leadership and
             Educational Change
TPS 3052H   Individual Reading and Research in
             Educational Administration: Doctoral
             Level
TPS 3055H   Democratic Values, Student Engagement
             and Democratic Leadership
TPS 3145H   Advanced Issues in Educational Policy
             Analysis and Program Evaluation
JCT 2000H   Proseminar in Educational Evaluation,
             Measurement and Policy Analysis
JCT 2001H   Using Classroom Assessment to Enhance
             Student Learning

Higher Education

Master of Arts

Minimum Admission Requirements

- The department welcomes applicants with diverse but relevant backgrounds.
- Applicants are admitted under the General Regulations of the School of Graduate Studies.
- An appropriate bachelor's degree from a recognized university with high academic standing (equivalent to at least a University of Toronto mid-B in the final year).

Program Requirements

- 4.0 full-course equivalents (FCEs). The number of FCEs may be reduced to 3.0 for students with prior

undergraduate or graduate degrees that are relevant to the study of Higher Education. Additional courses may be required of some applicants.
- All students are required to complete TPS 1803H *Recurring Issues in Postsecondary Education* and a half course in Research Methods.
- Thesis.

Normal Program Length: 5 sessions full-time; 12 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

Master of Education

Minimum Admission Requirements

- The department welcomes applicants with diverse but relevant backgrounds.
- Applicants are admitted under the General Regulations of the School of Graduate Studies.

Program Requirements

- Students in Higher Education pursue the MEd Option IV degree program: 5.0 full-course equivalents (FCEs).
- All students are required to complete TPS 1803H *Recurring Issues in Postsecondary Education* and a half course in Research Methods.
- **Health Professional Education.** Students in the health professional education specialization normally register in the MEd Option IV program: 5.0 FCEs. The MEd Option II program requires 4.0 FCEs plus a master's research project/paper. Both options, if pursued on a full-time basis, cannot be completed in less than 12 months. Additional information on the health professional education specialization may be obtained from Professor Linda Muzzin.

Normal Program Length: 5 sessions full-time; 10 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

Doctor of Education

Minimum Admission Requirements

- The department welcomes applicants with diverse but relevant backgrounds.
- Applicants are admitted under the General Regulations of the School of Graduate Studies.
- 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

- Minimum of 4.0 full-course equivalents (FCEs) including:
  - TPS 1803H *Recurring Issues in Postsecondary Education* (0.5 FCE).
  - at least 1.0 other FCE in Higher Education.
  - 0.5 FCE in research methodology 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 (equivalent to 0.5 FCE).
  - Collaborative proseminar (0.5 FCE).
- Doctoral comprehensive examination.
- Thesis reporting the results of original research on an applied topic in postsecondary education.

Normal Program Length: 4 years full-time; 6 years part-time

Time Limit: 6 years full-time; 8 years part-time

Doctor of Philosophy

Minimum Admission Requirements

- The department welcomes applicants with diverse but relevant backgrounds.
- Applicants are admitted under the General Regulations of the School of Graduate Studies.
- 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

- Minimum 3.0 full-course equivalents (FCEs) including:
  - TPS 1803H *Recurring Issues in Postsecondary Education* (0.5 FCE).
  - at least 1.0 other FCE in Higher Education.
  - 0.5 FCE in research methodology 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.
- Doctoral comprehensive examination.
- Thesis reporting the results of original research in postsecondary education.

Normal Program Length: 4 years full-time; 6 years flexible-time

Time Limit: 6 years full-time; 6 years flexible-time

Course List

Not all courses are offered every year. Please consult OISE's Graduate Studies Course Schedule which lists the courses the department will offer this year as well as those offered by other departments that may be taken for credit.

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.

Higher Education

TPS 1801H	The History of Higher Education in Canada: An Overview
TPS 1802Y	Theory in Higher Education
TPS 1803H	Recurring Issues in Postsecondary Education
TPS 1804H	Issues in Medical/Health Professional Education
TPS 1805H	The Community College
TPS 1806H	Systems of Higher Education
TPS 1807H	Strategic and Long-Range Planning for Postsecondary Systems
TPS 1808H	Research in Health Professional Education
TPS 1809H	Administration of Colleges and Universities
TPS 1810H	Evaluation of Knowledge, Clinical Competence, and Professional Behaviour in the Health Professions
TPS 1811H	Institutional Research and Planning
TPS 1812H	Education and the Professions
TPS 1813H	Issues in Cognitive and Educational Psychology: Implications for Health Professional Education
TPS 1814H	Curriculum in Institutions of Higher Education
TPS 1815H	Teaching in Institutions of Higher Education
TPS 1817H	Nurturing Professional Education
TPS 1818H	Educational Development: Examination of Strategies for Improving Teaching and Learning in Postsecondary Institutions
TPS 1819H	Governance in Higher Education
TPS 1820H	Special Topics in Higher Education: Master's Level
TPS 1821H	Institutional Differentiation in Postsecondary Education
TPS 1822H	The Idea of the University and the College
TPS 1824H	The Planning of Facilities in Higher Education
TPS 1825H	Comparative Education: Theory and Methodology
TPS 1826H	Comparative Higher Education
TPS 1827H	The Politics of Higher Education
TPS 1828H	Evaluation in Higher Education
TPS 1832H	East Asian Higher Education
TPS 1833H	Academic Capitalism: Higher Education with a Corporate Agenda
TPS 1834H	Qualitative Research in Higher Education
TPS 1836H	Critical Analysis of Research in Higher Education

TPS 1837H	Environmental Health, Transformative Higher Education and Policy Change: Education Toward Social and Ecosystem Healing
TPS 1838H	Continuing Education
TPS 1839H	Administration of Technology in Higher Education
TPS 1842H	Higher Education and the Labour Market
TPS 1843H	Higher Education and the Law
TPS 1844H	The Student Experience in Postsecondary Education
TPS 1845H	Applications in the Student Experience
TPS 1846H	Internationalization of Higher Education in a Comparative Perspective
TPS1848H	Innovative Curricula in Higher Education and the Professions
TPS 1852H	Individual Reading and Research in Higher Education: Master's Level
TPS 2006H	Educational Finance and Economics (Exclusion: Students who have taken TPS 1017H, TPS 1841H are not eligible to take TPS 2006H)
TPS 3810H	International Academic Relations
TPS 3820H	Special Topics in Higher Education: Doctoral Level
TPS 3852H	Individual Reading and Research in Higher Education: Doctoral Level

Graduate Faculty

Full Members

Anderson, Stephen - BA, MA, PhD
Bascia, Nina - PhD
Bredo, Eric - BA, MA, PhD *(Chair and Graduate Chair)*
Burstow, Bonnie - BA, MEd, MA, PhD
Chambers, Anthony - BS, MS, EdD
Childs, Ruth - BS, MA, PhD
Dietsche, Peter - BA, MA, PhD, PhD
Flessa, Joseph - BA, MA, PhD
Gaskell, Jane - BA, EdD
Hayhoe, Ruth - BA, MA, PhD
Hildyard, Angela - BSc, MA, PhD
Hodges, Brian - BA, MEd, MD
Iacovetta, Franca - AB, AM, PhD
Jones, Glen - PhD
Joshee, Reva - BLitt, MA, PhD
Levin, Benjamin - BA, MEd, PhD
Magnusson, Jamie-Lynn - BA, MA, PhD
Mascall, Blair - BA, MSc, PhD *(Associate Chair, Program Coordinator, Educational Administration)*
Miles, Angela - BA, MA, PhD
Mirchandani, Kiran - BA, MPH, PhD
Mojab, Shahrzad - BA, MEd, EdD
Mundy, Karen - AB, MA, PhD
Muzzin, Linda - BA, MA, MPsy, PhD
Ng, Roxana - BA, MA, PhD
Pascal, Charles - BA, AM, PhD
Quarter, Jack - PhD
Radforth, Ian - BA, MA, PhD
Regehr, Glenn - BA, PhD
Ryan, James - BEd, MEd, PhD

Sa, Creso - BA, MA, DPhil *(Program Coordinator, Higher Education)*
Sawchuk, Peter - BSc, BEd, PhD
Wrobel, Piotr Jan - MA, PhD
Zuker, Marvin - BA, LLB, MEd

Members Emeriti

Acker, Sandra - BA, MA, PhD
Bogdan, Deanne - BA, MA, PhD
Boyd, Dwight - BA, MEd, EdD
Davis, John - BA, BEd, MEd, PhD
Gamlin, Peter - BA, MA, PhD
Hache, Denis - BA, BEd, MEd, MBA, PhD
Jackson, Nancy - BA, MA, PhD
Kilbourn, Brent - BS, PhD
Knowles, J Gary - MS, EdD
Laiken, Marilyn - BA, MA, PhD
Lang, Daniel - BA, MAT, PhD
Lawton, Stephen - BA, MA, MA, PhD
Miezitis, Solveiga - BA, MA, PhD
Misgeld, Dieter - BA, PhD
Olsen, Christopher - BSc, MA, PhD
Padro, Susan - BA, MS, PhD
Pierson, Ruth - BA, MA, PhD
Prentice, Alison - BA, MA, PhD
Skolnik, Michael - BPhil, BA, MA
Stiegelbauer, Suzanne - BS, MA, MA, PhD
Sullivan, Edmund - MA, PhD
Watson, Cicely - BA, MA, PhD

Associate Members

Akingbola, Olakunle - BSc, MIR, MA, PhD
Albert, Mathieu - PhD
Archer, Anne - DIPP
Balan, Jorge - BA, AB, PhD
Batty, Helen - MEd, MD
Chen, Liang - BA, MBA, MSc, PhD
Drea, Catherine - AB, MA, EdD
D'Souza, Mario Osbert - BA, MEd, MDiv, PhD
Dubrowski, Adam - BSc, MSc, PhD
Gingras, Jacqui - PhD
Goldin Rosenberg, Dorothy - DIPP, MES, PhD
Hilliard, Robert - MD, MD
Hogan, Colman - AB, AM, PhD
Janzen, Katharine - BS, BN, MEd, EdD
Kane, Gabrielle - MEd, MBChB
Kitto, Simon - BA, BEd, DPhil
Macdonald, Geraldine - BSN, MEd, EdD
Mendlowitz, Sandra - PhD
Mullen, Ann Louise - BA, MA, PhD
Mylopoulos, Maria - BS, MA, PhD
Nasmith, Louise - AB, AB, MDCM
Nyhof-Young, Joyce - PhD
Pinto, Laura Elizabeth - BEd, BCom, MEd, PhD
Poldre, Peeter - MD
Raphael, Dennis - PhD
Reeves, Scott - BSc, MSc
Restoule, Jean-Paul - BA, MA, DPhil
Schmidt, Matthias - PhD
Scully-Stewart, Coleen Mary - BA, MEd, PhD
Seifert, Tricia - BA, MS, PhD
Seller, Wayne - BA, MEd
Sharratt, Lyn - BA, MEd, EdD

Tully, James - PhD
Woods, Nicole - BA, PhD
Wright, Cynthia - BA, MA, PhD

Linguistics

Faculty Affiliation

Arts and Science

Degree Programs Offered

Linguistics – MA, PhD

Collaborative Programs

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

Sexual Diversity Studies
- Linguistics, MA, PhD

Overview

The Department of Linguistics offers **Master of Arts** and **Doctor of Philosophy** degree programs in three fields:

- Theoretical Linguistics
- Language Variation
- Psycholinguistics

Contact and Address

Web: www.linguistics.utoronto.ca
E-mail: lingdept@chass.utoronto.ca
Telephone: (416) 978-4029
Fax: (416) 971-2688

Department of Linguistics
University of Toronto
Sidney Smith Hall
4th Floor, 100 St. George Street
Toronto, Ontario M5S 3G3
Canada

Degree Programs

Linguistics

Master of Arts

Minimum Admission Requirements

- Applicants with a bachelor's degree, with a minimum B+ average, may be admitted to a one-year or two-year MA program, depending on their background in linguistics. Admission to a one-year program requires a strong background in linguistics with at least courses in introductory phonetics, phonology, morphology, and syntax. Admission to a two-year program is offered to exceptional applicants whose background is limited to these courses.

Program Requirements

- The **one-year MA** program normally requires 4.0 full-course equivalents (FCEs), including courses LIN 1121H, LIN 1131H, LIN 1181H, LIN 1290Y, and JAL 1145H, or their equivalents, if not already taken, plus other requirements as determined by the department.
- The **two-year MA** program normally requires 8.0 FCEs, including courses LIN 1121H, LIN 1131H, LIN 1181H, LIN 1290Y, and JAL 1145H, or their equivalents, if not already taken, plus other requirements as determined by the department. LIN 1121H, LIN 1131H, and LIN 1181H are normally taken in the first year. LIN 1290Y is taken in the final year of the program.
- 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.

Normal Program Length: 3 sessions one-year MA; 6 sessions two-year MA

Time Limit: 3 years full-time

Doctor of Philosophy

Minimum Admission Requirements

- University of Toronto MA in Linguistics, or its equivalent, with at least an A- average.

Program Requirements

- Students are normally required to complete 3.0 full-course equivalents (FCEs) during the first year. Generals papers (LIN 2201H and LIN 2202H) in two areas of concentration (at least one of which must be in an area of linguistic theory) must be completed by the end of the second year.
- During these two years, 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.
- The language requirement as outlined for the MA degree must be satisfied. Additionally, there is one more language requirement. Other requirements are determined in consultation with the Graduate Coordinator.
- 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.

Normal Program Length: 4 years full-time

Time Limit: 6 years full-time

Course List

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	Introduction to 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 1000Y	Introduction to Linguistics
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 1121H	Phonological Theory
LIN 1126H	Phonetics
LIN 1127H	Phonetic Analysis
LIN 1131H	Introduction to Syntactic Theory
LIN 1133H	Morphology: Morphosyntactic Issues
LIN 1145H	Semantics
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 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 1250H	Topics in Speech Perception
LIN 1256H	Advanced Language Variation II
LIN 1270H	Language Processing and Linguistic Theory
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 2201H	Generals Paper I
LIN 2202H	Generals Paper II

Graduate Faculty

Full Members

Bhatt, Parth - BA, MA, PhD
Brousseau, Anne-Marie - PhD
Chambers, Craig - BA, MA, MA, PhD
Colantoni, Laura - MA, PhD
Cowper, Elizabeth - BA, AM, PhD *(Graduate Coordinator)*
Heller, Daphna - PhD
Ippolito, Michela - BA, MPH, PhD
Johns, Alana - BA, MA, PhD
Kahnemuyipour, Arsalan - PhD
Kang, Yoon Jung - BA, PhD
Kochetov, Alexei - BA, MA, PhD
Massam, Diane - BA, MA, PhD
Nagy, Naomi - BA, PhD
Perez-Leroux, Ana Teresa - MA, PhD
Rice, Keren - BA, MA, PhD *(Chair and Graduate Chair)*
Roberge, Yves - BA, MA, PhD
Schallert, Joseph - PhD
Sidnell, Jack - BA, MA, PhD
Smyth, Ronald - BA, MSc, PhD
Tagliamonte, Sali - AB, MA, DPhil

Members Emeriti

Binnick, Robert - BA, MA, PhD
Chambers, J - DipEd, BA, MA, PhD
Dresher, B Elan - BA, PhD
Reich, Peter - BS, MS, PhD

Associate Members

Cuervo, Maria Cristina - PhD
Hachimi, Atiqa - BA, MA, PhD
Hall, Daniel Currie - BA, MA, PhD
Helms-Park, Rena - BA, MA, AM, DPhil
Johnson, Elizabeth - PhD
Nikiema, Emmanuel - PhD
Paul, Ileana - BA, PhD
Paz, Alejandro - BA, MPA, MA, PhD
Pirvulescu, Mihaela - MA, PhD
Steele, Jeffrey - BA, MA, PhD

Management

Faculty Affiliation

Management

Degree Programs Offered

Management – MBA, BASc/MBA, JD/MBA, PhD
Executive Master of Business Administration – MBA
Omnium Global Executive Master of Business Administration – MBA
Finance – MF

Collaborative Programs

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

1. **Asia-Pacific Studies**
   - Management, MBA
2. **Dynamics of Global Change**
   - Management, PhD
3. **Environmental Studies**
   - Management, MBA, PhD
4. **Global Health**
   - Management, PhD
5. **Management and Economics**
   - Management, PhD

Overview

The Rotman School of Management offers a suite of management programs including the **Master of Business Administration,** available in full-time and Morning and Evening formats; an **Executive Master of Business Administration,** a one-year format designed for senior managers; the **Omnium Global Executive Master of Business Administration,** an alternative to the EMBA for executives wanting to participate in an internationally focused business program; the **Master of Finance,** training tomorrow's global finance leaders; and a world-class doctoral program, the **Doctor of Philosophy.** The PhD program offers specialization in six different fields:

- Accounting
- Finance
- Organizational Behaviour and Human Resource Management
- Marketing
- Operations Management
- Strategic Management

Other areas, including international business, are available for selection as the minor field in Management.

In addition, the Rotman School of Management offers two combined MBA degree programs. The

Combined JD/MBA 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. The **Combined Jeffrey Skoll BASc/MBA,** 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.

Contact and Address

Web:
general: www.rotman.utoronto.ca
Global Executive MBA: www.omniumgemba.com
Telephone:
MBA: (416) 978-3499
Executive MBA: (416) 946-3022
Global Executive MBA: (416) 946-3022
PhD: (416) 978-4226

Rotman School of Management
University of Toronto
105 St. George Street
Toronto, Ontario M5S 3E6
Canada

Degree Programs

Management

Master of Business Administration

Full-Time MBA Program

Minimum Admission Requirements

- Applicants are considered under the General Regulations of the School of Graduate Studies.
- 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 Full-time MBA program admits annually in September. Applicants for the Full-Time program are encouraged to apply before January 15 and no later than April 30 (final deadline).

Program Requirements

- Within this 16-month program (two academic years), students must:
  - Complete a set of mandatory first-year 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 5.0 elective full-course equivalents (FCEs) at the 2000 level (equivalent to ten 2000-level courses). With the permission of the Associate Dean, MBA Program, 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 Associate Dean, MBA Program.

Morning and Evening MBA Programs

Minimum Admission Requirements

- Applicants are considered under the General Regulations of the School of Graduate Studies.
- 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 Morning and Evening MBA program sections admit annually in September. Applicants are encouraged to apply by February 1 and no later than June 1. 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 but is delivered over a three-year period.
- There are two sections in the Morning and Evening MBA programs: morning section and evening section.
- Students must:
  ○ Complete a set of mandatory 1000-level courses. 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 5.0 full-course equivalents (FCEs) at the 2000 level (equivalent to ten 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.

Normal Program Length: 4 sessions (2 years) Full-time MBA; 8 sessions (3 years) part-time Morning and Evening MBA

Time Limit: 3 years full-time (full-time MBA); 6 years part-time (Morning and Evening MBA)

Combined JD (Law)/ MBA (Management)

Minimum Admission Requirements

- Applicants must be admitted to both the Faculty of Law and the Rotman School of Management. Individual applications are required for both programs, and applicants must satisfy the admission requirements of both Faculties independently.
- Management admission criteria are the same as those for the full-time MBA program, with the following exception: although work experience is not a requirement, the average MBA student has five years' experience. It is expected that JD/MBA applicants' academic and personal background reflects diversity and life experience.
- Applicants must obtain satisfactory scores on the Law School Admission Test (LSAT) and the Graduate Management Admission Test (GMAT) or the Graduate Record Examination (GRE; General Test). Test results are valid for five years.
- Students who are in the first year of either the JD or Full-Time program may apply for admission to the combined JD/MBA program by meeting the normal application and admission requirements for the other Faculty.

Program Requirements

- Within this combined four-year program, students must:
  ○ Register and complete the first year of the JD program with at least a B standing to continue in the program.
  ○ Complete the MBA 1000-level core courses with at least a B+ to be eligible to continue in the program.
  ○ Complete a further 3.0 full-course equivalents (FCEs) at the 2000 level (equivalent to six 2000-level courses) from the Rotman School of Management and 45 credits from the Faculty of Law (in addition to the JD requirements to

complete a moot, a perspectives course, and the Extended Writing Requirement).

- At the completion of the four-year combined program, the successful student is awarded both the Juris Doctor and the Master of Business Administration degrees which, if taken separately, would require five years of study.

Time Limit: 4 years full-time

Combined BASc (Engineering)/ MBA (Management)

Minimum Admission Requirements

- Applicants must apply, meet all the admission requirements for both the BASc and the MBA, and be accepted into each program.
- Students in the second or third undergraduate year at the Faculty of Applied Science and Engineering are eligible to apply for the combined BASc/MBA degree program.
- Applicants need a minimum B+ average in each of the following four sessions: 1W, 2F, 2W, 3F; students with one session slightly below B+ who meet all other entrance parameters should still apply.

Program Requirements

- Within this combined six-year-and-eight-month program, students in:
  - ○ **Years 1–4:** complete engineering studies before entering MBA studies; participate in the Professional Experience Year (PEY) placement.
  - ○ **Year 5:** complete a set of mandatory 1000-level MBA courses. 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).
  - ○ **Year 6:** students must complete nine 2000-level courses (4.5 FCEs) and a required RSM 2050H *Technology and Management Interface* course (0.5 FCE) at the Rotman School of Management. Up to two of the 2000-level management courses may be replaced by 400-level or higher engineering courses from the Faculty of Applied Science and Engineering. Students must also ensure that they complete any additional required electives from the Faculty of Applied Science and Engineering to ensure they have met their BASc degree requirements. Elective requirements vary for each engineering program area; consultation with a Faculty of Applied Science and Engineering counsellor is strongly encouraged.
- All students are required to complete a Management Experience Year (MEY). Consult the Faculty of Applied Science and Engineering for detailed MEY requirements.

Time Limit: 4 years full-time

Courses for the MBA

Weighting for 1000-level courses is determined by the second digit of the four-digit course number as follows:

Second-Digit Course Weight

0 CR/NCR (Credit/No Credit)
1 one credit hour
2 two credit hours
3 three credit hours

The department should be consulted each session as to course offerings.

First-Year Core Courses (required courses)—1000 Level

RSM 1110H	Introduction to Model Based Problem Solving
RSM 1111H	Methods for Business Problem Solving
RSM 1120H	Financial Accounting I
RSM 1121H	Financial Accounting II
RSM 1160H	Business Ethics
RSM 1210H	Managerial Economics
RSM 1211H	Economic Environment of Business
RSM 1212H	Global Managerial Perspective
RSM 1213H	The Capstone Project
RSM 1222H	Managerial Accounting
RSM 1231H	Finance I: Capital Markets & Valuation
RSM 1232H	Finance II: Corporate Finance
RSM 1261H	Managerial Negotiations
RSM 1262H	Leadership
RSM 1263H	Managing People in Organizations
RSM 1291H	Foundations of Integrative Thinking
RSM 1292H	Business Problem Solving Practicum
RSM 1301H	Fundamentals of Strategic Management
RSM 1310H	Economic Environment of Business
RSM 1320H	Financial Accounting
RSM 1330H	Business Finance
RSM 1331H	Finance I
RSM 1340H	Operations Management
RSM 1350H	Managing Customer Value
RSM 1360H	Leading People in Organizations
RSM 1382H	Statistics for Management

Second-Year Elective Courses—2000 Level

RSM 2000H	Multi-Disciplinary Special Topics III: Business Problem Solving—An Integrated Approach
RSM 2002Y	Research Project
RSM 2003H	Research Project
RSM 2010H	Business-Government Relations
RSM 2011H	International Business
RSM 2012H	Entrepreneurship
RSM 2015H	Special Topics in Strategic Management
RSM 2016H	Special Topics in Strategic Management

RSM 2017H	Special Topics in Strategic Management
RSM 2018H	Special Topics in Strategic Management
RSM 2019H	Special Topics in Strategic Management
RSM 2020H	Health Sector Strategy and Organizations
RSM 2021H	Corporate Strategy
RSM 2022H	Competition and Strategy in Creative Industries
RSM 2023H	Strategic Change and Implementation
RSM 2024H	Outsourcing
RSM 2027H	Not-for-Profit Consulting
RSM 2030H	Using History to Make Strategic Choices
RSM 2050H	Technology/Management Interface
RSM 2052H	Management Consulting
RSM 2053H	Organizational Strategy
RSM 2054H	Technology Strategy
RSM 2055H	Cooperative Strategy
RSM 2056H	Game Theory and Competitive Strategy
RSM 2057H	Venture Capital
RSM 2058H	Case Analysis and Presentation
RSM 2059H	Health Care Consulting
RSM 2080H	Special Topics in Strategic Management
RSM 2081H	Special Topics in Strategic Management
RSM 2082H	Special Topics in Strategic Management
RSM 2083H	Special Topics in Strategic Management
RSM 2084H	Special Topics in Strategic Management
RSM 2087H	Corporate Citizenship Strategy
RSM 2109H	Rotman Study Tour
RSM 2115H	Special Topics in Business Economics
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	Business and the Regulatory Environment
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 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	Corporate Bankruptcy and Insolvency
RSM 2211H	Business Law
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 2315H	Special Topics in Finance
RSM 2316H	Special Topics in Finance
RSM 2317H	Special Topics in Finance
RSM 2319H	Special Topics in Finance
RSM 2320H	Special Topics in Finance
RSM 2321H	Special Topics in Finance
RSM 2405H	Supply Chain Management
RSM 2406H	Operations Management Strategy
RSM 2407H	Services Operations Management
RSM 2415H	Special Topics in Management Science
RSM 2500H	Marketing Strategy
RSM 2501H	Global Marketing
RSM 2504H	Consumer Behaviour
RSM 2505H	Integrated Marketing Communication
RSM 2506H	Marketing Research
RSM 2507H	Marketing Analysis and Decision Making
RSM 2510H	Distribution Channel Strategy
RSM 2511H	Marketing 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 2518H	Special Topics in Marketing
RSM 2519H	Special Topics in Marketing
RSM 2520H	Special Topics in Marketing
RSM 2524H	Design Practicum
RSM 2601H	Organization Design
RSM 2602H	The Socially Intelligent Manager
RSM 2603H	Advanced Negotiations and Conflict Management
RSM 2605H	International Organizational Behaviour
RSM 2606H	Designing New Work Organizations
RSM 2607H	Managerial Negotiations
RSM 2609H	Aligning People and Strategy
RSM 2610H	Industrial Relations
RSM 2612H	Managing Talent for Global Operations
RSM 2615H	Special Topics in Organizational Behaviour
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 2704H	Information Technology Management
RSM 2800H	Management Science

RSM 2910H	Learning How to Learn
RSM 2913H	Getting It Done®
RSM 2915H	Multidisciplinary Special Topics— Integrative Thinking Practicum (required course for Morning and Evening MBA program)
RSM 2916H	Multidisciplinary Special Topics
RSM 2917H	Multidisciplinary Special Topics
RSM 2918H	Multidisciplinary Special Topics
RSM 2920H	Top Manager's Perspective
RSM 2922H	The Opposable Mind

Executive Master of Business Administration (EMBA)

Minimum Admission Requirements

- Applicants are considered under the General Regulations of the School of Graduate Studies.
- Admission is restricted to applicants with significant professional work or 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.
- Please note that special program fees apply for this program.

Program Requirements

- Within this 13-month program:
  - Students complete 23 courses with an accumulated credit weighting of 11.25.
  - One or more of the course(s) may be substituted by course(s) offered in the regular MBA program at the discretion of the Associate Dean.
  - The Executive MBA is offered on Fridays and weekends every other week, plus four week-long residential modules and study periods.
  - With the permission of the Associate Dean and EMBA Program Director, students may participate in an international exchange program approved by the Rotman School of Management for one course.

Normal Program Length: 4 sessions (13 months) full-time

Courses for the EMBA

RSM 5001H	Strategy 1
RSM 5002H	Strategy 2
RSM 5003H	Personal Leadership 1
RSM 5004H	Personal Leadership 2
RSM 5005H	The Business Environment 1
RSM 5006H	The Business Environment 2
RSM 5007H	International Business
RSM 5009H	Topics in Strategic Management
RSM 5011H	Capstone Project: The Responsible Leader

RSM 5012H	Special Topics in Strategic Management
RSM 5101H	Economics 1
RSM 5102H	Economics 2
RSM 5201H	Accounting 1
RSM 5202H	Accounting 2
RSM 5291H	Foundations of Integrative Thinking
RSM 5301H	Finance 1
RSM 5302H	Finance 2
RSM 5401H	Business Operations
RSM 5501H	Marketing 1
RSM 5502H	Marketing 2
RSM 5601H	Organizational Leadership 1
RSM 5602H	Organizational Leadership 2
RSM 5801H	Quantitative Reasoning for Management

Global Executive Master of Business Administration (Omnium)

Minimum Admission Requirements

- Applicants are considered under the General Regulations of the School of Graduate Studies.
- Admission is restricted to applicants with significant professional work or 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.
- Please note that special program fees apply for this program.

Program Requirements

- Within this 18-month program:
  - Students complete 23 courses with an accumulated credit weighting of 11.25.
  - 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.

Normal Program Length: 5 sessions (18 months) full-time

Courses for the GEMBA

RSM 5001H	Strategy 1
RSM 5002H	Strategy 2
RSM 5004H	Personal Leadership
RSM 5005H	The Business Environment 1
RSM 5006H	The Business Environment 2
RSM 5007H	International Business
RSM 5009H	Topics in Strategic Management
RSM 5010H	Industry Analysis Project

RSM 5011H   Capstone Project: the Responsible Leader
RSM 5012H   Special Topics in Strategic Management
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 1
RSM 5602H   Organizational Leadership 2
RSM 5801H   Quantitative Reasoning for Management
RSM 5901H   Technology Innovation

Doctor of Philosophy

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies.
- Some depth in the cognate disciplines relevant to the field of specialization 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 facility, if applicable.

Program Requirements

- Students normally complete coursework in a major field and two minor fields during the first two years in the program. 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. During all years of study, students must maintain residency

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

in conformance with SGS requirements. Specific requirements include:

  ○ A minimum of 4.0 full-course equivalents (FCEs) to satisfy requirements for one major field and two minor fields 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.
  ○ The two minor fields are usually taken in cognate departments. Each minor field comprises at least 1.0 FCE.
  ○ Successful completion of the required course RSM 3080H *Research Methods in Business.*
  ○ A student is expected to be qualified in the three basic disciplines essential to the study of Management: economics, behavioural science, and quantitative analysis/statistics.
  ○ Upon completion of the courses in the major and minor fields, the student is expected to pass comprehensive examinations in the major field.
  ○ 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.

Normal Program Length: 4 years full-time; students requiring additional courses may take an additional year

Time Limit: 6 years full-time

Courses for the PhD

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 3009H   Special Topics in Strategic Management
RSM 3029H   Special Topics in Accounting
RSM 3039H   Special Topics in Finance
RSM 3049H   Special Topics in Operations Management
RSM 3059H   Special Topics in Marketing
RSM 3069H   Special Topics in Organizational Behaviour and Human Resources 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 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 3041H   Seminar in Operations Management
RSM 3045H   Advanced Topics in Operations
                    Management I
RSM 3046H   Advanced Topics in Operations
                    Management II
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 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 3080H   Research Methods in Business
RSM 3090H   Reading Course in Approved Field
RSM 3091H   Reading Course in Approved Field

Finance

Master of Finance

Minimum Admission Requirements

- Applicants are admitted under the General Regulations, including an appropriate bachelor's degree from a recognized university with a mid-B average in the final year of undergraduate or prior graduate education.
- Satisfactory score on the Graduate Management Admissions Test (GMAT) or GRE (Graduate Record Examination; General Test). Students who have passed the Uniform Evaluation (UFE) or all three levels of the Chartered Financial Analyst (CFA) designation prior to the application deadline are exempt from the GMAT/GRE requirement.
- At least two years of full-time work experience in finance. In special circumstances, other substantial experiences will be considered in lieu of the work experience in finance, but only when accompanied by demonstrated exceptional academic and professional potential. Generally, applicants are not accepted immediately after completion of their undergraduate education, unless they have significant prior full-time work experience.

- Applicants who meet all the criteria will be assessed on the basis of their application essay, grades, standardized graduate test scores, references, and professional experience by the admissions committee. Prospective students will then be invited for an admission interview. The admission decision will be based on both submitted materials and interview performance.

Program Requirements

- Within this 20-month program (two academic years):
  - Students must complete a structured sequence of 14 courses taken over five semesters (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.
  - All degree requirements must be completed within six years of first enrolment in the Master of Finance program.

Normal Program Length: 4 sessions (2 years) full-time

Time Limit: 3 years full-time

Courses for the Master of Finance

RSM 4113H   Macro Economics for Finance
                    Professionals
RSM 4216H   Financial Reporting and Financial
                    Statement Analysis
RSM 4220H   Advanced Accounting Topics for Finance
RSM 4310H   Foundations of Finance
RSM 4311H   Corporate Finance and Valuation
RSM 4312H   Derivatives
RSM 4314H   Risk Management and Financial
                    Institutions
RSM 4315H   Investment Banking
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 4621H   Leadership and Negotiations for Finance
                    Professionals

Graduate Faculty

Full Members

Aggarwal, Pankaj - BEc, MBA, MBA, PhD
Aivazian, Varouj - BS, MA, PhD
Amburgey, Terry - BS, MA, PhD
Amernic, Joel - BSc, MBA, CA
Averbakh, Igor - MSc, PhD
Baum, Joel - BA, MBA, PhD *(Associate Dean, Faculty)*

Berdahl, Jennifer - BA, MA, MA, PhD
Berman, Oded - BA, PhD
Blum, Bernardo Soares - BA, MA, MA, PhD
Booth, Laurence - BSc, MBA, MA, DBA
Borins, Sandford - BA, PhD
Brean, Donald - BA, MBA, MSc, PhD
Brooks, Leonard - BCom, MBA, CA
Callen, Jeffrey - BM, MBA, DPhil
Ching, Andrew Tat Tin - BEc, MA, MA, PhD
Christoffersen, Peter - BEc, PhD
Christoffersen, Susan - BEc, MEc, MA, PhD
Corts, Kenneth - BA, MA, PhD
Cote, Stephane - BSc, MA, PhD
De Franco, Gus - BA, MBA, PhD
Doidge, Craig Andrew - BComm, MSc, PhD
Dyck, Alexander - BA, PhD
Elitzur, Ramy - BA, MBA, Phm, PhD
Florida, Richard - BA, PhD
Frazer, Garth - BE, BM, MPH, MA, PhD
Gans, Joshua - BEc, PhD
Golden, Brian - BS, MS, PhD
Goldfarb, Avi - BA, MA, PhD
Goldreich, David - BS, MS, MS, PhD
Gunz, Hugh - DPhil, PhD
Hawkins, Scott - BA, MS, PhD
Hejazi, Walid - BA, MA, PhD
Hope, Ole-Kristian - MBA, PhD
Horstmann, Ignatius - BA, PhD
Hull, John - BA, MA, MA, PhD
Hyatt, Douglas - BA, MA, PhD
Jalland, R. Michael - BA, PhD
Kan, Raymond - BBA, MBA, DPhil
Kaplan, Sarah - BA, MA, PhD
Kirzner, Eric - BA, MBA
Kramer, Lisa - BBA, PhD
Krass, Dmitry - BS, MEng, PhD
Labroo, Aparna - MBA, MSc, PhD
Latham, Gary - BA, MS, PhD
Lederman, Mara - BA, PhD
Leonardelli, Geoffrey - BA, MA, PhD
Li, Yue - BSc, MBA, PhD
Liu, Christopher - BA, PhD, DBA
Lu, Hai - MBA, PhD, PhD
Mahrt-Smith, Jan - BSc, PhD
Martin, Roger - AB, MBA *(Dean)*
McCurdy, Thomas - AB, MEc, DPhil
McEvily, William - BS, PhD
McGahan, Anita - BA, MA, MBA, PhD *(Associate Dean, Research)*
Mehta, Nitin - BTech, MS, MS, PhD
Menzefricke, Ulrich - MBA, DBA
Milner, Joseph - BSc, MS, PhD
Mitchell, Matthew - BS, MA, PhD
Mohanram, Partha Sarathy - BTech, MBA, PhD
Moldoveanu, Mihnea (Michael) - BSc, MSc, DBA *(Associate Dean, Full-Time MBA Program)*
Moorthy, Sridhar - BSc, MBA, MS, PhD
Oxley, Joanne - BSc, MA, MBA, PhD
Pauly, Peter - MA, PhD *(Vice Dean, Academic)*
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

Ryall, Michael - BS, MBA, PhD
Saks, Alan - BA, MSc, PhD
Shi, Mengze - BS, MS, MA, PhD
Silverman, Brian - AB, MA, SM, PhD
Smieliauskas, Waldemar - BS, MS, PhD
Soberman, David - BSChE, MBA, PhD
Soman, Dilip - BE, MBA, PhD
Stabile, Mark - BS, MA, PhD
Stark, Andrew - BA, MSc, AM, PhD
Strange, William - BA, MA, PhD
Tombak, Mihkel - BS, MBA, AM, PhD
Trefler, Daniel - BA, MPH, PhD
Verma, Anil - BTech, MBA, DPhil
Wang, Qing (Kevin) - BS, MA, PhD
Wei, Jason - MBA, PhD
Wensley, Anthony - MA, MA, MBA, PhD
White, Alan - BE, MBA, DPhil
Whyte, Glen - LLB, MA, MPH, MBA, PhD
Womack, Kent - BA, MBA, PhD
Wong, Moon Hung (Franco) - BA, MA, PhD
Xie, Jia Lin - BA, MBA, PhD
Zhang, Ping - BS, MACCT, MA, PhD

Members Emeriti

Bird, Richard - BA, MA, PhD
Fleck, James - BA, DBA
Gordon, Myron - BA, MA, PhD
Kolodny, Harvey - BEng, MBA, PhD
Mitchell, Andrew - BA, PhD
Ondrack, Daniel - BComm, MBA, PhD
Safarian, Albert - BA, PhD
Sawyer, John - BCom, MA, PhD
Wilson, Thomas - BA, AM, PhD

Associate Members

Afeche, Philipp - BA, MS, PhD
Agrawal, Ajay - BASc, MEng, MBA, PhD
Baron, Opher - BSc, MBA, PhD
Borkovsky, Ron - BSc, MA, PhD
Bova, Francesco - BComm, MPH, MBA, MA, PhD
Buti, Sabrina - BEc, MPH, MEc, PhD
Campbell, James David - BEc, MA, PhD
Casciaro, Tiziana - BA, MS, PhD
Cen, Ling - BEc, MEc, PhD
Chandra, Ambarish - BMath, MEc, PhD
Chen, Feng - PhD
Christianson, Marlys - MD, PhD
Connelly, Brian Samuel - BA, PhD
Dart, Beatrix - MISt, MEc, PhD *(Associate Dean, EMBA/ Omnium Programs)*
Davydenko, Sergei - MA, MSc, PhD
De Voe, Sanford - BA, PhD
DeCelles, Katherine - BS, PhD
Edwards, Alexander - BAC, MS, MACCT, PhD
Eiling, Esther - BA, MS, PhD
Elkamhi, Redouane - PhD
Fisher, James - BA, MBA *(Vice-Dean, Programs)*
Fleischer, Anne - BA, MBA, PhD
Franco, April - BPhil, MEc, PhD
Galasso, Alberto - PhD
Grennan, Matthew - BS, MS, PhD
Han, Lu - BA, MA, PhD
Hirsh, Jacob - BSc, MA, PhD

Hossain, Tanjim - PhD
Hu, Ming - BS, MS, PhD
Lee, Byung Soo - BS, MA, PhD
Liao, Wei-Yi (Scott) - MA, PhD
Mazar, Nina - MBA, PhD
McCarthy, Julie - BA, MPsy, PhD
Meza, Sergio - BTech, MPH, MBA, PhD
Montes, Samantha - BA, MA, PhD
Oesch, John - BS, MSc, MBA, MEd, PhD
Pomorski, Lukasz - MA, MA, MBA, PhD
Powers, Richard - BPHE, BA, LLB, MBA
Simutin, Mikhail - BA, PhD
Toh, Soo Min - BBA, PhD
Trougakos, John Peter - BS, MBA, PhD
Tsai, I-Wen (Claire) - BBA, MBA, PhD
Weber, Mark - AB, MBA, AM, PhD
Xin, Baohua - PhD
Xu, Jing (Alison) - PhD
Yang, Liyan - BA, MA, PhD
Ye, Minlei - PhD
Zhao, Min - BA, MA, PhD
Zhong, Chenbo - BA, MA, PhD
Zweig, David - DPhil

Materials Science and Engineering

Faculty Affiliation

Applied Science and Engineering

Degree Programs Offered

Materials Science and Engineering – MASc, MEng, PhD

Collaborative Programs

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

1. **Biomedical Engineering**
   - Materials Science and Engineering, MASc, PhD
2. **Environmental Engineering**
   - Materials Science and Engineering, MASc, MEng, PhD
3. **Optics**
   - Materials Science and Engineering, MASc

Overview

The Department of Materials Science and Engineering (MSE) offers graduate programs leading to the degrees of **Master of Applied Science, Master of Engineering,** and **Doctor of Philosophy.** Graduate courses and research opportunities are offered to qualified students in a wide range of subjects.

Typical subjects in extractive and process metallurgy involve a study of the equilibria existing during the reduction of oxides with carbon and metals, life cycle analysis of materials, properties of iron and steelmaking slags, the fundamental properties of fused salt solutions, fused salt electrolysis of reactive metals, kinetics of high-temperature reactions, mathematical modelling of metallurgical processes, process metallurgy, and hydrometallurgy.

Typical physical metallurgy and materials science subjects deal with the structure and properties of metallic, ceramic, polymeric, and nanomaterials in such fields as plastic deformation, surface chemistry, sustainable development, electron microscopy, biomaterials, nuclear materials, metal-matrix composites (MMCs), metallic glasses, corrosion, fatigue, welding and bonding, phase transformations, and solidification. These studies are all related to the general problem of understanding structure-property-processing relationships in materials.

Contact and Address

Web: www.mse.utoronto.ca
E-mail: 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

Degree Programs

Materials Science and Engineering

Master of Applied Science

Minimum Admission Requirements

- Students are admitted under the General Regulations of the School of Graduate Studies.
- 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 program of study normally includes 2.0 full-course equivalents (FCEs) (four half courses), including the weekly MASc Graduate Research Seminar, the Graduate Ethics Seminar, and a thesis. Normally, the coursework selected includes the MASc Graduate Research Seminar, which is a half-year course, and three half courses, one of which is normally taken inside the department.
- The required thesis is based upon research work carried out in the department in the fields of extractive and process metallurgy, physical metallurgy, or materials science. The thesis must be presented at an oral examination.

Normal Program Length: 6 sessions full-time
Time Limit: 3 years full-time

Master of Engineering

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies.
- 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 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. The project must be presented at an oral examination.

Normal Program Length: 4 sessions (2 years) full-time; 6 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

Doctor of Philosophy

Minimum Admission Requirements

• Students are normally expected to have completed the master's 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 Materials Science and Engineering Graduate Studies office. A student who is permitted such a transfer must complete only the PhD Graduate Research Seminar in addition to the four courses 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 major subject in a program will be extractive and process metallurgy, physical metallurgy, or materials science.
• The program of study normally includes 2.0 full-course equivalents (FCEs) (four half courses), including the weekly PhD Graduate Research Seminar, and a thesis. Normally, the coursework selected includes the PhD Graduate Research Seminar, which is a half-year course, and three half courses, at least one of which must be taken inside the department. In the PhD program, the departmental seminar comprises a minimum of two

seminars presented to the academic staff/students of MSE.
• Within 12 months of initial enrolment, all PhD students must pass a general Qualifying Examination based on the course material taken within the department and on background knowledge in the student's field of specialization.
• The required thesis is based upon research work carried out in the department in the fields of extractive and process metallurgy, physical metallurgy, or materials science.

Normal Program Length: 4 years full-time; 5 years direct-entry

Time Limit: 6 years full-time; 7 years direct-entry

Course List

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.

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 550H	Advanced Physical Properties of Structural Nanomaterials
MSE 558H	Nanotechnology in Alternate Energy Systems
MSE 561H	Engineered Ceramics
MSE 1000H[0]	Graduate Research Seminar MASc
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 2000H[0]	Graduate Research Seminar PhD
JMZ 1704H	Polymer Process Engineering

JTC 1020H   Ceramics
JTC 1135H   Applied Surface Chemistry

Metallurgy

MSE 504H   Extractive Metallurgy
MSE 1000H[0] Graduate Research Seminar MASc
MSE 2000H[0] Graduate Research Seminar PhD
MSE 3000Y   MEng Project

Graduate Faculty

Full Members

Argyropoulos, Stavros - MEng, PhD
Barati Sedeh, Mansoor - BSc, MASc, PhD
Coyle, Thomas - BS, BA, ScD
Erb, Uwe - MSc, PhD
Grynpas, Marc - MSc, PhD
Hibbard, Glenn - BASc, PhD
Kherani, Nazir - BASc, MASc, PhD
Lian, Keryn - BE, MASc, MSc, PhD
Lu, Zheng-Hong - BSc, MSc, PhD
Naguib, Hani - BSc, ME, PhD, Reg Professional Engineer
Nogami, Jun - BASc, MASc, PhD *(Chair and Graduate Chair)*
Perovic, Doug - BASc, MASc, PhD
Ruda, Harry - BSc, PhD
Sone, Eli - BSc, MS, PhD
Thorpe, Steven - BASc, MASc, PhD *(Associate Chair, Graduate Studies)*
Wang, Zhirui - BEng, BEng, MASc, PhD

Members Emeriti

Aust, Karl - BASc, MASc, PhD
Cox, Brian - BA, MA, PhD
Franklin, Ursula - PhD
Mclean, Alexander - BSc, PhD
North, Thomas - BSc, MSc, PhD
Pilliar, Robert - BASc, PhD
Rutter, John - BASc, MA, PhD
Sommerville, Iain - BSc, PhD, ARCS

Associate Members

Ramsay, Scott - BASc, MASc, PhD
Singh, Chandra Veer - BASc, MTech, PhD

Mathematical Finance

Faculty Affiliation

Arts and Science

Degree Programs Offered

Mathematical Finance – MMF

Overview

Financial engineering is one of the fastest growing areas of applied mathematics. In the **Master of Mathematical Finance** (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.

Contact and Address

Web: www.mmf.utoronto.ca
E-mail: math.finance@utoronto.ca
Telephone: (416) 946-5206
Fax: (416) 946-5205

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

Degree Programs

Mathematical Finance

Master of Mathematical Finance

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies.

- 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 facility 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.

Normal Program Length: 3 sessions full-time

Time Limit – 3 years full-time

Course List

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	Statistics for Finance I
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	Pricing Theory 2
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

Graduate Faculty

Full Members

Feuerverger, Andrey - BSc, PhD
Jackson, Kenneth - BSc, MSc, PhD

Jaimungal, Sebastian - BS, MS, PhD
Kwon, Roy - BA, MS, MSc, PhD
McCurdy, Thomas - AB, MEc, DPhil
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

Mathematics

Faculty Affiliation

Arts and Science

Degree Programs Offered

Mathematics – MSc, PhD

Overview

The Department of Mathematics offers opportunities for research—leading to the **Master of Science** and **Doctor of Philosophy** degrees—in the fields 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 (in cooperation with the Department of Statistics), combinatorics, optimization, control theory, dynamical systems, computer algebra, cryptography, and mathematical finance.

More information about this program and courses may be found in the brochure, Graduate Studies in Mathematics at the University of Toronto.

Contact and Address

Web: www.math.utoronto.ca
E-mail: grad-info@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

Degree Programs

Mathematics

Master of Science

Minimum Admission Requirements

- General Regulations of the School of Graduate Studies and evidence of an excellent academic background and mathematical ability.

Program Requirements

- Full-time students are accepted into a 12-month, 16-month, or 24-month program. The program may be completed on a part-time basis.
- Students in the 12-month program are required either (a) to successfully complete 3.0 approved full-course equivalents (FCEs) and a supervised research project (MAT 4000Y), or its equivalent, or (b) successfully complete 2.0 approved FCEs and submit an acceptable thesis. Two approved half-year courses are considered the equivalent of a full-year course. Two prerequisite courses may, with approval, be substituted for one program course. Students may, with approval, take courses outside the department as part of a coherent program.
- Students who do not have a complete undergraduate background in mathematics may be accepted into a 16-month or 24-month program which includes an approved selection of prerequisite and other courses in addition to the requirements of the 12-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.
- Students who undertake the MSc part-time must, at a minimum, satisfy the requirements of the 12-month program.

Normal Program Length: 3 sessions full-time 1-year MSc; 4 sessions full-time 16-month MSc; 6 sessions full-time 2-year MSc; 6 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

Doctor of Philosophy

Minimum Admission Requirements

- Normally, a master's degree from a recognized university. However, exceptionally strong BSc students may apply for direct admission to the PhD program. In all cases, 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

- At least 6.0 half courses or 3.0 full-course equivalents (FCEs).
- Students must pass a comprehensive examination in basic mathematics before beginning an area of specialization. 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 the first-year

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 specialist oral examination or give a seminar presentation in their particular field 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.

Normal Program Length: 4 years full-time; 5 years direct-entry

Time Limit: 6 years full-time; 7 years direct-entry

Course List

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, and 1301H will be offered each year; the complete list of courses will be available from the department in May. 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 1035H	C* Algebras
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 1109H	Classical Groups
MAT 1110H	Algebraic Groups
MAT 1120H	Lie Groups and Lie Algebras I
MAT 1121H	Lie Groups and Lie Algebras II
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 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 1299H	General Topology
MAT 1300H	Topology I
MAT 1301H	Topology II
MAT 1302H	Combinatorial Theory
MAT 1303H	Combinatorial Designs
MAT 1304H	Topics in Combinatorics
MAT 1309H	Geometrical Inequalities
MAT 1312H	Topics in Geometry
MAT 1313Y	Seminar in Geometry
MAT 1314H	Introduction to Noncommutative Geometry
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 1345H	Symplectic Geometry and Topology
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	Infinitary Combinatorics
MAT 1436H	Large Cardinals, Structure Theory of Ideals and Applications
MAT 1448H	Topics in Set Theoretic Topology
MAT 1449H	Seminar in Foundations
MAT 1450H	Topics in Foundations
MAT 1499H	Teaching Large Mathematics Courses (Credit/No Credit)

Applied Mathematics

MAT 1500Y	Applied Analysis
MAT 1501H	Applied Analysis I
MAT 1502H	Applied Analysis II
MAT 1507H	Asymptotic and Perturbation Methods
MAT 1508H	Techniques of Applied Mathematics
MAT 1520H	Wave Propagation
MAT 1525Y	Inverse Problems of X-Ray and Radar Imaging
MAT 1638H	Fluid Mechanics
MAT 1639Y	Topics in Fluid Mechanics
MAT 1700H	General Relativity
MAT 1705H	Foundations of Classical Mechanics
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	Topics in Computational Mathematics
MAT 1760H	Computer Algebra
MAT 1761H	Algorithms in Algebraic Geometry
MAT 1839H	Optimization and Control
MAT 1840H	Control Theory
MAT 1843H	Mathematics of Pattern Recognition
MAT 1844H	Nonlinear Dynamical Systems
MAT 1845H	Dynamical Systems
MAT 1846H	Topics in 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 1950Y	Readings in Applied Mathematics
MAT 1951H	Readings in Applied Mathematics
MAT 1952H	Readings in Applied Mathematics

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

MAT 2000Y	Readings in Theoretical Mathematics
MAT 2001H	Readings in Theoretical Mathematics I
MAT 2002H	Readings in Theoretical Mathematics II

MSc Project

MAT 4000Y+ Supervised Research Project

Graduate Faculty

Full Members

Alexakis, Spyridon - BA, PhD
Angel, Omer - PhD
Arkhipov, Sergey - PhD
Arthur, James - BSc, MSc, PhD
Bar-Natan, Dror - BSc, PhD
Bierstone, Edward - BSc, MA, PhD
Binder, Ilia - PhD
Bland, John - BSc, MSc, PhD
Bloom, Thomas - BSc, MA, PhD
Braverman, Mark - BMath, MSc, PhD
Buchweitz, Ragnar-Olaf - ScD, DRHAB
Burchard, Almut - MS, PhD *(Coordinator of Graduate Studies)*
Choi, Man-Duen - BSc, MSc, PhD
Colliander, James - BA, MS, PhD
Cook, Stephen - BS, AM, PhD
Del Junco, Andres - BSc, MSc, PhD
Derzko, Nicholas - BSc, 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
Guth, Lawrence - BS, PhD
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 - PhD, DSc
Kim, Henry - BSc, PhD
Kudla, Stephen - BA, MA, PhD
Lorimer, Joseph - BSc, MSc, PhD
McCann, Robert - BS, PhD
Meinrenken, Eckhard - PhD
Milman, Pierre - MA, PhD
Murnaghan, Fiona - BSc, MSc, PhD
Murty, Vijayakumar - BSc, PhD *(Chair and Graduate Chair)*
Nabutovsky, Alexander - MSc, PhD
Nachman, Adrian - BSc, MA, PhD
Pugh, Mary - BA, MS, PhD
Quastel, Jeremy - BSc, MS, PhD
Repka, Joseph - BSc, PhD
Rosenthal, Jeffrey - PhD
Rosenthal, Peter - BS, MA, PhD
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
Szegedy, Balazs - MS, PhD
Tall, Franklin - AB, PhD
Tanny, Stephen - BSc, PhD
Todorcevic, Stevo - PhD
Virag, Balint - BA, MA, PhD
Weiss, William - BSc, MSc, PhD
Yampolsky, Michael - DPhil
Young, Robert Ji Wai - BMath, MMath, PhD

Members Emeriti

Akcoglu, Mustafa - MSc, PhD
Andrews, David - BSc, MSc, PhD
Barbeau, Edward - BA, MA, PhD
Davis, H Chandler - BS, MA, PhD
Ellers, Erich - DrRerNat, DrRerNat
Fraser, Donald AS - BA, MA, PhD, FRSC
Greiner, Peter - BSc, MA, PhD
Halperin, J Stephen - BSc, MSc, PhD, FRSC
Haque, Wahidul - MA, MS, PhD
Jurdjevic, Velimir - BS, MS, PhD
Kupka, Ivan - BSc, PhD, PhD
Masson, David - BSc, MSc, PhD
McCool, James - BSc, PhD
Mendelsohn, Eric - BSc, MSc, PhD
Murasugi, Kunio - BSc, DSc
Rooney, Paul - BSc, PhD
Sen, Dipak - MSc, DSc
Sharpe, Richard - BSc, MA, PhD
Sherk, F Arthur - BA, MSc, PhD
Smith, Stuart - BSc, PhD

Mechanical and Industrial Engineering

Faculty Affiliation

Applied Science and Engineering

Degree Programs Offered

Mechanical and Industrial Engineering – MASc, MEng, PhD

Collaborative Programs

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

1. **Biomedical Engineering**
   - Mechanical and Industrial Engineering, MASc, PhD
2. **Environmental Engineering**
   - Mechanical and Industrial Engineering, MASc, MEng, PhD
3. **Health Care, Technology, and Place**
   - Mechanical and Industrial Engineering, PhD
4. **Knowledge Media Design**
   - Mechanical and Industrial Engineering, MASc, MEng, PhD
5. **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 materials and manufacturing 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.

The **Master of Applied Science** (MSc) degree program provides students with an opportunity to pursue research-intensive advanced studies in a particular field of interest.

The **Master of Engineering** (MEng) degree program is designed for students preparing for advanced professional activity; it is not a research-oriented degree.

The **Doctor of Philosophy** (PhD) degree program is for students anticipating a career in which they will be performing or directing research at the most advanced level.

Contact and Address

Web: www.mie.utoronto.ca/contact/grad.php
E-mail: grad.admission@mie.utoronto.ca
Telephone: (416) 978-8823
Fax: (416) 978-3453

Department of Mechanical and Industrial Engineering
University of Toronto
Mechanical Engineering Building
5 King's College Road
Toronto, Ontario M5S 3G8
Canada

Degree Programs

Mechanical and Industrial Engineering

Master of Applied Science

Minimum Admission Requirements

- Applicants must normally have a minimum average of B+, or equivalent, in each of the final two years of an accredited bachelor's program in engineering or a closely related field.
- Applicants are also assessed on publications, work experience, the school and program to which each previous degree pertains, evidence of exceptional communication skills, references, and the availability of financial resources, space, and suitable supervision.

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 2.5 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.
- MASc students, in their first year of study, are required to attend at least 70% of seminars that are part of the MIE Seminar Series. MASc students who complete the requirement will receive credit for SRM 3333Y *MIE Seminar Series for MASc Students*.

Normal Program Length: 6 sessions full-time

Time Limit: 3 years full-time

Master of Engineering

Minimum Admission Requirements

- Applicants must normally have a minimum average of B+, or equivalent, in each of the final two years of an accredited bachelor's program in engineering or a closely related field.
- Applicants are also assessed on publications, work experience, the school and program to which each previous degree pertains, evidence of exceptional communication skills, references, and the availability of financial resources.

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 Mechanical and Industrial Engineering.
- The program may be taken on a full-time or part-time basis.

Normal Program Length: 3 sessions full-time; 6 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

Doctor of Philosophy

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.

Minimum Admission Requirements

Full-Time PhD Option

- 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 via one of three routes:
  - **Master's degree.** Appropriate University of Toronto master's degree or its equivalent from a recognized university with a minimum B+ average.
  - **Direct entry.** Exceptionally strong applicants with a bachelor's degree and an appropriate background may apply directly to the PhD program. Applicants are advised to consult the Graduate Coordinator before applying to ensure that they possess the appropriate admission requirements for direct entry.
  - **Transfer.** Very strong MASc students may apply to transfer to the PhD program after completing only one year of the MASc program.

Flexible-Time PhD Option

- 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:
  - **Students with a master's degree** normally are required to complete 2.5 full-course equivalents (FCEs) and a thesis.
  - **Direct-entry students** admitted with a bachelor's degree are required to complete 4.0 FCEs plus a thesis.
  - **Transfer students** must complete a total of 4.0 FCEs plus a thesis.
- Students are required to participate in the non-credit seminar course JDE 1000H during their first or second session of registration.
- Full-time PhD students in their first and second years of study are required to attend at least 70% of seminars that are part of the MIE Seminar Series. Full-time PhD students who complete the requirement will receive credit for SRD 4444Y *MIE Seminar Series.* Students in the flexible-time option 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.
- Each PhD student must pass a qualifying examination, annual progress meetings, and the SGS Doctoral Final Oral Examination.
- PhD students are required to present a research seminar during the final year of their studies.
- PhD students (except those in the flexible-time option) are required to be on campus full-time unless special permission is obtained for off-campus study.

Normal Program Length: 4 years full-time; 5 years direct-entry; 5 years transfer-from-master's; 6 years flexible-time option

Time Limit: 6 years full-time; 7 years direct-entry; 7 years transfer-from-master's; 8 years flexible-time option

Course List

See the departmental website for a schedule of available courses.

Fluid Mechanics

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 1222H	Multiphase Flows
MIE 1232H	Microfluidics and Laboratory-on-a-Chip Systems
MIE 1233H	Flow and Transport through Porous Media
MIE 1240H	Wind Power
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 1713H	Analysis and Design of Joints in Manufactured Products
MIE 1716H	Design and Computer-Aided Engineering
MIE 1717H	Life Cycle Engineering
MIE 1720H	Creativity in Conceptual Design
MIE 1732H	Tribology
MIE 1740H	Smart Materials and Structures
MIE 1741H	Multiphysics Materials Modelling
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 1006H	Nonlinear Vibrations
MIE 1064H	Control Analysis Methods with Applications to Robotics
MIE 1068H	Applied Nonlinear Control
MIE 1070H	Intelligent Robots for Society
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 1111H	Conduction Heat Transfer
MIE 1115H	Heat Transfer with Phase Change
MIE 1118H	Partially Ionized Gases
MIE 1122H	Combustion Engine Processes

MIE 1123H	Fundamentals of Combustion
MIE 1126H	Diffusion-Wave Fields
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 1357H	Laser Biomedical Photoacoustics, Biothermophotonics and Imaging
MIE 1801H	Advanced Engineering Analysis
MIE 1803H	Advanced MATLAB for Engineers

Human Factors and Ergonomics

MIE 1402H	Experimental Methods in Human Factors Research
MIE 1403H	Analytical Methods in Human Factors Research
MIE 1406H	Cognitive Work Analysis
MIE 1407H	Engineering Psychology and Human Performance
MIE 1409H	Human Computer Interface Design for Complex Systems
MIE 1411H	Design of Work Places
MIE 1412H	Human-Automation Interaction
MIE 1413H	Statistical Models in Empirical Research
MIE 1414H	Human Factors in Transportation

Information Engineering

MIE 1501H	Knowledge Modelling and Management
MIE 1505H	Enterprise Modelling
MIE 1510H	Formal Techniques in Ontology Engineering
MIE 1512H	Research Topics in XML Retrieval

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 1609H	Multiple Criteria and Multi-Agent Decision Making
MIE 1613H	Discrete Event Simulation
MIE 1615H	Markov Decision Processes
MIE 1616H	Research Topics in Healthcare Engineering
MIE 1619H	Constraint Programming and Local Search
MIE 1620H	Linear Programming and Network Flows
MIE 1621H	Non-Linear Optimization
MIE 1699H	Special Topics in Operations Research
MIE 1721H	Reliability
MIE 1723H	Engineering Maintenance 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	Management of Innovation in Engineering
APS 1013H	Applying Innovation in Engineering
APS 1014H	Advanced Project Management
APS 1015H	Social Entrepreneurship
APS 1016H	Financial Management for Engineers
APS 1017H	Supply Chain Management and Logistics
APS 1202H	Engineering and Sustainable Development
APS 1203H	Teaching Engineering in Higher Education

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

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

Graduate Faculty

Full Members

Aleman, Dionne - BSc, MSc, PhD
Amon, Cristina - BASc, MSc, ScD
Ashgriz, Nasser - BS, ME, DPhil
Balcioglu, Ahmet Baris - BS, MS, PhD
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
Bussmann, Markus - BASc, MASc, PhD *(Coordinator of Graduate Studies)*
Carter, Michael - BM, MMath, PhD
Chan, Timothy - BSc, PhD
Chandra, Sanjeev - PhD
Chignell, Mark - BSc, PhD
Cleghorn, William - BASc, MASc, PhD
Consens, Mariano - BEng, MSc, PhD
Donmez, Birsen - BS, MS, PhD
Ethier, C Ross - BSc, MMath, SM, 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
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, Reg Professional Engineer
Nejat, Goldie - BASc, PhD
Park, Chul - 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
Zu, Jean - BEng, PhD *(Chair and Graduate Chair)*

Members Emeriti

Abdelmessih, Abdo - BME, MS, PhD
Baines, William - BSc, MD, PhD
Currie, Iain - BSc, MASc, PhD
Fenton, Robert - DIPING, 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

Armstrong, Stephen - MA
Atalla, Noureddine - BE, ME, PhD
Banjevic, Dragan - BS, MS, PhD
Cameron, Donald - MASc
Dincer, Ibrahim - BSc, MSc, PhD
Dworkin, Seth - PhD
Farkas, Kornel - PhD
Fels, Deborah - BSc, MHSc, PhD
Frances, Daniel - BASc, MASc, PhD, Reg Professional
  Engineer
Hair, Michael - BSc, PhD
He, Siyuan - PhD
Hollands, Justin - PhD
Hoorfar, Mina - BSc, MASc, PhD
Metcalfe, Murray - MS, PhD
Michaelian, Kirk - PhD
Munro, Michael - BASc, SM, PhD
Papini, Marcello - BASc, MASc, PhD
Paraschivoiu, Marius - MASc, PhD
Purdie, Thomas
Rizvi, Ghaus - PhD
Sefiane, Khellil - DPhil
Sharpe, Michael - BSc, PhD
Sun, Dong - BS, MS, PhD
Topaloglou, Thodoros - BSc, MSc, PhD
Zaric, Gregory - BSc, MASc, MS, PhD

Medical Biophysics

Faculty Affiliation

Medicine

Degree Programs Offered

Medical Biophysics – MSc, PhD

Collaborative Programs

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

1. **Biomolecular Structure**
   - Medical Biophysics, PhD
2. **Cardiovascular Sciences**
   - Medical Biophysics, MSc, PhD
3. **Genome Biology and Bioinformatics**
   - Medical Biophysics, PhD
4. **Neuroscience**
   - Medical Biophysics, MSc, PhD

Overview

The Department of Medical Biophysics, an inter-disciplinary department with three fields—Cellular and Molecular Biology, Molecular and Structural Biology, and Medical Physics—is located primarily at the Ontario Cancer Institute and the Sunnybrook Health Sciences Centre.

The department offers opportunities for re-search—leading to the **Master of Science** and **Doctor of Philosophy** degrees—in a variety of biological problems; projects which cut across the conventional boundaries of physics, engineering, chemistry, biology, and medicine are encouraged. The department em-phasizes basic and applied research related to cancer. Projects include the following areas: tumour biology, radiobiology, membrane function, molecular interac-tions, gene expression, cell differentiation and growth control, viral and chemical carcinogenesis, cellular and molecular immunology, hemopoiesis, macromolecular structure via x-ray crystallography, NMR spectroscopy and electron microscopy, the physics and engineering of diagnostic imaging and radiation therapy, develop-ment 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
E-mail: medbio@uhnres.utoronto.ca
Telephone: (416) 946-2819 or (416) 946-2973
Fax: (416) 946-2050

Department of Medical Biophysics
Ontario Cancer Institute
University of Toronto
Room 7-413, 610 University Avenue
Toronto, Ontario M5G 2M9
Canada

Degree Programs

Medical Biophysics (MBP)

Master of Science

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies.
- Successful applicants with BSc degrees are en-rolled in the MSc program; qualified students can reclassify into the PhD degree program during their second year.
- Applicants with diverse backgrounds are encour-aged to apply.
- Applicants holding bachelor's degrees from non-Canadian universities are required to pro-vide Graduate Record Examination (GRE) scores (General and Subject) with their application.

Program Requirements

- Students must successfully complete all degree course requirements as outlined in the MBP Graduate Student Handbook. Course requirements depend on the subject chosen for study and on the student's background.
- Successful completion of an oral examination on the thesis topic.

Normal Program Length: 6 sessions (2 years) full-time

Time Limit: 3 years full-time

Doctor of Philosophy

Minimum Admission Requirements

- Applicants are admitted via one of two routes:
  - reclassification from the MSc program
  - completion of an MSc degree program in bio-logical, physical, chemical, or medical sciences from a recognized Canadian university
- Admission to the PhD program is highly selective and attainment of minimum admission require-ments does not guarantee acceptance into the PhD program.

Program Requirements

- Because of the broad range of topics available for thesis research and because of the different backgrounds of students admitted, each student, in consultation with his or her supervisor, will plan a program of study that provides the appropriate background for the area of investigation.
- All students must complete the required four full-course credits as outlined in the MBP Graduate Student Handbook.
- Students who transfer/reclassify into the doctoral program or who have completed an MSc degree in Medical Biophysics will receive credit for all courses taken during their MSc program in medical biophysics. Students who completed their MSc degree in a department other than medical biophysics may request one full-course credit for that degree. These students must still complete or be formally exempt from the required courses for the medical biophysics MSc degree. Exemption from a required course does not reduce the number of courses required; students must substitute another course equivalent in place of the exempted course.
- All PhD students are expected to participate in MBP 1015Y *Biophysics Seminar Course* regardless of whether they previously received credit for it or not.
- Except by special arrangements, students are required to be on campus and participating full-time until all program requirements are completed.

Normal Program Length: 4 years full-time; 5 years direct-entry; 5 years transfer-from-master's

Time Limit: 6 years full-time; 7 years direct-entry; 7 years transfer-from-master's

Course List

MBP 1001Y	Advanced Cell Biology (Topics change; consult Course Coordinator about current topics)	
MBP 1007Y	Fundamentals in Molecular and Cell Biology	
MBP 1010H	Quantitative Biology—Statistical Methods	
MBP 1011H	Foundations of Bioinformatics (Not currently offered; suggested alternative is JTB 2010H Proteomics and Functional Genomics)	
MBP 1015Y[0]	Biophysics Seminar	
MBP 1018Y	Oncology	
MBP 1022H	Advanced Cell Biology for Physical Scientists	
MBP 1023H	Clinical Radiation Physics	
MBP 1024Y	Advanced Medical Imaging	
MBP 1026H	Clinical Imaging for Physical Scientists	
MBP 1028H	Optical, Thermal and Radiation Biophysics	

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

Graduate Faculty

Full Members

Ailles, Laurie - PhD
Archer, Michael - MA, MSc, PhD, DSc
Arrowsmith, Cheryl - BSc, PhD
Attisano, Liliana - BSc, PhD
Aubin, Jane - BSc, PhD
Barber, Dwayne - BSc, PhD
Benchimol, Samuel - BSc, PhD
Ben-David, Yacov - BSc, MSc, PhD
Berinstein, Neil - MD
Bjerknes, Matthew - BSc, MSc, PhD
Boyd, Norman - MD
Bristow, Robert Glen - MD, PhD
Brock, Kristy - PhD
Bronskill, Michael - BSc, MSc, PhD
Burns, Peter - BSc, BSc, MSc, PhD *(Chair and Graduate Chair)*
Chakrabartty, Avijit - BSc, MSc, PhD *(Graduate Coordinator, Biology Stream)*
Cheung, Peter - BSc, MS, PhD
Chopra, Rajiv - PhD
Cunningham, Charles - BSc, MSc, PhD
Czarnota, Gregory - MD, PhD
Danska, Jayne - AB, PhD
Done, Susan - BA, MA, MBA, BCh, MB, PhD
Dumont, Daniel - BSc
Edwards, Aled - BSc, PhD
Filmus, Jorge - MSc, PhD
Flannery, John - 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
Hedley, David - MD
Henkelman, Mark - BSc, MSc, PhD
Hill, Richard - BA, PhD
Hogg, David - BSc, MD
Hudson, Thomas J - 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
Kamel-Reid, Suzanne - BA, MA, PhD
Keller, Gordon - BSc, PhD
Kerbel, Robert - BSc, PhD
Khokha, Rama - BSc, MSc, PhD
Kislinger, Thomas - PhD *(Graduate Coordinator, Biology Stream)*
Koch, Christine - BSc, MD, PhD
Kolios, Michael - BSc, MSc, PhD
Letarte, Michelle - BSc, PhD
Lilge, Lothar - DIPPHY, PhD *(Graduate Coordinator, Physics Stream)*
Liu, Fei-Fei - MD

Liu, Geoffrey - MSc, MD
Macgowan, Christopher - BSc, MSc, PhD
Mak, Tak - BSc, MSc, PhD
Malkin, David - MD
Manoukian, Armen - BSc, PhD
Marsden, Philip - MD
Martel, Anne - BSc, PhD
Mcglade-Dolson, Jane - BSc, PhD
McPherson, John - PhD
Medin, Jeffrey - BSc, PhD
Messner, Hans - MD, PhD
Minden, Mark - MD, PhD
Minkin, Salomon - BSc, MSc, PhD
Moody, Alan - BA, MA, MBBS
Neel, Benjamin - AB, MD, PhD
Ohashi, Pam - BSc, PhD
Pai, Emil - PhD
Paige, Christopher - BSc, PhD
Penn, Linda - BSc, PhD
Pignol, Jean-Phillipe - MD, PhD
Plewes, Donald - BSc, MSc, PhD
Prive, Gil - BSc, PhD
Puri, Mira - BSc, PhD
Raught, Brian - BS, MS, PhD
Rose, David - BA
Rottapel, Robert - BA, MD
Rowlands, John - BSc, PhD
Schimmer, Aaron - MD, PhD
Schuh, Andre - MD
Sherar, Michael - BA, PhD
Sled, John - BASc, MS, PhD
Spaner, David - PhD
Squire, Jeremy - BSc, MSc, PhD
Stambolic, Vuk - BSc, MSc, PhD
Stanisz, Greg - PhD
Strother, Stephen - BSc, MS, PhD
Tillier, Elisabeth - BSc, MS, PhD
Tritchler, David - BA, MS
Tsao, Ming-Sound - BSc, MD
Van Der Kooy, Derek - BSc, MA, PhD
Vitkin, Alex - BASc, MASc, PhD
Wells, Richard - MD, 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

Axelrad, Arthur - BSc, MD, PhD
Bruce, Robert - BSc, LMCC, MSc, MD, PhD
Cunningham, Alastair - PhD
Hunt, John - BSc, MSc, PhD
Miller, Richard - BSc, MSc, PhD
Ottensmeyer, Peter - BASc, MA, PhD
Phillips, Robert - BA, MSc, PhD
Rauth, A Michael - BSc, PhD
Till, James - BA, MA, PhD
Whitmore, Gordon - PhD

Associate Members

Boutros, Paul - PhD
Caldwell, Curtis - BSc, MSc, PhD
Chen, Jean - PhD
Cheng, Hai-Ling - BSc, MS, PhD
Gauthier, Mona L. - BSc, MS, PhD
MacIntosh, Bradley - PhD
Martin, Lisa - BSc, MSc, DPhil
Muthuswamy, Lakshmi - PhD, PhD
Nieman, Brian - PhD
Okada, Hitoshi - MD, PhD
Pang, Geordi - PhD
Stefanovic, Bojana - BASc, PhD
Trudel, Suzanne - MSc, MD
Woo, Minna Nancy - MD

Medical Science

Faculty Affiliation

Medicine

Degree Programs Offered

Bioethics – MHSc
Biomedical Communications – MScBMC
Medical Radiation Science – MHSc
Medical Science – MSc, PhD

Collaborative Programs

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

1. **Aboriginal Health**
   - Medical Science, MSc, PhD
2. **Addiction Studies**
   - Medical Science, MSc, PhD
3. **Aging, Palliative and Supportive Care Across the Life Course**
   - Medical Science, MSc, PhD
4. **Bioethics**
   - Medical Science, MSc, PhD
5. **Biomedical Engineering**
   - Medical Science, MSc, PhD
6. **Biomedical Toxicology**
   - Medical Science, MSc, PhD
7. **Cardiovascular Sciences**
   - Medical Science, MSc, PhD
8. **Dynamics of Global Change**
   - Medical Science, PhD
9. **Environment and Health**
   - Medical Science, MSc, PhD
10. **Genome Biology and Bioinformatics**
    - Medical Science, PhD
11. **Global Health**
    - Medical Science, PhD
12. **Health Care, Technology, and Place**
    - Medical Science, PhD
13. **Health Services and Policy Research**
    - Medical Science, MSc, PhD
14. **Knowledge Media Design**
    - Medical Science, MSc, PhD
15. **Neuroscience**
    - Medical Science, MSc, PhD
16. **Resuscitation Sciences**
    - Medical Science, MSc, PhD
17. **Women's Health**
    - Medical Science, MSc, PhD

Overview

The **Master of Health Science 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 Program in Bioethics.

The **Master of Science in Biomedical Communications** is a two-year professional master's program involving the artist/visual communicator in medical and health education and research. The program offers two fields: Biomedical Media Design and Biomedical Visualization Design.

The **Master of Health Science in Medical Radiation Science** is designed for expert radiation therapy clinicians who wish to expand their academic competence and advance their clinical skills. The program is delivered in either a two-year full-time or three-year extended format. The program comprises coursework (required and elective), clinical practica, and a master's research project—all 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. Didactic courses will run primarily outside of regular working hours—mornings, evenings, and weekends—with the exception of the clinical practica in the final year that require a maximum of 25 hours of clinical practice per week at an affiliated teaching site.

The **Master of Science and Doctor of Philosophy programs in Medical Science** are 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:

- Biomedical Science
- Clinical Science
- Population Health/Health Services
- Bioethics
- Health Professions Education
- Radiation Oncology

The full-time MSc and PhD programs emphasize 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).

Contact and Address

Bioethics Program

Web: www.jointcentreforbioethics.ca/education/mhsc.shtml
E-mail: carmen.alfred@utoronto.ca
Telephone: (416) 978-0871
Fax: (416) 978-1911

Joint Centre for Bioethics (JCB)
University of Toronto
Suite 754, 155 College Street
Toronto, Ontario M5T 1P8
Canada

Biomedical Communications Program

Web: www.bmc.med.utoronto.ca
E-mail: bmc.info@utoronto.ca
Telephone: (905) 569-4849
Fax: (905) 569-4847

Institute of Medical Science (IMS)
Faculty of Medicine
University of Toronto Mississauga
HSC 308, 3359 Mississauga Road North
Toronto, Ontario L5L 1C6
Canada

Medical Radiation Sciences

Web: www.radonc.utoronto.ca
E-mail: nicole.harnett@rmp.uhn.on.ca
Telephone: (416) 946-4501, ext 5756
Fax: (416) 946-4442

Medical Radiation Sciences Graduate Program
Department of Radiation Oncology
University of Toronto
105-150 College Street
Toronto, Ontario M5S 3E2
Canada

Medical Science Program

Web: www.ims.utoronto.ca
E-mail: dir.medscience@utoronto.ca
Telephone: (416) 978-5012
Fax: (416) 971-2253

Institute of Medical Science
University of Toronto
Medical Sciences Building
Room 2374, 1 King's College Circle
Toronto, Ontario M5S 1A8
Canada

Degree Programs

Bioethics

Master of Health Science

Minimum Admission Requirements

- Normally, an appropriate bachelor's degree and a recognized degree in one of the health care sciences (e.g., MD, BScN, BScOT, BScPT, BSW) or equivalent. 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.
- The application must be accompanied by:
  - a current curriculum vitae (CV)
  - original university academic transcripts
  - a letter of intent or statement of professional goals
  - three letters of reference
  - a writing sample, in English
- Deadline for receipt of applications is February 1. Enrolment is limited and not all applicants meeting the prerequisites will be admitted. Applicants are screened for eligibility; short-listed applicants are interviewed.

Program Requirements

- The program is offered in modular format in 20 two-day Thursday/Friday blocks from September to April, normally over two years; certain international students may complete all coursework in one academic year.
- A major paper of publishable quality on a topic of the student's choice.
- A practicum that will ensure the application of the knowledge and skills gained elsewhere in the two-year program of study.
- Courses as outlined below.

Normal Program Length: 6 sessions full-time

Time Limit: 3 years full-time

Required Course List

Courses are restricted to students officially enrolled in the MHSc in Bioethics and the Collaborative Program in Bioethics, except where noted. All courses are understood as "or equivalent" in order to accommodate the diverse background education and training of applicants.

First-year courses concentrate on theoretical foundations of health care sciences, key topics in bioethics, philosophical bioethics, legal bioethics, and resource allocation ethics. The application of theory to practice in clinical and research settings is emphasized.

Second-year courses focus on applied skills and knowledge concentrating on teaching in a variety of settings to a variety of audiences; managing differences in culture, gender, and religion; the mediation skills with which to work; further instruction in the two primary areas of clinical bioethics and research ethics.

First Year

HAD 5771H	Resource Allocation Ethics
MSC 3001Y	Foundations Seminar I
MSC 3003Y	Empirical Approaches in Bioethics
MSC 3005H	Legal Approaches to Bioethics
PHL 2146Y	Topics in Bioethics

Second Year

MSC 1051H	Research Ethics
MSC 1052H	Clinical Bioethics
MSC 3002Y	Foundations Seminar II
MSC 3004Y	Ethics Committees and Consultations
	For international students, MSC 3004Y is not required. Instead, MSC 3010Y International Research Ethics is required and is taken in May.
MSC 3006Y	Bioethics Independent Study
MSC 3008Y	Practicum

Biomedical Communications

Master of Science in Biomedical Communications

Minimum Admission Requirements

- Graduation from a recognized university with an appropriate 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.
- High-quality portfolio of visual material; consult the MScBMC website for list of prerequisite courses required for admission.

Program Requirements

- 8.5 full-course equivalents (FCEs); students have the option to select either 1.0 elective FCE and a master's research project and paper or 2.0 elective FCEs and a master's research project.
- In Year 2 of the graduate program, students enter their chosen field.

Normal Program Length: 6 sessions full-time

Time Limit: 3 years full-time

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

Course List

Consult the Faculty each session regarding course offerings.

Required Courses

MSC 1001Y	Human Anatomy (Including Embryology)
MSC 2001Y	Visual Representation of Medical Knowledge
MSC 2002Y	Sequential Medical Communication
MSC 2003Y	Biomedical Communications Technologies
MSC 2004H	Research Methods
MSC 2005H	Evolution of Medical Illustration
MSC 2009H	Ethics and Professionalism in Biomedical Communications
MSC 2012H	Neuroanatomy for Visual Communication
MSC 2013Y	Master's Research Project and Paper
MSC 2018H+	Visual Representation of Processes in Human Pathology

Elective Courses

Students are encouraged to take at least one of their electives in a graduate program other than Biomedical Communications.

MSC 2015H	Interpretive Visualization: Cinematic Design and Preproduction
MSC 2016H	Visualization Methods
MSC 2017H	Visualization Technology
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 2019H	Information and Data Visualization in Science and Medicine

Medical Radiation Sciences

Master of Health Science

Minimum Admission Requirements

- Students may complete this full-time program either in two years (six sessions) or three years (nine sessions). The admission requirements for the two-year program and three-year program options are the same. The three-year program option may appeal to working professionals who wish to complete the degree over an extended period of time.
- Either hold relevant certification in radiation therapy or provide evidence for eligibility for such.
- 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 three years (5,000 hours) of professional practice within five years of application.

- The application must be accompanied by:
  - Three letters from professional referees (academic, professional, or specific — see below).
  - A letter of intent (three-year option applicants should indicate why they wish to pursue this option).
  - An updated curriculum vitae (CV).
  - Original university academic transcripts.
- 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 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.

Two-Year Full-Time Program Option Requirements

- Within this two-year, six-session program, students must:
  - Complete a mandatory set of 4.0 full-course equivalents (FCEs) over the first four sessions. Each course has a weighting of 0.5 FCEs.
  - Complete 1.0 elective FCE within the first four sessions. In all cases, courses selected are subject to the approval of the Program Director.
  - Complete the two final-year internship courses (2.0 FCEs) and the major research project (0.5 FCE) in the final two sessions of the program.

Three-Year Extended Program Option Requirements

- This program, designed for working professionals, covers the equivalent of the two-year, six-session program, but over a three-year or nine-session period. In this program, students must:
  - Complete a mandatory set of 4.0 full-course equivalents (FCEs) over the first six sessions. Each course has a weighting of 0.5 FCEs.

  - Complete 1.0 elective FCEs within the first six sessions. In all cases, courses selected are subject to the approval of the Program Director.
  - Complete the two final-year internship courses (2.0 FCEs) and the major research project (0.5 FCE) over a maximum of the final four sessions of the program.

Normal Program Length: 6 sessions (2-year full-time option); 9 sessions (3-year extended option)

Time Limit: 3 years full-time for both options

Course List

MSC1500H	Advanced Radiotherapy and Medical Physics
MSC 1501H	Frontiers in Radiation Medicine Research
MSC 1502H	Translational Radiobiology Applied to Radiation Science
MSC 1503H	Clinical Reasoning and Decision Making in Radiotherapy Part I
MSC 1504H	Clinical Reasoning and Decision Making in Radiotherapy Part II
MSC 1505H	Clinical Reasoning and Decision Making in Radiotherapy Part III
MSC 1506H	Professional and Clinical Leadership
MSC 1507H	Clinical Competence and Continuous Learning
MSC 1508H	Medical Radiation Sciences Research Development
MSC 1509H	Master's Research Project
MSC 1510Y	Clinical Practicum I
MSC 1511Y	Clinical Practicum II

Medical Science

Master of Science

Minimum Admission Requirements

- 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

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

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 93/120 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 and research.
- 1.0 graduate full-course equivalent (FCE) in addition to MSC 1010Y[0] *MSc Student Seminars.*
- A research thesis and oral thesis examination.
- Students are expected to be on campus and participating full-time until all program requirements are completed.

Normal Program Length: 6 sessions full-time

Time Limit: 3 years full-time

Doctor of Philosophy

Minimum Admission Requirements

- 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 93/120 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 one of three routes:

- ○ **After completing an MSc degree** (with an MSc thesis) with at least A- standing from a recognized university.
- ○ **Transfer from the IMS MSc program.** Outstanding students may be considered for reclassification into the PhD program without writing an MSc thesis.
- ○ **Direct entry** into the PhD program from an appropriate BSc or an MD degree, without completing an MSc degree.

Program Requirements

- Coursework; students may be required to take extra courses in addition to the degree requirements listed below:
  - ○ **Students with an MSc degree** (with an MSc thesis) complete a minimum of 1.0 graduate full-course equivalent (FCE), plus MSC 1011Y[0] *PhD Student Seminars.*
  - ○ **Transfer students from the IMS MSc** must complete 1.0 graduate FCE with a minimum A- average, plus MSC 1010Y[0] *MSc Student Seminars.* If recommended by the Program Advisory Committee, the student will be evaluated in an oral transfer examination within 18–21 months of initial graduate registration. The successful applicant will enter the PhD program and complete a minimum of 2.0 graduate FCEs (including those already completed in the MSc), plus MSC 1011Y[0] *PhD Student Seminars.* Alternatively, the Exam Committee may decide that the student must complete the MSc degree before being considered for admission to the PhD program.
  - ○ **Direct-entry students** must pass a qualifying examination within 18–21 months of entry and must complete a minimum of 2.0 graduate FCEs plus MSC 1011Y[0] *PhD Student Seminars.*
- 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 (Year 4 for direct-entry PhD students), students must have completed all program requirements exclusive of the thesis research to achieve candidacy.
- Students are expected to be on campus and participating full-time until all program requirements are completed.

Normal Program Length: 4 years full-time; 5 years direct-entry; 5 years transfer-from-master's

Time Limit: 6 years full-time; 7 years direct-entry; 7 years transfer-from-master's

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

Course List

Not all courses are offered each year. Check departmental website for course availability.

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
JFK 1120H	Selected Topics in Drug Development I
JFK 1121H	Selected Topics in Drug Development II
JHM 1000H	Issue Analysis in Interdisciplinary International Health Research
JPM 1005Y	Behavioural Pharmacology
JPM 1008H	Psychopharmacology and Women's Health
MSC 1001Y	Human Anatomy (Including Embryology)
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 1051H	Research Bioethics
MSC 1052H	Clinical Bioethics
MSC 1060H	Biostatistics for Health Scientists
MSC 1080H	Introduction to Biostatistics and Clinical Epidemiology
MSC 1081H	Studies in Schizophrenia
MSC 1082H	Seminars in Psychosomatic Research
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 1090H	Introduction to Clinical Biostatistics
MSC 1500H	Advanced Radiotherapy and Medical Physics
MSC 1501H	Frontiers in Radiation Medicine Research
MSC 1502H	Translational Radiobiology Applied to Radiation Science
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
MSC 1507H	Clinical Competence and Continuous Learning
MSC 1508H	Medical Radiation Sciences Research Development
MSC 1509H	Master's Research Project (0.5)
MSC 1510Y	Clinical Practicum 1
MSC 1511Y	Clinical Practicum 2
MSC 2010Y	Molecular Medicine in Human Genetic Disease
MSC 2020H	Diagnostic and Therapeutic Strategies in Genomic Medicine
MSC 4100H	Cell Mechanics: Structure, Function, and Disorder
MSC 5100H	Evolutionary Medicine: The Sociobiology of Sickness and Healing
MSC 6000H	Special Topics Reading Course
MSC 7000Y	Regenerative Medicine
MSC 8000Y	Transdisciplinary Studies in Infectious Disease (using Hepatitis C as a Model)

Graduate Faculty

Full Members

Abel, Sharon - BA, MA, PhD
Agur, Anne - BSc, MSc, PhD
Alain, Claude - BA, MA, PhD
Allard, Johane - MD
Alman, Benjamin - BSc, MD
Aubin, Jane - BSc, PhD
Backx, Peter - DrMedVet, PhD, PhD
Bagby, Michael - BA, MA, PhD, PhD
Bagli, Darius - BS, MD
Baker, Andrew - MD, MD
Bapat, Bharati - BSc, MSc, PhD
Barr, Cathy - BSc, PhD
Baruchel, Sylvain - BS, MD, MD
Bassett, Anne - BSc, MD
Bear, Christine - BSc, MSc, PhD
Beitchman, Joseph - MDCM
Belik, Jaques - MD
Belsham, Denise - PhD
Bendeck, Michelle - BSc, PhD
Bhavnani, Bhagu - BSc
Black, Sandra - BSc, MD
Blanchard, Ray - MA, PhD
Bocking, Alan - MD
Bogoch, Earl - BA, MSc, MD
Bombardier, Claire - MA, MD
Boulianne, Gabrielle - BSc, PhD
Bradley, T. Douglas - BA, MD
Bremner, Roderick Angus - BSc, PhD
Brill, Julie - PhD
Bristow, Robert Glen - MD, PhD
Brooks, Dina - BSc(PT), MSc, PhD
Broussard, Dianne - PhD
Brumell, John - BSc, PhD
Buys, Yvonne Margareth - LMCC, MD
Caldarone, Christopher - BSc, MD
Carlen, Peter - MD
Carnahan, Heather - BPHE, MSc, PhD
Casper, Robert - MD
Cassidy, David - BSc, MSc, PhD
Catton, Pamela - MHPE, MD
Cattral, Mark - MSc, BScMed, MD
Cattran, Daniel - MD
Chan, Helen - MBBS
Chapman, Kenneth - MSc, MD

Chen, Robert - MB
Cheung, Angela - BA, MD, PhD
Cheyne, Douglas - BSc, MA, PhD
Chow, Chung-Wai - MD, PhD
Christensen, Bruce - BA, PhD
Clarke, David - PhD
Cohen, Zane - BA, MD
Cole, Donald - MSc, MD
Coles, John - MD
Cordes, Sabine - BS, PhD
Corey, Mary - BSc, PhD
Corey, Paul - BSc, MA, PhD
Croitoru, Ken - MDCM
Cusimano, Michael - MHPE, MD, PhD
Daar, Abdallah - MD
Daneman, Denis - BSc, MBChB, MBChB
Daskalakis, Zafiris Jeffrey - MD
Davis, Aileen - BSc(PT), MSc, PhD
Davis, Karen - BSc, MSc, PhD
Dawson, Laura - MD
de Veber, Gabriel - MD
Deber, Raisa - BS, MS, PhD
Dennis, Maureen - BA, MA, PhD
Detsky, Allan - BS, MD, PhD
Devins, Gerald - PhD
Donnelly, Sandra - BSc, MSc, MDCM
Dorian, Paul - MSc, MDCH
Drake, James - BSE, MSc, MBChB
Dror, Yigal - MD
Drucker, Daniel - MD
Dubrowski, Adam - BSc, MSc, PhD
Duchen, Suzanne - MBChB
Dunn, James - AB, AM, PhD
Einstein, Gillian - AB, PhD
Etchells, Edward - MSc, MD
Eubanks, James - BSc, AA, PhD
Ezzat, Shereen - MD
Fantus, George - BSc, MDCM
Fehlings, Michael - LMCC, MD, PhD
Feinstein, Anthony - MBChB, PhD
Fish, Joel - BSc, MSc, MD
Fisher, Joseph - MD
Fleming, Alison - BS, PhD
Fleshner, Neil - MPH, LRCP, MD
Flint, Alastair - ChB
Floras, John - MD, DPhil
Forrest, Christopher - BSc, MSc, MD
Frank, John - BSc, MSc, MD
Frankland, Paul - MA, PhD
Fremes, Stephen - BA, MSc, MD
Gaisano, Herbert - BS, MD
Gallinger, Steven - MSc, MD
Ganguli, Rohan - MBBS
George, Tony - BSc, MD
Giacca, Adria - MD
Gilbert, Richard - MBBS, PhD
Gladman, Dafna - MD
Glazier, Richard - MPH, MD
Goering, Paula - BSc, MSc, PhD
Goh, M Cynthia - PhD
Goldstein, Roger - MBChB
Gorczynski, Reginald - BSc, BA, MA, MD, PhD
Gordon, Karen - DPhil
Grady, Cheryl - BA, MA, PhD

Granton, John - BS, MD
Grinstein, Sergio - BSc, PhD
Gross, Gil - MD
Gupta, Neeru - BM
Hamilton, Jill - BSc, MSc, MD
Hannah, Mary - BSc, MDCM, MS
Harrison, Robert - PhD, DSc
Heathcote, Elizabeth Jenny - MBBS, MD, PhD
Heon, Elise - LMCC, MD
Herridge, Margaret - MD
Herrmann, Nathan - MD
Heslegrave, Ronald - PhD
Hinek, Aleksander - MD, PhD
Hoch, Jeffrey - BA, MA, PhD
Hodges, Brian - BA, MEd, MD
Hogg, David - BSc, MD
Holness, D Linn - MHSc, MD
Horner, Richard - BSc, PhD
Hu, Jim - BSc, PhD
Hudson, Christopher - BSc, PhD
Husain, Mansoor - MB, MD
Hutchison, William - BSc, MSc, PhD
Hwang, Paul Als - BSc, MSc, MD
Inman, Robert - BA, MD
Irwin, Meredith - MD
Jadad, Alejandro - MD, DPhil
Jaffray, David - BSc, PhD
Jarvi, Keith - MD
Jenkins, David Ja - BA, MA, MD, MB, BS, PhD, Canada
  Research Chair
Jeschke, Marc - DrMed, PhD
Jewett, Michael - LMCC, MD
Jha, Prabhat - DrMed, MD, PhD
Jin, Tianru - PhD
Jones, Nicola - MD
Josselyn, Sheena - MA, PhD
Kain, Kevin - MD
Kaplan, Allan - AA, BA, MSc, MD *(Director)*
Kaplan, David - BA, PhD
Kapus, Andras - MD, PhD
Katz, Joel - PhD
Kaul, Rupert - MD, PhD
Kavanagh, Brian - BSc, BSc, MBChB, MBChB
Keating, Armand - BSc, MD
Kelvin, David - MASc, PhD
Kennedy, James - MD
Kennedy, Sidney - DPsych, MBChB, BAO
Keshavjee, Shafique - BA, MSc, LMCC, MD
Kim, Peter - MDCM, PhD
Kish, Stephen John - BSc, MSc, PhD
Klip, Amira - ScD
Klotz, Laurence - LMCC, MD
Kucharczyk, Walter - MD
Kuebler, Wolfgang - DrMed, PhD
Laupacis, Andreas - MD
Lavery, James - BA, BS, PhD
Lazarus, Alan - PhD
LeBlanc, Vicki - PhD
Lee, Douglas - DrMed, PhD
Lemmens, Trudo - LLM, DCL
Leong-Poi, Howard - MD
Levine, Brian - BA, MA, PhD
Levinson, Wendy - BSc, MD
Levitt, Anthony - MBBS, DGO, MB

Levy, Gary - BSc, MD
Lewis, Gary - BCh, MBChB
Li, Ren-Ke - MHSc, MSc, MD, PhD
Lindsay, Thomas - BSc, MSc, MDCM
Links, Paul - MD
Liu, Fei-Fei - MD
Liu, Mingyao - MSc, MD
Liu, Peter - MD
Lobaugh, Nancy - BS, PhD
Logan, Alexander - MD
Lozano, Andres - BSc, LMCC, MD, BScMed, PhD
Lu, Wei Yang - MSc, MD, PhD
Lumsden, Charles - BSc, MSc, PhD
Lye, Stephen - BSc, PhD
MacDonald, Kelly - MD
Macdonald, Robert - MD, PhD
MacDonald, Russell - MD
Mak, Tak - BSc, MSc, PhD
Maki, Brian - BASc, MASc, PhD, Reg Professional
  Engineer
Malkin, David - MD
Marrett, Loraine - BMath, PhD
Marsden, Philip - MD
Marshall, John - MD
Maunder, Robert - MD
McAndrews, Mary Patricia - BSc, MA, PhD
McCart, Judith Andrea - MSc, MD
McCrindle, Brian - MD
McDonald, Lynn - PhD
McIntosh, Anthony Randal - BSc, MSc, PhD
McIsaac, Warren - MSc, MD
McKee, Nancy - MD
McKneally, Martin - MD, PhD
Mclaughlin, Peter - MD
McNamara, Patrick - MB
McNeill, Helen - PhD
Messner, Hans - MD, PhD
Meyer, Jeffrey - MD
Meyn, Michael - MD
Mikulis, David - BS, MD
Milgram, Norton - BSc, MSc, PhD
Miller, Freda - BSc, PhD
Miller, Judith - MD
Millson, Margaret - BSc, MHSc, MD
Minassian, Berge - MDCM
Minden, Mark - MD, PhD
Mizrahi, Romina - MD, PhD
Moe, Gordon - MD
Moody, Alan - BA, MA, MBBS
Morrison, Laurie - BSc
Morshead, Cindi Marie - BS, PhD
Mount, Howard - BSc, PhD *(Coordinator of Graduate Studies)*
Mulsant, Benoit - MD
Naglie, I. Gary - BSc, MDCM
Nagy, Andras - PhD
Narod, Steven - BSc, MD
Nathens, Avery - MPH, MD, PhD
Neel, Benjamin - MD, PhD
Nolan, Robert - PhD
O'Campo, Patricia - PhD
Olivieri, Nancy - MD
Olmsted, Marion - BSc(CD), MA, PhD, PhD
Osborne, Lucy - PhD

Ostrowski, Mario - MD
Palaniyar, Nades - MSc, PhD
Pang, Cho - BSc, MSc, PhD
Parker, John - BA, MD
Parker, Thomas - MD
Parkin, Patricia - BSc, MD, MD
Paus, Tomas - PhD
Pawson, Anthony - PhD
Pei, York Po-Chee - MD
Petronis, Arturas - MD
Pignol, Jean-Phillipe - MD, PhD
Pollock, Bruce - BSc, MD, PhD
Post, Martin - PhD
Pringle, Dorothy - BScN, MS, PhD
Quaggin, Susan Elizabeth - MD
Rand, Margaret - BSc, PhD
Rao, Leticia - BSc, MSc, PhD
Rao, Vivek - LMCC, MD, PhD
Ravindran, Arun - PhD
Read, Stanley - MSc, MD, PhD
Redelmeier, Donald - MS, MD
Reeves, Scott - BSc, MSc
Regehr, Cheryl - AB, MA, PhD
Regehr, Glenn - BA, PhD
Rehm, Jurgen - PhD
Reithmeier, Reinhart - BSc, PhD
Remington, Gary - MD, PhD
Renwick, Rebecca - DipOT, BA, PhD
Richards, Robin - BA, MD
Roder, John - PhD
Rodin, Gary - BSc, MD
Rosenblum, Norman - MD
Ross, Heather - BSc, MD
Rotin, Daniela - BSc, MSc, PhD
Rotstein, Ori - MSc, MD
Rottapel, Robert - BA, MD
Rourke, Sean - BSc, BA, PhD
Rovet, Joanne - BSc, PhD
Rubenfeld, Gordon - MSc, MD
Rubin, Barry - BSc, LMCC, MDCM, PhD
Rubin, Laurence - MD
Rummens, Anneke - PhD
Sadavoy, Joel - MD
Saint-Cyr, Jean - BA, MA, PhD
Salit, Irving - BSc, MDCH
Sandor, Paul - BASc, MD
Schachar, Russell James - MD
Schemitsch, Emil - MD
Scherer, Stephen - PhD
Schimmer, Aaron - MD, PhD
Scholey, James - MD
Schuh, Andre - MD
Semple, John Wesley - PhD
Shapiro, Colin - BSc, PhD
Sharpe, James - MD
Sherman, Philip - MD
Shoichet, Molly - PhD
Shojania, Kaveh - BSc, MD
Silver, Ivan - BSc, MD
Silverberg, Mark - MD
Silverman, Earl - MD
Silverman, Frances - PhD
Silverman, Melvin - BSc, MDCH
Siminovitch, Katherine - MD

Singer, Peter - MPH, MD
Slutsky, Arthur - BASc, MASc, MD
Snead III, Carter - BS, MD, MD
Stanford, William - BA, PhD
Steiner, Meir - MD, PhD
Stevens, Bonnie - BSc, MSN, DPhil
Stewart, Donna - DPsych, MD
Stewart, Duncan - MDCH
Strafella, Antonio - MD, PhD
Strauss, Bradley - MD
Streiner, David - PhD
Swallow, Carol - BA, MD, PhD
Sweezey, Neil - BSc, MD, MD
Szaszi, Katalin - MD, PhD
Tannock, Rosemary - BSc, MA, PhD
Tanswell, Alan - BS, MBBS, MBBS
Tarlo, Susan - MBBS
Taylor, Ian - MD, MBChB
Taylor, Margot - BA, MA, PhD
Thorsteinsdottir, Halla - PhD
Tierney, Mary - BA, MA, PhD
To, Teresa - BA, MA, PhD
Toner, Brenda - BA, MA, PhD *(Coordinator of Graduate Studies)*
Trachtenberg, John - BSc, MDCM
Trope, Graham - DOMS, LMCC, MD
Tu, Jack Ven - MD, PhD
Tymianski, Michael - BA, MD, PhD
Upshur, Ross Edward - BSc, BA, MA, MD
Urbach, David - MSc, MD
Urowitz, Murray - MD
Vaccarino, Franco - BSc, MSc, PhD
Van Der Kooy, Derek - BSc, MA, PhD
Vasdev, Neil - PhD
Venkateswaran, Vasundara - BSc, MPH, MSc, PhD *(Coordinator of Graduate Studies)*
Verhoeff, Nicolaas - MD
Verma, Subodh - MSc, MD, PhD
Verrier, Mary (Molly) - DipOT, MHSc
Vincent, John - PhD
Waddell, Thomas - MSc, CSPO, LMCC, MD, PhD
Wald, Robert - BSc, MD
Warsh, Jerry - MD
Wedge, John - BSc, MD
Weisel, Richard - BA, MD
Weksberg, Rosanna - MD, PhD
West, Lori - MD
Westall, Carol - BSc, MSc, PhD
Whiteside, Catharine Isobel - BSc, MD, PhD
Whyne, Cari - BSc, PhD
Wiley, Mike - BSc, MSc, PhD
Wilson, Alan - BA, PhD
Wilson, Gregory - MSc, MD
Wittnich, Carin - MSc, DVM
Wong, Chong Shun - MD
Wong, Ming F Agnes - DOMS, MD, PhD
Woo, Minna Nancy - MD
Woodside, Blake - BSc, MSc, MD
Wright, James - BA, LMCC, CSPO, MPH, MD
Wu, Robert - MSc, MD
Wunder, Jay - BA, MSc, LMCC, MD
Yang, Burton - BSc, MSc, PhD
Yau, Terrence - BA, MSc, MDCM, MDCM
Yee, Albert - MSc, LMCC, MD

Yeger, Herman - BSc, MScPhm, PhD
Yeo, Erik - MD
Yeung, Rae - DrMed, MD
Yoshida, Karen - BSc, BPHE, MSc, PhD
Young, Kue - DrMed, PhD
Yucel, Yeni - MD
Zhang, Haibo - MSc, PhD
Zhang, Li - MSc, MD, PhD
Zhang, Liang - PhD
Zhen, Mei - PhD
Zipursky, Robert - MD
Zwarenstein, Merrick - MPH, MMed, MBChB

Members Emeriti

Boyd, Norman - MD
Burnham, Willets - PhD
Diamant, Nicholas - MDCM
Harvey, William - PhD
Moldofsky, Harvey - MD
Seeman, Mary - BA, MDCH, MD
Walfish, Paul - LMCC, MD

Associate Members

Advani, Andrew - MBChB, PhD
Ahmed, Najma - BSc, MD, PhD
Al-Hesayen, Abdul - MD
Alibhai, Shabbir - MD
Alter, David - MD
Anagnostou, Evdokia - MD
Anastakis, Dimitrios - BSc, MEd, MD
Arnold, Paul - BSc, MD
Atri, Mostafa - MD
Aviv, Richard - MBChB
Backstein, David - MEd, MD
Bandiera, Glen - MD
Barrera, Maria - MA, PhD
Batt, Jane - MD, PhD
Bayley, Mark - MD
Beattie, William Scott - MD
Boileau, Isabelle - PhD
Borschel, Gregory - BSc, DrMed
Bowman, Kerry - BA, BSW, MSW, PhD
Bril, Vera - BSc, MD
Brock, Kristy - PhD
Carter, Jacqueline - BA, MA, DPhil
Catton, Charles - MD
Chauhan, Vijay - MD
Cheema, Asim - MBBS
Cherney, David - MD, PhD
Cheung, Amy - BA, MSc, MD
Chow, Edward - MBBS
Chow, Tiffany - MSc, MD
Classen, Catherine - BA, MA, PhD
Connelly, Kim - MBBS, PhD
Corrin, Michael - BFA, BA, BSc, MSc
Crawley, Adrian - BA, PhD
Di Prospero, Lisa - MSc
Dick, Alexander - MD
Doria, Andrea - MSc, MD, PhD
Dos Santos, Claudia - MSc, MD
Downar, Jonathan - MD
Dryer, Marc - MSA
Easterbrook, William - MD

Farhat, Walid - BSc, DrMed
Feld, Jordan - MPH, MD
Fortin, Paul - MPH, MD
Furlan, Andrea - MD, PhD
Fyles, Anthony - MD
Gagliardi, Anna - BSc, BE, MSc, MLS, PhD
Gagliese, Lucia - BSc, PhD
Ginsburg, Shiphra - MEd, MD
Gladstone, David - MD
Godkin, Dianne - BScN, MN, PhD
Goltz, Herbert - BA, MA, PhD
Graff-Guerrero, Ariel - MD
Grigoriadis, Sophie - MD, PhD
Haider, Masoom - BM, MD
Hamani, Clement - DrMed, PhD
Hare, Gregory - MD, PhD
Harrison, Christine - BA, MA, PhD
Hassouna, Magdy - MSc, LMCC, LMCC, MBChB, PhD
Hellmann, Jonathan - DCH, MBChB, MBChB
Hitzler, Johann - MD, MD
Hodaie, Mojgan - BSc, MSc, MD
Hodgson, David - MD
Hofer, Stefan - MD, PhD
Husain, Amna - LMCC, MD
Hutchison, Jamie - MD
Ickowicz, Abel - MD
Jassal, Sarbjit Vanita - MD
Jenkinson, Jodie - BA, MSc
Jin, Yaping - PhD
Jones, Jennifer - PhD
Kamath, Binita - MBBS
Karkouti, Keyvan - MD
Kassner, Andrea - MSc, PhD
Kelly, Valerie - MS
Kertes, Peter - MD
Kingdom, John - DCH, MB, MD
Koeberle, Paulo - BS, PhD
Koritzinsky, Marianne
Krzyzanowska, Monika - MPH, MD
Kulkarni, Abhaya - BSc, MD, PhD
Lang, Anthony - MD
Lax, Leila - BA, BSc, MEd
Lazar, Neil - BSc, MD
Le, Dzung - PhD
Le Foll, Bernard - DrMed
Lee, Warren - MD, PhD
Librach, Clifford - MD
Licht, Christoph - MD
Lo, Kirk - BSc, MD
MacRae, Helen - BSc, MA, MD
Mamdani, Muhammad - DP
Mamo, David - MSc, MS, MD
Manassis-Krumma, Katharina - MD
Mazierski, David - BSc, MSc
McCartney, Colin - MBChB
Menard, Cynthia - BSc, MD
Menon, Mahesh - PhD
Milosevic, Michael - MD
Monks, Ashley - BSc, MA, PhD
Moses, Sandra - BSc, MSc, PhD
Moulton, Carol-Anne - MSc, DrMed
Mueller, Daniel - MD
Nancekivell, Sharon - BA, BE, MA
Nanthakumar, Kumaraswamy - MD

Newton, Gary Evan - MD
Nyhof-Young, Joyce - PhD
O'Connor, Paul - MD
O'Sullivan, Brian - MBChB
Pang, Elizabeth - PhD
Papsin, Blake Croll - BSc, MSc, MD
Paul, Narinder - BM
Petrella, Teresa - BSc, MD
Rajji, Tarek - MD
Ralhan, Ranju - ScD
Ray, Joel - MSc, MD
Rector, Neil - MA, MA
Reich, Heather - MDCM, PhD
Retnakaran, Ravi - MSc, MD
Richter, Peggy - MD
Rizoli, Sandro - LRCP, MD, PhD
Rosen, Cheryl - BSc, MD
Ross, Lori - PhD
Rotzinger, Susan - PhD
Schuh, Suzanne - MD
Scott, Jeremy - PhD
Secker, Barbara - BA, AM, PhD
Silversides, Candice - MSc, MD
Singer, Lianne - MD
Sixel, Katharina - PhD
Stergiopoulos, Vicky - MD
Strauss, John - MD
Strike, Carol - PhD, PhD
Strug, Lisa - BS, BA, SM, PhD
Sun, Hong-Shuo - MSc, DrMed, DPhil
Tackett, Jennifer - BA, MA, PhD
Tandon, Anu - BSc, MD, BScMed
Tandon, Anurag - BSc, PhD
Tobe, Sheldon - BSc, MD
Trudeau, Maureen - BSc, MA, MD
Valiante, Taufik - BSc, MD, PhD
Van Reekum, Robert - BSc, MD
Voineskos, Aristotle - MD, PhD
Von Harsdorf, Rudiger - MD
Wales, Paul - BSc, MSc, MD
Wall, Shelley - PhD
Wang, Qinghua - DSc
Waters, Valerie - MD
Webster, Fiona - BA, MA, PhD
Wen, Xiao-Yan - PhD
Wilson-Pauwels, Linda - ATD, BSc, MEd, EdD
Witterick, Ian - DrMed
Wong, Rebecca - MBChB
Woolridge, Nicholas - BFA, BSc, BFA, MSc
Yousef, George - MSc, MD, PhD
Zadeh, Gelareh - BSc, DrMed, BScMed, DPhil
Zimmermann, Camilla - MSc, MD

Medieval Studies

Faculty Affiliation

Arts and Science

Degree Programs Offered

Medieval Studies – MA, PhD

Collaborative Programs

The following collaborative programs 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 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
E-mail: 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

Degree Programs

Medieval Studies

Master of Arts

Minimum Admission Requirements

- An appropriate bachelor's degree with at least a B+ standing 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 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.
- MA students must either achieve a pass of the Level One Medieval Latin examination upon arrival or else attain credit in MST 1000Y in the first year of enrolment in the MA program.
- Students may obtain an MA in medieval studies by coursework or by a combination of coursework and thesis.
  - In the **coursework option,** the student must successfully complete 4.0 full-course equivalents (FCEs), unless he or she passes the Level One Latin examination upon arrival, in which case 3.0 FCEs are required. MA students who pass the Level One Latin examination on arrival are required to take only 3.0 FCEs for the MA; however, those interested in eventually proceeding to the PhD are strongly urged to audit MST 1001Y. (Enrolment for credit for MST 1001Y is open only to students enrolled in a doctoral program.) MA students who do not pass the Level One Latin examination on arrival *must* register for MST 1000Y.
  - In the **thesis option,** in addition to the thesis, 3.0 FCEs are required or else 2.0 FCEs plus a Level One Latin examination pass upon arrival in the program. An MA thesis must be on a subject approved by the Centre for Medieval Studies, and the topic must be submitted to the centre by November 30 of the MA year.

- Course training in Latin is given at three levels. All students are expected to arrive with knowledge equivalent to a first-year university course in Latin language. MST 1000Y *Introductory Medieval Latin* 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.

Normal Program Length: 3 sessions full-time 1-year MA; 6 sessions full-time 2-year MA; 6 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

Doctor of Philosophy

Minimum Admission Requirements

- Applicants must satisfy the Centre for Medieval Studies of their ability to do independent research of high quality. Students may be admitted via one of two routes:
  - An appropriate bachelor's degree from a recognized university with an average grade of at least A- in the applicant's overall program.
  - 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 application instructions on the department's website
  - complete forms in which they state the reasons for undertaking graduate studies in the medieval area and their qualifications for applying to do so
  - pass the Level One Latin examination before they may register in the PhD program.

Program Requirements

- The PhD is offered only on a full-time basis. During the first two years, students must take a minimum of 3.0 FCEs, including 1.0 FCE in one minor subject. In view of the centre's interdepartmental nature, courses in medieval philosophy, history, music, English, and so on, that are related to the general area of the major field may be counted as minors, as long as they do not directly constitute part of the major field proposal. MST 1001Y may not be counted as a minor subject 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 upon arrival in the program.
- Course training in Latin is given at two levels. MST 1001Y *Intermediate Medieval Latin* 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.
- Level Two Latin examination and the centre's examinations in the French and German languages. No other language may be substituted for either of these.
- When students have qualified in these three languages, they may proceed to the major field examination whose purpose is to demonstrate both the student's scholarly expertise in the particular area of the doctoral dissertation and a broader academic competence.
- Students should seek out a provisional supervisor by the beginning of the second year and contact two other academic advisors as early as possible, no later than the end of the second year.
- As soon as possible thereafter, students should prepare a major field proposal. The proposal must be signed by all three of the student's advisors and submitted to the PhD Secretary for approval at least two months prior to the major field examination.
- The major field examination ordinarily must be passed before the student registers for the fourth year of the program.
- The 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 prospectus should be prepared according to the Centre of Medieval Studies' guidelines. 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.

Normal Program Length: 4 years full-time; 5 years direct-entry

Time Limit: 6 years full-time; 7 years direct-entry

Course List

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 1120H	Problems in Patronage
FAH 1121H	Twelfth-Century Renaissance?
FAH 1123H	The Art of the Medieval Book
FAH 1124H	Byzantine Church Decoration
FAH 1125H	Medieval Pilgrimage Art and Architecture
FAH 1126H	Exceptional Cities of the Middle Ages
FAH 1127H	Early Medieval Art
FAH 1128H	Byzantine Art and the West
FAH 1130Y	The Classical Tradition in Western Medieval Art
FAH 1131H	Profane Medieval Art
FAH 1134H	Communal Painting and Propaganda in Italy During the Thirteenth and Fourteenth Centuries
FAH 1135H	Naples in the Later Middle Ages
FAH 1141H	Words and Images in Medieval Art
FAH 1142H	Multicultural Middle Ages
FAH 1171H	Beginning of Modernism: From Images to Pictures
FAH 1200H	Crusader Art

Book History and Print Culture

BKS 1000Y	Book History and Print Culture
BKS 2000H	Advanced Seminar in Book History and Print Culture
BKS 2001H	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 and Text
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 Histographies
ENG 1551H	The Canterbury Tales
ENG 2485H	London Drama 1190–1590

French Language and Literature

FRE 1164H	Medieval French Language and Literature

Germanic Languages and Literatures

GER 1200H	Middle High German

History

HIS 1201H	The Materials of Medieval History (Credit/No Credit)
HIS 1207H	Pastoralia: The Medieval History of Pastoral Care
HIS 1208H	Writings of Robert Grosseteste
HIS 1209H	The Anglo-Saxons
HIS 1210H	Gregory of Tours and the Sixth Century
HIS 1213H	Medieval Institutes of Perfection (joint graduate/undergraduate)
HIS 1214H	The Merovingians
HIS 1215H	Social Change in Medieval England, 1154-1279
HIS 1218H	The Mediaeval Church (joint graduate/undergraduate)
HIS 1220H	Mediaeval Canon Law (joint graduate/undergraduate)
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 1283H	Crusades, Conversion and Colonialization in the Medieval Baltic (joint graduate/undergraduate)
HIS 1293Y	Kievan Rus'

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 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
JMT 1001H   Topics in the Ancient Philosophical
              Commentators (PR)

Medieval Studies

MST 1000Y   Introductory Medieval Latin
MST 1001Y   Intermediate Medieval Latin
MST 1002H   Topics in Medieval Latin Literature (PR)
MST 1013H   Pre-Conquest Anglo-Latin Literature (PR)
MST 1016H   Hagiography of the Norman Transition (PR)
MST 1017H   Medieval Exegesis (PR)
MST 1020H   The Medieval Latin Epic (PR)
MST 1022H   Virgil in the Middle Ages (PR)
MST 1035H   Humanistic Latin (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 1116H   New Philology
MST 1121H   Literacy in Late Antiquity (c. 284–632)
MST 1371H   Old English Philology: Grammar (PR)
MST 1379H   The Blickling Homilies (PR)
MST 1381H   Homilies of the Vercelli Book (PR)
MST 1384H   The Exeter Book of Old English Verse (PR)
MST 1392H   Editing and Appreciating Wulfstan's Prose
              (PR)
MST 1425H   Medieval Magic: Predicting the Future and
              Influencing Events (PR)
MST 2001H   Old Saxon
MST 2005H   Medieval German Heroic Epic (PR)
MST 2006H   Wolfram von Eschenbach: Parzival (PR)
MST 2010Y   Old Norse
MST 2015H,Y   Studies in Old Norse Texts (PR)
MST 2017H   The Sources of Norse Myths (PR)
MST 2030Y   Old and Middle Irish
MST 2031H   Early Irish Saga (PR)
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 2038H   Medieval Brittany (PR)
MST 2039H   Saints, Monasteries, and Heretics in
              Medieval Brittany
MST 2040H   Beginnings of Medieval Rhetoric and
              Poetics (PR)
MST 2048H   Music in Medieval Life
MST 2050Y   Middle Welsh
MST 2055Y   Studies in Middle Welsh Texts (PR)

MST 3021H   Boethius (PR)
MST 3022H   Consolation Through the Ages: Later
              Medieval Approaches to Boethius's
              Consolation of Philosophy (PR)
MST 3025H   The Medieval Alexander (PR)
MST 3101H   Current Theory and Medieval Texts: An
              Introduction
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 3116H   Medieval Medicine
MST 3131H   Troubadours and Trouvères
MST 3140Y   Medieval Catalan Language and Literature
MST 3150H   Medieval French Epic (PR)
MST 3151H   Introduction to Old French
MST 3152H   Introduction to Old Occitan (PR)
MST 3153H   Old Occitan Trobador Poetry (PR)
MST 3154H   British History in French: Wace, Brut (PR)
MST 3155H   Chrétien de Troyes, Perceval (PR)
MST 3156H   Charlemagne: Facts and Legends
MST 3157H   Old French and Old Occitan Crusade Epics
              (PR)
MST 3158H   The Roman de la Rose and Medieval
              Allegory (PR)
MST 3159H   Classical Antiquity in the French Middle
              Ages (PR)
MST 3162H   Boccaccio and Chaucer
MST 3201H   Medieval Social History
MST 3203H   Topics in Medieval Economic History
MST 3204H   Marxism and Premodern History
MST 3205H   Violence in Medieval Society
MST 3210H   Medieval Spain (PR)
MST 3223H   Medieval and Early Modern Inquisitions
MST 3225H   Jews and Christians in Medieval and
              Renaissance Europe
MST 3230H   The Common Law of Medieval Europe
MST 3235H   Communal Florence, 1150–1530
MST 3236H   The Papal Monarchy
MST 3242H   The Carolingians and the Birth of Europe
MST 3243H   Dark Age Italy
MST 3244H   Patron 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 3262H   Monastic Identities
MST 3301H   Themes in Medieval Philosophy
MST 3306H   Topics in Augustine
MST 3307H   Augustine in Transition (PR)
MST 3308H   The Philosophy of Peter Abelard
MST 3311H   Topics in Medieval Metaphysics (PR)
MST 3321H   Philosophy of Mind in the Middle Ages (PR)
MST 3322H   William of Ockham (PR)
MST 3326H   Individuation and Individuality in Medieval
              and Early Modern Philosophy

MST 3327H	Free Will and Human Action in Medieval Philosophy
MST 3346H	Medieval Islamic Philosophy
MST 3501H	Introduction to the Medieval Christian Liturgy
MST 9310Y,H	Directed Reading
MST 9315Y,H	Directed Reading

Music

| MUS 1040H | Topics in Medieval Music |

Near and Middle Eastern Civilizations

NMC 1311Y	Post-Biblical Hebrew: Mishnah and Midrashim
NMC 1326Y	Topics in Midrashic Literature
NMC 1500Y	Archaeology, from Alexander to Muhammad
NMC 2090Y	Islamic History to the Fall of Baghdad
NMC 2119H	Readings in Mediaeval Arabic Legal Documents
NMC 2221H	Medieval Persian Ethical and Advice Literature
NMC 2222H	Persian Mystical Poetry
NMC 2225H	History of Medieval Iran and Central Asia
NMC 2226H	Readings in Medieval Persian Historical and Documentary Sources
NMC 2500H	Early Islamic Art and Architecture
NMC 2515Y	The Islamic City
NMC 2521H	The Taj Mahal and Its Origins: Medieval Islamic Architecture in Iran, Central Asia, and India
NMC 2526H	Islamic Painting
NMC 2527H	Islamic Decorative Arts
NMC 2540Y	Islamic Archaeology

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 in the Christian Tradition |
| RLG 3653Y | Jewish Exegetical Traditions in Antiquity |

Slavic Languages and Literatures

| SLA 1104H | Introduction to Old Church Slavonic |
| SLA 1109H | Studies in Old Church Slavonic |

Spanish

| SPA 2021H | The Politics of Print |
| SPA 2022H | Books and Borders |

Graduate Faculty

Full Members

Abray, L Jane - BA, MA, MPH, PhD
Akbari, Suzanne - BA, MA, MPH, PhD
Armstrong, Lawrin - BA, MA, MA, MDiv, PhD
Bartlett, Kenneth - BA, MA, PhD
Black, Deborah - BA, MA, PhD
Blackmore, Josiah - PhD
Bowen, William - BA, BMus, MA, PhD
Carley, James - BA, MA, PhD
Caskey, Jill - AB, MA, MPH, PhD *(Coordinator of Graduate Studies)*
Cochelin, Isabelle - DipdESup, BA, MA, PhD
Cohen, Adam - PhD
Dewar, Michael - BA, MA, DPhil
Dimnik, Martin - BA, MA, MDiv, DPhil
Dresher, B Elan - BA, PhD
Eisenbichler, Konrad - BA, MA, PhD
Everett, Nicholas - BA, MA, PhD
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
Healey, Antonette - BA, MA, PhD
Herren, Michael - PhD
Hoffmann, Richard - BA, PhD
Hutchison, Ann - BA, MA, PhD
Inwood, Brad - BA, MA, PhD, FRSC
Kaczynski, Bernice - BA, MPH, PhD
Keith, Alison - BA, MA, PhD
King, Peter - AB, PhD
Kivimae, Juri - AM, PhD
Kullmann, Dorothea - PhD
Lancashire, D Ian - BA, MA, PhD
Magee, John - BA, MA, PhD *(Director)*
Meyerson, Mark - BA, PhD
Mulchahey, M. Michele - BA, MA, PhD
Murray, Jacqueline - PhD
Northrup, Linda - BA, MA, PhD
Orchard, Andrew - DPhil, PhD
Percy, Carol - BA, MA, DPhil
Pickavé, Martin - BA, MA, PhD *(Associate Director)*
Pietropaolo, Domenico - BSc, MA, PhD
Robins, William - BA, MPH, PhD
Ross, Jill - 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
Wollesen, Jens - 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 - PhD
Hughes, Andrew - MA, DPhil
Johnston, Alexandra - PhD
Klausner, David - AB, PhD
Mayer, Hartwig - PhD, PhD
McConica, James - STB, BA, MA, DPhil, FRHistS
McDonough, Christopher - BA, MA, PhD
Merrilees, Brian - PhD, FRSC
Munro, John - BA, MA, PhD
Murray, Alexander - BA, PhD
Reynolds, Roger - AB, JD, PhD
Rigg, Arthur George - BA, MA, DPhil
Sinkewicz, Robert - BA, PhD
Stock, Brian - AB, PhD
Taylor, Robert - PhD

Associate Members

Andrée, U.O. Alexander - BA, PhD
Boyle, Marjorie - AM, PhD
Currie, Gabriela Ilnitchi - MA, PhD
Evans, Claude - BA, MA, PhD
Fernandez Pelaez, Iban - PhD
MacLean, Sarah - BA, MA, PhD
McDougall, David - BA, MA, PhD
McDougall, Ian - BA, MA, PhD
Michelet Pickave, Fabienne L. - MPH, LESL, LittD
Thompson, Pauline - BA, MA, PhD

Molecular Genetics

Faculty Affiliation

Medicine

Degree Programs Offered

Genetic Counselling – MSc
Molecular Genetics – MSc, PhD

Collaborative Programs

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

1. **Biomolecular Structure**
   - Molecular Genetics - PhD
2. **Developmental Biology**
   - Molecular Genetics - MSc, PhD
3. **Genome Biology and Bioinformatics**
   - Molecular Genetics - PhD
4. **Neuroscience**
   - Molecular Genetics, MSc, PhD

Overview

The Department of Molecular Genetics is located in the Medical Sciences Building, the FitzGerald Building, the Best Institute, the Hospital for Sick Children, and the Mount Sinai Hospital.

The **Master of Science** program in **Genetic Counselling** 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.

The **Master of Science** and the **Doctor of Philosophy** programs in **Molecular Genetics** offer 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.

For detailed information on these programs, visit the department's website.

Contact and Address

Web: www.moleculargenetics.utoronto.ca
E-mail: 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

Degree Programs

Genetic Counselling

Master of Science

Minimum Admission Requirements

- 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 the 14 required courses listed below (6.5 full course-equivalents [FCEs] and laboratory and clinical practicum) with a minimum B standing. Lectures, meetings, and rounds must be attended at a minimum of 85% of scheduled occurrences.
- There is no thesis requirement, but an independent research project consisting of a limited clinical research study, an extensive literature review from a novel viewpoint, or a new case presentation involving clinical, cytogenetic, and molecular work-up will be completed and presented both orally and in 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.

Normal Program Length: 6 sessions full-time

Time Limit: 3 years full-time

Required Courses

MSC 2010Y	Advanced Concepts 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
MMG1230H	Cancer Genetic Counselling

Molecular Genetics

Master of Science

Minimum Admission Requirements

- Normally, a BSc or MD degree or equivalent with excellent academic credentials in molecular biology, genetics, microbiology, and/or biochemistry.

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.

Normal Program Length: 6 sessions full-time

Time Limit: 3 years

Doctor of Philosophy

Minimum Admission Requirements

- Admission via one of three routes:
  - admission into the PhD program with a completed MSc degree or equivalent from the University of Toronto or another recognized university

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§ Listing (course description) in the Faculty of Arts and Science Calendar, Molecular Genetics and Molecular Biology Program

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

  - reclassification to the PhD program during the first or second year in the MSc program
  - under exceptional circumstances, outstanding students with a BSc degree, an MD degree, or equivalent, may be accepted directly into the PhD program
- 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, are required to spend a minimum of two sessions in full-time attendance. Students entering the doctoral program from a bachelor's program are required to spend a minimum of three sessions in full-time attendance.

Normal Program Length: 4 years full-time; 5 years direct-entry; 5 years transfer-from-master's

Time Limit: 6 years full-time; 7 years direct-entry; 7 years transfer-from-master's

Course List

JBB 1425H	Biophysical Methods
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

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
Chan, Hue Sun - BSc, MA, PhD
Ciruna, Brian - BSc, PhD
Claycomb, Julie - BS, BA, PhD
Cochrane, Alan - BSc, PhD
Collins, Richard - BSc, PhD
Cordes, Sabine - BS, PhD
Cowen, Leah - BSc, PhD *(Associate Chair)*
Culotti, Joseph - PhD
Davidson, Alan Richard - BSc, PhD
Dennis, James - PhD
Derry, W. Brent - BSc, MSc, PhD
Dick, John - PhD
Dirks, Peter - MD, PhD
Durocher, Daniel - PhD
Edwards, Aled - BSc, PhD
Egan, Sean - PhD
Ellis, James - PhD
Emili, Andrew - DPM
Ensminger, Alexander - BS, PhD
Ernst, Oliver - PhD
Frappier, Lori - PhD
Fraser, Andrew - BSc
Funnell, Barbara - PhD *(Vice-Chair)*
Gallie, Brenda - MD
Giaever, Guri - BS, PhD
Gingras, Anne-Claude - BSc, PhD
Gray-Owen, Scott - BS, PhD
Greenblatt, Jack - BSc, PhD
Hudson, Thomas J - MD
Hughes, Timothy - BSE, BMus, PhD
Hui, Chi-Chung - PhD
Ingles, C James - BSc, PhD
Joshi-Sukhwal, Sadhna - BSc, MSc, PhD, DSc
Kaplan, David - BA, PhD
Kay, Lewis - PhD
Kim, Philip - BS, PhD
Krause, Henry - BSc, PhD
Lavoie, Brigitte - PhD
Lipshitz, Howard - PhD *(Chair and Graduate Chair)*
Liu, Jun - PhD
McNeill, Helen - PhD
Meneghini, Marc - BSc, PhD
Meyn, Michael - MD
Miller, Freda - BSc, PhD
Moffat, Jason - BSc, PhD
Moran, Michael - BSc, PhD
Morris, Quaid - BS, PhD
Nagy, Andras - PhD
Navarre, William - BSc, PhD
Nislow, Corey - BA, PhD
Osborne, Lucy - PhD
Pai, Emil - PhD
Parkinson, John - BS, PhD
Pawson, Anthony - PhD
Pearson, Bret - BS, PhD
Pearson, Christopher - PhD
Pelletier, Laurence - BSc, MSc, PhD
Ray, Peter - PhD
Rini, James - BSc, PhD

Roder, John - PhD
Rommens, Johanna - BSc, PhD
Rossant, Janet - PhD
Roth, Frederick - PhD
Roy, Peter John - BSc, PhD *(Graduate Coordinator)*
Scherer, Stephen - PhD
Scott, Ian - BSc, PhD
Segall, Jacqueline - BSc, PhD
Sicheri, Frank - BSc, PhD
Sidhu, Sachdev - BSc, DPhil
Siminovitch, Katherine - MD
Smibert, Craig - BSc, PhD
Spence, Andrew - BSc, PhD
Stagljar, Igor - BS, PhD
Stein, Lincoln - BA, MD, PhD
Steipe, Boris - MD, PhD
Tailor, Chetankumar - PhD
Van Der Kooy, Derek - BSc, MA, PhD
Wilde, Andrew Rhys - BSc, PhD
Wodak, Shoshana - LicScChem, PhD
Wrana, Jeff - PhD
Zhang, Zhaolei - BS, PhD
Zhen, Mei - PhD

Members Emeriti

Becker, Andrew - MD, PhD
Carver, Jeremy - BA, PhD
Sadowski, Paul - MD, PhD
Siminovitch, Louis - BSc, BSc, PhD

Associate Members

Armel, Susan - MS
Aronson, Melyssa - BS, MS
Babul-Hirji, Riyana - BSc, MSc
Chitayat, David - MD
Clarke, Joe - MD
Cytrynbaum, Cheryl - MSc
Druker, Harriet - MSc
Dupuis, Lucie - MSc
Harrison, Christine - BA, MA, PhD
Kaiser, Amy - BA
Klatt, Regan - BSc, MSc
Koren, Gideon - MD
Lemmens, Trudo - LLM, DCL
Mendoza, Roberto - MD
Okamoto, Kenichi - BS, MA, PhD
Quercia, Nada - BS, MSc
Ryu, William - AB, PhD
Shugar, Andrea - BSc, MS
Shuman, Cheryl - MSc
Steele, Leslie - BSc, MSc
Sutherland, Joanne - MSc
Thomas, Michal - MSc
Trevors, Christopher - BSc, MS
Weksberg, Rosanna - MD, PhD
Winsor, Elizabeth - BSc, MSc, PhD
Yoon, Grace - MD

Music

Faculty Affiliation

Music

Degree Programs Offered

Music – MA, PhD
Fields:
- Musicology
- Ethnomusicology
- Music Education

Music Performance – MMus, DMA
Fields (MMus):
- Collaborative Piano
- Composition
- Conducting
- Instrumental
- Jazz
- Opera
- Piano Pedagogy
- Vocal
- Vocal Pedagogy

Fields (DMA):
- Composition
- Performance

Collaborative Programs

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

1. **Book History and Print Culture**
   - Music, MA, PhD
2. **Editing Medieval Texts**
   - Music, PhD
3. **Sexual Diversity Studies**
   - Music, MA, PhD
4. **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 five 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 the areas of composition, music education, musicology, ethnomusicology, and performance. Although music theory is not offered as a named degree specialization, students in this field of study are welcome to enrol in our musicology degree programs. Graduates from all areas of our program occupy leading positions in music departments across Canada and around the world.

Contact and Address

Web: www.music.utoronto.ca
E-mail: grad.music@utoronto.ca
Telephone: (416) 978-5772
Fax: (416) 946-3353

Graduate Department of Music
University of Toronto
Edward Johnson Building
80 Queen's Park Crescent
Toronto, Ontario M5S 2C5
Canada

Degree Programs

Music

Master of Arts

The MA in Music degree is offered in three fields:
- Musicology
- Ethnomusicology
- Music Education

Field Musicology

Minimum Admission Requirements

- Applicants to the MA in Musicology are admitted under the General Regulations of the School of Graduate Studies.
- 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

The two-year MA program in Musicology requires 6.0 full-course equivalents (FCEs) including:
- *Introduction to Music Research I* (MUS 1000H) in Year 1.
- *Introduction to Music Research II* (MUS 1001H), offered in alternate years.
- Either the Associate Dean, Graduate Education, or the History and Culture Coordinator will advise students on course selection with a view to establishing a balance between their interests and any perceived weaknesses in their background preparation.

- We advocate interdisciplinarity with Ethnomusicology, and while the majority of electives chosen will reflect traditional scholarship in Western art music, others may be chosen to provide a broader base that includes non-Western and popular musics. To reinforce the notion of interdisciplinarity, up to 1.0 FCE may be taken from another graduate unit.
- The primary means of evaluating quality are research essays and seminar presentations. MUS 1990H *MA Major Paper* is optional.
- 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 will ordinarily be German except by petition to the department. We encourage the completion of the language requirement at the earliest possible opportunity.

Normal Program Length: 6 sessions full-time; 8 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

Field Ethnomusicology

Minimum Admission Requirements

- Applicants to the MA in Ethnomusicology are accepted under the General Regulations of the School of Graduate Studies.
- 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

- The two-year MA program in the field of Ethnomusicology requires 6.0 full-course equivalents (FCEs), including:
  - MUS 1000H *Introduction to Music Research I* in Year 1.
  - MUS 1002H *Fieldwork Methods and Practicum*, offered in alternate years.
- Either the Associate Dean, Graduate Education, or the Ethnomusicology Coordinator will advise students on course selection with a view to establishing a balance between their interests and any perceived weaknesses in their background preparation.
- We advocate interdisciplinarity with Musicology, and while the majority of electives reflect socio-

musical scholarship of non-Western and popular musics, others provide a broader base that includes traditional scholarship in Western art music. To reinforce the notion of interdisciplinarity, up to 1.0 FCE may be taken from another graduate unit.
- The primary means of evaluating quality are research essays and seminar presentations. MUS 1990H *MA Major Paper* is optional.
- 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.

Normal Program Length: 6 sessions full-time; 8 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

Field Music Education

Minimum Admission Requirements

- 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

- Students may complete the degree program full-time or part-time.
- Students must complete 4.0 full-course equivalents (FCEs) including:
  - 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).

Normal Program Length: 3 sessions full-time; 6 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

Doctor of Philosophy

The PhD in Music degree is offered in three fields:
- Musicology
- Ethnomusicology
- Music Education

Field Musicology

Minimum Admission Requirements

- The PhD in Musicology 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 from elsewhere, may be interviewed by the department.
- Exceptional students may be admitted directly to the doctoral stream with an appropriate bachelor's degree (direct entry).

Program Requirements

- Students holding a master's degree in musicology, ethnomusicology, or theory must fulfil the following requirements:
  - A minimum of 3.0 full-course equivalents (FCEs).
  - MUS 1250H *PhD Seminar* is taken in the first session.
  - Coursework should be completed during Year 1 of study with an average grade of at least A-. The exception is MUS 1999H, which lays the groundwork for the major 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.
  - Students may be required to take additional courses or acquire other skills to meet the needs of their proposed subjects of study.
- Students must demonstrate advanced reading knowledge of German; however, with departmental permission, another non-English language may be substituted, provided it is required for the approved research. Advisory committees 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.
- Students must prepare a thesis under the direction of an advisor and a committee and will defend it at a Doctoral Final Oral Examination. The thesis, including bibliography and appendices, should ideally be between 75,000 and 80,000 words in length. The department will not consider a thesis that exceeds 100,000 words.
- **Direct-entry PhD:** Students holding an appropriate bachelor's degree must complete the following requirements as a prerequisite to undertaking the requirements listed above for students with master's degree in hand:
  - 3.0 FCEs at the graduate level must be completed in Year 1 with a minimum average of A-.

Normal Program Length: 4 years full-time; 5 years direct-entry

Time Limit: 6 years full-time; 7 years direct-entry

Field Ethnomusicology

Minimum Admission Requirements

- The PhD in Ethnomusicology 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.
- Exceptional students may be admitted directly to the doctoral stream with an appropriate bachelor's degree (direct entry).

Program Requirements

- Students holding a master's degree in musicology, ethnomusicology, or theory must fulfil the following requirements:
  - 3.0 full-course equivalents (FCEs). 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. By the end of Year 1, 2.5 FCEs must be completed with at least a grade of A. MUS 1250H *PhD Seminar* is compulsory and must be taken in the first session. Other courses will be chosen from the departmental list; however, with departmental approval, 0.5 graduate FCE may be taken outside the department.

- MUS 1997H *Research in Ethnomusicology,* which lays the groundwork for the major field examination and the dissertation, 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.
  - 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.
  - 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.
  - All course requirements must be completed by the end of Year 2.
  - Students must prepare a thesis and will defend it at a Doctoral Final Oral Examination.
- **Direct-entry PhD:** Students holding an appropriate bachelor's degree must complete the following requirements as a prerequisite to undertaking the requirements listed above for students with master's degree in hand:
  - An intermediate-level language examination must be taken in Year 1. All language requirements must be completed by Year 3.
  - Students must take 3.0 FCEs in Year 1, exclusive of MUS 1250H and MUS 1997H. An average grade of at least A- must be maintained to continue with the doctorate; otherwise, the student will be required to transfer into the master's program. Successful students go on to take 3.0 more FCEs in Year 2, inclusive of MUS 1250H in the first session and MUS 1997H from the beginning of the second session.
  - All course requirements must be completed by the end of Year 3.

Normal Program Length: 4 years full-time; 5 years direct-entry

Time Limit: 6 years full-time; 7 years direct-entry

Field Music Education

Minimum Admission Requirements

- Applicants must hold a master's degree 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

The PhD program in Music Education may be completed as a full-time program or a flexible-time program.

Full-Time PhD

- 6.0 full-course equivalents (FCEs) including:
  - At least 2.0 FCEs (including MUS 2995Y *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.
- Students must be registered full-time, on campus for a minimum of two 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.
- 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.
- 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.

Flexible-Time PhD

- The admission, course, and degree requirements for the flexible-time option are identical to those listed for the full-time PhD program.
- 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.
- 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.
- 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 number of courses, major field examination, and thesis 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.

Normal Program Length: 4 years full-time; 6 years flexible-time

Time Limit: 6 years full-time; 8 years flexible-time

Course List

Final course offerings may vary. Students should consult the departmental handbook.

MA/PhD in Musicology/Ethnomusicology

MUS 1000H	Introduction to Music Research I
MUS 1001H	Introduction to Music Research II
MUS 1002H	Fieldwork Methods and Practicum
MUS 1013H	Monteverdi's Madrigals
MUS 1055H	Oratorio
MUS 1058H	Music and Politics
MUS 1059H	Ars Nova
MUS 1061H	Performance Space in Seventeenth-Century Music
MUS 1066H	Music and the Racial and Ethnic Imaginations
MUS 1067H	Orpheus
MUS 1068H	Music and Jewish Identity
MUS 1106H	Music in Canada 1500 to 1600
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 1202H	Music of the Mid-Eighteenth Century
MUS 1204H	Orientalism and Opera: Interdisciplinary Approaches
MUS 1215H	Music in Cities and Courts 1575–1750
MUS 1223H	Virtuosity in Baroque Music
MUS 1232H	Music, Culture and Health
MUS 1236H	Haydn
MUS 1243H	The Italian in Handel
MUS 1244H	Rhythm and Metre in Cross-Cultural Perspective

MUS 1246H	Music and Colonialism
MUS 1249H	Music and Technoculture
MUS 1250H	PhD Seminar
MUS 1254H	Critical Approaches to Popular Music
MUS 1256H	Indigeneities
MUS 1262H	Symphonies of Gustav Mahler
MUS 1265H	Critical Approaches to the Music of Benjamin Britten
MUS 1266H	Music, Space and Place
MUS 1267H	Popular Music and Identity
MUS 1268H	Musical Life in Bali
MUS 1269H	Advanced Research in Indian Music
MUS 1317H	Music in Canada
MUS 1327H	The Social Poetics of Music
MUS 1990H	MA Major Paper
MUS 1997H	Research in Ethnomusicology
MUS 1998H	Individual Reading and Research
MUS 1999H[0]	Research in Musicology
MUS 3101H	Seminar in Schenkerian Analysis I
MUS 3309H	Brahms: Symphonies and Chamber Music
MUS 3412H	Theories of Rhythm and Metre

MA/PhD in Music Education

MUS 2001H	Music in Cultural Perspective
MUS 2004H	Music in Childhood
MUS 2010H	Seminar in Music Education
MUS 2111H	Research Methods in Music Education
MUS 2122H	Music and Brain
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]	MusM Major Essay (Music Education)
MUS 2995Y[0]	Music Education Doctoral Research Project
MUS 2998H	Reading in Advanced Topics in Music Education

Music Performance

Master of Music

The Master of Music (MMus) degree in Music Performance is offered in nine fields:

- Composition
- Instrumental
- Vocal
- Opera

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

- Conducting
- Jazz
- Collaborative Piano
- Vocal Pedagogy
- Piano Pedagogy

Minimum Admission Requirements

- 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 whose undergraduate degree does not meet this standard may be required to take appropriate prerequisite courses.
- Applicants in Composition must submit several original compositions, at least one of which shall be with moderately large instrumentation.
- Applicants in Instrumental, Vocal, Opera, Conducting, Jazz, Collaborative Piano, Vocal Pedagogy, and Piano Pedagogy must pass an audition.

Program Requirements

Field Composition

- Minimum of 6.0 full-course equivalents (FCEs) taken over two years, including MUS 3100Y; its continuation, MUS 3105Y; and MUS 3990Y.
- Students may be required to take additional courses 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.

Field Instrumental

- 7.0 full-course equivalents (FCEs), of which 5.0 FCEs must include:
  - MUS 4444Y and MUS 4445Y (applied lessons).
  - 1.0-FCE MUS 4200Y *Seminar in Music Literature,* normally taken in the first year of the program.
  - 1.0 FCE selected from MUS 4600H or MUS 4606H; MUS 4610H; MUS 4615H.
  - 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.

Field Vocal

- 7.0 full-course equivalents (FCEs), of which 5.0 FCEs must include:
  - MUS 4444Y and MUS 4445Y (applied lessons).
  - 1.0-FCE MUS 4200Y *Seminar in Music Literature*, normally taken in Year 1.
  - 1.0 FCE selected from MUS 4600H or MUS 4606H; MUS 4610H; MUS 4615H.
  - 1.0 FCE chosen from a specified list approved by the department.
- Two recitals. Recitals may include a chamber music component with the approval of the department.

Field Opera

- 7.0 full-course equivalents (FCEs) as follows:
  - MUS 4444Y and MUS 4445Y (applied lessons).
  - 1.0-FCE MUS 4200Y *Seminar in Music Literature*, taken in Year 1.
  - MUS 4513Y *Operatic Repertory*, taken in Year 2.
  - 1.0 FCE chosen from a specified list approved by the department.
  - 2.0 FCEs in Operatic Studies (MUS 4900Y and MUS 4901Y).
- 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.*

Field Conducting

- 6.0 full-course equivalents (FCEs) including:
  - 1.0-FCE MUS 4200Y *Seminar in Music Literature*, normally taken in Year 1.
  - 1.0 FCE selected from MUS 4600H or MUS 4606H; MUS 4610H; MUS 4615H.
  - Orchestral conducting majors must also complete MUS 4220H, MUS 4221H, MUS 4222Y, MUS 4223H, and MUS 4700H (choral).
  - Wind ensemble conducting majors must also complete MUS 4226H, MUS 4227H, and MUS 4228Y.
  - Choral conducting majors must also complete MUS 4223H, MUS 4224H, MUS 4225Y, MUS 4220H, and MUS 4700H (choral).
- Two public performances.

Field Jazz

- 7.0 full-course equivalents (FCEs) including:
  - MUS 4444Y, MUS 4445Y, MUS 4300Y, normally taken in Year 1.
  - MUS 4606H, MUS 4615H.
  - Either MUS 4310Y, MUS 4311Y, 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, MUS 4741H, MUS 4742H, MUS 4743H);
- Jazz Orchestra (MUS 4750H, MUS 4751H, MUS 4752H, MUS 4753H); or
- Vocal Jazz Ensemble (MUS 4760H, MUS 4761H, MUS 4762H, MUS 4763H).

- Two recitals; however, students may elect to replace one recital with a significant recording project.

Field Collaborative Piano

- 7.0 full-course equivalents (FCEs) including:
  ○ MUS 4444Y and MUS 4445 (applied lessons).
  ○ 1.0-FCE MUS 4200Y *Seminar in Music Literature*, normally taken in Year 1.
  ○ 1.0 FCE selected from MUS 4600H; MUS 4610H; MUS 4615H.
  ○ 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 course elective.
- Based on the outcome of preliminary consultations with the department, students may be required to take MUS 4520H *Advanced Diction Studies – French*, MUS 4521 *Advanced Diction Studies – Italian*, or MUS 4522H *Advanced Diction Studies – German.*
- Two recitals.

Field Vocal Pedagogy

- 7.0 full-course equivalents (FCEs) as follows:
  ○ MUS 4444Y and MUS 4445Y (applied lessons).
  ○ 1.0-FCE MUS 4200Y *Seminar in Music Literature*, normally taken in Year 1.
  ○ 1.0 FCE selected from MUS 4600H, MUS 4610H, and MUS 4615H; or MUS 4620Y.
  ○ MUS 2122H, MUS 4240H, MUS 4241H, MUS 4248H.
  ○ 0.5 FCE selected from MUS 4231H, MUS 4213H, and MUS 4730H.
  ○ 0.5 FCE chosen from a list of courses approved by the department.
- Two recitals.

Field Piano Pedagogy

- 7.0 full-course equivalents (FCEs) as follows:
  ○ MUS 4444Y and MUS 4445Y (applied lessons).
  ○ 1.0-FCE MUS 4200Y *Seminar in Music Literature*, normally taken in Year 1.
  ○ 1.0 FCE selected from MUS 4600H, MUS 4610H, MUS 4615H.
  ○ MUS 4770H, MUS 4771H, MUS 4772H, and MUS 4773H.
  ○ 1.0 FCE chosen from MUS 2122H, MUS 4730H–4733H, MUS 4620Y, or from a list of courses approved by the department
- Two recitals.

Normal Program Length: 6 sessions full-time

Time Limit: 3 years full-time

Doctor of Musical Arts

The Doctor of Musical Arts (DMA) degree in Music Performance is offered in two fields:

- Composition
- Performance

Field Composition

Minimum Admission Requirements

- Applicants for the DMA in Composition must hold a Master of Music degree 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

- Students take a minimum of 5.0 full-course equivalents (FCEs), including MUS 3300Y, MUS 3305Y, and MUS 3999Y (research project, 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.
- Upon completion of coursework, students are required to present a recital of original works (MUS 3888Y) 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.

Normal Program Length: 4 years full-time

Time Limit: 6 years full-time

Field Performance

Minimum Admission Requirements

- Applicants for the DMA in Performance must hold a Master of Music degree 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

- Students must complete a minimum of 5.0 full-course equivalents (FCEs) as follows:
  - MUS 4800H *DMA Seminar* is taken in the first session.
  - MUS 4899H *Work on Research in Performance* is begun in the second session.
  - MUS 4844Y *Advanced Applied Music I* and 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 major 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.
- Three DMA recitals: MUS 4866Y, MUS 4877Y, and MUS 4888Y. The format of these recitals will be determined in consultation with the major teacher 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.

Normal 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.

Course List

Final course offerings may vary. Students should consult the departmental handbook.

MMus/DMA in Composition

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 3204H	Advanced Orchestration
MUS 3208H	The String Quartet in the Twentieth Century
MUS 3221H	Sequencing and Improvisation in Music for Electronic Media
MUS 3222H	Composing for Film
MUS 3224H	Sonata Form
MUS 3225H	Music of Gubaidulina, Coulthard, and Chen
MUS 3227H	Composing for Film 2
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 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 Project (DMA)
MUS 4615H	Analysis and Performance Practices of Twentieth-Century Music

MMus/DMA in Performance

MUS 4200Y	Seminar in Music Literature
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 4228Y	Advanced Wind Ensemble
MUS 4231H	Advanced Vocal Repertoire Study I
MUS 4232H	Advanced Vocal Repertoire Study II
MUS 4240H	Introduction to Vocal Pedagogy and Vocology
MUS 4241H	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 4300Y	Seminar in Jazz Studies
MUS 4310Y	Advanced Jazz Composition and Arranging I
MUS 4311Y	Advanced Jazz Composition and Arranging II
MUS 4312H	Advanced Jazz Improvisation
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 4500H	Advanced Diction Studies
MUS 4502H	Collaborative Piano Techniques I
MUS 4504H	Advanced Song Studies for Pianists
MUS 4506H	Sonata Coaching I
MUS 4507H	Sonata Coaching II
MUS 4508H	Collaborative Piano Techniques II – Instrumental (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 4513H	Operatic Repertory Studies
MUS 4520H	Advanced Diction Studies I (French)
MUS 4521H	Advanced Diction Studies II (German)

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

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 4613H	Performance Techniques for Hospice Palliative Care
MUS 4615H	Analysis and Performance Practices of Twentieth-Century 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 4708H	Contemporary Chamber Ensemble III
MUS 4709H	Contemporary Chamber Ensemble IV
MUS 4710H	Chamber Music I
MUS 4711H	Chamber Music II
MUS 4712H	Chamber Music III
MUS 4713H	Chamber Music IV
MUS 4714H	Chamber Choir I
MUS 4715H	Chamber Choir II
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 4731H	Performance Studies II
MUS 4732H	Performance Studies III
MUS 4733H	Performance Studies IV
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 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 4770H	Oratorio Ensemble I
MUS 4771H	Oratorio Ensemble II
MUS 4772H	Oratorio Ensemble III
MUS 4773H	Oratorio Ensemble IV
MUS 4774H	Early Music Instrumental Ensemble I
MUS 4775H	Early Music Instrumental Ensemble II
MUS 4776H	Early Music Instrumental Ensemble III
MUS 4777H	Early Music Instrumental Ensemble IV
MUS 4780H	World Music Ensemble I
MUS 4781H	World Music Ensemble II
MUS 4782H	World Music Ensemble III
MUS 4783H	World Music Ensemble IV
MUS 4785H	Orchestral Studies I
MUS 4786H	Orchestral Studies II
MUS 4787H	Orchestral Studies III

MUS 4788H	Orchestral Studies IV
MUS 4790H	Instrumental Performance Class I
MUS 4791H	Instrumental Performance Class II
MUS 4792H	Instrumental Performance Class III
MUS 4793H	Instrumental Performance Class IV
MUS 4795H	Piano/Instrumental I
MUS 4796H	Piano/Instrumental II
MUS 4797H	Piano/Instrumental III
MUS 4798H	Piano/Instrumental IV
MUS 4800H	DMA Seminar
MUS 4810H	Seminar in Performance Literature
MUS 4815H	Seminar in Performance Pedagogy
MUS 4816H	Researching Performance / Performing Research
MUS 4820H	DMA Study in Masterclass Teaching
MUS 4821H	DMA Study in Undergraduate Piano Pedagogy
MUS 4822H	DMA Study in Piano Studio Teaching
MUS 4838H	Twentieth- and Twenty-first–Century Interpretive Analysis
MUS 4844Y	Advanced Applied Music I
MUS 4845Y	Advanced Applied Music II
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 5707H	Violin Master Class IV
MUS 5710H	Early Music Vocal Ensemble I
MUS 5711H	Early Music Vocal Ensemble II
MUS 5712H	Early Music Vocal Ensemble III
MUS 5713H	Early Music Vocal Ensemble IV
MUS 6666Y[0]	Recital I
MUS 8888Y[0]	Recital II

Courses Recognized for MMus in Performance and MA Graduate Credit

Available to MA students only with the permission of the department.

MUS 1015H	Topics in Twentieth-Century Music
MUS 1020H	Topics in Baroque Music
MUS 1025H	Topics in Classical Music
MUS 1030H	Topics in Romantic Music
MUS 1040H	Topics in Medieval Music
MUS 1045H	Topics in Renaissance Music
MUS 1090H	Topics in Ethnomusicology

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

Graduate Faculty

Full Members

Apfelstadt, Hilary - PhD
Bartel, Lee - BA, BMus, MEd, PhD
Bowen, William - BA, BMus, MA, PhD
Briskin, David - MA
Cain, M. Celia - BA, MA, PhD
Chan, Ka Nin - BASc, BMus, MMus, MusD
Clark, Caryl - BMus, MA, PhD
Dolloff, Lori Anne - MusB, PhD
Edwards, Darryl - BEd, BMus, MMus, DMA
Elliott, Robin - BMus, MA, PhD
Gould, Elizabeth - BM, MA, MusDoc
Haines, John - BSc, BA, MA, PhD
Hartenberger, J Russell - MB, MM, PhD
Hatzis, Christos - MusM, PhD
Horst, Sandra - BMus, MM
Johnston, Gregory - MusB, MA, PhD
Kippen, James - BA, PhD
Koga, Midori - BMus, AA, MMus, DMA
Kruspe, John - MusBac, ARCT
Kulesha, Gary - AA, ARCT, ARCT
Lee, Sherry - BMus, MMus, PhD
Macdonald, Lorna - BME, MMus
MacKay, Gillian - BMus, MMus, DMA *(Associate Dean, Graduate Education)*
McClelland, Ryan - BMus, MM, PhD
McLean, Don - PhD *(Dean and Graduate Chair)*
McLeod, Kenneth - AM, PhD
Palej, Norbert - BM, MM, DMA
Parker, James - BMus, MM, DMA, ARCT
Parker, Mary Ann - BA, MM, PhD, ARCT
Patrick, Dennis - MusBac, MMus
Promane, Terry
Rao, Doreen - BS, MM, PhD
Rapoport, Alexander - MMus, MusD
Read, Paul - MusBac, BEd, MusM
Reynolds, Jeffrey - BMus, BA, MA, MMus, PhD
Rolston, Shauna - BA, MM
Sallmen, Mark - BM, MA, PhD
Sanger, Annette - BMus, PhD
Sicsic, Henri-Paul - MMus, DMA
Smith, Gordon - BMus, MA, PhD, ARCT
Walter, Cameron - BMus, MMus, EdD
Wong, Lydia - BMus

Members Emeriti

Aide, William - BSc
Beach, David - BA, MusM, PhD
Hughes, Andrew - MA, DPhil
Laufer, Edward - MusBac, MusM, MFA, PhD

Associate Members

Besnard, Christine - BA, MA, PhD
Hennigar, Harcus - BMus, BA
McFadden, Jeffrey - BMus, MusM
Vande Moortele, Steven - PhD

Near and Middle Eastern Civilizations

Faculty Affiliation

Arts and Science

Degree Programs Offered

Near and Middle Eastern Civilizations – MA, PhD

Collaborative Programs

The following collaborative programs 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. **Sexual Diversity Studies**
   - Near and Middle Eastern Civilizations, MA, PhD
4. **Women and Gender Studies**
   - Near and Middle Eastern Civilizations, MA, PhD

Overview

The Department of Near and Middle Eastern Civilizations offers graduate programs leading to the **Master of Arts** and **Doctor of Philosophy** in two fields:

- Ancient Near Eastern Studies
- Middle Eastern and Islamic Studies

Courses are offered and 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, history, and religion; Aramaic and Syriac studies, including language, history, and 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: www.utoronto.ca/nmc
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

Degree Programs

Near and Middle Eastern Civilizations

Master of Arts

Minimum Admission Requirements

- 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 a concentration in 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 is not English are required to meet the School of Graduate Studies English-language facility requirements.

Program Requirements

- Depending upon the amount of undergraduate preparation, students may be enrolled in either a two-year or a one-year program.
- Students choosing a concentration in Islamic Art and Material Culture are required to successfully complete at least 6.0 full-course equivalents (FCEs) in art and Near and Middle Eastern civilizations (a minimum of 2.0 FCEs in each). This is normally a two-year program.
- The MA program may be taken on a part-time basis.

Normal Program Length: 3 sessions full-time 1-year MA; 6 sessions full-time 2-year MA

Time Limit: 3 years full-time; 6 years part-time

Doctor of Philosophy

Minimum Admission Requirements

- Admission via one of two routes:
  - MA degree in a relevant program from a recognized university with at least an A- average or equivalent in courses taken for the MA program
  - direct entry from a bachelor's degree for exceptionally qualified applicants, at the discretion of the department
- Ability to conduct independent research.

- Competence in primary source language(s) relevant to the applicant's research.
- Two letters of reference.
- Statement of academic intent.
- Writing sample of no more than 12 double-spaced pages including footnotes.
- 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 website.

Program Requirements

- Program of study is determined in consultation with the department and includes written and oral general examinations. These examinations should be taken no later than January in the year following the completion of coursework for the PhD program.
- Students are required to demonstrate reading comprehension in two languages of modern scholarship (typically French and German), the first by the end of their first year in residence, and the second by the end of their second year 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.
- 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.
- The minimum course requirement will normally be 6.0 graduate full-course equivalents (FCEs). In approved cases, up to 3.0 FCEs may be counted from the University of Toronto MA program or its equivalent, at the discretion of the department.

Normal Program Length: 4 years full-time; 5 years direct-entry

Time Limit: 6 years full-time; 7 years direct-entry

Course List

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 1006Y   Akkadian Literary Texts

NMC 1007Y   Akkadian Letters and Business Documents (Early Period)
NMC 1008Y   Akkadian Letters and Business Documents (Late Period)
NMC 1009Y   Introduction to 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 Scripts
NMC 1209H   Old Egyptian Texts
NMC 1210H   Ancient Egyptian Historical Texts
NMC 1213H   Ancient Egyptian Religious and Funerary Literature

Arabic Studies

NMC 2100Y   Introductory Standard Arabic
NMC 2101Y   Intermediate Standard Arabic I
NMC 2102Y   Intermediate Standard Arabic II
NMC 2103Y   Advanced Standard Arabic
NMC 2130Y   Topics in Arabic Literature

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 1400Y   Introduction to the Archaeology of the Near East
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 (1)
NMC 1412H   Near Eastern Ceramics (2)
NMC 1414H   Egyptian Artifacts
NMC 1416H   Egyptian Iconography
NMC 1417H   Architecture of Egypt
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   The Archaeology of Mesopotamia I (8,000–2,000 BC)
NMC 1424H   The Archaeology Mesopotamia II (2,000–330 BC)
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 Archaelogy
NMC 1500Y   Archaeology, from Alexander to Muhammad
NMC 2540Y   Islamic Archaeology

Gender-Related Topics in Law and Religion

NMC 1608H   Life Cycle and Personal Status in Judaism
NMC 1609H   Gender-Related Topics in Law and Religion

Hebrew Language and Literature

NMC 1305H   Early Hebrew Epigraphy
NMC 1306H   Scribes, Manuscripts, and Translations of the Hebrew Bible
NMC 1309H   Wisdom in Ancient Israel
NMC 1310H   The First Part of Isaiah
NMC 1311Y   Post-Biblical Hebrew: Mishnah and Midrashim
NMC 1312H   Midrash Before the Rabbis: The Beginnings of Biblical Interpretation
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 1319H   Midreshei Halakha: Legal Texts and Narrative
NMC 1326Y   Topics in Midrashic Literature
NMC 1327H   Themes in Midrashic Literature
NMC 1328H   Intertextuality: Tannaitic and Amoraic Literature

History

NMC 1020H   Ancient Mesopotamia I: Sumerians and Akkadians
NMC 1021H   Ancient Mesopotamia II: Assyrians and Babylonians
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   Islamic History to the Fall of Baghdad

NMC 2117H   Readings in Medieval Arabic Chronicles
NMC 2118H   Readings in Medieval Arabic Biographical Literature
NMC 2119H   Readings in Medieval Arabic Legal Documents
NMC 2170H   Topics in Modern Arab History I
NMC 2171H   Topics in Modern Arab History II
NMC 2173H   Intellectuals of the Modern Arab World
NMC 2180H   Iranian Modernity
NMC 2225Y   History of Iran
NMC 2226H   Medieval Persian Historiography and Diplomatics
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 2527H   Islamic Decorative Arts
NMC 2530Y   Selected Problems in Islamic Art and Archaeology
NMC 2541Y   Contextualizing Medieval Middle Eastern and Islamic Pottery

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 2220Y   Classical Persian Literature
NMC 2221H   Medieval Persian Ethical and Advice Literature
NMC 2222H   Persian Mystical Poetry
NMC 2223H   The *Masnavi* of Rumi
NMC 2224H   Persian Myths, Islamic Legends, and Mystical Allegories
NMC 2227H   Zoroastrian Cosmic History: From Genesis to Universal Judgment
NMC 2228H   Zoroastrian Apocalyptic Literature: To the Netherworld and Beyond
NMC 2235Y   Literature and Society in Modern Iran

Religion and Philosophy

NMC 1613Y   Ancient Western Asiatic 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	Islamic Theology and Philosophy
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

Other Courses

| NMC 2000Y | Directed Reading |
| NMC 2001Y | Directed Reading and Research |

Graduate Faculty

Full Members

Aksan, Virginia - BA, MA, MLS, PhD
Beaulieu, Paul-Alain - LLB, BA, MA, PhD *(Associate Chair; Coordinator of Graduate Studies)*
Daviau, Michele - MTh, PhD
Fox, Harry - BSc, BA, MS, MA, PhD
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
Lawson, Todd - BA, MA, PhD
Leprohon, Ronald - BA, PhD
Meacham, Tirzah - BA, MA, PhD
Metso, Sarianna - MA, PhD
Najman, Hindy - AB, MA, PhD
Newman, Judith - PhD
Northrup, Linda - BA, MA, PhD
Ostapchuk, Victor - BA, PhD
Pouls Wegner, Mary-Ann - BA, PhD
Reilly, James - BA, MA, PhD
Ruehrdanz, Karin - ScD, 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
Holladay, Jr., John - BS, BD, DTh
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
Emon, Anver - LLB, BA, LLM, MA, PhD, SJD
Fadel, Mohammad - BA, JD, PhD
Goebs, Katja - MA, DPhil
Guenther, Sebastian - MA, PhD
Hassanpour, Amir - BA, MA, PhD
Mason, Robert - BA, PhD
McLaughlin, John - BA, MA, MDiv, PhD
Mittermaier, Amira - MA, PhD
Raffaelli, Enrico - PhD
Reichel, Clemens - MA, PhD
Sadeq, Mohammedmoin - BA, PhD

Nursing Science

Faculty Affiliation

Nursing

Degree Programs Offered

Nursing Science – MN,
 MHSc (Health Administration)/MN, PhD

Diploma Programs Offered

Nurse Practitioner –
Master of Nursing (Nurse Practitioner Field)
Concurrent Diploma in Anesthesia Care
 Post-Master of Nursing (Nurse Practitioner Field)
 Diploma in Anesthesia Care
 Post-Master's Nurse Practitioner (PMNP)
 Diploma

Collaborative Programs

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

1. **Aboriginal Health**
   - Nursing Science, MN, PhD
2. **Addiction Studies**
   - Nursing Science, MN, PhD
3. **Aging, Palliative and Supportive Care Across the Life Course**
   - Nursing Science, MN, PhD
4. **Bioethics**
   - Nursing Science, MN, PhD
5. **Cardiovascular Science**
   - Nursing Science, MN, PhD
6. **Community Development**
   - Nursing Science, MN
7. **Ethnic and Pluralism Studies**
   - Nursing Science, MN, PhD
8. **Global Health**
   - Nursing Science, PhD
9. **Health Care, Technology, and Place**
   - Nursing Science, PhD
10. **Health Services and Policy Research**
    - Nursing Science, PhD
11. **Resuscitation Sciences**
    - Nursing Science, MN, PhD
12. **Women and Gender Studies**
    - Nursing Science, MN, PhD
13. **Women's Health**
    - Nursing Science, MN, PhD

Overview

The **Master of Nursing** program prepares advanced nursing practitioners with specialized knowledge, skills, and expertise in a defined area of nursing to design programs and influence practice. The program offers three fields:

- Nursing Administration
- Clinical Nursing
- Nurse Practitioner

The **Post-Master's Nurse Practitioner Diploma** provides students holding an appropriate graduate degree the opportunity to develop the knowledge and skills required to practice as a nurse practitioner. Students study in the areas of adult or pediatric acute care.

The **Master of Nursing (Nurse Practitioner field) Concurrent Diploma in Anesthesia Care** provides advanced education for Nurse Practitioner field students to develop their knowledge and skill related to the continuum of anesthesia care. The diploma is completed in conjunction with the MN (NP field) program.

The **Post-Master of Nursing (Nurse Practitioner field) Diploma in Anesthesia Care** is for students who are already nurse practitioners currently registered or eligible for registration with the College of Nurses of Ontario as Nurse Practitioner–Adult or Nurse Practitioner–Pediatric.

The **Combined Master of Health Science (Health Administration)/Master of Nursing** program provides students who have a strong interest in both nursing and health administration with an opportunity to engage in an integrated program leading to the concurrent receipt of the MN and MHSc (Health Administration) degrees.

The **Doctor of Philosophy** program prepares scientists with the required analytical and research skills to study clinical or administrative nursing problems. Students study in one of three research fields:

- Effective Care and Health Outcomes
- Critical Approaches to Health and Health Care
- Nursing Health Systems

Contact and Address

Web: http://bloomberg.nursing.utoronto.ca
E-mail: inquiry.nursing@utoronto.ca
Telephone: (416) 978-8727
Fax: (416) 978-8222

Graduate Department of Nursing Science
University of Toronto
Suite 130, 155 College Street
Toronto, Ontario M5T 1P8
Canada

Degree Programs

Nursing Science

Master of Nursing

Minimum Admission Requirements

- 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 seeking admission to the Nurse Practitioner field must also have two years of clinical experience.
- For further information about admissions, please contact the Graduate Department of Nursing Science.

Program Requirements*

- To qualify for the degree, a student shall complete a program of study outlined by the Graduate Department of Nursing Science.
- Students in all three fields are required to take foundational courses NUR 1017H, NUR 1022H, NUR 1028H, and NUR 1034H.
- For the Nursing Administration and Clinical Nursing fields, the program requirement is 5.0 full-course equivalents (FCEs), including a 1.0 FCE clinical course (NUR 1072Y), which should be taken alone in the final term and only after completion of all other coursework and program requirements.
- Students in the Nursing Administration and Clinical Nursing fields are required to take one of the relational courses (NUR 1012H, NUR 1016H, NUR 1021H, NUR 1032H, or NUR 1043H) and choose three courses from a core-field concentration, two of which need to be Faculty of Nursing courses. One core-field course may be taken outside the Faculty of Nursing.
- For the Nurse Practitioner field, the program requirement is 5.5 FCEs. This field of study is offered in both e-learning and campus-based formats.
- All students in the Nurse Practitioner field are required to take NUR 1100Y, NUR 1110Y, and a combination of courses based on their specialization in adult (NUR 1101H and NUR 1115Y), pediatric (NUR 1102H and NUR 1116Y), or primary health care–global health (NUR 1114H and NUR 1117Y).

Normal Program Length: 6 sessions full-time

Time Limit: 3 years full-time

The course structure for the Nurse Practitioner field for those starting the program in September 2012 is currently under review.

Master of Nursing (Nurse Practitioner Field) Concurrent Diploma in Anesthesia Care

Minimum Admission Requirements

- To qualify, applicants must be first admitted to the master's program in the Nurse Practitioner field.
- Applicants must have successfully completed a minimum of two sessions in the MN (NP Field) program.
- Applicants must apply directly to the Faculty of Nursing by June 1 in Year 1 of the MN (NP field) program and are selected by an internal process involving the Faculty Admissions Committee.
- Applicants must have the two years of experience required for the MN (NP field), normally in critical care or equivalent, and submit a written statement to support their interest and future application to this program.
- The diploma must be completed in conjunction with the MN curriculum that includes all NP courses required in the NP field of the MN program. Students must meet all School of Graduate Studies requirements for admission to and completion of the MN program, whether or not they complete the diploma program.
- Prerequisite is Anesthesia Graduate Certificate (basic) with pass grade from the Michener Institute or equivalent (1.0 full-course equivalent [FCE]).

Program Requirements

- The diploma, completed in conjunction with the MN NP program, requires two years of full-time study to meet the MN requirements and three sessions of full-time study for the diploma, with two sessions embedded within the MN (NP field) and one additional session.
- Students complete a total of 3.0 FCEs (includes two clinical courses) in a program of study outlined by the Graduate Department of Nursing Science. Students are required to complete the following:
  - NUR 1201H *Principles of Anesthesia Care*
  - NUR 1202H *Advanced Pain Management Across Clinical Settings*
  - NUR 1209Y *Advanced Nursing Practice in Caring for Clients and Families Requiring Anesthesia I* (300 clinical hours)
  - NUR 1210Y *Advanced Nursing Practice in Caring for Clients and Families Requiring Anesthesia II* (300 clinical hours)

Normal Program Length: 7 sessions full-time

Time Limit: 6 years full-time

Combined Master of Health Science (Health Administration)/ Master of Nursing

Minimum Admission Requirements

- Admission to the combined program is conditional upon independent admission to each of the participating graduate units. Applicants will normally be required to complete separate application forms on a concurrent basis and pay the application fees for admission to the MN program and the MHSc (Health Administration) program. Students must satisfy the full requirements for each of the participating graduate units.
- The aggregate criteria listed below must be satisfied to ensure that an application is considered complete for the purpose of entry into the Combined MHSc/MN program in Health Administration and Nursing Science. Applicants must:
  - Be admitted under the General Regulations of the School of Graduate Studies. Meeting the minimum requirements does not guarantee admission.
  - Hold a University of Toronto BSc degree in Nursing with a B+ standing or better in the last two years of undergraduate study, or its equivalent from a recognized university. The student is expected to have good academic standing in non-nursing as well as nursing subjects.
  - Have successfully completed an introductory course in statistics prior to admission.
  - Have at least three years of work experience in the health care field.

Program Requirements

- Year 1: students enrol in the Faculty of Nursing and complete 4.0 required full-course equivalents (FCEs) for the MN degree.
- Year 2: students enrol in the Institute of Health Policy, Management and Evaluation (IHPME) and complete 5.5 FCEs towards the MHSc (Health Administration) degree plus 1.0 elective FCE that can be taken from either degree program.
- Year 3: 1.0 FCE taken in HPME.

Time Limit: 6 years full-time

Doctor of Philosophy

Minimum Admission Requirements

- Applicants must normally have a master's degree in nursing with at least a B+ standing or its equivalent from a recognized university.
- For further information about admissions, please contact the Graduate Department of Nursing Science.

Program Requirements

- The PhD in Nursing may be completed as a full-time program or a flexible-time program.

Full-Time PhD Option

- The program of study includes a minimum of five courses, including NUR 1081Y *PhD Student/ Faculty Seminars,* one required course (either NUR 1085H, NUR 1086H, or NUR 1087H depending on the chosen field of study), and a thesis.
- In order to qualify for the degree, a student shall complete a program of study to support her or his research plan. The student's program must be approved by her or his supervisory committee in the department.
- An examination of the dissertation proposal is required, usually in the second year and no later than August 31 of the third year, at the completion of the minimum coursework requirements. The student's dissertation will be defended in the departmental oral examination and the Doctoral Final Oral Examination of the School of Graduate Studies.

Flexible-Time PhD Option

- Applicants must indicate on the application form their preference for the flexible-time option. The admission, course, and degree requirements for the flexible-time option are identical to those listed for the full-time PhD program.
- The dissertation proposal is usually examined in the third year and no later than August 31 of the fourth year.

Normal Program Length: 4 years full-time; 5 years transfer-from-master's; 6 years flexible-time

Time Limit: 6 years full-time; 7 years transfer-from-master's; 8 years flexible-time

Diploma Programs

Nurse Practitioner

Post-Master of Nursing (Nurse Practitioner Field) Diploma in Anesthesia Care

Minimum Admission Requirements

- Applicants must have completed a University of Toronto Master of Nursing (NP field) degree or equivalent.
- Applicants must be currently registered or are eligible for registration with the College of Nurses of Ontario as a Nurse-Practitioner Adult or Nurse Practitioner Pediatrics.
- Applicants must normally have two years of experience in critical care or equivalent.

- Applicants must provide three letters of reference (academic, professional, and clinical [NP or MD]), and submit a written statement to support their application to this program.
- Applicants must apply by June 1 to the Faculty of Nursing.
- Prerequisite is successful completion (Pass grade) of the Anesthesia Graduate Certificate (basic) from the Michener Institute or equivalent (1.0 full-course equivalent [FCE]).

Program Requirements

- Students complete a total of 3.0 FCEs (includes two clinical courses) in a program of study outlined by the Graduate Department of Nursing Science. Students are required to complete the following:
  - NUR 1201H *Principles of Anesthesia Care.*
  - NUR 1202H *Advanced Pain Management Across Clinical Settings.*
  - NUR 1209Y *Advanced Nursing Practice in Caring for Clients and Families Requiring Anesthesia I* (300 clinical hours).
  - NUR 1210Y *Advanced Nursing Practice in Caring for Clients and Families Requiring Anesthesia II* (300 clinical hours).

Normal Program Length: 3 sessions full-time

Time Limit: 3 years full-time

Post-Master's Nurse Practitioner Diploma

Minimum Admission Requirements

- 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. A signed preceptor agreement is required.
- 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.

Program Requirements

- All students in the PMNP diploma program are required to complete a total of 3.5 full-course equivalents (FCEs) as follows:
  - NUR 1100Y *Pathophysiologic Concepts and Therapeutics.*
  - NUR 1101H *Advanced Health Assessment and Clinical Reasoning: Adult* or NUR 1102H *Advanced Health Assessment and Clinical Reasoning: Pediatric* or NUR 1114H *Advanced Health Assessment and Clinical Reasoning:*

Primary Health Care–Global Health; each course consists of 100 clinical hours.
  - NUR 1115Y *Advanced Health Assessment and Therapeutic Management: Adult* or NUR 1116Y *Advanced Health Assessment and Therapeutic Management: Pediatric* or NUR 1117Y *Advanced Health Assessment and Therapeutic Management: Primary Health Care–Global Health;* each course consists of 300 clinical hours.
  - NUR 1110Y *Advanced Nursing Practice: Roles and Issues*; course consists of 300 clinical hours.
- Three program courses require the learners to be engaged in clinical practice.
- The program can be completed in one year on a full-time basis or in 20 months on a part-time basis. Part-time students must be enrolled in a minimum of two out of three sessions in each academic year.

Normal Program Length: 5 sessions part-time

Time Limit: 6 years part-time

Course List

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 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 1039H	Women's Health Across the Lifespan
NUR 1040H	Issues in Women's Health Care
NUR 1042H	Responses of Children and Families to Illness in Childhood
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 1048H   Politics of Health in the Community
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 1058H   Aging, Gender and Equity
NUR 1059H   Informatics: Theory and Application in Nursing
NUR 1060H   Leadership and Management of Nursing and Health Services
NUR 1061H   Patient Information Systems/Workload Measurement
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   Recovery-Oriented Mental Health Systems of Care
NUR 1068H   Youth and Mental Health Promotion
NUR 1072Y   Advanced Nursing Practice Scholarship
NUR 1073H   Research in Health Informatics
NUR 1074H   Facilitating Learning: Nursing Perspectives
NUR 1080H   Theoretical Perspectives in Nursing Science (Required course for PhD students only)
NUR 1081Y   PhD Student/Faculty Seminars
NUR 1082H   Knowledge Production in Nursing and Health
NUR 1083H   Comparative Politics of Health Policy in Globalizing World
NUR 1084Y   Applied Statistics in Nursing
NUR 1085H   Topics in Critical Perspectives in Health and Health Care
NUR 1086H   Selected Topics in 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 1100Y   Pathophysiologic Concepts and Therapeutics
NUR 1101H   Advanced Health Assessment and Clinical Reasoning: Adult (Credit/No Credit) (Prerequisite: NUR 1100Y. Pre- or co-requisite: NUR 1022H.)
NUR 1102H   Advanced Health Assessment and Clinical Reasoning: Pediatric (Credit/No Credit) (Prerequisite: NUR 1100Y. Pre- or co-requisite: NUR 1022H.)

NUR 1114H   Advanced Health Assessment and Clinical Reasoning: Primary Health Care–Global Health (Credit/No Credit) (Prerequisite: NUR 1100Y. Pre- or co-requisite: NUR 1022H.)
NUR 1115Y   Advanced Health Assessment and Therapeutic Management: Adult (Prerequisites: NUR 1017H, NUR 1022H, NUR 1100Y, NUR 1101H)
NUR 1116Y   Advanced Health Assessment and Therapeutic Management: Pediatric (Prerequisites: NUR 1017H, NUR 1022H, NUR 1100Y, NUR 1102H)
NUR 1117Y   Advanced Health Assessment and Therapeutic Management: Primary Health Care–Global Health (Prerequisites: NUR 1017H, NUR 1022H, NUR 1100Y, NUR 1114H)
NUR 1110Y   Advanced Nursing Practice: Roles and Issues (Credit/No Credit) (Prerequisite: NUR 1115Y or NUR 1116Y or NUR 1117Y. Pre- or co-requisite: NUR 1034H)
NUR 1200H   Reading Course
NUR 1201H   Principles of Anesthesia Care
NUR 1202H   Pain Management Across Clinical Settings: Theory, Research And Practice
NUR 1209Y   Advanced Nursing Practice in Anesthesia I
NUR 1210Y   Advanced Nursing Practice in Anesthesia II

Graduate Faculty

Full Members

Angus, Janet - BScN, MSN, PhD
Bierman, Arlene - MS, MD
Clarke, Sean - MSN, PhD
Dennis, Cindy-Lee - PhD
Doran, Diane - BA, PhD
Dubrowski, Adam - BSc, MSc, PhD
Esplen, Mary Jane - BScN, MSN, PhD, RN
Gastaldo, Denise - BSN, MA, PhD
Goering, Paula - BSc, MSc, PhD
Hillan, Edith - MPH, MSc, PhD
Hodnett, Ellen - BSN, PhD
Howell, Doris - BNSc, MSN, PhD
Khanlou, Nazilla - BScN, MS, DPhil
McGillion, Michael - PhD
McGillis, Linda - BHA, MS, PhD
McGilton, Kathy - BScN, MN, PhD
McKeever, Patricia - BN, MSA, DPhil, RN
Metcalfe, Kelly - BNSc, PhD
Muntaner, Carles - MHSc, MD, PhD
Nelson, LaRon - MSc
Nelson, Sioban - PhD *(Dean)*
Parry, Monica - BScN, MSc, MEd, PhD
Peter, Elizabeth - BA, BSN, MSN, PhD
Puts, Martine - PhD
Rose, Rebecca Louise - BN, MN, PhD
Sidani, Souraya - TD, BS, MS, PhD
Stevens, Bonnie - BSc, MSN, DPhil
Stremler, Robyn - PhD, RN
Titchkosky, Tanya - BA, MA, PhD
Tourangeau, Ann - BScN, MN, PhD *(Director of Graduate Programs)*

Members Emeriti

Donner, Gail - PhD
Gallop, Ruth - BSN, MSN, PhD
Pringle, Dorothy - BScN, MS, PhD
Watt-Watson, Judith - BSN, MSN, DPhil

Associate Members

Adams, Sherri - BScN
Armson, Anthony - BSc, MSc, MD
Beduz, Mary Agnes - MN
Belford, Linda - BSN
Berta, Whitney - BS, MBA, PhD
Birn, Anne-Emanuelle - BA, MA, DSc
Bordeleau, Louise - MSc, MD
Burry, Lisa - BScPhm, DP
Carney, Colleen - BScN, AM, PhD
Carroll, June - MD
Chau, Tom - PhD
Davies, Barbara - BScN, MSN, PhD
Deber, Raisa - BS, MS, PhD
Diamond, Timothy - BPhil, MA, PhD
Edwards, Geoffrey - PhD
Friedrich, Jan - BSc, MD, PhD
Fung, Kenneth - MD
Gilmour, Joan - LLB, LLM, LLD
Gladstone, Brenda - BA, PhD
Hardie, Catherine - BSN, MSN, EdD
Hsiung, Ping-Chun - PhD
Husain, Amna - LMCC, MD
Hutchison, Jamie - MD
Jeffs, Lianne - PhD
Korkola, Lori - MN
Lester, Charlene - BScN, MN
Leung, Doris - BScN, MN, PhD
Macdonald, Geraldine - BSN, MEd, EdD
Maser, Catherine - BSc, MN
McAllister, Mary - BNSc, MHSc
McPherson, Kathryn - Phm
Messner, Hans - MD, PhD
Miller, Fiona - BIS, MA, DPhil
Murphy, Joan - MD
Mykhalovskiy, Eric - BA, MA, PhD
Noh, Samuel - BA, MA, PhD
O'Grady, Caroline - BScN, MN, PhD, RN
Robertson, Ann - BSc, MSc, PhD
Rose, Donald Nelson - PhD
Ross, Heather - BSc, MD
Rourke, Sean - BSc, BA, PhD
Rourke, Sean - BSc, BA, PhD
Ruddick, Susan - PhD
Rudge, Trudy - PhD
Sahlas, Demetrios James - MSc, MD
Schneeweiss, Suzan - MD
Secker, Barbara - BA, AM, PhD
Shamian, Judith - PhD
Simmonds, Anne - BScN, MN
Sinuff, Tasnim - MSc, MD, PhD
Squires, Mae - PhD
Stern, Susan - DSW
Thomson, Nadia - BScN, MN
Waddell, Janice - PhD
Watson, Mary Jo - BScN, MSc
Watson, William - BA, MSc, MDCM

Williams, Charmaine - BA, BSc, MSW, PhD
Wodchis, Walter - MA, PhD
Wynn, Francine - BA, MA, PhD
Zabjek, Karl - BSc, MClSc, PhD

Nutritional Sciences

Faculty Affiliation

Medicine

Degree Programs Offered

Nutritional Sciences – MSc, PhD

Collaborative Programs

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

1. **Aboriginal Health**
   - Nutritional Sciences, MHSc, MSc, PhD
2. **Biomedical Toxicology**
   - Nutritional Sciences, MSc, PhD
3. **Women's Health**
   - Nutritional Sciences, MSc, PhD

Overview

The Department of Nutritional Sciences offers advanced studies leading to the **Master of Science** and **Doctor of Philosophy** degrees in the basic science, clinical, and community aspects of human nutrition. Research projects range from the molecular to the community level of inquiry. Applicants with appropriate preparation in health sciences will be admitted under the General Regulations of the School of Graduate Studies.

Applicants interested in pursuing a Master of Public Health degree in Community Nutrition are advised to consult the calendar entry for the Department of Public Health Sciences for details.

Contact and Address

Web: www.utoronto.ca/nutrisci
E-mail: grad.nutrisci@utoronto.ca
Telephone: (416) 978-6071
Fax: (416) 978-5882

Department of Nutritional Sciences
University of Toronto
FitzGerald Building
Room 316, 150 College Street
Toronto, Ontario M5S 3E2
Canada

Degree Programs

Nutritional Sciences

Master of Science

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Students with diverse backgrounds are encouraged to apply.
- A- standing in the final two years of a bachelor's degree program or evidence of strong potential as a researcher.

Program Requirements

- A limited number of students are admitted to the MSc program on a part-time basis.
- Students participate in NFS 1204Y *Master's Seminars in Nutritional Sciences* throughout their period of full-time registration and complete a minimum of two half courses.
- 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.

Normal Program Length: 3 sessions full-time; 6 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

Doctor of Philosophy

Minimum Admission Requirements

- Applicants may enter the PhD program in one of two ways:
  - 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.
  - 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 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

- The residence requirement for students admitted with a bachelor's degree is three years; for students admitted with a master's degree, it is two years.
- It is expected that students from either background can complete their PhD in a period of four years of full-time study, research, and thesis preparation; however, some students may require longer.
- Students participate in NFS 1304Y *Doctoral Seminars in Nutritional Sciences.*
- Students entering with a bachelor's degree will also complete a minimum of six half courses; those entering with an MSc degree, a minimum of four half courses. The courses will be chosen by each student to provide an appropriate background for his or her 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 comprehensive examination in nutritional sciences.
- Thesis.
- Student must pass the departmental examination before proceeding to the Doctoral Final Oral Examination.

Normal Program Length: 4 years full-time; 5 years direct entry

Time Limit: 6 years full-time; 7 years direct-entry

Course List

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   Field Observation and Nutrition Program Laboratory I
NFS 1209H   Field Observation and Nutrition Program Laboratory II (Credit/No Credit)
NFS 1210H   Field Observation and Program Laboratory III: Management of Community Food Programs
NFS 1211H   Community Nutrition
NFS 1212H   Regulation of Food Safety
NFS 1216H   Selected Topics Nutrition
NFS 1218H   Recent Advances in Nutritional Sciences I
NFS 1220H   Clinical Nutrition
NFS 1221H   Nutrition Programs and Strategies

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

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 1301H   Directed Reading in Nutritional Sciences
NFS 1304Y[0]   Doctoral Seminars in Nutritional Sciences (Credit/No Credit)
NFS 1484H   Advanced Nutrition

Graduate Faculty

Full Members

Allard, Johane - MD
Anderson, Gerald - BSc, MSc, PhD
Archer, Michael - MA, MSc, PhD, DSc
Boyd, Norman - MD
El-Sohemy, Ahmed - BSc, MSc, PhD, Canada Research Chair
Eyssen, Gail - BSc, MSc, MSc, PhD
Greenwood, Carol - BSc, MSc, PhD
Hanley, Anthony - BSc, MSc, PhD *(Graduate Coordinator, Admissions and Awards)*
Jenkins, David Ja - BA, MA, MD, MB, BS, PhD, Canada Research Chair
Kim, Young-In - MD
Kreiger, Nancy - BA, MPH, PhD
L'Abbe, Mary - BSc, MSc, PhD *(Chair and Graduate Chair)*
Leiter, Lawrence Alan - BSc, MD
McCrindle, Brian - MD
Munro, Ian - BSc, MSc, PhD
Narod, Steven - BSc, MD
O'Connor, Deborah - BASc, MS, PhD
Pencharz, Paul - MD, MB, ChB
Sellen, Daniel - BA, AM, PhD
Tarasuk, Valerie - BA, BEd, BASc, MSc, PhD
Vieth, Reinhold - BSc, 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

Beaton, George - BA, MA, PhD
Bruce, Robert - BSc, LMCC, MSc, MD, PhD
Jeejeebhoy, Khursheed - MB, PhD
Krondl, Maria - BSc, PhD
Rao, A Venketeshwer - BSc, MSc, PhD
Thompson, Lilian - BSc, MSc, PhD

Associate Members

Ball, Ronald - BSc, MSc, PhD
Darling, Pauline - BSc, MSc, PhD
Fox, Ann - BAA, MHSc, PhD
Hamilton, Jill - BSc, MSc, MD
Josse, Robert - BSc, MBBS
Keith, Mary - BASc, PhD

Kotsopoulos, Joanne - BSc, MSc, PhD
Levitt, Anthony - MBBS, DGO, MB
Ma, David - BSc, PhD
Madill, Janet - BSc, MSc, PhD
Maguire, Jonathon - BSc, MSc, MSc, MD
Pausova, Zdenka - MD
Power, Krista - BSc, MSc, PhD
Roth, Daniel - BSc, MSc, MD
Tomlinson, Christopher - BSc, MBChB, PhD
Whiting, Susan - BSc, MSc, PhD
Williams, Patricia - BSc, PhD
Yeung, David - BA, MA, PhD

Occupational Science and Occupational Therapy

Faculty Affiliation

Medicine

Degree Programs Offered

Occupational Therapy – MScOT

Collaborative Programs

The following collaborative program is available to students in the participating degree program as listed below:

Women's Health

- Occupational Therapy, MScOT

Overview

The **Master of Science in Occupational Therapy** (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. practice 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.

Contact and Address

Web: www.ot.utoronto.ca
E-mail: ot.reception@utoronto.ca
Telephone: (416) 946-8571
Fax: (416) 946-8570

Department of Occupational Science and Occupational Therapy
University of Toronto
Room 160, 500 University Avenue
Toronto, Ontario M5G 1V7
Canada

Degree Programs

Occupational Science and Occupational Therapy

Master of Science in Occupational Therapy

Minimum Admission Requirements

- 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) at www.ouac.on.ca/orpas. Applications are accepted approximately mid-October each year, with a deadline approximately the first week of 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 facility by March 1 of the year of application. See General Regulations, sections 4.1.10 English-Language Facility and 5 Admission Regulations 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 www.ot.utoronto.ca and the ORPAS website 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.

Normal Program Length: 6 sessions full-time

Time Limit: 3 years full-time

Course List

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.

Graduate Faculty

Full Members

Agur, Anne - BSc, MSc, PhD
Cameron, Jill - BS, 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
Farrow, Susan - BSc(OT), BA
Fourt, Anne - BSc(OT), MEd
Hebert, Debbie - BSc(OT), MSc
Keightley, Michelle - BSc, MA, PhD
Langlois, Sylvia - BSc, MSc
Mckee, Patricia - DipOT, BSc(OT), MSc
Mosnyk, Debra - BSc(OT), MEd, PhD
Rigby, Patty - DipOT, MHSc
Secker, Barbara - BA, AM, PhD
Stack, Rachel - BSc, MClSc
Stier, Jill - MA, BMedSc *(Coordinator of Graduate Studies)*
Trentham, Barry - BSc(OT), MES

Pharmaceutical Sciences

Faculty Affiliation

Pharmacy

Degree Programs Offered

Pharmaceutical Sciences – MSc, PhD

Collaborative Programs

The following collaborative programs 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. **Biomedical Engineering**
    • Pharmaceutical Sciences MSc, PhD
4. **Biomedical Toxicology**
    • Pharmaceutical Sciences, MSc, PhD
5. **Cardiovascular Sciences**
    • Pharmaceutical Sciences, MSc, PhD
6. **Global Health**
    • Pharmaceutical Sciences, PhD
7. **Health Care, Technology, and Place**
    • Pharmaceutical Sciences, PhD
8. **Health Services and Policy Research**
    • Pharmaceutical Sciences, MSc, PhD
9. **Neuroscience**
    • Pharmaceutical Sciences, MSc, PhD
10. **Resuscitation Sciences**
    • Pharmaceutical Sciences, MSc, PhD

Overview

The Department of Pharmaceutical Sciences offers graduate programs leading to the **Master of Science** and **Doctor of Philosophy** degrees. The department offers research opportunities and courses in three principal areas:

1. **Molecular pharmacology and toxicology**: drug receptor interactions, molecular biology, electrophysiology, biochemistry, clinical, adverse drug reactions, and drug metabolism
2. **Pharmaceutics and pharmacokinetics**: pharmaceutical and medicinal chemistry, pharmaceutical formulations, radiopharmaceutical synthesis, drug discovery, biophysical chemistry, basic pharmacokinetics, and clinical research
3. **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
E-mail: pharm.sci@utoronto.ca
Telephone: (416) 978-2179
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

Degree Programs

Pharmaceutical Sciences

Master of Science

Minimum Admission Requirements

Full-Time MSc

• 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).

Part-Time MSc

• A limited number of students will be admitted to the MSc program on a part-time basis. All admission requirements are the same as for the full-time MSc.

Program Requirements

Full-Time MSc

- 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.
- The student normally completes 2.0 full-course equivalents (FCEs), but a minimum of 1.0 FCE is required.
- Yearly advisory committee meetings.
- One poster presentation given to all faculty and graduate students at Graduate Research in Progress (GRIP), and yearly attendance at GRIP.
- Regular attendance at the graduate departmental and student group seminars.
- An oral presentation of 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 a field of pharmaceutical sciences.

Part-Time MSc

- All requirements are the same as for the MSc full-time program.

Normal Program Length: 6 sessions full-time; 14 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

Doctor of Philosophy

Minimum Admission Requirements

Full-Time PhD

- Appropriate master's degree from a recognized university with a minimum overall B+ average.
- Under exceptional circumstances, students may be admitted directly to the PhD program with an appropriate bachelor's degree. Factors considered include academic standing, ability to conduct research, and availability of financial support from the potential supervisor.
- 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.

Transfer from MSc to PhD

- 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 FCE with an average grade of A- and 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.

Flexible-Time PhD

- 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.
- 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, and
  - hold a university appointment in Canada at an academic standard equivalent to the University of Toronto Lecturer.

Program Requirements

Full-Time PhD

- 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. Students normally complete 2.0 FCEs. Students admitted directly to the PhD program with a BSc must complete 3.0 FCEs.
- Yearly advisory committee meetings.
- A qualifying examination.
- 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. Direct-entry

PhD students must complete two poster presentations, one of which may be a peer-reviewed conference.

- Annual attendance at GRIP, and an exit full-length research seminar to be given before the thesis defence.
- Regular attendance, with a minimum of eight Pharmaceutical Sciences departmental seminars in each academic year.
- In addition to the departmental exit seminar held within three months of the final thesis defence, all PhD students are required to give an oral research presentation of approximately 20–30 minutes every year after the first 12 months of registration in the program, unless the student presents at GRIP.
- 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 are required to be on campus and participating full-time (including summer) until all program requirements are completed. Simultaneous registration in another full-time degree program is not allowed. Coursework should normally be completed within the first three years of registration.

Transfer from MSc to PhD

- 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.

Flexible-Time PhD

- 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 admissions committee.
- 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 for those entering the program with a master's degree; five years for those with a bachelor's degree. Thereafter, students may register part-time.

Normal Program Length: 4 years full-time; 5 years direct-entry; 5 years transfer-from-master's; 7 years flexible-time

Time Limit: 6 years full-time; 7 years direct-entry; 7 years transfer-from-master's; 7 years flexible-time

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

Course List

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 1110H	Chemical Basis of Drug Metabolism
PHM 1111H	Research and Statistical Analytical Methods
PHM 1115H	Special Topics in Radiopharmaceuticals II
PHM 1120H+	Selected Research Topics in the Pharmaceutical Sciences
PHM 1122H	Fundamentals of Drug Discovery
PHM 1124H	The Power and Politics of Global Pharmaceutical Policy
PHM 1126H	The Economics of Health and Health Care
PHM 1128H	Introduction to Models and Methods of Research in Clinical, Social, and Administrative Pharmacy
PHM 1130H	Biomolecular Interactions and Thermodynamics I
PHM 1131H	Biomolecular Interactions and Thermodynamics II
PHM 1132H	Applied Health Econometrics
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 1016H	Graduate Seminar in Toxicology
JNP 1017H+	Current Topics in Molecular and Biochemical Toxicology
JNP 1018H+	Molecular and Biochemical Basis of Toxicology
PAS 3700H	Multidisciplinary Aspects of Addictions
PCL 1004Y	Clinical Pharmacology
PPG 2010H	Panel Data Methods for Public Policy Analysis

Graduate Faculty

Full Members

Allen, Christine - BSc, PhD, PhD
Angers, Stephane - BSc, PhD, Canada Research Chair
Austin, Zubin - BA, BScPhm, MBA, MISt, MEd, PhD
Ballantyne, Peri - BA, MA, PhD
Bendayan, Reina - DP
Boon, Heather - PhD *(Associate Dean, Graduate Education)*
Bowen, Barry - BScPhm, MScPhm
Busto, Usanda - BSc, DP
Cadarette, Suzanne - BSc, MSc, PhD
Chalikian, Tigran - PhD
Cheng, Yu-Ling - SB, PhD
Crandall, Ian - BSc, MSc, PhD
Cummins, Carolyn - BSc, PhD
Einarson, Thomas - BScPhm, MSc, MPharm, MEd, PhD

Gariepy, Jean - BSc, PhD
Giaever, Guri - BS, PhD
Grant, Denis - BSc, PhD
Grootendorst, Paul - BA, MEc, PhD
Hampson, David - PhD
Heerklotz, Heiko - PhD, Canada Research Chair
 (Graduate Coordinator)
Henderson, Jeffrey - PhD
Hindmarsh, K Wayne - BSP, MSc, PhD
Holbrook, Anne - BScPhm, MSc, MD, DP
Ito, Shinya - MD, BM
Kelley, Shana - BA, PhD
Kohler, Jillian - BA, MA, PhD
Koren, Gideon - MD
Krahn, Murray - BA, MSc, MD
Lee, Ping - BsChE, PhD, GlaxoSmithKline Chair in
 Pharmaceutics and Drug Delivery
Macgregor, Robert - BS, PhD
MacKeigan, Linda - BScPhm, PhD
Mann, Henry - BScPhm, DP
Muzzin, Linda - BA, MA, MPsy, PhD
Pang, K Sandy - BSc, PhD
Pennefather, Peter - BSc, PhD
Piquette-Miller, Micheline - BScPhm, PhD
Reilly, Raymond - BSc, BSc, MSc, PhD
Saville, Bradley - BSc, PhD
Spino, Michael - BScPhm, DP
Sproule, Beth - BScPhm, DP
Taddio, Anna - BScPhm, MScPhm, PhD
Thompson, Alison - BA, MA, PhD
Uetrecht, Jack - BSc, MSc, MD, PhD, Canada Research
 Chair
Walker, Scott - BScPhm, MScPhm
Wells, James - BSc, MSc, PhD
Wells, Peter - BScPhm, DP
Wu, Xiao Yu - PhD
Zheng, Gang - MSc, PhD

Members Emeriti

Marshman, Joan - BScPhm, MSc, PhD
Nairn, John - BScPhm, PhD
O'Brien, Peter John - BSc, MSc, PhD

Associate Members

Dupuis, Lee - BSc, BScPhm
Hardy, Brian - BSc, BSP, DP
Hoch, Jeffrey - BA, MA, PhD
Levesque, Linda - BScPhm, MSc, PhD
Mamdani, Muhammad - DP
Papadimitroupoulos, Emmanuel - BSc, BSP, MScPhm,
 PhD
Seto, Winnie - BScPhm, MSc, DP
Tseng, Alice - BScPhm, DP
van der Velde, Gabrielle - BSc, PhD

Pharmacology and Toxicology

Faculty Affiliation

Medicine

Degree Programs Offered

Pharmacology – MSc, PhD

Collaborative Programs

The following collaborative programs 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. **Neuroscience**
   - Pharmacology, MSc, PhD
5. **Resuscitation Sciences**
   - Pharmacology, MSc, PhD
6. **Women's Health**
   - Pharmacology, MSc, PhD

Overview

The Department of Pharmacology and Toxicology offers graduate programs leading to the degrees of **Master of Science** and **Doctor of Philosophy in Pharmacology.** Faculty 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

All MSc and PhD students are expected to undertake self-directed study and to demonstrate proficiency in pharmacological principles throughout the course of their graduate program.

Contact and Address

Web: www.pharmtox.utoronto.ca
E-mail: 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

Degree Programs

Pharmacology

Master of Science

Minimum Admission Requirements

- 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

- 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.
- PCL 1002Y *Graduate Pharmacology*. 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.

Normal Program Length: 6 sessions full-time; 9 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

Doctor of Philosophy

Minimum Admission Requirements

- 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.
- Well-qualified students with excellent research potential holding an appropriate bachelor's degree from a recognized university may be considered for direct admission 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.
- 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.
- 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

- 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.
- PCL 1002Y *Graduate Pharmacology* (major subject), PCL 1003Y[0] *Seminars in Pharmacology* (Credit/No Credit course), 1.0 additional FCE (minor subject), and any other courses advised by the

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.

Graduate Education Committee. The student's advisory committee should help the student determine the minor 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.
- PhD students in other departments who desire to take a minor in pharmacology will be permitted to take one of the listed courses depending on their previous training and space availability in the course.

Normal Program Length: 4 years full-time; 5 years direct-entry

Time Limit: 6 years full-time; 7 years direct-entry

Course List

The department should be consulted each session as to course offerings. Students may also find up-to-date course information on the departmental website, www.pharmtox.utoronto.ca/programs/grad/courses.

PCL 1002Y	Graduate Pharmacology
PCL 1003Y[0]	Seminars in Pharmacology (Credit/No Credit)
PCL 1004Y	Clinical Pharmacology
PCL 1012H	Cognitive Neuropharmacology
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[+]	Molecular and Biochemical Basis of Toxicology
JNP 1018H[+]	Current Topics in Molecular and Biochemical Toxicology
JNR 1444Y	Fundamentals of Neuroscience: Cellular and Molecular

JPM 1005Y	Behavioural Pharmacology
JYG 1555H	Topics in Cellular and Molecular Neurobiology

Graduate Faculty

Full Members

Busto, Usanda - BSc, DP
Dorian, Paul - MSc, MDCH
George, Susan - MD
Grant, Denis - BSc, PhD *(Chair and Graduate Chair, July–Dec. 2012)*
Grupp, Larry - DSc
Hampson, David - PhD
Ito, Shinya - MD, BM
Kish, Stephen John - BSc, MSc, PhD
Koren, Gideon - MD
Lanctot, Krista - MSc, PhD
Laposa, Rebecca - PhD
Le, Dzung - PhD
Le Foll, Bernard - DrMed
Li, Peter Pun - BSc, MSc, PhD
MacDonald, John - BSc, MSc, PhD
Matthews, Jason - PhD
McPherson, J. Peter - MSc, PhD *(Coordinator of Graduate Studies)*
Meyer, Jeffrey - MD
Milgram, Norton - BSc, MSc, PhD
Mitchell, Jane - BSc, PhD
Moore, Malcolm - MD
Nobrega, Jose - PhD
O'dowd, Brian - PhD
Pang, K Sandy - BSc, PhD
Parker, John - BA, MD
Petronis, Arturas - MD
Piquette-Miller, Micheline - BScPhm, PhD
Pollock, Bruce - BSc, MD, PhD
Riddick, David - BSc, PhD
Schimmer, Bernard - BS, PhD
Semple, John Wesley - PhD
Snead III, Carter - BS, MD, MD
Tomkins, Denise - PhD
Tyndale, Rachel - PhD
Uetrecht, Jack - BSc, MSc, MD, PhD, Canada Research Chair
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
Heersche, Johannes - BSc, PhD
Inaba, Tadanobu - BEng, MSc, PhD
Kadar, Dezso - BSc, MSc, PhD
Kalant, Harold - BSc, MD, PhD

O'Brien, Peter John - BSc, MSc, PhD
Okey, Allan - BSc, MSc, PhD
Pace-Asciak, Cecil - PhD
Seeman, Philip - BSc, MSc, MDCH, PhD
Sellers, Edward - MD, PhD

Associate Members

Arnot, Michelle - PhD
Brands, Bruna - PhD
Goldstein, Benjamin - MD
Park, Hee-Won - DVSM, MSc, DChem
Ramsey, Amy - PhD
Salahpour, Ali - PhD
Sun, Hong-Shuo - MSc, DrMed, DPhil
Woodland, Cindy - PhD
Zack, Martin - PhD

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

Philosophy

Faculty Affiliation

Arts and Science

Degree Programs Offered

Philosophy - MA, PhD, JD/PhD

Collaborative Programs

The following collaborative programs 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. **Environmental Studies**
   - Philosophy, MA, PhD
5. **Jewish Studies**
   - Philosophy, MA, PhD
6. **Sexual Diversity Studies**
   - Philosophy, MA, PhD
7. **Women and Gender Studies**
   - Philosophy, MA, PhD

Overview

The Department of Philosophy offers two degree programs, **Master of Arts** and **Doctor of Philosophy,** as well as the **Combined Juris Doctor/Doctor of Philosophy**, which enables students to pursue work at the intersection of philosophy and law and to complete both the JD and the PhD in a shorter time than it would take to complete the degrees separately.

Applicants should consult the department's web page (www.philosophy.utoronto.ca) for complete details on graduate programs, course offerings, and short academic profiles of the graduate faculty.

Contact and Address

Web: www.philosophy.utoronto.ca
E-mail: phildept@chass.utoronto.ca
Telephone: (416) 978-3312
Fax: (416) 978-8703

Department of Philosophy
University of Toronto
Jackman Humanities Building (JHB)
4th Floor, 170 St. George Street
Toronto, Ontario M5R 2M8
Canada

Degree Programs

Philosophy

Master of Arts

Minimum Admission Requirements

- Students are admitted under the General Regulations of the School of Graduate Studies. Admission requires an appropriate bachelor's degree from a recognized university. Applicants should 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 must submit the following supporting documents with their applications:
  - One official transcript of the applicant's academic record from each university attended, complete to the time of application.
  - A statement of about 300 words, indicating the applicant's areas of interest in philosophy at the graduate level.
  - Two letters of reference from philosophy instructors, written on the appropriate forms.
  - One sample of the applicant's written work in philosophy (written in English or French); e.g., a term paper, not exceeding 20 pages, double spaced. It should be as recent as possible and should provide evidence of ability to study 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 facility are acceptable.
- The submission deadline for all complete applications and supporting documents, including letters of reference, is January 7.

Program Requirements

- The program consists of a minimum of 4.0 full-course equivalents (FCEs) in philosophy. At least 1.0 FCE must be in the history of philosophy and at least 1.0 FCE must be in the problems of philosophy. In the first session and again in the second, one graduate half course will be designated for MA students only. All full-time MA students will be required to take these courses. (One will be in the broad area of ethics/politics and the other in the broad area of metaphysics and epistemology. Either could be historical.)
- 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.
- Part-time enrolment in the MA program is permitted.

Normal Program Length: 3 sessions full-time; 5 years part-time

Time Limit: 3 years full-time; 6 years part-time

Doctor of Philosophy

Minimum Admission Requirements

- Students approved by the department are admitted under the General Regulations of the School of Graduate Studies via one of two routes:
  - From a **bachelor's degree.** 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.
  - From a **master's degree.** 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 must submit the following supporting documents with their applications:
  - One official transcript of the applicant's academic record from each university attended, complete to the time of application.
  - A statement of about 300 words, indicating the applicant's areas of interest in philosophy at the graduate level.
  - Two letters of reference from philosophy instructors, written on the appropriate forms.
  - One sample of the applicant's written work in philosophy (written in English or French); e.g., a term paper not exceeding 20 pages, double spaced. It should be as recent as possible and should provide evidence of the student's capability to study philosophy at an advanced level.
  - The results of the Graduate Record Examination (GRE) taken within the preceding 18 months. If this requirement imposes an undue burden on an overseas applicant, it can be waived at the discretion of the Graduate Coordinator.
  - 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 facility are acceptable.
- 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 Graduate Coordinator.
- Students who wish to take 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 for both the MA and PhD programs.
- The submission deadline for all complete applications and supporting documents, including letters of reference, is January 7.

Program Requirements

PhD students pursue a program of study and research approved by the department. 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. There are two main differences between these PhD options: the five-year option provides five years of funding rather than four, and has an extra year of courses. The program requirements are summarized below. Please see the departmental website for full details.

- **Course Requirements.**
  - Students with a **bachelor's degree** who are taking the five-year option must take a minimum of 6.0 FCEs in philosophy, with an average grade of at least an A-. At least 2.0 FCEs must be in the

history of philosophy and at least 2.0 FCEs must be in the problems of philosophy. To remain in good standing, students must complete 3.0 FCEs with an A- average by the end of their first academic year, and 6.0 FCEs with an A- average by the end of their second academic year.

- ○ Students with a **master's degree** who are taking the four-year option must complete a minimum of 3.0 FCEs in philosophy, with a minimum A- average by the end of their first academic year. At least 1.0 FCE must comprise history of philosophy courses and at least 1.0 must comprise problems of philosophy courses.

- All students must complete the proseminar in philosophy (PHL 1111H) during the fall session of their first year. This will count as 0.5 FCE towards the number of required courses.

- 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 topics 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 the third year of the five-year PhD, or the second year of the four-year PhD.

- **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), and so on. 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 their first year of registration, students with a **master's degree** (four-year option) should have completed all the course requirements for the degree. By the end of the second year of registration, students with a **bachelor's degree** (five-year option) 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.

Normal Program Length: 4 years full-time; 5 years direct-entry

Time Limit: 6 years full-time; 7 years direct-entry

Combined Juris Doctor/Doctor of Philosophy Program

Minimum Admission Requirements

- Entry to the program requires admission to both the PhD program in philosophy and the JD program in law. Separate applications are required.

Program Requirements

- For details, visit the Faculty of Law's website at www.law.utoronto.ca.
- Year 1: Students complete the first year of the law curriculum.
- Year 2: Students complete the remaining requirements for the JD degree and begin coursework required for the PhD. Note that some of the courses completed in fulfillment of PhD requirements will be counted for credit towards the JD and vice versa.
- By the end of Year 4, in the case of someone admitted on the basis of a master's degree, otherwise by the end of Year 5, a student should have completed any remaining course requirements for the PhD degree, satisfied the breadth requirement, and passed the qualifying exam. The candidate then begins work on the thesis.
- During Years 1 and 2, students are registered as full-time law students; subsequently, they are registered as full-time doctoral students and are eligible for graduate funding.

Normal Program Length: 4 years full-time; 5 years direct-entry

Time Limit: 6 years full-time; 7 years direct-entry

Course List

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

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

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 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 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 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
JVP 2147H   Environmental Philosophy
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 3000H   Professional Workshop
PHL 3101H   Intensive Special Course
PHL 4900H   Research Seminar

Graduate Faculty

Full Members

Ainslie, Donald - BSc, MA, PhD
Allen, Derek - PhD
Barney, Rachel - BA, PhD
Black, Deborah - BA, MA, PhD
Boyle, Joseph - BA, PhD
Brown, James - BA, MA, PhD
Clark, Philip - DPhil
Comay, Rebecca - BA, MA, PhD
Cunningham, Frank - BA, MA, PhD
Dickie, Imogen - BPhil, BA, DPhil
Dyzenhaus, David - BA, LLB, PhD
Franks, Paul - AB, MA, PhD
Gerson, Lloyd - BA, MA, PhD
Gibbs, Robert - BA, MA, PhD
Gooch, Paul William - BA, MA, PhD
Heath, Joseph - BA, MA, PhD
Hellie, Benjamin - BA, PhD
Howson, Colin - BSc, PhD
Hurka, Thomas - BPhil, BA, DPhil
Hutchinson, Douglas - BA, BPhil, DPhil
Inwood, Brad - BA, MA, PhD, FRSC
Katz, Bernard - BA, MA, PhD
King, Peter - AB, PhD
Kingwell, Mark - AB, BA, AM, MPH, PhD
Kremer, Philip - BS, PhD
Lange, Lynda - AB, MA, PhD
Matthen, Mohan - PhD
Misak, Cheryl - BA, PhD
Moreau, Stephanie Sophia - BPhil, BA, JD, PhD
Morgan, Kathryn - BA, MA, MEd, PhD
Morrison, Margaret - BA, MA, PhD
Mullin, Amy - BA, PhD
Nagel, Jennifer - DPhil
Novak, David - AB, PhD
Pickave, Martin - BA, MA, PhD
Raffman, Diana - PhD *(Director of Graduate Studies)*
Rattan, Gurpreet - AM, MPH, DPhil
Ripstein, Arthur S - BA, Phm, LLM, PhD *(Chair and Graduate Chair)*
Rozemond, Marleen - BA, PhD
Seager, William Edward - BA, MA, PhD
Sedivy, Sonia - BA, PhD
Shen, Vincent Tsing-song - PhD
Smith, Brian Cantwell - BS, MS, PhD
Stefanovic, Ingrid - BA, MA, PhD
Tenenbaum, Sergio - MA, PhD
Thompson, Evan - AB, MA, PhD
Thompson, Paul - BA, MA, PhD
Walsh, Denis - BA, MPH, PhD
Whiting, Jennifer - BA, MA, PhD
Wilson, Jessica Marie - BM, PhD
Yi, Byeong-Uk - PhD

Members Emeriti

Canfield, John - BA, MA, PhD
De Sousa, Ronald - BA, PhD
Goldstick, Daniel - BA, BPhil, DPhil
Gombay, Andre - BA, BPhil, MA, PhD
Hacking, Ian - BA, BA, MA, PhD
Robinson, Thomas - BA, BLitt, MA
Sumner, L Wayne - BA, MA, PhD
Urquhart, Alasdair - MA, MA, PhD

Associate Members

Charlow, Nathan - BA, MA
Hubner, Karolina - BA, MA, PhD
Schloesser, Ulrich - PhD
Sepielli, Andrew - AB, JD, PhD
Smolin, Lee - PhD
Weisberg, Jonathan - PhD
Zuidervaart, Lambert - MPH, PhD

Physical and Environmental Sciences

Faculty Affiliation

University of Toronto Scarborough

Degree Programs Offered

Environmental Science – MEnvSc, PhD
Fields (MEnvSc):
Biophysical Interactions in Terrestrial and Aquatic
Systems
Concentrations (PhD):
Contaminant Flux
Urban Geoscience
Remediation and Restoration of Degraded
Environmental Systems
Great Lakes Ecosystems
Climate Change and the Environment
Environmental Science in Transitional Economies

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/~physsci
E-mail: dpes-mesc-program@utsc.utoronto.ca *or*
dpes-phd-program@utsc.utoronto.ca
Telephone: (416) 287-7205
Fax: (416) 287-7204

Department of Physical and Environmental Sciences
University of Toronto Scarborough
1265 Military Trail
Toronto, Ontario M1C 1A4
Canada

Degree Programs

Environmental Science

Master of Environmental Science

The department offers a 12-month coursework Master of Environmental Science (MEnvSc) degree program. Courses within the program fall within the designated field of study: Biophysical Interactions in Terrestrial and Aquatic Systems. Although the program base is broad, a major focus for training professionals is understanding the flux of contaminants through surface and sub-surface environments and the methods/solutions needed to remediate contaminated or dam-

aged environmental systems. The program is committed to the development of well-trained practitioners in environmental science to meet the needs primarily of industry and government.

The MEnvSc program offers three enrolment options:

- Research
- Internship
- Part-time studies

Minimum Admission Requirements

- Students are expected to satisfy all requirements for entry into the School of Graduate Studies at the University of Toronto within a competitive selection process. Applicants educated outside Canada should pay particular attention to the English language competency requirements.

- An appropriate bachelor's degree from a recognized university, either in science or engineering, with a minimum mid-B grade average in the last two years of the undergraduate program. Ideal applicants will have a science background consisting of two half courses or one full course in each of chemistry, physics, calculus, and biology.

- Applicants must submit a written statement explaining their objectives for entering the program and the suitability of their background. Appropriate post-graduate work experience, such as in industry, will be considered as part of the admission application.

Program Requirements

- In all enrolment options, coursework consists of 5.5 full-course equivalents (FCEs).

- It is anticipated that students will complete all instructional courses in two sessions and will complete field and research-focused courses as well as the internship during the summer.

Normal Program Length: 3 sessions full-time; 6 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

Course List

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	Air and Water Quality Sampling and Monitoring
EES 1104H	Microorganisms and the Environment
EES 1105H	Soil Contamination Chemistry
EES 1106H	Environmental Challenges in Urban Areas

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   The Dynamics of Contaminant Dispersal in
                Fluids
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   Environmental Tracers
EES 1127H   Geomicrobiology and Biogeochemistry
EES 1128H   Biophysical Interactions in Managed
                Environments
EES 1129H   Brownfields Redevelopment
EES 1130H   Ontario BioGeospheres Field Course
EES 1701H   Environmental Legislation and Policy
EES 1704H   Environmental Risk Assessment

Doctor of Philosophy

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 physical sciences, biological sciences, engineering, forestry and social sciences. Research is clustered into six major concentrations:

1. Contaminant Flux Through Surface and Subsurface Environmental and Biochemical Cycles
2. Urban Geoscience
3. Remediation and Restoration of Degraded Environmental Systems
4. Great Lake Ecosystems
5. Climate Change and the Environment
6. Environmental Science and Transitional Economies

Minimum Admission Requirements

Students may be accepted into the PhD program through one of three routes:

1. 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.

2. 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.

3. In the case of exceptional students, by direct entry; that is, after completing an honours BSc degree in a bachelor's program in a related discipline with a minimum University of Toronto average of A- or equivalent.

Program Requirements

- The execution of an original piece of research in environmental science carried out under faculty supervision and presented in thesis form. The program requires successful defence of a thesis proposal, a departmental oral examination of the completed thesis, and a Doctoral Final Oral Examination carried out under the auspices of the School of Graduate Studies involving examination by an appropriate at-arms-length examiner.

- A total of 2.0 full-course equivalents (FCEs) as follows: a mandatory 0.5 FCE (ENV 2200H *Advanced Seminar on Environmental Research*) plus 1.5 FCEs from an approved course list in the graduate program. The courses are required to provide background for the student's research. Courses selected must be approved by the Graduate Chair/Associate 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 Department of Physical and Environmental Sciences (DPES) and outside DPES that can be considered for the PhD degree (see examples in the Course List section below) as part of their 1.5 FCEs credits for the degree. However, all courses for PhD degree credit must be approved by the Graduate Chair/Associate Graduate Chair.

- The degree program has been designed so that it can be completed within:
  - **four years** for students who have completed a related master's degree
  - **five years** from the start of enrolment in the MSc program for students transferring from the master's program
  - **five years** for direct-entry students from a bachelor's program

- Progress through the PhD program for students admitted with a master's degree:
  - Year I: complete coursework

- ○ Year II: complete and defend thesis proposal; start thesis research
- ○ Year III: research and thesis writing
- ○ Year IV: thesis writing and defense

Normal Program Length: 4 years full-time; 5 years direct-entry

Time Limit: 6 years full-time; 7 years direct-entry

Course List

Core Course

EES 2200H   Advanced Seminar in Environmental Science

The following are courses that are offered within the Department of Physical and Environmental Sciences. With the approval of the Graduate Chair/Associate Graduate Chair, relevant courses from other graduate departments can be applied to the required 1.5 FCEs.

Please note that not all courses are offered every year.

Elective Courses

EES 1102H   Analytical Chemistry for Geoscientists
EES 1103H   Air and Water Quality Sampling and Monitoring
EES 1104H   Microorganisms and the Environment
EES 1105H   Soil Contamination Chemistry
EES 1106H   Environmental Challenges in Urban Areas
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   The Dynamics of Contaminant Dispersal in Fluids
EES 1121H   Modeling the Fate of Organic Chemicals in the Environment
EES 1122H   Global Environmental Security and Sustainable Development
EES 1126H   Environmental Tracers
EES 1127H   Geomicrobiology and Biogeochemistry
EES 1128H   Biophysical Interactions in Managed Environments
EES 2201H   Advanced Readings in Environmental Science

Graduate Faculty

Full Members

Abbatt, Jonathan - BSc, PhD
Allen, D Grant - BASc, MASc, PhD
Andrade, Maydianne - BSc, MS, PhD
Archontitsis, Georgios - BSc, MSc, DSCA
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
Donaldson, D. James - PhD
Edwards, Elizabeth - BEng, PhD
Evans, Gregory - PhD
Eyles, Nicholas - BSc, MSc, PhD, DSc
Ferris, Grant - BSc, PhD
Fulthorpe, Roberta - BSc, MSc, PhD *(Chair)*
Gough, William - BSc, MSc, PhD
Howard, Kenneth - BSc, MSc, PhD
Isaac, Marney Elizabeth - BS, MES, PhD
Kraatz, Heinz-Bernhard - BA, MC, PhD
Kronzucker, Herbert - PhD
Malcolm, Jay - BSc, MSc, PhD
Miall, Andrew - BSc, PhD
Mitchell, Carl - PhD
Sherwood Lollar, Barbara - PhD
Simpson, Andre - BSc, PhD
Simpson, Myrna - BS, DPhil
Vanlerberghe, Greg - BSc, MSc, PhD
Wania, Frank - MPH, PhD
Wells, Mathew - BS, DPhil
Wortmann, Ulrich - BSc, MSc, PhD

Members Emeriti

Williams, D Dudley - DipEd, BSc, MSc, PhD, DSc

Associate Members

Bidleman, Terry - BSc, PhD
Muir, Derek - BSc, MSc, PhD

Physical Therapy

Faculty Affiliation

Medicine

Degree Programs Offered

Physical Therapy – MScPT

Overview

The **Master of Science in Physical Therapy** (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 MScPT program is also accredited by the Commission on Accreditation in Physical Therapy Education of the American Physical Therapy Association, enabling graduates to apply for licensure in the United States.

The **Master of Science in Physical Therapy, Advanced-Standing Option** is a professional graduate degree program that allows eligible physical therapists with a BScPT from a Canadian university to acquire the master's degree in an online environment with two on-campus residencies. There is a strong focus on research and best practices integrated throughout the program.

Contact and Address

Web: www.physicaltherapy.utoronto.ca
E-mail: 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

Degree Programs

Physical Therapy

Master of Science in Physical Therapy

Minimum Admission Requirements

24-Month Program

- Applicants to the 24-month MScPT program 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 (1.0 full-course equivalent [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).
- Facility 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) at www.ouac.on.ca/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 www.physicaltherapy.utoronto.ca and the ORPAS website for additional information regarding application document submissions (e.g., confidential assessment forms, prerequisite form, and prerequisite course descriptions).

Advanced-Standing Option

- Applicants to the 12-month MScPT Advanced-Standing Option who are eligible physical therapists will be considered if they have completed an appropriate BScPT program at a Canadian university with a minimum mid-B average in the final year.
- Applicants must be registered as independent practitioners with a relevant physiotherapy

regulating body and/or have completed the PCE and are awaiting results.

- Refer to the departmental website for additional information.

Program Requirements

24-Month Program

- The MScPT is a two-year, 18.5-FCE program of continuous, full-time study.
- Included within the program structure are 28 weeks of full-time clinical internships.
- Students are required to complete all required courses, as listed below.

Advanced-Standing

- Complete the program in an online environment with two mandatory on-campus residencies.
- Attend unit 6 (0.75 FCE) and unit 12 (1.0 FCE) in on-campus residency periods.
- Complete unit 10, a group research project, via online format (0.75 FCE).
- Complete an elective course (0.5 FCE) either online or on campus.
- For information on units of instruction, please visit www.physicaltherapy.utoronto.ca/admissions/advanced-standing.

Normal Program Length: 6 sessions full-time; 3 sessions advanced-standing

Time Limit: 3 years full-time; 1 year advanced-standing

Course List

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)

Selective 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.)

Graduate Faculty

Full Members

Agur, Anne - BSc, MSc, PhD
Berg, Katherine - BPT, BSc(PT), MSc, PhD *(Chair and Graduate Chair)*
Brooks, Dina - BSc(PT), MSc, PhD
Cott, Cheryl - DIPP, BPT, MSc, PhD
Davis, Aileen - BSc(PT), MSc, PhD
Hirdes, John - MD
Jaglal, Susan - BSc, MSc, PhD
McIlroy, William - BSc, PhD
Morshead, Cindi Marie - BS, PhD
Perry, Stephen - BS, MSc, PhD
Wright, Virginia - BSc, MSc
Yoshida, Karen - BSc, BPHE, MSc, PhD
Zabjek, Karl - BSc, MClSc, PhD

Members Emeriti

Verrier, Mary (Molly) - DipOT, MHSc

Associate Members

Davies, Robyn - DIPP, BHSc(P/T)
Ellerton, Cindy - BSc(PT), MSc
Evans, Catherine - BSc, MSc, PhD *(Coordinator of Graduate Studies)*
Gibson, Barbara - MSc, BMR(P/T), PhD
Hunter, Judith - BPT, MSc, PhD
Koeberle, Paulo - BS, PhD
Landry, Michel - BSc(PT), MSc(PT), PhD
Longmuir, Patricia - BPHE, MSc
Mathur, Sunita - BSc(PT), MSc(PT), PhD
McEwen, Sara - BSc(PT), BSc(PT), MS, MSc, PhD
Mori, Brenda - BSc(PT), MSc
Nixon, Stephanie - BHSc(P/T), BA, PhD
Nussbaum, Ethne - BSc, PhD
O'Brien, Kelly - BSc(PT), BS, PhD
Razmjou, Helen - BSc(PT), MSc(PT)
Salbach, Nancy - BSc(PT), BS, MSc, PhD
Switzer-Mcintyre, Sharon - BSc, BPHE, PhD
Waugh, Esther - BSc(PT), BSc(PT), MSc, MSc, PhD

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

Physics

Faculty Affiliation

Arts and Science

Degree Programs Offered

Physics – MSc, PhD

Collaborative Programs

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

1. **Astrophysics**
   - Physics, MSc
2. **Biomedical Engineering**
   - Physics, MSc, PhD
3. **Environmental Studies**
   - Physics, MSc, PhD
4. **Geology and Physics**
   - Physics, MSc, PhD
5. **Optics**
   - Physics, MSc

Overview

The Department of Physics offers graduate programs leading to the **Master of Science** and the **Doctor of Philosophy** degrees. The department carries out research in experimental and theoretical physics in the following fields: atmospheric physics, geophysics, quantum optics, condensed matter physics, subatomic physics and astrophysics, and biophysics. The department has close ties with the Canadian Institute for Theoretical Astrophysics (CITA). This association enables our students to work and consult with leading theorists who are appointed to, or who are visiting, CITA.

Students are admitted under the General Regulations of the School of Graduate Studies. The department provides financial support for one year of the MSc and four years of the PhD program (five years for direct-entry PhD).

Contact and Address

Web: www.physics.utoronto.ca
E-mail: 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

Degree Programs

Physics

Master of Science

Minimum Admission Requirements

- An appropriate bachelor's degree with a final-year average equivalent to at least a University of Toronto mid-B.
- Proof of English-language facility for applicants whose first language is not English.

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]) and a Research Report, which consists of a 6000-series research course appropriate to the field of specialization (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 specialization (1.0 FCE), and a Research Project, which consists of a 7000-series seminar course appropriate to the field of specialization (1.0 FCE) and PHY 3400Y (1.0 FCE).
  - **Option 3:** Coursework plus MSc Research Thesis: graduate lecture courses (2.0 FCEs) and a thesis. Selection of the program is made by the student and faculty advisor in consultation with the Associate Chair.
- All MSc students are expected to attend the weekly general colloquium conducted by the department.
- The MSc program is full-time.
- Residence requirement is one year.

Normal Program Length: 3 sessions full-time

Time Limit: 3 years full-time

Doctor of Philosophy

Minimum Admission Requirements

- An appropriate University of Toronto master's degree with an average of at least B+ or demonstrated comparable research competence.
- Proof of English facility for applicants whose first language is not English.
- Outstanding applicants may be considered directly from undergraduate programs. Normally, these

applicants will have an undergraduate average of A or higher.

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 4.0 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 graduate lecture courses towards their PhD course requirement.
- Complete a qualifying oral examination. Students entering the PhD program with a master's degree must complete the qualifying examination within eight months; students entering with a bachelor's degree must complete the 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.
- All PhD students are expected to attend the weekly general colloquium conducted by the department.
- The PhD program is full-time.

Normal Program Length: 4 years full-time; 5 years direct-entry

Time Limit: 6 years full-time; 7 years direct-entry

Course List

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	Advanced Classical Optics
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 1493H	Seismology
PHY 1494H	Geophysical Imaging: EM and Potential Fields
PHY 1495H	Geophysical Research Methods
PHY 1496H	Experimental Applied Geophysics
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

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 2601H	Special Topics in Geophysics I
PHY 2602H	Special Topics in Geophysics II
PHY 2603H	Inverse Theory
PHY 2604H	Planetary Dynamo Theory
PHY 2605H	Exploration Seismology
PHY 2609H	Planetary Physics
PHY 2701H	Biological Physics
PHY 2702H	Molecular Biophysics
PHY 2703H	Cellular Biological Physics
PHY 2705H	Special Topics in Biological Physics I
PHY 2706H	Special Topics in Biological Physics II
JGP 4170H	Geotectonics

Report Course for MSc Students

PHY 3400Y[+]	Selected Topics in Physics

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

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

Graduate Faculty

Full Members

Abbatt, Jonathan - BSc, PhD
Bailey, David - BSc, PhD
Bailey, Richard - BSc, PhD
Barzda, Virginijus - BS, DSc
Bond, J Richard - BSc, MS, PhD, FRSC, Fell Royal Society London
Burch, Kenneth - BSc, MS, PhD
Chan, Hue Sun - BSc, MA, PhD
Code, Richard - BSc, AM, PhD
Desai, Rashmikant - BSc, PhD
Dhirani, Al-Amin - MSc, PhD
Donaldson, D. James - PhD
Drummond, James - BA, MA, DPhil
Dyer, Charles - BS, MSc, PhD
Edwards, Richard - BSc, PhD, ARCS
Gradinaru, Claudiu - PhD
Holdom, Bob - BSc, MA, PhD
James, Daniel - BA, PhD
John, Sajeev - PhD
Jones, Dylan - AB, SM, PhD
Joy, Michael - BSc, MASc, PhD
Julian, Stephen - BSc, MS, PhD *(Associate Chair, Graduate Studies)*
Kee, Hae-Young - PhD
Key, Anthony - MA, DPhil
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 *(Chair and Graduate Chair)*
Luste, George - BA, PhD
Marjoribanks, Robin - BSc, MS, MSc, PhD
Martin, John - PhD

McMillen, David - BSc, MS, PhD
Milkereit, Bernd - DrRerNat
Miller, R J Dwayne - BSc, PhD
Milstein, Josh - BS, PhD
Mitrovica, Jerry - BASc, MSc, PhD
Moore, GW Kent - BSc, PhD
Morris, Stephen - BSc, MSc, PhD
Murray, Norman - BSc, PhD
Netterfield, C. Barth - BSc, PhD
Norwich, Kenneth - MSc, 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 - PhD
Poppitz, Erich - PhD
Repka, Joseph - BSc, PhD
Ryu, William - AB, PhD
Savard, Pierre - PhD
Shepherd, Theodore - BSc, PhD
Sinervo, Pekka - BSc, PhD
Sipe, John - BSc, MSc, PhD
Stanley, Sabine - BSc, PhD
Steinberg, Aephraim - PhD
Strong, Kimberly - PhD
Teuscher, Richard - BSc, MSc, PhD
Thompson, Christopher - BSc, PhD
Thywissen, Joseph - AM, PhD
Trischuk, William - PhD
Van Driel, Henry - BSc, MSc, PhD
Walker, Kaley - BSc, PhD
Wei, John - PhD
Wells, Mathew - BS, DPhil
Zilman, Anton - BSc, MSc, PhD

Members Emeriti

Drake, Thomas - BSc, MSc, PhD
Dunlop, David - MA, PhD
Litherland, Albert - BSc, PhD, Fell Royal Society London
Logan, Robert - BSc, PhD
May, Albert - BA, MA, PhD
Perz, John - BASc, MASc, PhD
Rowe, David - BA, MA, DPhil
Walker, Michael - BEng, DPhil
West, Gordon - BASc, MA, PhD
Wong, Samuel - BA, MS, PhD

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

Physiology

Faculty Affiliation

Medicine

Degree Programs Offered

Physiology – MSc, PhD

Collaborative Programs

The following collaborative programs 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. **Neuroscience**
   - Physiology, MSc, PhD
5. **Resuscitation Sciences**
   - Physiology, MSc, PhD

Overview

The Department of Physiology offers graduate programs leading to the **Master of Science** and **Doctor of Philosophy** degrees. 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
E-mail: 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

Degree Programs

Physiology

Master of Science

Minimum Admission Requirements

- Admission is based on academic record, an essay summarizing background strengths and scientific aims, and at least two confidential letters of reference.
- An appropriate bachelor's degree from a recognized university with a final-year average of at least B+ and with courses such as 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 facility in the English language through the successful completion of 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.

  Other English proficiency tests are acceptable. Please consult the 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 of course requirements.
- Present and defend a research thesis acceptable to the graduate department.

- Do one of the following after 12–18 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.

Normal Program Length: 6 sessions full-time

Time Limit: 3 years full-time

Doctor of Philosophy

Minimum Admission Requirements

- Admission is based on academic record, a statement summarizing background strengths and scientific aims, and at least two confidential letters of reference.
- Students may be admitted via one of the following routes:
  - After completion of an appropriate MSc degree program with an average of at least B+ from a recognized university.
  - Through transfer from the University of Toronto MSc program.
  - 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.
- Applicants should have taken courses such as 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 facility in the English language through the successful completion of 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

Other English proficiency tests are acceptable. Please consult the website for departmental standards.

Program Requirements

- All students are required to 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. Students transferring from the MSc in physiology are required to complete 1.5 FCEs since these students will have already fulfilled 1.0 FCE in the MSc.
- 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 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.

Normal Program Length: 4 years full-time; 5 years direct-entry; 5 years transfer-from-master's

Time Limit: 6 years full-time; 7 years direct-entry; 7 years transfer-from-master's

Course List

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
JYG 1555H Advanced Topics: Cellular and Molecular Neurobiology
PSL 1000H[0] MSc Seminars in Physiology (Credit/No Credit)
PSL 1024H Advanced Topics: Neuroendocrinology
PSL 1026H Advanced Topics: Experimental Cell Physiology
PSL 1034H Advanced Topics: Metabolic Disorders
PSL 1036H Advanced Topics: Respiration
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 1075H Biology in Time
PSL 1080H[+] Advanced Topics: Investigative Developmental Physiology
PSL 2000H[0] PhD Seminars in Physiology (Credit/No Credit)

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 1420H Reproductive Physiology
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 1454H Physiological Instrumentation and Electronics

+ 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.

PSL 1462H Molecular Aspects of Cardiovascular Function
PSL 1472H Sleep Physiology and Chronobiology

Graduate Faculty

Full Members

Adamson, Susan - BSc, MSc, MD, PhD
Anderson, Gerald - BSc, MSc, PhD
Backx, Peter - DrMedVet, PhD, PhD
Bear, Christine - BSc, MSc, PhD
Belik, Jaques - MD
Belsham, Denise - PhD *(Graduate Coordinator)*
Bocking, Alan - MD
Bolz, Steffen-Sebastian - MD, DrMed *(Acting Chair and Graduate Chair, July–Dec. 2012)*
Boonstra, Rudy - BSc, PhD
Broussard, Dianne - PhD
Brown, Theodore - BSc, PhD
Brubaker, Patricia - BSc, PhD
Caniggia, Isabella - MD, PhD
Carlen, Peter - MD
Casper, Robert - MD
Challis, John - BSc, PhD, DSc, FRSC
Charlton, Milton - BSc, MSc, PhD
Dostrovsky, Jonathan - BSc, MSc, PhD
Duffin, James - BASc, MASc, PhD
Eubanks, James - BSc, AA, PhD
Fantus, George - BSc, MDCM
Feng, Zhong Ping - PhD
Frankland, Paul - MA, PhD
Gaisano, Herbert - BS, MD
Giacca, Adria - MD
Gramolini, Anthony - BSc, MSc, PhD
Hare, Gregory - MD, PhD
Harrison, Robert - PhD, DSc
Heximer, Scott - PhD
Horner, Richard - BSc, PhD
Husain, Mansoor - MB, MD
Hutchison, William - BSc, MSc, PhD
Jankov, Robert - MB
Jia, Zhengping - PhD
Jin, Tianru - PhD
Jones, Nicola - MD
Josselyn, Sheena - MA, PhD
Jurisicova, Andrea - PhD
Kavanagh, Brian - BSc, BSc, MBChB, MBChB
Klip, Amira - ScD
Kuebler, Wolfgang - DrMed, PhD
Lambe, Evelyn - AB, MSc, PhD
Lewis, Gary - BCh, MBChB
Liu, Fang - PhD
Liu, Mingyao - MSc, MD
Liu, Peter - MD
Lye, Stephen - BSc, PhD
MacDonald, John - BSc, PhD
Mackay, William - BSc, MSc, PhD
Matthews, Stephen - BSc, DPhil *(Chair)*
McNamara, Patrick - MB
Miller, Freda - BSc, PhD
Mills, Linda - PhD
Monnier, Philippe - MBA, PhD

Mount, Howard - BSc, PhD
Ng, Dominic - MD
Orser, Beverley - MD
Palmert, Mark - MD
Pang, Cho - BSc, MSc, PhD
Pennefather, Peter - BSc, PhD
Post, Martin - PhD
Quaggin, Susan Elizabeth - MD
Rocheleau, Jonathan - BSc, PhD
Roder, John - PhD
Rosenblum, Norman - MD
Salter, Michael - MD, PhD
Schlichter, Lyanne - BSc, MSc, PhD
Seltzer, Ze'ev - DMD, BMedSc
Sessle, Barry - BS, MSD, BDS, PhD
Skinner, Frances - PhD
Sole, Michael - BSc, MD
Stanley, Elise - PhD
Sugita, Shuzo - PhD, PhD
Sweezey, Neil - BSc, MD, MD
Tanswell, Alan - BS, MBBS, MBBS
Thomas, Scott - BSc, MSc, PhD
Trimble, William - BSc, PhD
Tweed, Douglas - MD, PhD, PhD
Tymianski, Michael - BA, MD, PhD
Verrier, Mary (Molly) - DipOT, MHSc
Volchuk, Allen - BSc, PhD
Vranic, Mladen - MD, DSc
Wang, Lu-Yang - PhD
Wheeler, Michael - BSc, PhD
Wilson, Gregory - MSc, MD
Wittnich, Carin - MSc, DVM
Wojtowicz, J. Martin - BSc, PhD *(Graduate Coordinator)*
Zhen, Mei - PhD
Zhuo, Min - MS, PhD

Members Emeriti

Atwood, Harold - BA, MA, PhD, PhD, DSc, DSc, FRSC
Kwan, Hon - BASc, MSc, PhD
Norwich, Kenneth - MSc, PhD

Associate Members

Chauhan, Vijay - MD
Cox, Brian - BSc, MSc, PhD
Fisher, Joseph - MD
Lam, Tony - BS, DPhil
Mazer, Cyril David - MD
Min, Jinrong - PhD
Ni, Heyu - MSc, MD, PhD
Pausova, Zdenka - MD
Rogers, Ian - MSc, PhD
Sun, Hong-Shuo - MSc, DrMed, DPhil
Wang, Qinghua - DSc
Zhang, Haibo - MSc, PhD

Political Science

Faculty Affiliation

Arts and Science

Degree Programs Offered

Political Science – MA, JD/MA, PhD, JD/PhD

Collaborative Programs

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

1. **Asia-Pacific Studies**
   - Political Science, MA
2. **Diaspora and Transnational Studies**
   - Political Science, MA, PhD
3. **Dynamics of Global Change**
   - Political Science, 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 **Master of Arts** 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 Theory, Political Science, and Political Economy of International Development. Students whose interests are primarily normative and philosophical may choose the field of Political Theory.

The **Combined Juris Doctor/Doctor of Philosophy** program enables students to acquire a PhD in Political Science as well as a JD in Law.

The **Doctor of Philosophy** program offers courses in four major fields of Political Theory, Canadian Politics, International Relations, Comparative Politics, and in the two minor fields of Development Studies and Public Policy.

Contact and Address

Web: http://politics.utoronto.ca/graduate
E-mail: poligrad@utoronto.ca
Telephone: (416) 978-2017
Fax: 416-978-5566

Department of Political Science
University of Toronto
Room 3025, 100 St. George Street
Toronto, Ontario M5S 3G3
Canada

Degree Programs

Political Science

Master of Arts

Minimum Admission Requirements

- 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 for study in the field of Political Economy of International Development must provide evidence of a satisfactory background in political science and 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 website http://politics.utoronto.ca/graduate/application-procedures.

Program Requirements

- Minimum of 4.0. full-course equivalents (FCEs). See the specific requirements of each field below.
- Programs in which additional requirements or prerequisites must be met may take longer than three sessions to complete.

- The equivalent of 1.0 FCE may be taken in a cognate discipline with the approval of the department.
- All students, except those who declare Political Theory as a field or who are enrolled in collaborative programs with a similar requirement, must complete a full-year research seminar course and its required assignment of a 30- to 50-page major research paper. POL 2810Y and POL 2811Y are the two seminars currently offered which meet this requirement.
- The MA program may be taken on a part-time basis.

Field Political Theory

- 2.0 FCEs in Political Theory.
- At least 1.0 FCE in an area outside Political Theory.
- All courses must be chosen in consultation with the MA supervisor.

Field Political Science

- At least 0.5 FCE in Political Theory, which can be either the 0.5 FCE offered by the department specifically for this purpose (POL 2040H) or any other theory course.
- At least 0.5 FCE in statistics or research design. POL 2502Y, POL 2503H, and POL 2504H are among the courses currently offered by the department which meet this requirement.

Field Political Economy of International Development (PEID)

- JPE 2408Y.
- 0.5 FCE in economics or equivalent, normally ECO 2700H, selected from the economics course list (see list on the departmental website in the PEID program description).
- 1.0 FCE taken from the approved political science course list.
- To fulfil the Political Economy requirement, students must complete one of the *MA Research Seminars*, POL 2810Y or POL 2811Y, with political economy as the focus of the major research paper.
- The remaining 0.5 FCE can be a course from any of the three lists.

Normal Program Length: 3 sessions full-time

Time Limit: 3 years full-time; 6 years part-time

Combined Juris Doctor/Master of Arts in Law and Political Science

Effective September 2010: admissions have ceased for the JD/MA in Law and Political Science.

The combined JD/MA in Law and Political Science allows for the completion of both degrees in three years, rather than the four that would be required to complete the degrees separately.

Minimum Admission Requirements

- Students must be admitted to both the JD program in the Faculty of Law and the MA program in Political Science.

Program Requirements

- Year 1: complete the first year of law in the combined program.
- Years 2 and 3: complete credits towards both JD in Law and MA in Political Science degrees.
- Those interested in the combined program must also apply to the collaborative master's program in International Relations. If accepted, students must complete the requirements for both the combined program and the collaborative program.
- Students enrolled in both the combined JD/MA program and the collaborative master's program in International Relations will complete the following requirements in Years 2 and 3:
  - JHP 2231H, ECO 2302H, LAW 252H, 1.0 FCE in International Relations elective courses, and 1.5 FCEs in Political Science courses
- For the minimum period of registration, please refer to the individual entries for the two degrees.

Time Limit: 4 years full-time

Combined Juris Doctor/Doctor of Philosophy in Law and Political Science

The Combined JD/PhD in Political Science and Law allows students to complete both degrees at least one year sooner than it would take to complete the degrees separately.

Minimum Admission Requirements

Students must be admitted to both the Faculty of Law and the Doctor of Philosophy program.

Program Requirements

- Year 1: complete the first year of law in the combined program.
- Year 2: complete a year in political science.
- Years 3 and 4: two years in law.
- Complete the requirements of the PhD program, including a thesis.

Time Limit: 6 years full-time; 7 years direct-entry

Doctor of Philosophy

Minimum Admission Requirements

- Applicants may be admitted via one of three routes:
  - Excellent students who have completed an MA degree in Political Science (or its equivalent) by the time of enrolment.

- ○ 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.
  - ○ 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.
- Applicants from both levels 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 at http://politics.utoronto.ca/graduate/application-procedures.

Program Requirements

- PhD students will declare two fields:
  - ○ Field 1 will be one of Canadian Politics, Comparative Politics, International Relations, or Political Theory. The normal course requirement for Field 1 will be 2.0 full-course equivalents (FCEs).
  - ○ Field 2 will be one of Canadian Politics, Comparative Politics, International Relations, Political Theory, Development Studies, or Public Policy. The normal course requirement for Field 2 will be 1.5 FCEs.
- The Director of Graduate Studies may exercise discretion to waive the Field 2 requirement for students enrolled in collaborative programs.
- All PhD students who do not designate Political Theory as Field 1 are required to complete 0.5 graduate-level FCE in Political Theory.
- All PhD students are required to complete 0.5 FCE in qualitative methods. This requirement may be waived on the basis of MA work.
- All PhD students who do not designate Political Theory as Field 1 are required to 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.
- **Field Examinations.** All PhD students are required to 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 of the PhD program. A student who fails to achieve a grade of at least A- is permitted one opportunity to retake the examination. If, 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 the beginning of the Year 3 (fourth for direct-entry applicants) students must (a) have established a thesis committee of three faculty members including a thesis supervisor, and (b) have completed a thesis proposal of approximately 25 pages for submission to the thesis committee. 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 the Year 5 (in the case of those admitted from an MA) or the Year 6 (in the case of those admitted from a BA).
- **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 (or Year 4 for those entering directly from an undergraduate program).
- All PhD students must achieve an A- average in coursework and an A- in their field examinations to remain in good standing.

Students with MA

- 2.0 to 5.0 FCEs depending on the student's relevant background in the fields or area of choice. All PhD students are required to have at least 0.5 graduate FCE in political theory. 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. Most students who enter from the MA will take the equivalent of 4.0 FCEs to satisfy program requirements; all PhD students must take a minimum of 2.0 FCEs with the department after entering the PhD program.

- Minimum of three sessions in residence.

Students with BA

- 6.0 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 field requirements as described for those entering the PhD program with an MA.

- Minimum of six sessions in residence.

Normal Program Length: 4 years full-time; 5 years direct-entry; 5 years transfer-from-master's

Time Limit: 6 years full-time; 7 years direct-entry; 7 transfer-from-master's

Course List

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. **Theory Intensive Reading Courses are denoted with an asterisk (*).**

Political Theory

POL 2000Y	Comparative Studies in the History of Political Thought (core course)
POL 2001Y	Problems of Political Community
POL 2006H	Studies in Modern Political Theory*
POL 2007H	Twentieth-Century Political Thought*
POL 2008Y	The Political Theory of G. W. F. Hegel*
POL 2010H	Democratic Theory
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 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
POL 2029H	Sovereignty
JPJ 2029H	Religion and the Liberal State: the Case of Islam
POL 2030H	The Spirit of Democratic Citizenship
POL 2032H	Judgement in Law and Politics
JPJ 2036Y	Comparative Constitutionalism: Rights and Judicial Review
POL 2037H	Law, Religion, and Public Discourse
JPD 2037Y	Post-Modern and Contemporary Thought
POL 2038H	Pluralism, Justice and Equality: Imaginaries of Global Justice and Global Democracy
POL 2040H	Horizons of Political Reflection
POL 2041Y	Politics of Origin
JPJ 2047H	Comparative Constitutional Law and Politics
POL 2057Y	Markets, Justice and the Human Good
JPR 2057H	Democracy and the Secular

POL 2062H	Contemporary Indigenous Theory and Political Thought
POL 2083H	Cosmopolitanism*
POL 2127Y	Multiculturalism in Canada
POL 2212H	Human Rights Politics and International Relations
POL 2226H	Ethics and International Relations
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 2110H	The Politics of Public Monies
POL 2127Y	Multiculturalism in Canada
JPJ 2133H	Constitutional Courts and Constitutional Rights
POL 2139H	The Canadian Welfare State in Comparative Perspective
POL 2190Y	Topics in Canadian Politics I
POL 2191Y	Topics in Canadian Politics II
POL 2317H	Politics and Policy Analysis
HAD 5011H	Canada's Health System and Health Policy
HAD 5765H	Case Studies in Health Policy

International Relations

POL 2200Y	International Politics (core course)
DGC 1000H	Core Issues in the Dynamics of Global Change
DGC 2000H	Special Topics in the Dynamics of Global Change
DGC 2001H	Special Topics in the Dynamics of Global Change
DGC 2002H	Special Topics in the Dynamics of Global Change
DGC 2003H	Special Topics in the Dynamics of Global Change
JHP 1631H	Intelligence and International Relations
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 2202H	Advanced Topics in International Political Economy
POL 2205H,Y	Topics in International Politics I
POL 2206H,Y	Topics in International Politics II
POL 2207H	Topics in International Politics III
POL 2210Y	Elements of United States Foreign Policy
POL 2211H	International Political Economy of Finance
POL 2212Y	Human Rights Politics and International Relations
POL 2213H	Global Environmental Politics
POL 2214H	Global Health in a Changing World
POL 2216Y	The Military Instrument of Foreign Policy
POL 2218H	Political Economy of International Trade
POL 2226H	Ethics and International Relations
JBP 2230H	Topics in International Politics
POL 2234H	Globalization, Internationalization, and Public Policy

POL 2235H	Development, International Relations, Globalization: Through the Lens of a Gender
POL 2240Y	The Geopolitics of Information and Communication Technologies
POL 2256Y	The G8, G20, and Global Governance

Comparative Politics

POL 2700Y	Comparative Politics (core course)
JHP 1289Y	Twentieth-Century Ukraine
JPJ 2036H	Comparative Constitutionalism: Rights and Judicial Review
JPJ 2047H	Comparative Constitutional Law and Politics
POL 2062H	Contemporary Indigenous Theory and Political Thought
POL 2139H	The Canadian Welfare State in Comparative Perspective
POL 2202H	Advanced Topics in International Political Economy
POL 2234H	Globalization, Internationalization, and Public Policy
POL 2302H	Topics in United States Government and Politics
POL 2307H	Political Economy of Technology: from the Auto-Industrial to the Information Age
POL 2308Y	Politics of Transition in Eastern Europe
JPA 2310H	Democracy and Identity in Asia
JPA 2320H	Asia and the New Global Economy
POL 2313Y	Comparative Political Parties and Elections
POL 2316H	Women and Politics
POL 2317H	Politics and Policy Analysis
POL 2318H	Comparative Public Policies: Selected Areas (core course)
POL 2321H,Y	Topics in Comparative Politics I
POL 2322H,Y	Topics in Comparative Politics II
POL 2323Y	Multilevel Politics: The European Union in Comparative Perspective
POL 2324H	Ethnonationalism and State-Building: The Communist and Post-Communist Experience (exclusion to POL 2304Y)
POL 2326H	Democracy and Dictatorship
POL 2337H	Government Law and Politics in Russia
POL 2338H	Innovation and Governance
POL 2341H	Topics in Ukrainian and Post-Soviet Politics
POL 2344H	Politics of Independent Ukraine
POL 2351H	Contentious Politics
POL 2361Y	Globalization and Indigenous Politics
POL 2372H	The Comparative Political Economy of Industrial Societies
POL 2391H,Y	Topics in Comparative Politics III
POL 2392H,Y	Topics in Comparative Politics IV
JPJ 2394H	Innovation and Knowledge Transfer
POL 2411H	Topics in Asian Politics
POL 2429H	Nationalism, Ethnic Conflict, and Democracy
JPF 2430Y	Cities

Development Studies

POL 2400H	Theories and Issues -The Politics of Development (core course)
POL 2214H	Global Health in a Changing World
POL 2218H	The Political Economy of International Trade
JPA 2310H	Democracy and Identity in Asia
POL 2322H	Topics in Comparative Politics II
POL 2326H	Democracy and Dictatorship
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
JPE 2408Y	Political Economy of International Development
POL 2411H	Topics in Asian Politics
JPE 2415Y	Research Essay: Political Economy of Development
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 2110H	The Politics of Public Monies
POL 2139H	The Canadian Welfare State in Comparative Perspective
POL 2234H	Globalization, Internationalization, and Public Policy
POL 2307H	Political Economy of Technology: From the Auto-Industrial to the Information Age
POL 2317H	Politics and Policy Analysis
JPJ 2394H	Innovation and Knowledge Transfer
POL 2482H	The Politics of Disease and Epidemic
HAD 5011H	Canada's Health System and Health Policy
HAD 5765H	Case Studies in Health Policy

Methods and Research Seminars

POL 2502Y	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 2810Y	MA Research Seminar I
POL 2811Y	MA Research Seminar II

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 |
| POL 2906Y | Reading course in an approved special field |

Graduate Faculty

Full Members

Adler, Emanuel - PhD
Andersen, Robert - BA, MA, PhD
Balot, Ryan - BA, AM, PhD
Bashevkin, Sylvia - BA, MA, PhD
Bathelt, Harald - MA, PhD
Beiner, Ronald - BA, DPhil
Bejarano, Ana Maria - MA, MPH, PhD
Bernstein, Steven - PhD
Bertoldi, Nancy - BA, MA, PhD
Bertrand, Jacques - BA, MSc, MA, DrRerPol
Braun, Aurel - BA, MA, PhD
Brudner, Alan S - BA, MA, 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
Cunningham, Frank - BA, MA, PhD
Day, Richard - BA, MA, PhD
Deber, Raisa - BS, MS, PhD
Deibert, Ronald - BA, MA, DrRerPol
Eyoh, Dickson - MA, PhD
Fletcher, Joseph - BA, MA, PhD
Haddow, Rodney - BA, MSc, PhD
Handley, Antoinette - BA, MPH, PhD
Hansen, Randall - BA, MPH, PhD, Canada Research Chair
Hirschl, Ran - BA, LLB, MA, MPH, PhD, Canada Research Chair
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
Kopstein, Jeffrey - BA, MA, PhD
LeDuc, Lawrence - BA, MA, PhD
Levi, Ron - BCL, LLB, LLM, SJD
Magocsi, Paul - BA, MA, MA, PhD, FRSC
McCarney, Patricia - BA, MCP, PhD
Nedelsky, Jennifer R - BA, MA, PhD
Nevitte, Neil - BA, MA, PhD, FRSC
Norrlof, Carla - BS, MIR, MS, DrRerPol
Orbinski, James - MA, MD
Orwin, Clifford - AB, AM, PhD
Pauly, Louis - BA, MA, MSc, MSc, PhD, Canada Research Chair *(Chair)*
Rayside, David - BA, MA, PhD
Roach, Kent - BA, LLB, LLM
Schatz, Edward - PhD
Schneiderman, David - BA, LLB, LLM

Schwartz, Donald - BA, MA, PhD
Shachar, Ayelet - LLB, BA, LLM, SJD
Skogstad, Grace - DrRerPol
Stein, Janice - BA, MA, PhD
Teichman, Judith Ann - 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, Canada Research Chair

Members Emeriti

Andrew, Edward - BA, PhD
Clarkson, Stephen - BA, BA, MA, PhD, FRSC
Donnelly, Michael - BSc, MA, PhD
Forbes, Donald - BA, MA, PhD
Griffiths, Franklyn Jc - BA, MIA, PhD
Horowitz, Gad - BA, PhD
Kontos, Alkis - MA, PhD
Manzer, Ronald - BEd, BA, MA, PhD
Matthews, Robert - BA, MIA, PhD
Pratt, R Cranford - BA, BPhil, FRSC
Rotstein, Abraham - BA, PhD
Rubinoff, Arthur - BA, MA, PhD
Russell, Paul - BA, BEd, MA
Russell, Peter - BA, BA, FRSC
Sandbrook, Richard - BA, MA, DPhil, FRSC
Simeon, Richard - BA, MA, PhD, 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

Borins, Sandford - BA, PhD
Breunig, Christian - MA, MA, PhD
Choudhry, Sujit - LLB, LLM
Fujii, Lee Ann - PhD
Gilady, Lilach - BA, MPH, MA, PhD
Gunitskiy, Vsevolod - PhD
Hall, Todd - PhD
Hurst, William - BA, MA, PhD
Indart, Gustavo - BA, MA, PhD
Kuokkanen, Rauna - MA, MA, PhD
Lee, Daniel - BA, MA, MPH, PhD
Loewen, Peter - PhD
Marshall, Ruth - BA, MA, DPhil
Ong, Lynette - BA, AM, PhD
Prichard, Wilson R.S - BA, MPH, DPhil
Stark, Andrew - BA, MSc, AM, PhD
Triadafilopoulos, Phil (Triadafilos) - BA, MA, PhD
Wong, Wendy - PhD

Professional Graduate Programs Centre (Mississauga)

Faculty Affiliation

Professional Graduate Programs (Mississauga)

Degree Programs Offered

Biotechnology – MBiotech
Management & Professional Accounting – MMPA

Diploma Programs Offered

Investigative & Forensic Accounting – DIFA

Overview

The **Master of Biotechnology** (MBiotech) is an interdisciplinary course-based professional degree program. Students come from varied backgrounds with the common goal of pursuing a career in the biotechnology, financial, and pharmaceutical industries. The program meets the evolving needs of students and this global industry sector. Guest lecturers from various University of Toronto faculties provide students with a truly interdisciplinary experience. Leaders of the biotechnology and pharmaceutical industries and from governmental agencies round out the broadly based learning environment.

The **Master of Management & Professional Accounting** (MMPA) 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. Advanced-standing may be granted.

The **Diploma in Investigative & Forensic Accounting** (DIFA) 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, advisors in disputes, and preparers and deliverers of information to the courts. For students who are graduate Chartered Accountants (CAs), the diploma program is the educational gateway to the CA·IFA post-graduate specialist designation offered by the Canadian Institute of Chartered Accountants.

Contact and Address

Professional Graduate Programs Centre

Web: www.utm.utoronto.ca/vice-dean-grad/office-vice-dean-graduate
E-mail: anna.reale@utoronto.ca
Telephone: (905) 569-4432
Fax: (905) 828-3979

University of Toronto at Mississauga
Room 3200, William G. Davis Building
3359 Mississauga Road North
Mississauga, Ontario L5L 1C6
Canada

Biotechnology

Web: www.utm.utoronto.ca/mbiotech
E-mail: mbiotech@utoronto.ca
Telephone: (905) 569-4737
Fax: (905) 569-4738

Master of Biotechnology Program
University of Toronto Mississauga
Room 2071, William G. Davis Building
3359 Mississauga Road North
Mississauga, Ontario L5L 1C6
Canada

Management & Professional Accounting

Web: www.utoronto.ca/mmpa
E-mail: mmpa@utoronto.ca
Telephone: (905) 569-4318
Fax: (905) 569-4306

Master of Management & Professional Accounting Program
University of Toronto Mississauga
Room K108, Kaneff Centre
3359 Mississauga Road North
Mississauga, Ontario L5L 1C6
Canada

Investigative & Forensic Accounting

Web: www.utoronto.ca/difa
E-mail: difa@utoronto.ca
Telephone: (905) 569-4318
Fax: (905) 569-4306

Diploma in Investigative & Forensic Accounting Program
University of Toronto Mississauga
Room K108, Kaneff Centre
3359 Mississauga Road North
Mississauga, Ontario L5L 1C6
Canada

Degree Programs

Biotechnology

Master of Biotechnology

Admission Requirements

- An appropriate bachelor's degree from a recognized university in any area of biological sciences, chemistry, engineering, or related field.
- Acceptable Graduate Record Examination (GRE) scores and/or marks of A- or better in the final two years of study.

Program Requirements

- The program is a full-time, course-based master's degree which is *launched during the month of May each year.*
- Students are required to complete 8.5 graduate full-course equivalents (FCEs) over a 24-month period:
  - 5.5 to 6.5 FCEs science credits (includes credits for Seminar and Placement)
  - 2.0 FCEs business credits
  - up to 1.0 FCE elective credit

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.

Normal Program Length: 9 sessions (2 years) full-time

Time Limit: 3 years full-time

Course List

Required Courses

A general description of each required course is posted at www.utm.utoronto.ca/mbiotech.

BTC 1600H	Seminar in Bioscience/Biotechnology I
BTC 1610H	Seminar in Bioscience/Biotechnology II
BTC 1700H	Molecular Biology Laboratory
BTC 1710H	Biomaterials and Protein Chemistry Laboratory
BTC 1800H	Biotechnology in Medicine
BTC 1810H	Biotechnology and Corporations
BTC 1820H	Biotechnology in Agriculture and Natural Products
BTC 1900Y[0]	Work Term I
BTC 1910Y[0]	Work Term II
BTC 2000H	Effective Management Practices
BTC 2010H	Fundamentals of Managerial Concepts
BTC 2020H	Society, Organizations and Technology
BTC 2030H	Management of Technological Innovation

Elective Courses

BTC 1830H	Medical and Scientific Challenges in Marketing Therapeutics

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.

Program Committee

Cell and Systems Biology
    Lange, Angela - BSc, PhD
    Revers, Leigh - MA, DPhil **(Associate Director)**
    Westwood. J. Timothy - BSc, MSc, PhD
Chemistry
    Krull, Ulrich - BSc, MSc, PhD, AstraZeneca Professor of Biotechnology
    Prosser, Scott - BSc, MSc, PhD **(Director)**
Management
    Tombak, Mihkel - BASc, MBA, AM, PhD

Additional faculty are selected from Cell and Systems Biology, Chemistry, and related departments as well as from experts in industry and government.

Management & Professional Accounting

Master of Management & Professional Accounting

Minimum Admission Requirements

- 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.
- Proof of English facility if the applicant's first language is not English. Details on English language requirements are available in this calendar.

Program Requirements

- The program runs for 27 months covering seven sessions of full-time study, including five academic sessions and two co-op work-placement sessions in accounting or finance-related areas. The final session of the program will include a professional integrating experience (PIE) consisting of a four-week period in which students will complete one or more of the following:
  - attend the professional school of a professional accounting body, or
  - write professional accounting examinations, or
  - complete a consulting or work-term project

Normal Program Length: 7 sessions full-time

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 full-course equivalent (FCE).

The department should be consulted each session as to course offerings.

MGT 1090H(0)+Accounting Work-Term Course I
MGT 1102H(1) Business and Professional Ethics
MGT 1210H(2) Managerial Economics
MGT 1211H(2) Economic Environment of Business
MGT 1221H(2) Accounting I
MGT 1222H(2) Managerial Accounting
MGT 1241H(2) Operations Management
MGT 1260H(2) Leadership in the Management of Teams
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 1350H(3) Marketing
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 2070H(1) Management Consulting (elective course)
MGT 2090H(0)+Accounting Work-Term Course II
MGT 2205H(3) Advanced Financial Accounting
MGT 2206H(3) Taxation I
MGT 2207H(3) Taxation II
MGT 2208H(1) Taxation III (elective course)
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(3) Management Control
MGT 2261H(2) Advanced Management Accounting
MGT 2273H(2) Accounting Information Systems
MGT 2280H(2) Accounting Theory and Research
MGT 2281H(1) Seminar in Professional Accounting
MGT 2282H(1) Integrative Cases in Professional Decision Making
MGT 2301H(2) Financial Management

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

Substitute Courses

(taken only as required and only with the approval of the Program Director)

MGT 1111H   Marketing
MGT 1112H   Business Finance
MGT 1113H   Accounting II
MGT 1114H   Management Information Systems
MGT 1115H   Statistics for Management
MGT 1116H   Economic Environment of Business
MGT 2091H   Advanced Financial Accounting
MGT 2111H   Taxation 1
MGT 2113H   Taxation 2
MGT 2114H   Financial Reporting 1
MGT 2252H   Financial Reporting 2

Diploma Programs

Investigative & Forensic Accounting

Diploma of Investigative & Forensic Accounting

Minimum Admission Requirements

- 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

- Ten half-course program 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.

Normal Program Length: 6 sessions (26 months) part-time

Time Limit: 6 years part-time

Course List

IFA 1900H   Introduction to Investigative and Forensic Accounting
IFA 1901H   Investigative and Forensic Accounting Practice Issues
IFA 1902H   Legal Process—Introductory

IFA 1903H Investigative-related Matters—Introductory
IFA 1904H Loss Quantification—Introductory
IFA 2900H Loss Quantification—Advanced
IFA 2901H Investigative-Related Matters—Advanced
IFA 2902H Legal Process—Advanced
IFA 2903H Advanced Topics/Emerging Issues
IFA 2904H Integrative Capstone

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.

Graduate Faculty

Full Members

Aivazian, Varouj - BS, MA, PhD
Brooks, Leonard - BCom, MBA, CA *(Program Director)*
Krull, Ulrich - BSc, MSc, PHD
Li, Yue - BSc, MBA, PhD
Rotenberg, Wendy - BA, MBA, PhD
Smieliauskas, Waldemar - BS, MS, PhD
Tombak, Mihkel - BS, MBA, AM, PhD
Wensley, Anthony - MA, MA, MBA, PhD
Zweig, David - DPhil

Associate Members

Allen, Guy - BA, MA, PhD
Kitunen, Joan - BBM, CA
Lacetera, Nicola - PhD
Parkinson, John - BA, MA, PhD
Radhakrishnan, Phanikiran - DPhil
Revers, Leigh - PhD
Schneider, Manfred - BCom, MBA, JD, CA
Wiecek, Irene - BComm, CA

Psychology

Faculty Affiliation

Arts and Science

Degree Programs Offered

Psychology – MA, PhD

Collaborative Programs

The following collaborative programs 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. **Neuroscience**
   - Psychology, MA, PhD
4. **Sexual Diversity Studies**
   - Psychology, MA, PhD
5. **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

Web: www.psych.utoronto.ca
E-mail: grad@psych.utoronto.ca
Telephone: (416) 978-3404
Fax: (416) 978-4811

Department of Psychology
Graduate Studies
University of Toronto
Room 4034, Sidney Smith Hall
Toronto, Ontario M5S 3G3
Canada

Degree Programs

Psychology

Master of Arts

Minimum Admission Requirements

- 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 the following 2.0 FCEs as follows:
  - PSY 1000H *Directed Studies* to prepare for the MA thesis research
  - PSY 2001H *Design of Experiments I,* experimental design and statistics
  - two half courses
- 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.

Normal Program Length: 3 sessions full-time
Time Limit: 3 years full-time

Doctor of Philosophy

Minimum Admission Requirements

- 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.
- Individual programs of study are planned and include continuing research training with staff members. There is no language requirement.

- PSY 3000H *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 thesis proposal and oral exam (examination in the student's area of specialization).
- 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.

Normal Program Length: 4 years

Time Limit: 6 years full-time

Course List

Not all courses are offered each year. For current offerings, consult the Coordinator of Graduate Studies.

PSY 1000H   Directed Studies
PSY 1200H,Y 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 5122H   Advanced Topics in Animal Behaviour and
             Motivation III
PSY 5130H   Advanced Topics in Neuropsychology I
PSY 5131H   Advanced Topics in Neuropsychology II

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
PSY 5312H   Advanced Topics in Development III
PSY 5313H   Advanced Topics in Development IV

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 5422H   Advanced Topics in Personality III
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 3002H	Teaching Practicum (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 4720H,Y[+]	Internship in Applied Psychology (Credit/No Credit)

Cross-Listed Courses

CSC 2535H	Computation in Neural Networks
JLP 2450H	Psycholinguistics
JNS 1000Y	Fundamentals of Neuroscience: Systems and Behaviour
JPX 1001Y	Parenting: Multidisciplinary Perspectives
JPM 1005Y	Behavioural Pharmacology
ZOO 2215Y	Insect Behaviour

Graduate Faculty

Full Members

Alain, Claude - BA, MA, PhD
Andersen, Judith - BSc, MA, PhD
Anderson, Adam - BA, PhD
Anderson, Nicole - BA, MA, PhD
Bagby, Michael - BA, MA, PhD, PhD
Barense, Morgan - BA, PhD
Bassili, John - BA, PhD
Bors, Douglas - AB, AM, DPhil, PhD
Buchsbaum, Bradley - BS, PhD
Campos, Jennifer - BA, PhD
Chambers, Craig - BA, MA, MA, PhD
Chasteen, Alison - BA, PhD
Cohn, Melanie - BA, MA, PhD
Cote, Stephane - BSc, MA, PhD
Cree, George Scott - BA, MA, PhD
Cunningham, John - BSc, MA, PhD
Cupchik, Gerald Chaim - BA, MA, PhD
Daneman, Meredyth - BA, MA, PhD
De Rosa, Eve - BA, PhD
Dennis, Maureen - BA, MA, PhD
Dion, Karen - BA, PhD
Einstein, Gillian - AB, PhD
Erb, Suzanne - DPhil
Ferber, Susanne - MPsy, PhD *(Graduate Director)*
Fleming, Alison - BS, PhD
Fletcher, Paul - BSc, DPhil
Fournier, Marc - BA, PhD
Gerlai, Robert - MSc, PhD
Gilboa, Asaf - BA, MA, PhD
.

Grady, Cheryl - BA, MA, PhD
Haley, David - BA, MPsy, PhD
Hasher, Lynn - AB, PhD
Helwig, Charles - BA, PhD
Herman, C Peter - BA, PhD
Holmes, Melissa - PhD
Impett, Emily - BS, MS, PhD
Inzlicht, Michael - BS, MS, PhD
Ito Lee, Rutsuko - BA, PhD
Jenkins, Jennifer - BA, MA, PhD
Johnson, Elizabeth - PhD
Joordens, Steve - BA, MA, PhD
Kim, Junchul - BSc, MSc, PhD
Kraemer, Gary - PhD
Latham, Gary - BA, MS, PhD
Lee, Andy CH - BA, PhD
Leonardelli, Geoffrey - BA, MA, PhD
Levine, Brian - BA, MA, PhD
Lewis, Marc - BA, MA, PhD
Lockwood, Penelope - BA, MA, PhD
Mabbott, Donald - PhD
MacDonald, Geoffrey - BA, PhD *(Associate Graduate Director)*
Malti, Tina - PhD
McAndrews, Mary Patricia - BSc, MA, PhD
McGowan, Patrick - PhD
McIntosh, Anthony Randal - BSc, MSc, PhD
Meltzer, Jed - BSc, PhD
Milgram, Norton - BSc, MSc, PhD
Monks, Ashley - BSc, MA, PhD
Moscovitch, Morris - BSc, MA, PhD *(Graduate Chair)*
Murphy, Kelly - BSc, MA, PhD
Niemeier, Matthias - MA, PhD
Nobrega, Jose - PhD
Nussbaum, David - BA, MA, PhD
Paus, Tomas - PhD
Peterson, Jordan - BA, BA, PhD
Petit, Ted - BS, MA, PhD
Petitto, Laura Ann - BSc, MPsy, MA, PhD
Pichora-Fuller, Margaret Kathleen - AB, MS, DPhil
Plaks, Jason - BA, MA, MPH, PhD
Polivy, Janet - BS, MA, PhD
Pratt, Jay - BA, MS, PhD
Ralph, Martin - BSc, PhD
Ravindran, Arun - PhD
Reingold, Eyal - PhD
Rovet, Joanne - BSc, PhD
Rule, Nicholas - AB, MS, PhD
Ruocco, Anthony Charles - BS, MSc, DPhil
Ryan, Jennifer - BS, PhD
Schellenberg, Glenn - BSc, PhD
Schimmack, Ulrich - DPhil
Schmuckler, Mark - BA, PhD
Schneider, Bruce - BA, PhD
Shuper, Paul - BA, MA, PhD
Smith, Marylou - BSc, MSc, PhD
Smyth, Ronald - BA, MSc, PhD
Spence, Ian - MA, MA, PhD
Stuss, Donald - BPhil, MA, PhD
Tackett, Jennifer - 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, AM

[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.

Vaccarino, Franco - BSc, MSc, PhD
van Lieshout, Pascal - MA, MA, PhD
Vartanian, Oshin - BSc, PhD
Welsh, Timothy - BPHE
Winocur, Gordon - BA, MA, PhD
Yeomans, John - BA, PhD
Zakzanis, Konstantine - BA, AM, DPhil

Members Emeriti

Abramovitch, Rona - BA, MA, PhD
Craik, Fergus - BSc, PhD
Freedman, Jonathan - BA, PhD
Grusec, Joan - BA, PhD
Kennedy, John - BSc, MSc, PhD
Lockhart, Robert - BA, MA, PhD
Oatley, Keith - BA, PhD
Pliner, Patricia - PhD
Shettleworth, Sara - BA, MA, PhD
Smith, Marilyn - BA, PhD
Trehub, Sandra - BComm, MA, PhD
Tulving, Endel - BA, MA, PhD

Public Health Sciences

Faculty Affiliation

Medicine

Degree Programs Offered

Public Health Sciences – MHSc, MPH, MSc, PhD
Fields (MPH):
Community Nutrition
Epidemiology
Family and Community Medicine
Health Promotion (Social and Behavioural Health Sciences)
Occupational and Environmental Health
Fields (MSc):
Biostatistics
Fields (PhD):
Biostatistics
Epidemiology
Social and Behavioural Health Sciences

Community Health – MScCH
Fields:
Addictions and Mental Health
Family and Community Medicine
Health Practitioner and Teacher Education
Occupational Health Care
Wound Prevention and Care

Collaborative Programs

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

1. **Aboriginal Health**
   - Public Health Sciences, MPH, PhD
2. **Addiction Studies**
   - Public Health Sciences, MPH, MSc, PhD
3. **Aging, Palliative and Supportive Care Across the Life Course**
   - Public Health Sciences, MPH, MSc, PhD
4. **Bioethics**
   - Public Health Sciences, MPH, MSc, PhD
5. **Cardiovascular Sciences**
   - Public Health Sciences, MSc, PhD
6. **Community Development**
   - Public Health Sciences, MHSc, MPH
7. **Environment and Health**
   - Public Health Sciences, MPH, MSc, PhD
8. **Global Health**
   - Public Health Sciences, PhD
9. **Health Care, Technology, and Place**
   - Public Health Sciences, PhD
10. **Health Services and Policy Research**
    - Public Health Sciences, MPH, PhD
11. **Resuscitation Sciences**
    - Community Health, MScCH
    - Public Health Sciences, MPH, MSc, PhD
12. **Sexual Diversity Studies**
    - Public Health Sciences, MPH, MSc, PhD
13. **Women and Gender Studies**
    - Public Health Sciences, MPH, PhD
14. **Women's Health**
    - Public Health Sciences, MPH, PhD

Overview

The Dalla Lana School of Public Health enrols more than 300 graduate students in its master's and doctoral degree programs. In addition, the school has more than 40 post-graduate students in its two Royal College Residency programs: Community 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, and Bloomberg Faculty of Nursing.

The Graduate Department of Public Health Sciences at the Dalla Lana School of Public Health offers four graduate degrees, available both full-time and part-time. Applicants are strongly advised to have some background in statistics and quantitative methods. In addition, field and employment experience are taken into consideration, especially for the Master of Public Health (MPH) degree. Further information is available at www.sph.utoronto.ca

The **Master of Public Health** (MPH) degree is designed for students interested in professional and/or research careers in the community, academic, public, or private sectors. Five fields are offered:

- Community Nutrition
- Epidemiology
- Family and Community Medicine
- Health Promotion (Social and Behavioural Health Sciences)
- Occupational and Environmental Health

The **Master of Science** (MSc) degree is for students interested in research and academic careers in Biostatistics.

The **Master of Science in Community Health** (MScCH) degree is restricted to 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 **Doctor of Philosophy** (PhD) degree prepares students for research and academic careers in the public health science disciplines. Fields include:

- Biostatistics
- Epidemiology
- Social and Behavioural Health Sciences

The PhD program may be completed on a full-time or flexible-time basis.

Contact and Address

Web: www.sph.utoronto.ca
E-mail: dlsph.grad@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

Degree Programs

Public Health Sciences

Master of Public Health

Minimum Admission Requirements

- 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.
- Each specialization has unique requirements; refer to the website for details.

Program Requirements

- 10.0 full-course equivalents (FCEs), of which 0.5 FCE is a core public health sciences subject and at least 1.0 FCE is a field practicum.
  - Full-time students, depending on the area of specialization, require between 16 and 22 months to complete the program, including time spent in field practica. Specific program requirements, course sequences, and options vary by area of specialization and are fully explained on the website.
  - Part-time students have a maximum of six years to complete the program.

Advanced-Standing Option, Community Nutrition Field

Minimum Admission Requirements

Applicants to the Community Nutrition field may be eligible to be considered for the advanced-standing option with the following minimum admission requirements:

- 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 home country.
- Five years of professional work experience in clinical, community, administrative, or public health dietetics.

Program Requirements

- The advanced-standing option of the MPH Community Nutrition field is a coursework-only program that requires the completion of 5.0 full-course equivalents (FCEs), including 0.5 FCE of a core Public Health Sciences subject, 0.5 to 1.0 FCE in supervised field placements or practica, 3.0 FCEs in field-specific required courses; and 0.5 to 1.0 FCE in elective courses.
- Students can complete this option in 12 months of intensive full-time study or over a period of five years of part-time study.

Normal Program Length: 5 sessions (2 years) full-time; 15 sessions part-time; 1 year full-time advanced-standing; 6 years part-time advanced-standing

Time Limit: 3 years full-time; 6 years part-time

Master of Science

Minimum Admission Requirements

- Appropriate bachelor's degree from a recognized university with a minimum mid-B average in the final year.

Program Requirements

- Students specializing in Biostatistics may choose a course-only or thesis program. See the website for details.
  - **Full-time students** can complete the program in 12 months.
  - **Part-time students** have five years to complete the program.

Normal Program Length: 3 sessions full-time; 15 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

Doctor of Philosophy

Minimum Admission Requirements

- 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.
- Consult the website for details.

Program Requirements

Full-Time PhD

- Course requirements vary by specialization and are related to the student's knowledge of the field. Consult the website.
- Successful completion of formal examinations and other assessments at specified points within the program to ensure continuation in the program.
- Demonstrated proficiency in statistics or research methods.
- A written comprehensive examination in the major area of specialization.
- Writing of a PhD thesis under the supervision of an approved thesis committee (supervisor plus two additional faculty members).
- The oral defence of the thesis before an examination committee appointed by the School of Graduate Studies.

Flexible-Time PhD

- 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 and/or familial obligations.
- Degree requirements for the flexible-time program are identical to those for the full-time PhD program.
- A plan of study and research activities will be negotiated at initial registration, to be reviewed and updated annually.
- Students are required to register full-time for the first four years of their program. Thereafter, they may register part-time.

Normal Program Length: 4 years full-time; 6 years flexible-time

Time Limit: 6 years full-time; 8 years flexible-time

Community Health

Master of Science in Community Health

Minimum Admission Requirements

- A bachelor's degree in a public health speciality 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 either a public health, community, or clinical practitioner.
- Some fields (i.e., Family and Community Medicine 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.
- 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) of the program requirements, including the required courses for the field, and with the approval of the department.

Program Requirements

The MScCH is a coursework-only program which requires the completion of 5.0 FCEs, including 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.

The specific program requirements, course sequences, and options vary by field of specialization; they are fully outlined on the website.

Students can complete the program in 12 months of intensive full-time study or over a period of five years of part-time study.

Normal Program Length: 3 sessions full-time; 15 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

Course List

Core Courses

CHL 5004H   Introduction to Public Health Sciences

Biostatistics and Demography

CHL 5201H   Introductory Biostatistics for Students in Biological Sciences I
CHL 5202H   Introductory Biostatistics for Students in Biological Sciences II
CHL 5203H   Public Health Research Methods
CHL 5204H   Survey Methods in Health Sciences II

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

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   Community Health Appraisal Methods I
CHL 5221H   Community Health Appraisal Methods II
CHL 5222H   Longitudinal Data Analysis
CHL 5223H   Applied Bayesian Methods
CHL 5224H   Statistical Genetics
CHL 5225H   Advanced Statistical Methods for Clinical Trials
CHL 5250H   Special Topics in Biostatistics

Community Nutrition

Courses offered by the Department of Nutritional Sciences.

NFS 1201H   Public Health Nutrition
NFS 1204Y[0]   Master's Seminars in Nutritional Sciences (Credit/No Credit)
NFS 1208H   Field Observation and Nutrition Program Laboratory I
NFS 1209H   Field Observation and Nutrition Program Laboratory II
NFS 1210H   Field Observation and Program Laboratory III: Management of Community Food Programs
NFS 1211H   Community Nutrition
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 1484H   Advanced Nutrition

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 I: Principles
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 5421H   Aboriginal Health
CHL 5423H   Doctoral Series 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 5430H   Fundamentals of Genetic Epidemiology

Family Medicine

CHL 5601H   Teaching Evidence-Based Family Medicine in the Clinical Setting
CHL 5602H   Working with Families in Family Medicine
CHL 5603Y   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 5623H   Practical Management Concepts and Cases in Leading Small Health Organizations
CHL 5630Y   Wound Prevention and Care

Global Health

CHL 5700H   Global Public Health
CHL 5701H   Doctoral Seminar, Collaborative Program 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

Health Promotion

CHL 5801H Health Promotion
CHL 5803H Health Promotion Strategies
CHL 5804H Health Behaviour Change
CHL 5805H Critical Issues in Health Promotion Practice
CHL 5806H Health Promotion Field Research
JXP 5807H Health Communications

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 Safety Management and Accident Prevention
CHL 5918H Biological Hazards in the Workplace and Community

Public Health Policy

CHL 5300H Public Health Policy
CHL 5308H Tools and Approaches for Public Health Policy Analysis and Evaluation

Social and Behavioral 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 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 5124H Public Health Ethics
CHL 5126H Building Community Resilience
CHL 5127H Advanced Methods in Research on Social Determinants of Health (prerequisite)

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.

CHL 5150H Data Collection Methods for Public Health Research in the Field

Practica and Related Courses

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 MSc CH Required Practicum (Credit/No Credit)
CHL 5691H^0 MSc CH Optional Practicum (Credit/No Credit)
CHL 6010Y$^+$ Required MPH Practicum (Credit/No Credit)
CHL 6011H$^+$ Required Practicum Extension (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)

Reading Courses and Research Projects

CHL 7001H Directed Reading in an Approved Field of Community Health
CHL 7002H Approved Research Project in an Approved Field of Community Health

Collaborative Program Courses

Addiction Studies

AEC 1291H Addictive Behaviours: Approaches to Assessment and Intervention
CHL 5119H Social and Political Perspectives on Drugs and Addictions
CHL 5417H Tobacco and Health: From Cells to Society
JPM 1005Y Behavioural Pharmacology
MSC 1085H Molecular Approaches to Mental Health and Addictions
PAS 3700H Multidisciplinary Aspects of Addiction Studies
PAS 3701H Advanced Research Issues in Addictions
PSY 2703H The Psychology of Addictions
SOC 6123H Sociology of Addiction
SWK 4616H Drug Dependencies: Interventive Approaches

Aging and the Life Course

AGE 1000H Multidisciplinary Research Concepts in Palliative and Supportive Care
AGE 1200H Interprofessional Psychosocial Oncology: Introduction to Theory and Practice
AGE 1250H Relational Practices with Families in Oncology and Palliative Care
AGE 1500H Advanced Research Methodologies in Palliative and Supportive Care
AGE 2000H Principles of Aging

AGE 2500H   Research Topics in Aging and the Life
             Course
AGE 3000H   Advanced Research Seminar in Aging and
             the Life Course

Graduate Faculty

Full Members

Allison, Kenneth - MHSc, MSc, PhD
Angus, Janet - BScN, MSN, PhD
Badley, Elizabeth - BSc, MSc, PhD
Benatar, Solomon - MD
Birn, Anne-Emanuelle - BA, MA, DSc
Bondy, Susan - BA, MSc, PhD
Brown, Adalsteinn - AB, PhD
Bull, Shelley - BMath, MMath, PhD
Calzavara, Liviana - BA, MA, PhD
Cassidy, David - BSc, MSc, PhD
Chalin Clark, Catherine - BSN, MA, MDiv, PhD, RN
Cohen, Joanna - BSc, MHSc, PhD
Colantonio, Angela - BA, BSc(OT), MHSc, PhD
Cole, Donald - MSc, MD
Corey, Mary - BSc, PhD
Corey, Paul - BSc, MA, PhD
Crowcroft, Natasha - BA, MA, MSc, MBBS, PhD
Cusimano, Michael - MHPE, MD, PhD
Daar, Abdallah - MD
Eakin, Joan - BA, MA, PhD
Einstein, Gillian - AB, PhD
Escobar, Michael - BS, PhD
Eyssen, Gail - BSc, MSc, MSc, PhD
Ferguson, Bruce - BA, MA, PhD
Ferrence, Roberta - BA, MA, PhD
Ferris, Lorraine - AB, MA, LLM, LLM, PhD
Fox, Bonnie - AB, PhD
Gagnon, France - PhD
Gastaldo, Denise - BSN, MA, PhD
Gesink, Dionne - BSc, MSc, DPhil
Glazier, Richard - MPH, MD
Goel, Vivek - BSc, MSc, SM, MD
Goodstadt, Michael Stephen - BA, PhD
Harris, Shelley - PhD
Holness, D Linn - MHSc, MD
Howell, Doris - BNSc, MSN, PhD
Hu, Howard - BSc, MD, MPH, MS, ScD *(Director)*
Kreiger, Nancy - BA, MPH, PhD
Lavery, James - BA, BS, PhD
Levinson, Wendy - BSc, MD
Lou, Wen-Yi Wendy - DPhil
Mandel, Jack - BSc, MPH, 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
Myers, Ted - BA, MSW, MSc, PhD
Narod, Steven - BSc, MD
Naylor, C. David - MD, PhD
Noyek, Arnold - MD
O'Campo, Patricia - PhD
Orbinski, James - MA, MD
Palmer, Lyle - BSc, PhD

Peter, Elizabeth - BA, BSN, MSN, PhD
Poland, Blake - BA, PhD
Purdham, James - BSc, PhD
Rehm, Jurgen - PhD
Reid, Nancy - BM, MSc, PhD
Remis, Robert - BSc, MPH, MD
Robertson, Ann - BSc, MSc, PhD
Rosser, Walter - MD
Sakinofsky, Isaac - DPM, MBChB, MD
Sass-Kortsak, Andrea - BSc, MHSc, PhD
Scott, James - BSc, PhD
Silverman, Frances - PhD
Skinner, Harvey - BA, MA, PhD
Stafford, James - BS, MS, PhD
Sun, Lei - BS, PhD
To, Teresa - BA, MA, PhD
Valverde, Mariana - BA, MA, PhD, FRSC
Wheaton, Blair - PhD
Willan, Andrew - PhD
Young, Kue - DrMed, PhD
Zlotkin, Stanley - BSc, MD, PhD

Members Emeriti

Andrews, David - BSc, MSc, PhD
Ashley, Mary Jane - DPH, MSc, MD
Badgley, Robin - BA, MA, PhD
Baines, Cornelia - MSc, MSc, MD
Chipman, Mary - BSc, MA
Clarke, E Aileen - MSc, MB
Coburn, David - BA, MA, PhD
Frank, John - BSc, MSc, MD
Hewitt, David - MA
Kelner, Merrijoy - MA, PhD
Leake, James - DDPH, MSc, DDS
Leriche, William - BSc, MPH, MB, MD
Marshall, Victor - BA, MA, PhD
Miller, Anthony - BA, MA, MB, BChir, MD
Osborn, Richard - AB, PhD
Shah, Chandrakant - DCH, MBBS
Wigdor, Blossom - BA, MA, PhD

Associate Members

Abuelaish, Izzeldin - MPH, MBBS
Adlaf, Edward - BA, MA, PhD
Austin, Peter - PhD
Barrera, Maria - MA, PhD
Bassani, Diego - MSc, MS, DDS, PhD
Bassil, Kate - BA, MSc, PhD
Batty, Helen - MEd, MD
Bozek, Paul - BASc, MEng
Burchell, Ann - BSc, MSc, PhD
Cairney, John - PhD
Campbell, Kent - BSc, PhD
Ceolin, Lissa - BSc, MHSc, MHSc
Davis, David - BA, MD
Du Mont, Janice - BA, MEd, EdD
Fisman, David - MPH, MD
Fox, Ann - BAA, MHSc, PhD
Freeman, Risa - BSc, MEd, MD
Gardner, Sandra - BSc, MMath
Gournis, Effie - MPH, MSc
Green, Lois - DPH, BSc, MSc, DPhil
Halton, David - BSc, PhD

Handford, Curtis - DrMed
Hildebrand, Vincent - MA, PhD
Holowaty, Eric - MSc, MD, DPH
Hosein, H Roland - BSc, MSc, PhD
Jackson, Suzanne - BSc, MSc, PhD
Jaglal, Susan - BSc, MSc, PhD
Jha, Prabhat - DrMed, MD, PhD
Katz, Stephen - DPhil
Korn, David - MD
Krahn, Murray - BA, MSc, MD
Kustra, Rafal - PhD
Lee, Colin - BSc, MSc, MD
Magee, William - PhD
Malik, Rebecca - MD
Matheson, Flora - BA, MA
Mcquillan, Robert - BASc, MASc
McVey, Gail - BA, MA, PhD
Meier, Rosemary - DPM, LMCC, MSc, MBChB
Moineddin, Rahim - BSc, MSc, MSc, PhD
Murray, Stuart - BA, MA, MA, MA, PhD
Muzzin, Linda - BA, MA, MPsy, PhD
Nisenbaum, Rosane - BSc, MSc, PhD
Paterson, Andrew - MBChB
Pintilie, Melania - BSc, MSc
Rhodes, Anne - PhD
Scott, Fran - BSc, MSc, MD, MD
Scott-Marshall, Heather - BSc, MSc, PhD
Selby, Peter - MHSc, MBBS
Sibbald, R. Gary - MD
Siddiqi, Arjumand - ScD
Sridharan, Sanjeev
Strike, Carol - PhD, PhD
Strug, Lisa - BS, BA, SM, PhD
Sullivan, Terrence - BS, MA, PhD
Sun, Ye - BCS, MSc, PhD
Talbot, Yves - BA, MD
Thein, Hla Hla - PhD
Thorsteinsdottir, Halla - PhD
Turner, Nigel - BA, MA, PhD
Upshur, Ross Edward - BSc, BA, MA, MD
Wang, Lisa - BEng, MSc
Yuan, Lilian - MSc, MD, DHA

Public Policy and Governance

Faculty Affiliation

Arts and Science

Degree Programs Offered

Public Policy – MPP, JD/MPP

Collaborative Programs

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

1. **Asia-Pacific Studies**
   - Public Policy, MPP
2. **Ethnic and Pluralism Studies**
   - Public Policy, MPP
3. **Sexual Diversity Studies**
   - Public Policy, MPP

Overview

The School of Public Policy and Governance is a professional school offering a two-year **Master of Public Policy** (MPP) degree. The program degree 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 policy-making organizations.

The MPP program features core instruction on a small-group, cohort-based 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.

Contact and Address

Web: www.publicpolicy.utoronto.ca
E-mail: public.policy@utoronto.ca
Telephone: (416) 978-5120
Fax: (416) 978-5079

School of Public Policy and Governance
University of Toronto
Canadiana Gallery
Third Floor, 14 Queen's Park Crescent West
Toronto, Ontario M5S 3K9
Canada

Degree Programs

Public Policy

Master of Public Policy

Minimum Admission Requirements

- 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

Students normally complete:

- 8.0 full-course equivalents (FCEs) including 6.0 required core FCEs (see list of required core courses below);
- 2.0 FCEs from the list of electives offered by University-wide graduate units;
- PPG 2006Y (a mandatory internship) in the summer between first and second year or during the second year. The internship research report is graded on a credit/no-credit basis.

Normal Program Length: 5 sessions (20 months) full-time

Time Limit: 3 years full-time

Combined Juris Doctor/ Master of Public Policy

The Combined Juris Doctor/Master of Public Policy (JD/MPP) is designed for students interested in studying the intersections of law and public policy. The combined program permits the completion of both degrees in four years, rather than the five 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 Combined JD/MPP program. Students are registered in the Faculty of Law in Year 1 of the program, the School of Public Policy and Governance for Year 2 of the program, and in both the Faculty of Law (full-time) and the School of Public Policy and Governance (part-time) for Years 3 and 4.

Minimum Admission Requirements

Each student in the combined program shall meet the respective admission requirements of the Faculty of Law JD program and the Master of Public Policy

program. Students may be admitted to the combined program either at the time of their first application, or they can apply to the MPP program during their first year of JD studies. Whether admitted at the outset or after the first year of the JD program, all students will register in the School of Public Policy and Governance only after their first year in the JD program.

Program Requirements

- Year 1: full-time in Faculty of Law
  Year 2: full-time in School of Public Policy and Governance
  Summer between Years 2 and 3: full-time in School of Public Policy and Governance
  Year 3: full-time in Faculty of Law and part-time in School of Public Policy and Governance
  Year 4: full-time in Faculty of Law and part-time in School of Public Policy and Governance

Within this combined four-year program, students must meet all the respective degree requirements of the MPP and the JD programs, including:

- In Year 1, successfully complete all first-year courses of the JD program at the Faculty of Law, with at least a B standing.

- In Year 2, successfully complete all first-year requirements of the MPP (with the exception of MPP 2001H, but including the equivalent of 0.5 FCE credits in the Faculty of Law), with at least a B+ standing.

- In the summer between Years 2 and 3, complete a law-related summer policy internship (1.0 FCE) under the aegis of the School of Public Policy and Governance (PPG 2006Y).

- In Years 3 and 4, successfully complete:

  a) a further 4.0 FCEs from the School of Public Policy and Governance including the MPP capstone seminar and other second-year core requirements (PPG 2008H, PPG 2002H, PPG 2011H, PPG 2003H), with a minimum of 1.0 MPP FCE in Year 3; and

  b) 41–45 credits at the Faculty of Law, including a perspectives course, a moot (compulsory or competitive), and a Supervised Upper-Year Research Paper (SUYRP), with a minimum of 18 JD credits in Year 3.

- Students enrolled in combined programs *must* complete the requirements of *both* programs in order to graduate in each program. No diplomas will be awarded until the requirements for each program are fulfilled.

At the completion of the four-year combined program, the successful student is awarded both the Juris Doctor and the Master of Public Policy degrees, which, if taken separately, would require five years of study.

Time Limit: 4 years full-time

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 2001H	Integrating Seminars – Current Issues/Problems in Public Policy and Practice I
PPG 2002H	Integrating Seminars – Current Issues/Problems in Public Policy and Practice II
PPG 2003H	Capstone Course: Integrating Issues in Public Policy
PPG 2008H	Globalization, Internationalization, and Public Policy
PPG 2011H	Ethics and the Public Interest

Elective Courses

Offered by the School of Public Policy and Governance.

PPG 2010H	Panel Data Methods for Public Policy Analysis
PPG 2013H	Topics in Public Policy: Federalism and Intergovernmental Relations in the Policy-Making Process
PPG 2014H	Topics in Public Policy: The Future of Public Service
PPG 2015H	Topics In Public Policy: Policy Development
PPG 2017H	Topics in Public Policy: Urban Policy
PPG 2020H	MPP Reading Course
PPG 2021H	Priority Topics in Public Administration
RSM 2120H	Health Policy and Health Care Markets
HDP 1238H	Special Topics in Human Development and Applied Psychology
JRP 2000H	Religion and Public Policy

Internship

PPG 2006Y	MPP Internship

Graduate Faculty

Full Members

Baker, Michael - BComm, MA, PhD *(Acting Director)*
Benjamin, Dwayne - BSc, MA, PhD
Byer, Philip - BS, MS, PhD, Reg Professional Engineer
Cameron, David - PhD, FRSC
Flood, Colleen - LLB, LLM, SJD
Frazer, Garth - BE, BM, MPH, MA, PhD
Gunderson, Morley - BA, MA, PhD
Haddow, Rodney - BA, MSc, PhD
Hansen, Randall - BA, MPH, PhD, Canada Research Chair
Heath, Joseph - BA, MA, PhD

Karney, Bryan - BSc, MEng, PhD, Reg Professional
 Engineer
MacLean, Heather - BASc, MASc, MBA, PhD, Reg
 Professional Engineer
Miller, Eric - BASc, MASc, PhD
Myles, John - BA, BTh, MA, PhD
Nevitte, Neil - BA, MA, PhD, FRSC
Oreopoulos, Philip - BA, MA, PhD
Pesando, James - BA, MA, PhD
Reeve, Douglas - BSc, MASc, PhD
Reitz, Jeffrey - PhD
Rittich, Kerry - BMus, LLB, SJD
Smart, Michael - BA, BA, PhD
Stabile, Mark - BS, MA, PhD *(Director)*
Stein, Janice - BA, MA, PhD
White, Graham - BA, MA, PhD
White, Linda - BA, MA, PhD
Williams, Melissa - AB, AM, PhD
Wong, Joseph - BA, MA, PhD, Canada Research Chair

Associate Members

Anand, Anita - BA, LLB, MA, LLM
Grootendorst, Paul - BA, MEc, PhD
Kroft, Kory - BA, MA, PhD
Slack, Enid - PhD
Zuberi, Daniyal - BA, MSc, PhD

Rehabilitation Science

Faculty Affiliation

Medicine

Degree Programs Offered

Rehabilitation Science – MSc, PhD

Collaborative Programs

The following collaborative programs 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
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**
   - Rehabilitation Science, PhD
7. **Health Services and Policy Research**
   - Rehabilitation Science, MSc, PhD
8. **Neuroscience**
   - Rehabilitation Science, MSc, PhD
9. **Resuscitation Sciences**
   - Rehabilitation Science, MSc, PhD
10. **Women's Health**
    - Rehabilitation Science, MSc, PhD

Overview

Rehabilitation science is the systematic study of promoting, maintaining, or restoring human function, mobility, occupation, 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.

By its very nature, rehabilitation science is multidisciplinary. The Graduate Department of Rehabilitation Science offers graduate programs leading to the degrees of **Master of Science** and **Doctor of Philosophy.** To capture the full breadth of rehabilitation, the expertise of our faculty and the research of our students, Rehabilitation Science has identified six fields of study:

- Movement Science
- Occupational Science
- Practice Science
- Rehabilitation Health Services Studies
- Rehabilitation Technology Sciences
- Social and Cognitive Rehabilitation Sciences

Contact and Address

Web: www.gdrs.utoronto.ca
E-mail: rehab.science@utoronto.ca
Telephone: (416) 978-0300
Fax: (416) 946-8762

Graduate Department of Rehabilitation Science
University of Toronto
Rehabilitation Sciences Building
Room 160, 500 University Avenue
Toronto, Ontario M5G 1V7
Canada

Degree Programs

Rehabilitation Science

Master of Science

Minimum Admission Requirements

- Students are admitted under the General Regulations of the School of Graduate Studies.
- BSc degree with special training in occupational therapy, physical therapy, or a related field from a recognized university. A B+ average in the final two years of undergraduate study is required.
- 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 SGS General Regulations.
  - **U of T School of Continuing Studies academic preparation**: see SGS General Regulations.

Program Requirements

Students may be required to take extra courses in addition to the degree requirements listed below.

Fields:
Movement Science
Occupational Science
Rehabilitation Health Services Studies
Rehabilitation Technology Sciences
Social and Cognitive Rehabilitation Sciences

- Complete coursework and a thesis based on the student's research.
- Successful completion of 2.5 full-course equivalents (FCEs) as follows:
  - REH 1100H *Theory and Research in Rehabilitation Science.*
  - REH 2001Y *Rehabilitation Presentations and Proceedings.*
  - 0.5 FCE in research methods.
  - 0.5 FCE in a related field of study.
- 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 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.

Field Practice Science

- Complete coursework and a thesis based on the student's research.
- Successful completion of 3.5 FCEs as follows:
  - REH 1100H *Theory and Research in Rehabilitation Science.*
  - REH 2001Y *Rehabilitation Presentations and Proceedings.*
  - 0.5 FCE in research methods.
  - REH 3301H *Rehabilitation Leadership: Transforming Practice.*
  - REH 3302H *Determinants of Rehabilitation Practice.*
  - REH 3303H *Rehabilitation Clinical Practicum.*

- Submission of a thesis and completion of an oral examination of the thesis.
- The part-time option is not available in the Practice Science field.

Normal Program Length: 6 sessions full-time; 15 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

Doctor of Philosophy

Minimum Admission Requirements

- Appropriate University of Toronto MSc degree, or an MScOT or MScPT degree (with a research component), or equivalent degree from a recognized university; a minimum A- average in the master's degree is required.
- 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 SGS General Regulations.
  - **U of T School of Continuing Studies academic preparation**: see SGS General Regulations.

Program Requirements

Fields:
Movement Science
Occupational Science
Rehabilitation Health Services Studies
Rehabilitation Technology Sciences
Social and Cognitive Rehabilitation Sciences

- A minimum of 2.0 FCEs as follows:
  - REH 3100H *Advanced Rehabilitation Research Issues* or equivalent.
  - an advanced research methods course

- ○ REH 3001Y *Advanced Rehabilitation Presentation and Proceedings.*
- A comprehensive examination, with written and oral components, to be taken in the first 18 months of the program (2.5 years for direct-entry students).
- Complete and defend a thesis.
- Students may be required to take extra courses in addition to the degree requirements listed above.
- Students are expected to be on campus and participating full-time until all program requirements are completed.

Field Practice Science

- In addition to the program requirements above, students in the Practice Science field must complete the following 1.5 FCEs:
  - ○ REH 3301H *Rehabilitation Leadership: Transforming Practice.*
  - ○ REH 3302H *Determinants of Rehabilitation Practice.*
  - ○ REH 3303H *Rehabilitation Clinical Practicum.*
- **Direct entry**: Students in all fields who are admitted on the basis of a bachelor's degree must complete the following course requirements in addition to those listed above:
  - ○ REH 1100H *Theory and Research in Rehabilitation Science.*
  - ○ REH 1130H *Theory and Research in Occupational Science,* or REH 1140H *Theory and Research in Physical Therapy.*
  - ○ REH 1120H *Research Methods for Rehabilitation Science.*

Normal Program Length: 4 years full-time; 5 years direct-entry

Time Limit: 6 years full-time; 7 years direct-entry

Course List

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 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)

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

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	Rehabilitation Leadership: Transforming Practice
REH 3302H	Determinants of Rehabilitation Practice
REH 3303H	Rehabilitation Clinical Practicum
REH 5100H	Introduction to Cognitive Rehabilitation Neuroscience I: Basic Science to Clinical Applications
REH 5102H	Cognitive Rehabilitation Neuroscience II

Graduate Faculty

Full Members

Agur, Anne - BSc, MSc, PhD
Badley, Elizabeth - BSc, MSc, PhD
Berg, Katherine - BPT, BSc(PT), MSc, PhD
Black, Sandra - BSc, MD
Boschen, Kathryn Ann - BA, MA, PhD
Bressmann, Tim - MPH, PhD
Brooks, Dina - BSc(PT), MSc, PhD *(Coordinator of Graduate Studies)*
Cameron, Jill - BS, MS, PhD
Carnahan, Heather - BPHE, MSc, PhD
Chau, Tom - PhD
Colantonio, Angela - BA, BSc(OT), MHSc, PhD
Cott, Cheryl - DIPP, BPT, MSc, PhD
Davis, Aileen - BSc(PT), MSc, PhD
Dawson, Deirdre - BSc, MSc, PhD
Fernie, Geoffrey - BSc, PhD
Frank, John - BSc, MSc, MD
Girolametto, Luigi - BA, MSc, PhD
Green, Robin - PhD
Herridge, Margaret - MD
Jaglal, Susan - BSc, MSc, PhD
Kirsh, Bonnie - BSc(OT), MEd, PhD
Macarthur, Colin - BS, MSc, MBChB, PhD
Martino, Rosemary - BS, MA, DPH
McGilton, Kathy - BScN, MN, PhD
McIlroy, William - BSc, PhD
Mihailidis, Alex - BASc, MASc, PhD
Mustard, Cameron - AB, ScD
Polatajko-Howell, Helene - PhD
Popovic, Milos - DIPING, PhD
Rappolt, Susan - BSc(OT), MSc, PhD *(Chair and Graduate Chair)*
Reid, Denise - BSc(OT), MEd, PhD
Renwick, Rebecca - DipOT, BA, PhD
Roy, Eric - BSc, MPE, PhD
Streiner, David - PhD
Stuss, Donald - BPhil, MA, PhD
Thomas, Scott - BSc, MSc, PhD
van Lieshout, Pascal - MA, MA, PhD
Yoshida, Karen - BSc, BPHE, MSc, PhD
Young, Nancy - BSc(PT), MSc

Members Emeriti

Friedland, Judith - BA, MA, PhD
Verrier, Mary (Molly) - DipOT, MHSc

Associate Members

Andrysek, Jan - BSc, MASc, PhD
Beaton, Dorcas - BSc(OT), MSc, PhD
Biddiss, Elaine Alisa - MASc, PhD
Boynton, Erin - MD
Campbell, Kent - BSc, PhD
Cockburn, Lynn - BSc(OT), BCom, MEd, MPH, PhD
Comper, Paul - BA, MA, PhD
Evans, Catherine - BSc, MSc, PhD
Gibson, Barbara - MSc, BMR(P/T), PhD
Goldstein, Roger - MBChB
Gomez, Manuel - MSc, MD
Grace, Sherry - BA, MA, PhD
Graveline, Chantal - BSc, MSc
Hunter, Judith - BPT, MSc, PhD
Keightley, Michelle - BSc, MA, PhD
Koeberle, Paulo - BS, PhD
Landry, Michel - BSc(PT), MSc(PT), PhD
Lindsay, Sally - BA, MA, PhD
Lunsky, Yona - PhD
Mathur, Sunita - BSc(PT), MSc(PT), PhD
McGilton, Katherine - BScN, MN, PhD
Mochizuki, George - BPHE, MSc, PhD
Morshead, Cindi Marie - BS, PhD
Mosnyk, Debra - BSc(OT), MEd, PhD
Nixon, Stephanie - BHSc(P/T), BA, PhD
Novak, Christine - BSc, BSc, MS, PhD
Nussbaum, Ethne - BSc, PhD
Perry, Stephen - BS, MSc, PhD
Rigby, Patricia - DipOT, MHSc
Ryan, Stephen - BEng
Salbach, Nancy - BSc(PT), BS, MSc, PhD
Secker, Barbara - BA, AM, PhD
Shein, Fraser - PhD
Steele, Catriona - BA, MHSc, PhD
Switzer-Mcintyre, Sharon - BSc, BPHE, PhD
Turner, Gary - MPsy
Velji, Karima - BScN, MSN, PhD
Wright, Virginia - BSc, MSc
Zabjek, Karl - BSc, MClSc, PhD

Religion

Faculty Affiliation

Arts and Science

Degree Programs Offered

Religion – MA, PhD

Collaborative Programs

The following collaborative programs 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. **Sexual Diversity Studies**
   - Religion, MA, PhD
9. **South Asian Studies**
   - Religion, MA, PhD
10. **Women and Gender Studies**
    - Religion, MA, PhD
11. **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.

At the doctoral level, from the point of admission onward, 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, gives full information on admissions and programs as well as the research and teaching interests of the faculty.

Contact and Address

Web: www.religion.utoronto.ca
E-mail: 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

Degree Programs

Religion

Master of Arts

Minimum Admission Requirements

- 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.** 4.0 full-course equivalents (FCEs); included in the total are RLG 2000Y *Major Research Paper* and RLG 1200H MA *Method and Theory*

Workshop. 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.

Normal Program Length: 3 sessions full-time; 6–8 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

Doctor of Philosophy

Minimum Admission Requirements

- 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.** A minimum of 3.0 full-course equivalents (FCEs), including RLG 1000Y *Method and Theory in the Study of Religion* and at least 0.5 FCE outside the area of specialization. Students may be required to take more than 3.0 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.
- **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. Written examinations will cover (a) the student's area of specialization, and (b) at least one important cognate area. An oral examination on all materials assigned for the General Examinations will follow. 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 participate 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 those of the first two academic years of a program.

Normal Program Length: 4 years (some students may take longer)

Time Limit: 6 years full-time

Course List

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 2007H	Ethics, Society, and Technology
RLG 2008H	Sex, Gender, and the Body in Religious Perspective
RLG 2011H	Natural Law in Judaism and Christianity I
RLG 2012H	Natural Law in Judaism and Christianity II
RLG 2016H	Radical Evil: Religious, Philosophical and Psychological Response
RLG 2025H	Religious Thought
RLG 2028H	Enemies of God: Religion and Violence in a (Post) Modern Time
RLG 2060H	Religion and Philosophy in the European Enlightenment
RLG 2062H	Modern Hermeneutics and Religion
RLG 2065H	The Presuppositions of Interreligious Dialogue
RLG 2071H	Religion and Philosophy
RLG 2080H	Origins, Evolution and the Psychology of Religious Experience

RLG 2085H	Genealogies of Christianity
RLG 2088H	The Birth of Anthropology and the study of Primitive Religion
RLG 2089H	The Study of Non-Literate Religions in Nineteenth- and Early Twentieth-Century France
RLG 2090H	Topics in Psychology of Religion
RLG 3143H	Hebraica
RLG 3144H	Isaiah and Prophecy in the Early Judaism and Christianity
RLG 3150H	Reconceiving the Revelatory in Jewish Antiquity
RLG 3190H	Pseudepigraphy in Ancient Mediterranean Religion
RLG 3201H	Topics in Christian Origins I
RLG 3210H	Mani and the Kingdom of Light – Exploring an Alternate Christianity
RLG 3228H	Social History of the Early Jesus Movement
RLG 3230H	Comparative Theology Seminar
RLG 3232H	Sacred Space in the Christian Tradition
RLG 3235H	Liberation Theology: Examining the Work of Gustavo Guitiérrez and Thomas Berry
RLG 3236H	Religious Pluralism and the Church
RLG 3237H	Religion and Social Reform in Canada
RLG 3238H	Latin American Liberation Theology
RLG 3242H	Christian Asceticism in Late Antiquity
RLG 3243H	The Synoptic Problem
RLG 3248H	Gospel of John and the Jesus Traditions
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 3258H	Salvation as Liberation in Paul
RLG 3260H	Twentieth-Century Political Philosophy within Christianity
RLG 3261H	Augustine, Aquinas, Lonergan
RLG 3265H	Christian Spirituality and Modern Culture
RLG 3266H	God and Evil
RLG 3270H	Christianity and Crisis in North America
RLG 3272H	Jews and Judaism in Christian Traditions
RLG 3275H	Varieties of North American Christianity
RLG 3280H	Christianities of South Asia
RLG 3290H	Words and Worship in Christian Cultures
RLG 3410H	Reading Practices in East Asian Religions
RLG 3415H	Theravada Practice
RLG 3446H	Causation, Movement and Time in Buddhist Scholastic Debate
RLG 3448H	History of Sanskrit Buddhist Tantric Literature
RLG 3450H	Buddhism and Science
RLG 3454H	Readings in Tibetan Buddhism I
RLG 3455H	Readings in Tibetan Buddhism II
RLG 3456H	Tantra in Tibet
RLG 3458H	Rhetoric and Discipline in Buddhist Studies
RLG 3460H	Sanskrit Readings
RLG 3461H	Sanskrit Readings II
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 3510H	Studies in Islamic Thought and Spirituality
RLG 3512H	Introduction to Islamic Law
RLG 3514H	Ismaili History and Thought: The Persian Tradition
RLG 3515H	Law, Ethics and Society in the Islamic Tradition
RLG 3520H	Disciplining Islam
RLG 3522H	Dreams, Visions and the Enlightenment
RLG 3590H	Islam and Sexuality
RLG 3610H	Wisdom in Second Temple Judaism
RLG 3615H	Post-Holocaust Jewish Thought
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 3651H	Hellenistic-Jewish Thought
RLG 3653H	Jewish Exegetical Traditions in Antiquity
RLG 3655H	Readings in Jewish Literature (200 BCE–200 CE)
RLG 3691H	Themes in Jewish Studies I
RLG 3710H	Newar Religion
RLG 3715H	Readings in Hindu Tantra
RLG 3721H	Ramayana in Literature, Theology and Political Imagination
RLG 3744H	Hindu Epics
RLG 3745H	Hindu Myths and Mythology
RLG 3750H	Topics in South Asian Religions
RLG 3760H	Vedanta Through the Ages
RLG 3762H	Religion and Aesthetics in South Asia
RLG 3764H	Readings in Sanskrit Philosophy
RLG 3931H	Topics in North American Religions
RLG 4001H	Directed Reading: TST Seminar
RLG 4004H	Colloquium Presentation

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

Other Departments

Other departments and collaborative programs (see programs listed at the beginning of this entry) offer courses that may contribute to graduate programs in the study of religion. Visit our 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

Graduate Faculty

Full Members

Abray, L Jane - BA, MA, MPH, PhD
Airhart, Phyllis - BA, MA, PhD
Bendlin, Andreas - PhD
Bergen, Doris - MA, PhD
Black, Deborah - BA, MA, PhD
Boddy, Janice - BA, MA, PhD
Bryant, Joseph - MA, PhD
Cobb, Michael - BA, MA, AM, PhD
Cochelin, Isabelle - DipdESup, BA, MA, PhD
Coleman, Simon - BA, PhD
Cunningham, Hilary - BA, MA, PhD
Daswani, Girish - BSc, BSc, MS, PhD
Dhand, Arti - MA, PhD
Diamond, James - BA, MA, PhD
DiCenso, James - PhD *(Acting Chair and Graduate Chair)*
Donaldson, Terence - BSc, MTh, DTh
Eisenbichler, Konrad - BA, MA, PhD
Emmrich, Christoph - PhD
Emon, Anver - LLB, BA, LLM, MA, PhD, SJD
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
Green, Kenneth - BA, MA, PhD
Hackworth, Jason - BA, MA, MCP, PhD
Harrak, Amir - MA, LTh, PhD
Harris, Jennifer - BA, MA, PhD *(Director of Graduate Studies)*
Hewitt, Marsha - BA, MA, PhD
Kanaganayakam, Chelvanayakam - PhD
Kasturi, Malavika - DPhil
Kingwell, Mark - AB, BA, AM, MPH, PhD
Kivimae, Juri - AM, PhD
Klassen, Pamela - BA, MA, PhD
Kloppenborg, John - BA, MA, PhD *(Chair and Graduate Chair)*
Lambek, Michael - BA, MA, PhD
Lawson, Todd - BA, MA, PhD
Locklin, Reid - AB, MTh, PhD
Magee, John - BA, MA, PhD
Marshall, John - BA, MA, PhD

McGowan, Mark - BA, MA, PhD
McLean, Bradley - BSc, MTh, MDiv, PhD
Meacham, Tirzah - BA, MA, PhD
Metso, Sarianna - MA, PhD
Meyerson, Mark - BA, PhD
Mills, Kenneth - MA, PhD
Mittermaier, Amira - MA, PhD
Most, Andrea - BA, MA, PhD
Mullin, Amy - BA, PhD
Najman, Hindy - AB, MA, PhD
Newman, Judith - PhD
Northrup, Linda - BA, MA, PhD
Novak, David - AB, PhD
Ochs, Peter - BA, MA, PhD
Raman, Srilata - BA, MPH, PhD
Ross, Jill - MA, PhD
Saleh, Walid - BA, MA, PhD
Sandahl, Stella - MA, MA, PhD
Scharper, Stephen - BA, MA, PhD
Shantz, Colleen - BA, MDiv, PhD
Shen, Vincent Tsing-song - PhD
Stefanovic, Ingrid - BA, MA, PhD
Stoeber, Michael - BA, MA, PhD
Subtelny, Maria - BA, PhD
Taylor, Glen - BA, MPH, MTh, PhD
Ten Kortenaar, Neil - PhD
Terpstra, Nicholas - BA, MA, PhD
Toulouse, Mark - MDiv, PhD
Vaage, Leif - BA, PhD
Virani, Shafique - PhD

Members Emeriti

Brownlee, John - BA, MA, MPH
Callahan, William - AB, MA, PhD
Davies, Alan - PhD
Dooley, Ann - BA, MA, PhD
McIntire, C. Thomas - PhD
O'Connell, Joseph - PhD
O'Toole, Roger - DipEd, BA, MA, PhD
Richardson, G Peter - BAR, BD, PhD
Sinkewicz, Robert - BA, PhD
Stock, Brian - AB, PhD
Vertin, Joseph Michael - BA, PhD

Associate Members

Bahat, Dan - BA, MA, PhD
Blouin, Katherine - BA, MA, PhD, PhD
Dixon, David - BSc, MA, MD
Fehige, Yiftach - MA, PhD, DTh
Marshall, Ruth - BA, MA, DPhil
O'Neill, Kevin - PhD
Raffaelli, Enrico - PhD
Rao, Ajay - PhD
Ruffle, Karen - PhD
Sharma, Jayeeta - BA, MPH, MA, PhD
Smith, Kyle - BA, MA, PhD
Vaggione, Richard - BA, STB, STM, DPhil
Walfish, Barry - DipLib, BSc, MA, PhD

Slavic Languages and Literatures

Faculty Affiliation

Arts and Science

Degree Programs Offered

Slavic Languages and Literatures – MA, PhD

Collaborative Programs

The following collaborative programs 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.

Contact and Address

Web: www.utoronto.ca/slavic
E-mail: 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

Degree Programs

Slavic Languages and Literatures

Master of Arts

Minimum Admission Requirements

- 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.

Program Requirements

- Proficiency in language of major must be demonstrated during first week of session. Undergraduate language courses may be required. These are not tabulated as part of graduate program course requirements.
- Students normally complete:
  - 4.0 full-course equivalents (FCEs) including SLA 1104H and SLA 1040H, *or*
  - 3.0 FCEs including SLA 1104H and SLA 1040H; plus a research paper written in English.
- All MA students are required to take SLA 1104H *Introduction to Old Church Slavonic* and SLA 1040H *Methods of Teaching Slavic Languages,* or present evidence to the department that equivalent courses have been completed elsewhere.
- Students who intend to major or minor in Slavic linguistics must take SLA 1109H.
- Ordinarily, a student spends a full year in residence.

Normal Program Length: 2 sessions full-time

Time Limit: 3 years full-time

Doctor of Philosophy

Minimum Admission Requirements

- 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:
- Complete a major and a minor program.
- Complete 9.0 full-course equivalents (FCEs) with at least 0.5 FCE in Slavic linguistics. Advanced standing to a maximum of 3.0 FCEs may be available for work completed in the MA.
- Minor 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 or, with departmental approval, from a cognate discipline (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 and written and oral comprehensive examinations in the special field. The major field exam cannot be taken if students have any outstanding coursework.
- By the time of their major field exam, students should have chosen their supervisor and the rest of their committee (in consultation with the supervisor).
- Dissertation.
- In Years 1 and 2, students must take courses and be on campus full-time to participate fully in the PhD program's activities.

Field Slavic Literatures

Students in the field of Slavic Literatures must:

- Acquire a working knowledge of a Slavic language other than their major language of study or complete at least two approved undergraduate courses in a Slavic language that is different than their major language of study by the end of their third year. A working knowledge is defined as proficiency equivalent to a second-year course. Students must also satisfy departmental requirements for their major language. Students who do not major in Russian most often choose it as their second Slavic language.

Field Slavic Linguistics

Within the PhD program requirements listed above, students studying Slavic linguistics should include:

- At least 3.0 FCEs in Slavic linguistics, as well as 2.0 FCEs in theoretical linguistics from cognate disciplines (e.g., linguistics, anthropology). Linguistics students are also strongly advised to complete 1.0 FCE in the literature of their major language.
- Complete at least one course in Slavic languages from each of the three groups: West Slavic, East Slavic, and South Slavic by the end of their third year.

Normal Program Length: 4 years (many students require 5 years to complete the program)

Time Limit: 6 years full-time

Course List

Not all courses are offered every year. Students should consult the departmental handbook for current course offerings.

Croatian and Serbian Literatures

SLA 1507H	Modern Croatian Bards in Performance
SLA 1517H	Modern Serbian Bards: the Orphic Tradition
SLA 1537H	Political Drama from Dubrovnik to Danube
SLA 1547H	South Slavic Folklore

Czech and Slovak Literature

SLA 1600Y	Introduction to Czech and Slovak Literatures
SLA 1602Y	Czech Style and Syntax
SLA 1603H	Lifting the Iron Curtain: Czech Culture of the Sixties in Context
SLA 1604Y	History of Czech Verbal Art from the Early Stages to Baroque
SLA 1605Y	Of Robots, Clowns and Poets: Modern Czech Drama and Theatre
SLA 1606H	Public Places and Private Spaces in Czech Short Story
SLA 1608H	On the Wave of the Avant-garde
SLA 1609H	Karel Capek
COL 5039H	Of Laughter and Forgetting in Milan Kundera

Polish Literature

SLA 1304H	Staging God, Man and History: Polish Drama
SLA 1305H	Polish Fiction or a Disrupted Funeral of the Novel
SLA 1306H	Polish Poetry: Shaping the National Canon
SLA 1308Y	Topics in Polish Literature
SLA 1312Y	Modernism and Post-Modernism 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 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 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 1232H	Russian Symbolism
SLA 1233H	Studies in Modern Russian Poets
SLA 1234H	Dostoevsky
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

SLA 1900H	Russian Nineteenth-Century Poetry (mandatory for MA students)

Slavic Linguistics

SLA 1040H	Methods of Teaching Slavic Languages
SLA 1101H	Historical Phonology, Morphology, and Syntax of the Russian Language
SLA 1102Y	Advanced Russian Language Skills
SLA 1103H	Comparative South Slavic Linguistics
SLA 1104H	Introduction to Old Church Slavonic
SLA 1105H	Russian Phonetics, Phonology, and Derivational Morphology
SLA 1109H	Studies in Old Church Slavonic
SLA 1110H	Comparative Historical Slavic Linguistics
SLA 1112H	Tense, Aspect and Mood in Slavic
SLA 1113H	Language Standardization and the Politics of Identity in Southeastern Europe
SLA 1114H	Russian Inflectional Morphology, Stress, Lexicon, Aspect
SLA 1115H	Historical Dialectology, Accentuation, and Verbal Semantics of the Russian Language
SLA 1141H	History of the Ukrainian Language
SLA 1142H	Style and Structure of Ukrainian
SLA 1150H	Russian Since the Revolution

Russian Language

SLA 1101 Y	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 1405Y	Experiments in Ukrainian Prose
SLA 1406Y	Studies in Ukrainian Literary Criticism
SLA 1407H	Aspects of Literary Translation of Ukrainian
SLA 1408H	Taras Shevchenko
SLA 1412Y	Literature of the Ukrainian Diaspora

General Slavic

SLA 1037H	Theatre and Cinema in Extremis: Staging Twentieth Century Aesthetics and Politics
SLA 1038H	Performance in Theory and Practice
SLA 1039H	Kyiv-Kiev-Kijow: A City through Cultures and Centuries
SLA 1040H	Methods of Teaching Slavic Languages
SLA 1207H	The Imaginary Jew
SLA 1310H	Theatre in the Twentieth Century
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
SLA 2002Y	Reading and Research (for PhD students only)
SLA 2020Y	Research Paper

COL 5012Y	Readings in Czech/Russian Literary Theory
COL 5037H	Magic Prague: Question of Literary Cityscapes

Graduate Faculty

Full Members

Ambros, Veronika - MA, PhD
Barnes, Christopher - BA, MA, PhD
Holland, Kate - MA, PhD
Koznarsky, Taras - MA, PhD
Kramer, Christina - BA, MA, PhD
Livak, Leonid - BA, AM, PhD *(Coordinator of Graduate Studies)*
Obradovic, Dragana - MA, PhD
Orwin, Donna - PhD
Paivio, Pia-Maria - MA, PhD
Schallert, Joseph - PhD
Tarnawsky, Maxim - BA, PhD
Trojanowska, Tamara - MA, PhD

Members Emeriti

Bedford, Charles - MA, PhD
Bisztray, George - 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

Social Work

Faculty Affiliation

Social Work

Degree Programs Offered

Social Work – MSW, JD/MSW, MHSc/MSW, PhD

Diploma Programs Offered

Social Work – Advanced Diploma in Social Service Administration

Collaborative Programs

The following collaborative programs 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. **Asia-Pacific Studies**
   - Social Work, MSW
4. **Bioethics**
   - Social Work, PhD
5. **Community Development**
   - Social Work, MSW
6. **Ethnic and Pluralism Studies**
   - Social Work, MSW, PhD
7. **Health Care, Technology, and Place**
   - Social Work, PhD
8. **Health Services and Policy Research**
   - Social Work, MSW, PhD
9. **Sexual Diversity Studies**
   - Social Work, MSW, PhD
10. **Women and Gender Studies**
    - Social Work, MSW, PhD
11. **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 **MSW** program is distinguished by the integration of research and practice in both the classroom and its practicum education. The program offers five fields of specialization:

- Children and Their Families (MSW)
- Gerontology (MSW)
- Health and Mental Health (MSW)
- Social Justice and Diversity (MSW)
- Social Service Administration (MSW)

It is fully accredited by the Canadian Association of Social Work Education.

The **Advanced Diploma in Social Service Administration** program provides a rigorous, comprehensive grounding in the key values, skills, and knowledge required by administrators and leaders of social service organizations.

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. The program offers two fields:

- Social Work Policy Analysis (PhD)
- Social Work Practice, Theory, and Research (PhD)

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.

Contact and Address

Web: www.socialwork.utoronto.ca
E-mail: admissions.fsw@utoronto.ca
Telephone: (416) 978-6314
Fax: (416) 978-7072

Factor-Inwentash Faculty of Social Work
University of Toronto
246 Bloor Street West
Toronto, Ontario M5S 1V4
Canada

Degree Programs

Social Work

Master of Social Work

The Factor-Inwentash Faculty of Social Work offers two streams in the Master of Social Work program:

1. Students with an appropriate bachelor's degree from a recognized university will normally complete the program in two years of full-time study.
2. Students entering with a BSW degree from a recognized university will be given advanced standing

and will normally complete the program in one year of full-time study or two years of part-time study.

All students are expected to graduate with an advanced level of knowledge and professional competence in a chosen area of social work practice.

Minimum Admission Requirements

- 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 Program with Advanced Standing.
- Students applying to the Social Service Administration field must have at least three years experience in social 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.
- Proof of English-language facility (see SGS General Regulations).
- 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 Full-Time Program and MSW Program with Advanced Standing

- **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. (For more information, visit www.rcmp-grc.gc.ca/cr-cj/vulner/index-eng.htm.)

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

- Year 1 of the two-year full-time MSW program—all students.

Compulsory Courses

First-year MSW students must complete eight half courses (4.0 FCEs) and the first-year 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 is a prerequisite for second-year required courses.)
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)

- **MSW two-year program students** must declare their field of specialization by mid-February of the first year. 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 second year 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.

Field Children and Their Families

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.

MSW Two-Year Program

- Students must complete a total of 8.5 FCEs including core MSW coursework (4.0 FCEs), required field-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 the first year and is offered in the winter session; the second-year practicum (September–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-specialization coursework (2.0 FCEs), practica (1.5 FCEs), and a thesis (1.0 FCE).

MSW Program with Advanced Standing

- 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 TWO

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)

MSW Program with Advanced Standing students must complete the above courses plus a compulsory course:

SWK 4510H Research for Evidence-Based Social Work Practice (SWK 4510H is a prerequisite for required second-year courses)

Field Social Justice and Diversity

Reducing inequalities and marginalization is in line with professional social work's agenda of anti-oppression and social justice. Social work is committed to working with and on behalf of people from disenfranchised backgrounds.

MSW Two-Year Program

- Students must complete a total of 8.5 FCEs including core MSW coursework (4.0 FCEs), required field-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 the first year and is offered in the winter session; the second year practicum (September–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-specialization coursework (2.0 FCEs), practica (1.5 FCEs), and a thesis (1.0 FCE).

MSW Program with Advanced Standing

- Students in the MSW Program with Advanced Standing 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 TWO

SWK 4304H	Globalization and Trans-nationalization: Social Work Responses Locally and Globally
SWK 4306H	Process of Social Exclusion, Marginalization, and Resistance
SWK 4512H	Creating Knowledge to Inform Critical Practice
SWK 4606H	Diversity, Access, and Equity in Social Work Practice
SWK 4702Y	Social Work Practicum II (full-credit)

MSW Program with Advanced Standing students must complete the above courses plus a compulsory course:

SWK 4510H	Research for Evidence-Based Social Work Practice (SWK 4510H is a prerequisite for required second-year courses)

Field Health and Mental Health

As members of inter-professional health teams, social workers seek to assist others in understanding the social and community context in which physical and mental illness occur, and the way in which these larger systems contribute to the development of illness and disability and exacerbate or ameliorate the challenges in adapting to illness and living with disability.

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-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 the first year and is offered in the winter session; the second-year practicum (September–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-specific coursework (2.0 FCEs), practica (1.5 FCEs), and a thesis (1.0 FCE).

MSW Program with Advanced Standing

- Students in the MSW Program with Advanced Standing 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 Program with Advanced Standing 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 TWO

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)

MSW Program with Advanced Standing students must complete the above courses plus a compulsory course:

SWK 4510H	Research for Evidence-Based Social Work Practice (SWK 4510H is a prerequisite for required second-year courses)

Field Social Service Administration

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.

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-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 the first year of the MSW two-year program and is offered in the winter session; the second year practicum (September–April) is equivalent to 1.0 FCE and must be in the student's field of specialization.
- Students in the Social Service Administration specialization do not have the option of doing a thesis.

MSW Program with Advanced Standing

- Students in the MSW Program with Advanced Standing 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 TWO

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
SWK 4702Y	Social Work Practicum II (full-credit)

MSW Program with Advanced Standing students must complete the above courses plus a compulsory course:

SWK 4510H	Research for Evidence-Based Social Work Practice (SWK 4510H is a prerequisite for required second-year courses)

Field Gerontology

Social workers provide a wide variety of services and programs, both in the community and in institutions that are aimed at enhancing the quality of life of older people and assisting families to adjust to the aging of their family member. Social workers also play a vital role in the development and implementation of social and economic policies at the provincial and national levels through research on aging, consultation with government, and through social advocacy.

- All students enrolled in the Social Work in Gerontology field of specialization will automatically be enrolled in the Collaborative Program in Aging, Palliative and Supportive Care Across the Life Course.

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-specialization coursework (2.5 FCEs), elective coursework (1.0 FCE, 0.5 of which must be from the Collaborative Program in Aging, Palliative and Supportive Care Across the Life Course listing), the first year practicum (0.5 FCE), and a thesis (1.0 FCE).

MSW Program with Advanced Standing

- Students in the MSW Program with Advanced Standing 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 Program with Advanced Standing 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 Program in Aging, Palliative and Supportive Care Across the Life Course listing), and a thesis (1.0 FCE).

COMPULSORY COURSES — YEAR TWO

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)

MSW Program with Advanced Standing students must complete the above courses plus a compulsory course:

SWK 4510H Research for Evidence-Based Social Work Practice (SWK 4510H is a prerequisite for required second-year courses)

Normal Program Length: 6 sessions (2 years) full-time; 3 sessions advanced-standing full-time; 6 sessions advanced-standing part-time

Time Limit: 3 years full-time; 6 years part-time

Course List

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 website, www.socialwork.utoronto.ca.

AGE 2000H   Principles of Aging
JPX 1001H   Parenting: Multidisciplinary Perspectives
JFS 1460H   Community-Based Natural Resource Management
JPW 2118H   Philosophical Foundations of Women's Studies
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 4403H   Women and Social Policy in Canada
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   Advanced Research in Social Work
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 4616H   Drug Dependencies: Interventive Approaches
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 Social Service Administration
SWK 4643H   Special Topics in Social Justice and Diversity
SWK 4658H   Social Work with Immigrants and Refugees
SWK 4662H   Social Policy Analysis
SWK 4667H   Information Technology in Professional Social Work Practice
SWK 4668H   Welfare of Children

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

Combined JD/MSW in Law and Social Work

Minimum Admission Requirements

- Applicants must satisfy the admission requirements of both the Juris Doctor and Master of Social Work programs independently.

Program Requirements

- Program requirements will normally be satisfied within four years. Advanced standing for students with a BSW from a recognized university is possible.

Time Limit: 4 years full-time

Combined MHSc/MSW in Health Administration and Social Work

Minimum Admission Requirements

- Students must satisfy the admission requirements for both the Master of Health Science and Master of Social Work programs independently.

Program Requirements

- Program requirements will normally be satisfied within three years. Advanced standing for students with a BSW from a recognized university is possible.

Time Limit: 6 years full-time

Doctor of Philosophy

Minimum Admission Requirements

- 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.
- Evidence of facility in the English language (see SGS General Regulations).
- Initial admission inquiries should be made directly to the Faculty of Social Work. The application deadline for the PhD program is February 1. The Faculty of Social Work does not guarantee admission to all applicants who meet its minimum requirements.

Program Requirements

- Complete coursework totalling 5.0 FCEs, generally within two years of registration, as follows:
  - 2.0 FCEs in required research courses: SWK 6301H, SWK 6302H, SWK 6307H, SWK 6308H. 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 at least B+.
  - 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* (0.5 FCE) is required during the fall session of the second year of the program.
- Following completion of coursework, students are required to satisfactorily complete a comprehensive paper followed by a thesis proposal and thesis which constitutes a distinct contribution to knowledge in the field of social work, 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 the third year of the program. The research, writing, and Doctoral Final Oral Examination of the thesis are typically completed by the end of the fifth year of the program.
- 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.
- Minimum period of registration is 12 academic sessions of full-time enrolment (fall, winter, summer sessions).

Flexible-Time Option

- The flexible-time PhD differs only in design and delivery. All requirements are the same as those for the full-time PhD students.
- The flexible-time option is offered to practising professionals who can demonstrate their employment or other professional work is related to their intended field of study and research interests. Students who are considering the flexible-time PhD should ensure that they will have adequate time on campus to attend classes and to fulfil the academic requirements of a PhD program.

Normal Program Length: 4 years full-time; 6 years flexible-time

Time Limit: 6 years full-time; 8 years flexible-time

Course List

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)

Recommended Course

SWK 4506H Applied Quantitative Data Analysis
(Prerequisite: SWK 6301H or pass a competency exam)

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 website, www.socialwork.utoronto.ca.

SWK 6005H Theoretical Foundations of Social Work
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 6208H Advanced Principles of Social Policy Analysis
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

Diploma Programs

Advanced Diploma in Social Service Administration

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.

Admission Requirements

- Applicants follow admission requirements stipulated by the School of Graduate Studies at the University and by the Factor-Inwentash Faculty of Social Work. 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

- 3.0 full-course equivalents (FCEs) offered in modular format one full day per month.

Normal Program Length: 3 sessions (1 year) full-time; 6 sessions (2 years) part-time

Time Limit: 5 years full-time; 5 years part-time

Course List

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 given 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.

Graduate Faculty

Full Members

Alaggia, Ramona - BA, MSW, PhD
Bogo, Marion - BA, MSW
Chambon, Adrienne - BA, PhD
Fuller-Thomson, Esme - BA, MSW, PhD
Globerman, Judith - BSW, MHSc, MSc, PhD
Hulchanski, J David - BA, MSc, 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
Shera, Wes - BA, MA, PhD
Shlonsky, Aron - BA, MPH, MSW, DPhil *(Director, PhD Program)*
Stern, Susan - DSW
Trocme, Nicolas - PhD
Tsang, Ka Tat - BSc, PhD
Williams, Charmaine - BA, BSc, MSW, PhD *(Associate Dean)*

Members Emeriti

Bellamy, Donald - BA, BSW, MSW, DSW
Breton, Margot - BA, MSW
George, Usha - BSc, BEd, MA, MA, PhD
Irving, Howard - BS, MSW, DSW
Lang, Norma - BA, BSW, PhD
Marziali, Elsa - BA, MSW, DSW
Meeks, Donald - BA, MSW, DSW, Associate In
  Commerce
Schlesinger, Benjamin - BA, MSW, PhD
Shapiro, Ben - BA, BSW, MSW, DSW
Wells, Lilian - BA, BSW, BA, MSW

Associate Members

Anucha, Uzo - BSW, MSW, PhD
Bhuyan, Rupaleem - BA, MA, PhD
Blakely, Christine (Cindy) - BA, MSW
Brennan, David - BA, MSW, PhD
Craig, Shelley - BS, MSW, PhD
Cullen, James - BSW, BA, MSW, PhD
Das Gupta, Tania - MA, PhD
Donahue, Peter - BSc, BA, DSW
Fallon, Barbara - BA, MSW, PhD
Fang, Lin - BA, MSW, PhD
Faucher, Sheila - BA, MSc, PhD
Fleischer, Les - BA, MSW, DSW
Flicker, Sarah - BA, MPH, PhD
Flynn, Robert - BA, BTh, MA, PhD
Frolic, B. Michael - BA
Gadalla, Tahany - BASc, MS, MMath, EdD
Gold, Nora - BSW, MSW, DSW
Goldring, Luin - BA, MS, PhD
Goodman, Deborah - BA, MSW, DSW
Herie, Marilyn - BA, MSW, PhD
Ickowicz, Abel - MD
Jeffries, Joel - MA, MB
Jennissen, Therese - MSW, PhD
Lai, Daniel W. L. - MSW, PhD
Langley, John - LMCC, MD
Lee, Eunjung - BSW, MSW, PhD
Legault, Maurice - MSc, PhD
Levine, Deborah - BA, MA, MSW, PhD
Litvack, Andrea - BSW, MSW *(Director, MSW Program)*
Lurie, Stephen - BA, MSW, MBA
MacMillan, Harriet - MSc, MD
Maiter, Sarah - BSW, MSc, DPhil
Matsuoka, Atsuko Karin - BA, MA, PhD
McNeill, Ted - BA, MSc, DPhil
Muskat, Barbara - BSW, MSW, PhD
Myers, Ted - BA, MSW, MSc, PhD
Pepler, Debra - BA, BEd, MSc
Popova, Svetlana - MPH, MSD, DSW, MedScD
Power, Roxanne - BA, BSW, MSW
Ravitz, Paula - DPsych, BA, MD
Saini, Michael - BSW, BA, BA, MSW, PhD
Sakamoto, Izumi - DSW
Sinding, Christina - BA, MA, PhD
Skinner, Wayne - MSW
Stewart, Malcolm - DSW
Swift, Karen - AB, MSW, PhD

Sociology

Faculty Affiliation

Arts and Science

Degree Programs Offered

Sociology – MA, PhD

Collaborative Programs

The following collaborative programs 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. **Asia-Pacific Studies**
   - Sociology, MA
4. **Diaspora and Transnational Studies**
   - Sociology, MA, PhD
5. **Environmental Studies**
   - Sociology, MA, PhD
6. **Ethnic and Pluralism Studies**
   - Sociology, MA, PhD
7. **Jewish Studies**
   - Sociology, MA, PhD
8. **Knowledge Media Design**
   - Sociology, MA, PhD
9. **Sexual Diversity Studies**
   - Sociology, MA, PhD
10. **Women and Gender Studies**
    - Sociology, MA, PhD

Overview

The **Master of Arts** 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 can choose to take the program on a part-time or full-time basis.

The **Doctor of Philosophy** 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.

Students are expected to acquire autonomy in conducting research, preparing scholarly publications, and participating in professional conferences. These objectives are achieved through a combination of coursework, participation in seminars, preparation of comprehensive examinations, paid work as research and teaching assistants, preparing papers for conference presentation, and supervised dissertation research.

Contact and Address

Web: www.sociology.utoronto.ca
E-mail: sociology.graduate@utoronto.ca
Telephone: (416) 978-3414
Fax: (416) 978-3963

Department of Sociology
University of Toronto
725 Spadina Avenue
Toronto, Ontario M5S 2JH
Canada

Degree Programs

Sociology

Master of Arts

Minimum Admission Requirements

- 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 typed statement of interest indicating research interests and reasons for applying to study sociology at the University of Toronto.

- 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 facility 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: 580 with 5 on the Test of Written English (TWE)
  - Internet-based TOEFL exam: 93/120 with 22/30 on the writing and speaking sections

Program Requirements

- Students have the option of completing the master's degree in one of two ways:
  - eight half courses (4.0 FCEs) within nine months (the preferred option for those proceeding to the PhD), *or*
  - six half courses (3.0 FCEs) and a research paper within 12 months
- All master's students must take: SOC 6001H *Classical Sociological Theory,* SOC 6302H *Statistics for Sociologists,* and SOC 6712H *Qualitative Methods I.*
- 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.
- The MA degree may be pursued on a full-time or part-time basis.

Normal Program Length: 3 sessions full-time; 15 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

Doctor of Philosophy

Minimum Admission Requirements

- 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.
- 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 typed statement of interest indicating research interests and reasons for applying to study sociology at the University of Toronto
- 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 facility 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: 580 with 5 on the Test of Written English (TWE)
  - Internet-based TOEFL exam: 93/120 with 22/30 on the writing and speaking sections

Program Requirements

- 4.0 full-course equivalents (FCEs). These must include: SOC 6101H *Contemporary Sociological Theory,* SOC 6707H *Intermediate Data Analysis,* and SOC 6711Y *Research Practicum.* If a student has already taken these courses at the graduate level, other courses will be substituted to maintain the 4.0 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.
- Two comprehensive examinations which must be completed by the end of the second year of residence.
- Preparation of an original thesis, under the supervision of a committee of the faculty staff, and its oral defence.
- 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.
- Students who enter the doctoral program directly from a bachelor's degree will be required to take the three half courses (1.5 FCEs) that are required at the MA level in addition to the standard PhD requirements.
- Two years of residence.

Normal Program Length: 4 years full-time; 5 years direct-entry

Time Limit: 6 years full-time; 7 years direct-entry

Course List

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   Survey Methods
SOC 6302H   Statistics for Sociologists
SOC 6303H   Field Methods
SOC 6501H   Research Design and Hypothesis Testing in Sociology
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

Areas of Specialization

Immigration and Ethnicity

SOC 6002H   Immigration I
SOC 6003H   Immigration II
SOC 6009H   Ethnicity I
SOC 6109H   Ethnicity II
SOC 6209H   Ethnicity III

Health and Mental Health

SOC 6022H   Sociology of Health
SOC 6023H   Sociology of Mental Health I
SOC 6122H   Sociology of Mental Health II
SOC 6123H   Sociology of Addiction
SOC 6126H   The Social Ecology of Health

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

Crime and Sociolegal Studies

CRI 3140H   Special Topics in Criminology
SOC 6006H   Deviance I
SOC 6106H   Deviance II
SOC 6206H   The Sociology of Deviance and Control
SOC 6306H   Sociology of Law

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

SOC 6506H   Design and Analysis of Research on Deviance and Control

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

Stratification, Work, and Labour Markets

SOC 6012H   Sociology of Work I
SOC 6112H   Sociology of Work II
SOC 6013H   Social Inequality I
SOC 6113H   Social Inequality II
SOC 6312H   Social Aspects of Technology and Work

Political Sociology

SOC 6005H   Social Change and Development I
SOC 6105H   Social Change and Development II
SOC 6010H   Political Sociology I
SOC 6110H   Political Sociology II
SOC 6210H   Political Sociology III
SOC 6014H   Environmental Sociology I
SOC 6114H   Environmental Sociology II
SOC 6125H   Theories of Social Change

Sociology of Culture

SOC 6516H   Sociology of Culture
SOC 6517H   Sociology of Culture II
SOC 6518H   Sociology of Culture III

Other Courses

SOC 6016H   Social Demography
SOC 6018H   Sociology of Religion I
SOC 6118H   Sociology of Religion II
SOC 6021Y   Sociology and the Policy Process in Canada
SOC 6514H   Social Ecology

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

Graduate Faculty

Full Members

Andersen, Robert - BA, MA, PhD *(Chair)*
Baber, Zaheer - PhD
Baldus, Bernd - MA, DrRerPol
Baumann, Shyon - BA, MA, PhD
Berry, Brent - BS, PhD
Bodemann, Michal - MA, PhD
Boyd, Monica - BA, MA, PhD

Brownfield, David - PhD
Bryant, Joseph - MA, PhD
Brym, Robert - BA, MA, 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
Green, Adam - BA, MA, MSS, PhD
Hammond, Michael - BA, MA, MPH, 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
Levi, Ron - BCL, LLB, LLM, SJD
Magee, William - PhD
Maurutto, Paula - DPhil
Mullen, Ann Louise - BA, MA, PhD
Myles, John - BA, BTh, MA, PhD
Peng, Ito - BSW, BSc, MA, PhD
Reitz, Jeffrey - PhD
Schieman, Scott - BA, MA, PhD
Sev'er, Aysan - BA, MA, PhD
Sorenson, Ann Marie - PhD
Tanner, Julian - DipEd, BSc, MA, PhD
Taylor, Judith - BA, PhD
Tepperman, Lorne - BA, MA, PhD
Ungar, Sheldon - BA, MA, PhD
Veugelers, Jack - PhD
Wellman, Barry - BA, MA, PhD, 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
O'Toole, Roger - DipEd, BA, MA, PhD
Roman, Richard - BA, MA, PhD
Silva, Edward - BA, MA, PhD
Simpson, John - BA, BD, MTh, PhD
Spencer, Metta - AB, MA, PhD
Zeitlin, Irving - BA, MA, PhD

Associate Members

Abraham, Sara - DPhil
Choo, Hae Yeon - BA, MA, PhD
Farah Schwartzman, Luisa – PhD
Goodman, Philip - BA, MA, PhD
Lee, Jooyoung - BA, MA, PhD
Leschziner, Vanina - BA, BA, AM, DPhil
Lexchin, Joel - BSc, MSc, MD
Liddle, Kathleen - BA, AM, PhD
Marin, Alexandra - BA, MA, PhD
Schafer, Markus - BA, MS, PhD
Schneiderhan, Erik - PhD
Silver, Daniel - BA, MA, PhD

Spanish

Faculty Affiliation

Arts and Science

Degree Programs Offered

Spanish – 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**
   - 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 three fields:

- Spanish Peninsular Literature
- Latin American Literature
- Hispanic Linguistics

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
E-mail: 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

Degree Programs

Spanish

Master of Arts

Minimum Admission Requirements

- 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 (10–12 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 three fields:
  - Spanish Peninsular Literature
  - Latin American Literature
  - Hispanic Linguistics
- 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.

Normal Program Length: 3 sessions full-time; 6 sessions part-time

Time Limit: 3 years full-time; 6 years part-time

Doctor of Philosophy

Minimum Admission Requirements

- 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 (10–12 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 three fields:
  - Spanish Peninsular Literature
  - Latin American Literature
  - Hispanic Linguistics
- **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 25–30 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 (20–25 pages double-spaced, plus a bibliography) to the Graduate Coordinator by April 25 of his/her second year 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 his/her third year 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.

Normal Program Length: 4 years

Time Limit: 6 years full-time

Course List

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.

COL 5019H	Cervantes and Humanism
COL 5029H	Reading Cervantes
COL 5032H	Feminist Approaches to Medieval Literature
COL 5064H	Medieval Literary Theory
COL 5065H	The Forms of Literature in the Age of Electricity
COL 5072H	Affinities: Readings of Realism and Radicalism
JRL 1100Y	Introduction to Romance Philology
JRL 1101H	Topics in Romance Laboratory Phonetics and Phonology I: Theory
JRL 1106H	Topics in Romance Laboratory Phonetics and Phonology II
LIN 1029H	Sound Patterns in Language
LIN 1031H	Morphological Patterns in Language
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 1084H	Experimental Approaches to Hispanic Linguistics
SPA 1088H	Spanish Syntax
SPA 1089H	Morphosyntax
SPA 1097H	Second-Language Teaching and Methodology
SPA 1101H	Topics in the Acquisition of Spanish
SPA 1103H	Topics in Spanish Phonology

SPA 1104H	Experimental Approaches to Sound Variation and Change
SPA 1150H	Directed Research in Hispanic Linguistics
SPA 2018H	Poetics of Early Drama
SPA 2021H	The Politics of Print
SPA 2022H	Books and Borders
SPA 2025H	The Worlds of Alfonso X, el Sabio
SPA 2031H	Writing that Conquers: Early Colonial Historiography
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 2150H	Defining Journeys in the Spanish Empire
SPA 2171H	Politics and Aesthetics of Early Modern Verse
SPA 2187H	Comedy and the Comedia in Early Modern Spain
SPA 2189H	Lope and Calderón
SPA 2284H	Narrative and Political Transition in Contemporary Spain
SPA 2291H	The Urban Experience in Spain
SPA 2305H	Auteurism in Spanish Cinema
SPA 2352H	Modern Spanish Drama and its Traditions
SPA 2404H	The Latin American Novel
SPA 2405H	Issues of Testimonio
SPA 2415H	Disability and Latin American Cultural Production
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 3000H,Y	Directed Research in Hispanic Literatures

Graduate Faculty

Full Members

Blackmore, Josiah - PhD *(Chair and Graduate Chair)*
Colantoni, Laura - MA, PhD
Davidson, Robert - BA, AM, 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
Sternberg, Ricardo - BA, MA, 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
Rolph, Wendy - BA, MA, MPH
Skyrme, Raymond - BA, MA, PhD
Valdes, Mario - BA, MA, PhD
Webster, Jill - BA, MA, PhD

Associate Members

Antebi, Susan - AM, PhD
Fernandez Pelaez, Iban - PhD
Iglesias, Yolanda - BA, BA, MA, PhD
Ramirez-Salazar, Manuel - BA, MA, PhD

Speech-Language Pathology

Faculty Affiliation

Medicine

Degree Programs Offered

Speech-Language Pathology – MHSc, MSc, PhD

Collaborative Programs

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

1. **Aging, Palliative and Supportive Care Across the Life Course**
   - Speech-Language Pathology, MSc, PhD
2. **Neuroscience**
   - Speech-Language Pathology, MSc, PhD

Overview

Speech-language pathology is concerned with normal and disordered human communication and swallowing. The department offers professional and research degree programs leading to careers in the discipline.

The **Master of Health Science** (MHSc) **in Speech-Language Pathology** is a full-time professional graduate program. The primary aim of the program is to prepare practitioners for entry into the practice of speech-language pathology. Graduates are prepared to assume varied professional responsibilities including the assessment, treatment, and management of speech, voice, language, and swallowing disorders. Coursework and clinical internships are integrated and sequenced. There is a strong research-to-practice focus, and students complete a comprehensive portfolio requirement in their final year.

The **Master of Science** degree is a full-time program that prepares students to engage in the scientific study of normal and disordered speech, language, and swallowing processes in children and adults. The MSc is a research-oriented program and does not prepare students for clinical practice. Although the primary objective of the MSc program is to prepare students for doctoral studies in speech and language sciences, successful completion of the program does not guarantee entrance into the PhD program.

The purpose of the **Doctor of Philosophy** program is to prepare students to contribute independently to the advancement of scientific knowledge in their area of specialization within the discipline of speech-language pathology.

Contact and Address

Web: www.slp.utoronto.ca
E-mail: speech.path@utoronto.ca
Telephone: (416) 978-2765
Fax: (416) 978-1596

Department of Speech-Language Pathology
University of Toronto
Rehabilitation Sciences Building
Room 160, 500 University Avenue
Toronto, Ontario M5G 1V7
Canada

Degree Programs

Speech-Language Pathology

Master of Health Science

Minimum Admission Requirements

- An appropriate bachelor's degree from a recognized university, with standing equivalent to at least a University of Toronto mid-B in the final year.
- Prerequisite courses in child development, linguistics, phonetics, statistics, and human physiology.
- Facility in oral and written English 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 facility 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:
  - paper-based TOEFL: 600 with 5 on the Test of Written English (TWE) and 50 on the Test of Spoken English (TSE)
  - 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, TWE, and 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, during which their mastery of oral English for meeting clinical requirements will be assessed.

- See the departmental website for a full listing of admission requirements.

Program Requirements

- The professional MHSc program is divided into five academic and four clinical units. Each academic unit is made up of related coursework. Teaching within and across units emphasizes integrated learning experiences. Academic units are followed by full-time clinical placements, each lasting between 4 and 10 weeks for a total of 31 weeks of clinical experience throughout the two-year program. Students should anticipate receiving at least one placement outside of metropolitan Toronto. Students must accept placements offered to them and are responsible for all travel and accommodation costs.

- The MHSc program does not have a thesis requirement; however, prior to graduation, all MHSc students will be required to complete a portfolio that demonstrates their proficiency in key areas of professional practice.

- Students must complete all requirements within three consecutive years.

Normal Program Length: 6 sessions

Time Limit: 3 years

Courses for the MHSc Program

Consult the departmental website for a listing of courses offered during each academic year.

The first year 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 1507H0	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 1532H0	Clinical Laboratory in Hearing Disorders: Aural Rehabilitation or Audiology Component (Credit/No Credit)

The second year of the program for students will consist of:

SLP 1508Y	Advanced Clinical Laboratory in Speech-Language Pathology
SLP 1525H	Structurally Related Disorders
SLP 1527H+	Physical Analysis of Speech 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

Master of Science

Minimum Admission Requirements

- 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 facility in the English language through the successful completion of one of the English proficiency tests listed in this calendar. See General Regulations, 4.1.10 English-Language Facility.

Program Requirements

- Course requirements are determined by the student's supervisory committee. Normally, the student is required to complete satisfactorily a minimum of 2.0 full-course equivalents (FCEs), consisting of at least 1.0 FCE in research design and methodology, and at least 1.0 FCE in the area of research interest.

- One-year residency period, which typically is sufficient for completion of the coursework.

- Participate in student and faculty research seminars.

- Engage in a research project, present the results in a written thesis, and complete a successful oral defence of the thesis.

- **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 direct advancement to the equivalent year of 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.

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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.

Normal Program Length: 6 sessions full-time

Time Limit: 3 years full-time

Doctor of Philosophy

Minimum Admission Requirements

- 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.
- Demonstrated advanced research qualifications in speech and language sciences.
- 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, 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 facility 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, 4.1.10 English-Language Facility.

Program Requirements

- Course requirements are determined by the student's supervisory committee and consist of a minimum of 3.0 full-course equivalents (FCEs).
- Students must demonstrate evidence of adequate knowledge in research design and statistics or must include suitable coursework as determined by the supervisory committee.
- Participate in student and faculty research seminars in addition to their regular course requirements.
- The doctoral program consists of two phases, each taking approximately 18–24 months to complete. During the first phase of the program, the student completes all course requirements and initiates the development of a research thesis proposal, including the collection of preliminary experimental data, if appropriate. At the conclusion of this first phase, the student completes a departmental comprehensive examination that includes a full research proposal and a conceptual paper on a topic chosen by the student and the supervisory committee. The second phase of the program is devoted almost exclusively to the completion of the thesis research project. At the conclusion of this second phase, the student defends the research thesis at a Doctoral

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

Final Oral Examination in accordance with the regulations of the School of Graduate Studies.

- Students complete a residency requirement during the first two years of the program.

Normal Program Length: 4 years full-time

Time Limit: 6 years full-time; 7 years with transfer-from-master's

Courses for the MSc and PhD Programs

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

Special Courses Offered to Students from Other Departments

SLP 2501H	Special Topics in Communication Disorders
SLP 2502Y	Specialized Study in Communication Disorders

Graduate Faculty

Full Members

Abel, Sharon - BA, MA, PhD
Bressmann, Tim - MPH, PhD
De Nil, Luc - MSc, PhD
Eriks-Brophy, Alice - BEd, AB, MSL, PhD
Girolametto, Luigi - BA, MSc, PhD *(Chair and Graduate Chair)*
Hyde, Martyn - BSc, PhD
Mainela-Arnold, Elina - MA, PhD
Martino, Rosemary - BS, MA, DPH
Rochon, Elizabeth - BA, MSc, PhD
Smyth, Ronald - BA, MSc, PhD
Square, Paula Ann - BSc, MA, PhD
Stewart, Patricia - BSc, MSc, PhD
van Lieshout, Pascal - MA, MA, PhD *(Graduate Coordinator)*
Yunusova, Yana - MS, MA, PhD

Associate Members

Ben-David, Boaz - BA, MA, PhD
Bradley, Kimberley - BA, MHSc, PhD
Ellwood, Lynn - BSc(CD), MA
Jokel, Regina - MHSc, PhD
Kagan, Aura - BAA, BA, MA, PhD
Kroll, Robert - BSc, MSc, PhD
Leonard, Carol - BA, MASc, PhD
Liu, Louis - MD, PhD
Parnes, Pauline - BSc

Steele, Catriona - BA, MHSc, PhD
Wagner, Susan - BSc, MSc
Weitzman, Elaine - BA, MEd

Statistics

Faculty Affiliation

Arts and Science

Degree Programs Offered

Statistics – MSc, PhD
Fields:
　Statistical Theory and Applications (MSc, PhD)
　Probability (MSc, PhD)
　Actuarial Science and Mathematical Finance (PhD)

Overview

Statistical science 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, 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.

The Department of Statistics offers opportunities for study and research in the fields of (a) **Statistical Theory and Applications** and (b) **Probability**, leading to the **Master of Science** and the **Doctor of Philosophy** degrees, and (c) **Actuarial Science and Mathematical Finance**, leading to the **Doctor of Philosophy** degree. Please visit the Department of Statistics website, www.utstat.utoronto.ca, for further details about the fields offered, the research being conducted, and the course offerings in the department.

The department has substantial computing facilities available 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.

Interested applicants will find detailed information on the department's website.

Contact and Address

Web: www.utstat.utoronto.ca
E-mail: grad-info@utstat.utoronto.ca
Telephone: (416) 978-5136
Fax: (416) 978-5133

Department of Statistics
University of Toronto
Sidney Smith Hall
Room 6022, 100 St. George Street
Toronto, Ontario M5S 3G3
Canada

Degree Programs

Statistics

Master of Science

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.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must demonstrate facility in English using one of the official methods specified in the General Regulations of the School of Graduate Studies.

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.

Full-Time Program

- 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
  - STA 3000Y　Advanced Theory of Statistics
- The remaining 2.0 FCEs may be selected from:

- ○ any Department of Statistics 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
- 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 Program

- Students must satisfy the program requirements outlined for the full-time MSc.
- Students are limited to taking 1.0 full-course equivalent (FCE) during each session. In exceptional cases, the Associate Chair for Graduate Studies may approve 1.5 FCE in a given session. Both the Statistical Theory and Applications field and the Probability field are open to part-time students.

Normal Program Length: 3 sessions full-time; 6 sessions part-time

Time Limit: 3 years

Doctor of Philosophy

Minimum Admission Requirements

Admission to the PhD program is competitive, and applicants are admitted under the General Regulations of the School of Graduate Studies.

- Students may be accepted through one of two routes: a master's degree or by direct entry through a bachelor's degree. Successful applicants present either:
  1. 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.
  2. 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 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 facility in English using one of the official methods specified in the General Regulations of the School of Graduate Studies.

Program Requirements

Fields Statistical Theory and Applications and Probability

Course Requirements:

- During the first year of study, 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 the first year, students must attempt the following comprehensive examinations:
  - ○ Probability
  - ○ Theoretical Statistics
  - ○ Applied Statistics

  All three examinations must be passed by the end of the second year.

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 Statistics in addition to being presented and defended at the School of Graduate Studies.

Residency Requirements:

Students must also satisfy a two-year residency requirement.

Program Requirements

Field Actuarial Science and Mathematical Finance

Course Requirements:

- During the first year of study, students are required to 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 the first year, 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 the second year.

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 Statistics in addition to being presented and defended at the School of Graduate Studies.

Residency Requirements:

Students must also satisfy a two-year residency requirement.

Direct-Entry PhD Program Requirements

The program requirements are identical to the regular PhD program in the respective fields with the exception that 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.

Residency Requirements:

Students must also satisfy a three-year residency requirement.

Normal Program Length: 4 years full-time; 5 years direct-entry

Time Limit: 6 years full-time; 7 years direct-entry

Course List

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 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 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 3000Y	Advanced Theory of Statistics
STA 3047H	Stochastic Processes
STA 3431H	Monte Carlo Methods
STA 4000H,Y	Supervised Reading Project I
STA 4001H,Y	Supervised Reading Project II
STA 4246H	Research Topics in Mathematical Finance
STA 4247H	Point Processes, Noise, and Stochastic Analysis
STA 4272H	Research Topics in Statistics
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

Graduate Faculty

Full Members

Brenner, David - BSc, MSc, PhD
Broverman, Samuel - BSc, MSc, PhD
Brown, Patrick - BA, MSc, PhD
Brunner, Lawrence - BA, MA, PhD, DPhil
Bull, Shelley - BMath, MMath, PhD

Corey, Paul - BSc, MA, PhD
Craiu, Virgil Radu - BS, MS, PhD
Escobar, Michael - BS, PhD
Evans, Michael - BSc, MSc, PhD
Feuerverger, Andrey - BSc, PhD
Jackson, Kenneth - BSc, MSc, PhD
Jaimungal, Sebastian - BS, MS, PhD *(Associate Chair, Graduate Studies)*
Knight, Keith - PhD
Lin, Xiaodong - BSc, MSc, PhD
Lou, Wen-Yi Wendy - DPhil
Maheu, John - BA, MEc, DPhil
McDunnough, Philip - BSc, MSc, PhD
Neal, Radford - BSc, MSc, PhD
Quastel, Jeremy - BSc, MS, PhD
Reid, Nancy - BM, MSc, PhD
Rosenthal, Jeffrey - PhD
Stafford, James - BS, MS, PhD *(Chair and Graduate Chair)*
Sun, Lei - BS, PhD
Virag, Balint - BA, MA, PhD
Yao, Fang - BSc, MSc, DPhil

Members Emeriti

Andrews, David - BSc, MSc, PhD
Fraser, Donald AS - BA, MA, PhD, FRSC
Guttman, Irwin - BSc, MA, PhD
Srivastava, Muni - MSc, PhD

Associate Members

Gibbs, Alison - BS, MS, PhD
Willmot, Gordon - BMath, MMath, PhD

Theoretical Astrophysics

Faculty Affiliation

Arts and Science

Degree Programs Offered

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 post-doctoral 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
E-mail: office@cita.utoronto.ca
Telephone: (416) 978-6879
Fax: (416) 978-3921

Canadian Institute for Theoretical Astrophysics (CITA)
L'institut canadien d'astrophysique théorique (ICAT)
University of Toronto
Room 1403, McLennan Physical Laboratories
Toronto, Ontario M5S 3H8
Canada

Graduate Faculty

Full Members

Bond, J Richard - BSc, MS, PhD, FRSC, Fell Royal Society London
Martin, Peter - BSc, MSc, PhD
Murray, Norman - BSc, PhD *(Director)*
Pen, Ue-Li - BSc, PhD
Pfeiffer, Harald - PhD
Thompson, Christopher - BSc, PhD

Women and Gender Studies

Faculty Affiliation

Arts and Science

Degree Programs Offered

Women and Gender Studies – MA

Overview

The Women and Gender Studies Institute (WGSI) offers a program leading to the **Master of Arts** degree in Women and Gender Studies. The Master's Program in Women and Gender Studies (MWGS) focuses on transnationality, 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. Our offerings bring feminist scholarship to the tasks of challenging and investigating colonial, post-colonial, 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.

Collaborative Programs

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

1. **Addiction Studies**
   - Women and Gender Studies, MA
2. **Aging, Palliative and Supportive Care Across the Life Course**
   - Women and Gender Studies, MA
3. **Asia-Pacific Studies**
   - Women and Gender Studies, MA
4. **Diaspora and Transnational Studies**
   - Women and Gender Studies, MA
5. **Environment and Health**
   - Women and Gender Studies, MA
6. **Environmental Studies**
   - Women and Gender Studies, MA
7. **Ethnic and Pluralism Studies**
   - Women and Gender Studies, MA
8. **Jewish Studies**
   - Women and Gender Studies, MA
9. **Sexual Diversity Studies**
   - Women and Gender Studies, MA
10. **South Asian Studies**
    - Women and Gender Studies, MA
11. **Women's Health**
    - Women and Gender Studies, MA

Contact and Address

Web: www.wgsi.utoronto.ca/graduate/ma-program
E-mail: grad.womenstudies@utoronto.ca
Telephone: (416) 978-3668
Fax: (416) 946-5561

Women and Gender Studies Institute
University of Toronto
Room 2036, Wilson Hall, New College
40 Willcocks Street
Toronto, Ontario M5S 1C6
Canada

Degree Programs

Women and Gender Studies

Master of Arts

Minimum Admission Requirements

- 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 Institute. Total of 4.0 full-course equivalents (FCE) as follows:
  - 1.5 core full-course equivalents (FCEs) in women and gender studies (WGS 1000H, WGS 1001H, and WGS 1002H)
  - 0.5 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 your faculty advisor
- The MA degree program is not offered on a part-time basis.

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

Normal Program Length: 3 sessions full-time

Time Limit: 3 years full-time

Course List

WGS 1000H	Theories, Histories, Feminisms
WGS 1001H	Feminism, Transnationalism and Postcolonialism
WGS 1002H	Feminist Methodologies and Epistemologies
WGS 1003H	Special Topics 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 1008Y	Independent Research and Reading in Women and Gender Studies
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 1012Y	Special Topics in Feminist Studies 4
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	Special Topics in Feminist Studies
WGS 1017H	Special Topics in Feminist Studies
WGS 1018H	Special Topics in Feminist Studies
WGS 1019H	Special Topics in Feminist Studies
WGS 1020H	Special Topics in Feminist Studies
WGS 1021H	Special Topics in Feminist Studies
WGS 1022H	Special Topics in Feminist Studies
WGS 1023H	Special Topics in Feminist Studies
WGS 1024H	Special Topics in Feminist Studies
WGS 1025H	Special Topics in Feminist Studies
WGS 1026H	Special Topics in Race and Feminism
WGS 1027H	Special Topics in Queer Studies and Feminism

Graduate Faculty

Full Members

Alexander, Mary (Jacqui) - BSW, MA, PhD
Bamford, Sandra - BA, MA, MPA, 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
Cook, Rebecca - BA, LLM, MA, MPA, JD, SJD
Cossman, Brenda - LLB, LLM
Cowen, Deborah - BA, MCP, PhD
Dehli, Kari - BA, MA, PhD
Fox, Bonnie - AB, PhD
Georgis, Dina - PhD

Keith, Alison - BA, MA, PhD
Klassen, Pamela - BA, MA, PhD
Larkin, June - PhD
Larson, Katherine - BMus, AB, MPH, PhD
Lo, Marieme - DPhil
Magnusson, Jamie-Lynn - BA, MA, PhD
McElhinny, Bonnie - BA, MA, MA, PhD, PhD *(Director)*
Miles, Angela - BA, MA, PhD
Mirchandani, Kiran - BA, MPH, PhD
Mojab, Shahrzad - BA, MEd, EdD
Morgan, Kathryn - BA, MA, MEd, PhD
Morgenstern, Naomi - BA, MA, PhD
Murphy, Michelle - BA, PhD
Murray, Heather - BA, MA, PhD
Newton, Melanie - BA, PhD
Ng, Roxana - BA, MA, PhD
Nyquist, Mary - BA, MA, PhD
Rankin, Katharine - BA, MA, PhD
Razack, Sherene - BA, MA, PhD
Rittich, Kerry - BMus, LLB, SJD
Ruddick, Susan - PhD
Salih, Sara - BA, DPhil
Song, Je Sook - BA, PhD *(Graduate Coordinator)*
Sykes, Heather - BSc, PhD
Tambe, Ashwini - BA, MA, PhD
Taylor, Judith - BA, PhD
Titchkosky, Tanya - BA, MA, PhD
Trotz, Alissa - AB, MPH, PhD
Valverde, Mariana - BA, MA, PhD, FRSC
Walcott, Rinaldo - BA, MA, PhD
Wane, Njoki - BE, MSc, MEd, PhD
Yoneyama, Lisa - BA, MA, PhD

Members Emeriti

Armatage, Kay - BA, MA, PhD

Associate Members

Bhuyan, Rupaleem - BA, MA, PhD
Choo, Hae Yeon - BA, MA, PhD

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

Collaborative Programs

The School of Graduate Studies currently offers 40 graduate collaborative programs. Collaborative programs emerge from cooperation between two or more graduate units (departments, centres, or institutes). The collective experience of the participating graduate units provides the student with 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 and must fulfil all the requirements for the degree in the home unit and any additional requirements of the collaborative program. Each collaborative program is designed to allow a focus in the area of speciality. On successful completion of the program, the student receives a transcript notation.

Aboriginal Health

Lead Faculty

Medicine

Participating Degree Programs

Adult Education and Community Development – MA, MEd, PhD
Anthropology – MA, MSc, PhD
Counselling Psychology – MA, MEd, EdD, PhD
Geography – MA, PhD
Medical Science – MSc, PhD
Nursing Science – MN, PhD
Nutritional Sciences – MHSc, MSc, PhD
Public Health Sciences – MPH, PhD
Sociology in Education – MA, MEd, EdD, PhD

Supporting Units

Aboriginal Studies program (undergraduate), Faculty of Arts and Science

Overview

The Collaborative Program in Aboriginal Health involves the graduate programs listed above. The program is offered in collaboration with the Faculty of Arts and Sciences' Aboriginal Studies program. The main objective of the program is to provide graduate training in Aboriginal health research and practice while enhancing mutually beneficial relationships with Aboriginal communities and organizations.

Contact and Address

Web: www.cpah.utoronto.ca
E-mail: kue.young@utoronto.ca
Telephone: (416) 978-6459
Fax: (416) 978-1883

Collaborative Program in Aboriginal Health
c/o Dalla Lana School of Public Health
University of Toronto
Room 547, 155 College Street
Toronto, Ontario M5T 3M7
Canada

Programs

Master's Level

Minimum Admission Requirements

- Applicants who wish to enrol in a collaborative program must apply to and be admitted to both the collaborative program and a graduate degree program in one of the collaborating departments.

- Applicants must submit to the Program Committee of the Collaborative Program in Aboriginal Health:
  - A personal statement, in the form of a letter no longer than three pages, to describe relevant personal and/or professional experiences, a career plan, and motivation in seeking advanced training in Aboriginal health. The nature of any relationship with an Aboriginal community/organization that already exists or to be developed should also be described.
  - Photocopies of application materials submitted to their home unit including a curriculum vitae (CV), transcripts, and letters of reference.

Program Requirements

- All master's students in the program will take a core course (0.5 full-course equivalent [FCE]) chosen from the list below or an individual reading course to be approved and supervised by a member of the Collaborative Program in Aboriginal Health.

- In home graduate units where a thesis or major research paper is required, it must deal with an Aboriginal health topic. At least one member of the student's thesis committee should be a core faculty member of the collaborative program.

- In home graduate units that do not have a thesis requirement, students must undertake a practicum or equivalent in an Aboriginal health topic, supervised by a core faculty member of the collaborative program.

- Students must participate in the Research Seminar Series, held monthly, as well as participate in at least one National/Regional Workshop.

- Students must complete the requirements of the collaborative program in addition to those requirements for the degree program in their home graduate unit.

Doctoral Level

Admission Requirements

- Applicants who wish to enrol in a collaborative program must apply to and be admitted to both the collaborative program and a graduate degree program in one of the collaborating departments.

- Applicants must submit to the Program Committee of the Collaborative Program in Aboriginal Health:
  - A personal statement, in the form of a letter no longer than three pages, to describe relevant personal and/or professional experiences, a career plan, and motivation in seeking advanced training in Aboriginal health. The nature of any relationship with an Aboriginal community/organization that already exists or to be developed should also be described.

- Photocopies of application materials submitted to their home unit including a curriculum vitae (CV), transcripts, and letters of reference.

Program Requirements

- The requirements are the same as for the master's program listed above.
- Students who have previously taken one of the core courses (0.5 full-course equivalent [FCE]) during their master's program are required to take a different course during their doctoral program.
- Students participate in a new Research Seminar Series and at least one National/Regional Workshop.

Course List

Core Courses

AEC 1290H Indigenous Healing in Counselling and
  Psychoeducation
CHL 5421H Aboriginal Health
NUR 1014H Politics of Aboriginal Health
SES 1930H Race, Indigenous Citizenship and Self-
  Determination: Decolonizing Perspectives

Program Committee

Applied Psychology and Human Development
  Stewart, Suzanne - BA, MA
Geography
  McGregor, Deborah - BSc, MES, PhD
Humanities, Social Sciences and Social Justice
 Education
  Cannon, Martin - MA, PhD
Medical Science
  Marrett, Loraine - BMath, PhD
Nursing Science
  Muntaner, Carles - MHSc, MD, PhD
Nutritional Sciences
  Hanley, Anthony - BSc, MSc, PhD
Public Health Sciences
  Young, Kue - DrMed, PhD *(Director)*

Addiction Studies

Lead Faculty

Medicine

Participating Degree Programs

Anthropology – MA, MSc, PhD
Biomedical Engineering – MASc, PhD
Counselling Psychology – MA, PhD
Criminology – MA, PhD
Exercise Sciences – MSc, PhD
Information – MI, PhD
Medical Science – MSc, PhD
Nursing Science – MN, PhD
Pharmacology – MSc, PhD
Pharmaceutical Sciences – MSc, PhD
Psychology – MA, PhD
Public Health Sciences – MPH, MSc, PhD
Social Work – MSW, PhD
Sociology – MA, PhD
Women and Gender Studies – MA

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 Program in Addiction Studies at the University of Toronto. The purpose of the program 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 fulfilment of the program requirements, transcripts issued by the School of Graduate Studies will denote completion of the Collaborative Program in Addiction Studies.

Contact and Address

Web: www.phs.utoronto.ca/c_copas.htm
E-mail: marilyn_herie@camh.net
Telephone: (416) 535-8501 ext. 7434
Fax: (416) 599-3802

Collaborative Program in Addiction Studies
University of Toronto
Centre for Addiction and Mental Health
175 College Street
Toronto, Ontario M5T 1P7
Canada

Programs

Master's Level

Admission Requirements

- Applicants must apply to and be admitted to both the collaborative program and a graduate degree program in one of the collaborating departments. They must contact the collaborating professor within their department directly.

Program Requirements

- Students must meet all requirements of their home department in terms of coursework and thesis work, or equivalent.
- Master's students in the collaborative program 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 department, but normally involves, as appropriate, supervisory and examining professors from other disciplines represented in the collaborative program. In collaborating departments 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 departments that do not have a thesis or equivalent requirement, students must take a third 0.5 FCE from the list of approved electives.

Doctoral Level

Admission Requirements

- Applicants who wish to enrol in the collaborative program must apply to and be admitted to both the collaborative program and a graduate degree program in one of the collaborating departments. They must contact the collaborating professor within their department directly.

Program Requirements

- Doctoral students in the collaborative program 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 department 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 department, but normally involves, as appropriate, supervisory and examining professors from other disciplines represented in the collaborative program. In collaborating departments 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 departments that do not have a thesis or equivalent requirement, students must take a third 0.5 FCE from the list of approved electives.

Course List

Core Course

PAS 3700H   Multidisciplinary Aspects of Addiction

Elective Courses

AEC 1291H   Addictive Behaviours: Approaches to Assessment and Intervention
CHL 5119H   Social and Political Perspectives on Drugs and Addictions
CHL 5417H   Tobacco and Health: From Cells to Society
JPM 1005Y   Behavioural Pharmacology
MSC 1085H   Molecular Approaches to Mental Health and Addictions
PAS 3700H   Multidisciplinary Aspects of Addiction Studies
PAS 3701H   Advanced Research Issues in Addictions
PSY 2703H   The Psychology of Addictions
SOC 6123H   Sociology of Addiction
SWK 4616H   Drug Dependencies: Interventive Approaches

Program Committee

Applied Psychology and Human Development
    Goldstein, Abby - PhD
Centre for Addiction and Mental Health
    Agic, Branka - MHSc, MD, PhD cand.
    Erickson, Patricia - BA, MA, PhD
Criminology and Sociolegal Studies
    Gartner, Rosemary - BA, AA, MS, PhD
Information Studies
    Duff, Wendy - BA, BA, MLS, PhD
Nursing Science
    Muntaner, Carles - MHSc, MD, PhD
Ontario Tobacco Research Unit
    Ferrence, Roberta - BA, MA, PhD
Pharmaceutical Sciences
    Sproule, Beth - BScPhm, DP
Pharmacology and Toxicology
    Brands, Bruna - PhD

Psychology
    Cunningham, John - BSc, MA, PhD
Public Health Sciences
    Mann, Robert - BA, MASc, PhD
    Shachak, Aviv - PhD
Social Work
    Cullen, James (Jim) - BSW, BA, MSW, PhD
    Herie, Marilyn - BA, MSW, PhD *(Director)*
Sociology
    Tepperman, Lorne - BA, MA, PhD
    Watson, Tara - PhD cand. *(Student Representative)*

Aging, Palliative and Supportive Care Across the Life Course

Lead Faculty

Medicine

Participating Degree Programs

Adult Education and Community Development – MA, MEd, PhD
Anthropology – MA, MSc, PhD
Counselling Psychology – MA, MEd, EdD, PhD
Dentistry – MSc, PhD
Exercise Sciences – MSc, PhD
Health Administration – MHSc
Health Policy, Management and Evaluation – MSc, PhD
Information – MI
Information Studies – PhD
Medical Science – MSc, 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 Program 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 program 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 Program in Aging, Palliative and Supportive Care Across the Life Course.

Upon successful completion of the requirements, students receive, in addition to the degree from the home graduate unit, the notation "Completed the Collaborative Program in Aging, Palliative and Supportive Care Across the Life Course" on their transcript.

Contact and Address

Web: www.aging.utoronto.ca
Telephone: (416) 978-0377
Fax: (416) 978-4771

Collaborative Program in Aging, Palliative and Supportive Care Across the Life Course
University of Toronto
Suite 328, 263 McCaul Street
Toronto, Ontario M5T 1W7
Canada

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 Program in Aging, Palliative and Supportive Care Across the Life Course.
- Applicants must forward the following to the Program Committee of the Collaborative Program 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 program 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 Program in Aging, Palliative and Supportive Care Across the Life Course. These may be obtained from their home participating graduate unit.

Program Requirements

- In addition to meeting the program requirements of their home department, students will be required to complete the master's-level core course (0.5 full-course equivalent [FCE]) and one elective course (0.5 full-course equivalent [FCE]) for either of the two options. It is expected that the student's thesis or practicum (whichever is included in their program of study) would be in his or her chosen study area (i.e., in either aging and the life course or palliative and supportive care).

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 Program in Aging, Palliative and Supportive Care Across the Life Course.
- Applicants must forward the following to the Program Committee of the Collaborative Program 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 program 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 Program in Aging, Palliative and Supportive Care Across the Life Course. These may be obtained from their home participating graduate unit.
  e. Two letters of reference (with specific mention of background in either aging and the life course or palliative and supportive care).

Program Requirements

- In addition to meeting the program requirements of their home department, 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).

Course List

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 program)

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 program)

Elective Courses

AEC 1187H	Alternative Ways of Researching Aging, Illness and Health
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 1037H	Aging and Place: Social and Policy Transitions
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 4803H   Special Studies 3: Evidence-Based
                      Counselling Strategies with Older Adults
      Requests to approve other courses as equivalent
to fulfil program requirements may be made to the
Program 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
RLG 2018H   Religion and Bioethics
RLG 2037H   Religion and Healing
PHL 2145H   How Bioethics Fits into Other Disciplines
PHL 2146Y   Topics in Bioethics
HAD 5301H   Intro to Clinical Epidemiology and Health
HAD 5730H   Research Economics I: Economic
                      Evaluation
HAD 5771H   Resource Allocation Ethics
LAW 338H   Public Health Law
LAW 582H   Privacy, Property, and the Human Body
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

Program Committee

Health Policy, Management and Evaluation
      Berta, Whitney - PhD
Life Course and Aging; Social Work
      McDonald, Lynn - BA, MSW, PhD *(Co-director)*
Medical Science
      Devins, Gerald - PhD
      Rodin, Gary - BSc, MD, FRCP *(Co-director)*
Psychology
      Chasteen, Alison - BA, MA, PhD
      Einstein, Gillian - PhD
Sociology
      Berry, Brent - PhD

Ancient and Medieval Philosophy

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 Program in Ancient and Medieval Philosophy. The three units contribute courses and provide facilities and supervision of doctoral research. The program operates only at the doctoral level. The program is administered by a program 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 program must apply to and be admitted to both the doctoral program in one of the collaborating departments and the collaborative program. Successful completion of the program permits the designation "Completed Collaborative Program in Ancient and Medieval Philosophy" to appear on the student's transcript. 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
E-mail: cpamp@chass.utoronto.ca
Telephone: (416) 978-3178
Fax: (416) 978-8703

Programs

Doctoral Level

Admission Requirements

- All applicants must meet the admission criteria of the unit through which they wish to enrol.

Program 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 program of study must also be approved by the Program 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 program's pro-seminar (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.

Course List

Required Course

AMP 2000Y   Collaborative Program in Ancient and Medieval Philosophy (CPAMP) Proseminar (CR/NCR)

Program Committee

Classics; Philosophy
    Inwood, Brad - BA, MA, PhD, FRSC
Medieval Studies; Philosophy
    Pickavé, Martin - BA, MA, PhD **(Director)**
Philosophy
    King, Peter - AB, PhD

Ancient Greek and Roman History

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 Program in Ancient Greek and Roman History** (COLPAH). 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 program operates only at the doctoral level.

Students are enrolled in one of the two units. The program is administered by a Program 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. Successful completion of the program permits the designation "Completed Joint Collaborative Doctoral Program in Ancient Greek and Roman History" to appear on the student's transcript.

Interested applicants should contact the Director of the joint collaborative program as well as the graduate coordinator of the unit in which they intend to register.

Contact and Address

University of Toronto
Web: www.chass.utoronto.ca/classics
E-mail: grad.classics@utoronto.ca
Telephone: (416) 978-5513
Fax: (416) 978-7174

Joint Collaborative Program in Ancient Greek and Roman History (COLPAH)
Department of Classics
University of Toronto
125 Queen's Park Crescent
Toronto, Ontario M5S 2C7 Canada

York University
Web: www.yorku.ca/gradhist
E-mail: jedmond@yorku.ca
Telephone: (416) 736-5123
Fax: (416) 736-5836

Joint Collaborative Program in Ancient Greek and Roman History (COLPAH)
Department of History
York University
2140 Vari Hall
Toronto, Ontario M3J 1P3 Canada

Programs

Doctoral Level

Admission Requirements

- Applicants must meet the admissions criteria of the unit through which they wish to enrol. Interested applicants register in the joint collaborative program with the approval of the Program 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.

Program 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 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 unit.
- The Program Committee approves the major and minor fields of all students in the joint collaborative program; 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 program in addition to those of their home unit.

Course List

CLA 3020H   Research Methods in Ancient History (Credit/No Credit)
CLA 3200Y   Work in Progress in Ancient History (Credit/No Credit)

Program Committee

Classics
University of Toronto
    Akrigg, Benjamin - BA, MA, PhD
    Bendlin, Andreas - BA, DPhil, DrHabil
    Bruun, Christer - BA, MA, PhD
York University
    Kelly, Benjamin - BA, MA, DPhil
    Trevett, Jeremy - BA, MA, DPhil *(Director)*

Asia-Pacific Studies

Lead Faculty

Arts and Science

Participating Degree Programs

Anthropology – MA
East Asian Studies – MA
Economics – MA
Geography – MA
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 Program in Asia-Pacific Studies 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 program contributes to the development of an integrated and interdisciplinary research community in Asia-Pacific Studies at the University.

The graduate programs listed above participate in the Collaborative Master's Program in Asia-Pacific Studies at the University of Toronto. The collaborating units contribute courses and provide facilities and supervision for master's-level research. This program is administered by a Program Committee chaired by a Program Director.

Applicants are expected to meet the admission and degree requirements of both a home unit and the program in Asia-Pacific Studies. The collaborative master's degree program requirements can be met concurrently with, or in addition to, home unit requirements. In addition to their master's degree from the home unit, students who successfully complete the requirements of the collaborative program will receive a certificate and the notation "Completed Collaborative Program in Asia-Pacific Studies" on their transcript.

Contact and Address

Web: www.utoronto.ca/asiapacific-ma
E-mail: asiapacific.ma@utoronto.ca
Telephone: (416) 946-8832
Fax: (416) 946-8838

Collaborative Master's Program in Asia-Pacific Studies
Asian Institute
Munk School of Global Affairs
University of Toronto
Room 228N, 1 Devonshire Place
Toronto, Ontario M5S 3K7
Canada

Programs

Master's Level

Admission Requirements

- Applicants who wish to enrol in the collaborative program must apply to and be admitted to both the collaborative program and a graduate degree program in one of the collaborating departments.
- To be considered for admission to the collaborative master's degree program in Asia-Pacific Studies, applicants should have taken the equivalent of 4.0 full-course equivalents (FCEs) with substantial Asia coverage by the time of application, or should have had substantial working or living experience in East or Southeast Asia.
- Applicants use the online application process and must forward the following to the Director of the collaborative master's degree program:
  - a hard copy Supplementary Application package (www.utoronto.ca/asiapacific-ma)
  - official undergraduate and graduate transcripts from all institutions attended previously and currently
  - at least two letters of reference with specific mention of Asia-Pacific studies background or Asia-Pacific experiences
  - a statement of purpose
  - a curriculum vitae (CV)

Program Requirements

- ASI 1000Y.
- 1.0 FCE that may be in the form of one of the following:
  - a master's thesis
  - a major research paper in one of the FCEs related to Asia-Pacific
  - a thesis-equivalent research paper in an independent research 0.5 FCE. This option must be combined with an additional 0.5 FCE on Asia-Pacific listed on the website (www.utoronto.ca/asiapacific-ma)
- By the time of graduation from the master's degree program, every student is strongly expected to have a working knowledge of an East or Southeast

Asian language as needed for his or her program of study.

Course List

ASI 1000Y   Issues in Asia-Pacific Studies

Please consult the Asia-Pacific Studies website for courses offered by participating graduate units.

Program Committee

Anthropology
    Barker, Joshua - BA, MA, PhD
    Luong, Hy Van - BA, MA, PhD *(Director)*
    McElhinny, Bonnie - BA, MA, MA, PhD, PhD
East Asian Studies
    Cazdyn, Eric - BA, MA, PhD
    Hsiung, Ping-Chun - PhD
    Kawashima, Ken - BA, MA, Ph
    Lam, Tong - BSc, MA, PhD
    Sakaki, Atsuko - MA, PhD
    Tran, Nhung -MA, PhD
Economics
    Brandt, Loren - BS, MS, PhD
Geography
    Boland, Alana - BA, MA, PhD
    Daniere, Amrita - AB, PhD
    Silvey, Rachel - BA, MA, PhD
    Sorensen, Andre - BFA, MSc, PhD
History
    Tran, Nhung - BA, MA, PhD
Management
    Oxley, Joanne - BSc, MA, MBA, PhD
    Xie, Jia Lin - BA, MBA, PhD
Planning
    Silvey, Rachel - BA, MA, PhD
Political Science
    Bertrand, Jacques - BA, MSc, MA, DrRerPol
    Wong, Joseph - BA, MA, PhD, Canada Research Chair
Public Policy and Governance
    Wong, Joseph - BA, MA, PhD, Canada Research Chair
Social Work
    Bogo, Marion - BA, MSW
    Tsang, Ka Tat - BSc, PhD
Sociology
    Hsiung, Ping-Chun - PhD
    Peng, Ito - BSW, BSc, MA, PhD
    Zhang, Weiguo - PhD
Women and Gender Studies
    McElhinny, Bonnie - BA, MA, MA, PhD, PhD

Astrophysics

Lead Faculty

Arts and Science

Participating Degree Programs

Astronomy and Astrophysics – MSc
Physics – MSc

Overview

The graduate programs listed above participate in the Collaborative Master of Science Program in Astrophysics. This program fosters graduate education in astrophysics, particularly in those areas of study that overlap traditional departmental boundaries.

Upon certification by the Director that all requirements of the collaborative program have been fulfilled, the participating home department will recommend the granting of the MSc degree, and the designation "Completed Collaborative Program in Astrophysics" will appear on the transcript.

Contact and Address

Web: www.astro.utoronto.ca/graduate
E-mail: collab.astrophys@utoronto.ca
Telephone: (416) 946-3044
Fax: (416) 971-2026

Collaborative Master of Science Program in Astrophysics
c/o C. C. Dyer
Department of Astronomy and Astrophysics
University of Toronto
Room AB209, 50 St. George Street
Toronto, Ontario M5S 3H4
Canada

Programs

Master's Level

Admission Requirements

- Applicants who wish to enrol in the collaborative program must apply to and be admitted to both the collaborative program and a graduate degree program in one of the collaborating departments, this being either Astronomy and Astrophysics or Physics.
- Applicants must submit a supplementary brief application form to the Collaborative Program Director (available from either the home department or the collaborative program office).

Program Requirements

- Students must meet all respective degree requirements of the School of Graduate Studies and the home department. This will normally require the equivalent of 5.0 full-course equivalents (FCEs) as follows:
  - 1.5 or more FCEs in astronomy and astrophysics
  - 1.5 or more FCEs in physics
  - 1.0 FCE from astronomy and astrophysics, physics, or a cognate department
  - a supervised research project in the field of astrophysics, equivalent to 1.0 FCE; the supervised research project and associated report will be completed under the regulations of AST 1500Y for students whose home department is Astronomy and Astrophysics and under the regulations of PHY 3400Y for students whose home department is Physics
- Students must attend the seminar program of the Canadian Institute of Theoretical Astrophysics and prepare a report on a selection of these seminars for submission to the Director.

Program requirements are normally completed within 12 months of entry to the program.

Program Committee

Astronomy and Astrophysics
    Dyer, Charles - BSc, MSc, PhD *(Director)*
Physics
    Sipe, John - BSc, MSc, PhD
Theoretical Astrophysics
    Murray, Norman - BSc, PhD, Canada Research Chair

Bioethics

Lead Faculty

Medicine

Participating Degree Programs

Health Administration – MHSc
Health Policy, Management and Evaluation –
 MSc, PhD
Law – LLM, SJD
Medical Science – MSc, PhD
Nursing Science – MN, PhD
Philosophy – MA, PhD
Public Health Sciences – MPH, MSc, PhD
Rehabilitation Science – MSc, PhD
Religion – MA, PhD
Social Work – PhD

Overview

The graduate units listed above participate in the Collaborative Program 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 Program in Bioethics (CPB). Upon successful completion, the student receives the master's or PhD degree in their discipline as well as the notation "Completed Collaborative Program in Bioethics" on the transcript.

Contact and Address

Web: www.jointcentreforbioethics.ca/education/cpb.shtml
E-mail: carmen.alfred@utoronto.ca
Telephone: (416) 978-0871
Fax: (416) 978-1911

Collaborative Program in Bioethics
Joint Centre for Bioethics (JCB)
University of Toronto
Suite 754, 155 College Street
Toronto, Ontario M5T 1P8
Canada

Programs

Master's Level

Admission Requirements

- Applicants to the collaborative program must apply to and be admitted to both the collaborative program and a graduate degree program in one of the collaborating departments.

- Students interested in the master's programs apply simultaneously to both the collaborating graduate unit and the CPB. Applications for admission to the CPB 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 Academic Secretary, Collaborative Program in Bioethics.

- Visit the CPB's website for the application form and details about supporting documentation. The application must be accompanied by:
  - CPB's 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 e-mail or note from the proposed supervisor indicating willingness to supervise the student should be submitted to the Academic Secretary. The JCB website lists faculty and bioethicists who are available for advice relating to research proposals.

Program Requirements

- Students will be expected to meet the requirements of the home graduate unit as well as those of the collaborative program. Students should check with their home graduate program whether CPB 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 CPB 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.

Doctoral Level

Admission Requirements

- Applicants to the collaborative program must apply to and be admitted to both the collaborative program and a graduate degree program in one of the collaborating departments.
- Students interested in the doctoral programs apply simultaneously to both the collaborating graduate unit and the CPB. Applications for admission to the CPB 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 Secretary, Collaborative Program in Bioethics.
- Visit the CPB's website for the application form and details about supporting documentation. The application must be accompanied by:
  - CPB's 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 e-mail or note from the proposed supervisor indicating willingness to supervise the student should be submitted to the Academic Secretary. The JCB website lists faculty and bioethicists who are available for advice relating to research proposals.

Program Requirements

- Students will be expected to meet the requirements of the home graduate unit as well as those of the collaborative program. Students should check with their home graduate program whether CPB course requirements may be counted towards the degree.
- Students must complete:
  - SDM 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 Program 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 CPB faculty member. The thesis is evaluated according to the procedures and standards of the home graduate unit and must faill within the broad area of bioethics.

Course List

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
HAD 5306H	Introduction to Health Care Research Methodology
HAD 5741H	Health Law
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 department. 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	Medical Law
LAW 388H	Public Health Law
LAW 582H	Privacy, Property and the Human Body

Medical Science

MSC 1051H	Research Bioethics
MSC 3001Y	Foundations Seminar I
MSC 3002Y	Foundations Seminar II
MSC 3003Y	Empirical Approaches in Bioethics
MSC 3004Y	Ethics Committees and Consultation

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 5111H	Qualitative Research Methods
CHL 5121H	Genomics, Bioethics and Public Policy
CHL 5401H	Epidemiology Methods I
CHL 5411H	International Health
CHL 5124H	Public Health Ethics

Rehabilitation Science

REH 3120H	International Issues in Disability and Rehabilitation

Religion

RLG 2007H	Ethics, Society, and Technology
RLG 2018H	Religion and Bioethics

Social Work

SWK 6101H   Critical Evaluation of Social Work Practice
            Theories
SWK 6308H   Designing and Implementing Quantitative
            Social Work Research

Program Committee

Health Policy, Management and Evaluation
    Miller, Fiona - BIS, MA, DPhil
Law
    Lemmens, Trudo - LLM, DCL
Medical Science
    Upshur, Ross Edward - BSC, BA, MA, MD
Nursing Science
    Peter, Elizabeth - BA, BSN, MSN, PhD
Philosophy
    Sepielli, Andrew - AB, JD, PhD
Public Health Sciences; Medical Science
    Daar, Abdallah - MD
Rehabilitation Science
    Nixon, Stephanie - BHSc(PT), BA, PhD
    Secker, Barbara - BA, AM, PhD
Religion
    Novak, David - AB, PhD
Social Work
    Newman, Peter - BA, MA, MSW, PhD

Biomedical Engineering

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 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 Program in Biomedical Engineering at the University of Toronto. This program 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, the student receives the master's or PhD degree in his or her departmental area as well as a notation on the transcript reading "Completed Collaborative Program in Biomedical Engineering."

Contact and Address

Web: www.ibbme.utoronto.ca
E-mail: admissions.ibbme@utoronto.ca
Telephone: (416) 978-4841
Fax: (416) 978-4317

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

Programs

Master's Level

Admission Requirements

- Applicants who wish to enrol in the collaborative program must apply to and be admitted to both the collaborative program and a graduate degree program in one of the collaborating departments.
- 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 Program in Biomedical Engineering through one of the collaborating graduate departments (home departments) listed above.

Program Requirements

Students register in the School of Graduate Studies through their home department; they will meet all respective degree requirements as described by SGS and the Program Committee.

As part of these requirements:

- Engineering and physical science students will be required to take a biological sciences course such as JPB 1022H (or an equivalent).
- Biological science students will be expected to take a physical sciences course such as JPB 1055H (or an equivalent).
- Students will be expected to take BME 1450H *Bioengineering Science* and pursue a thesis topic relevant to biomedical engineering.
- 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* and JDE 1000H *Ethics in Research.*
- Students are required to have a supervisory committee approved by the program committee and consisting of a supervisor from IBBME, with a cross appointment in the home department, and other

members from other collaborating departments as required.

- The program of study for each Master of Applied Science or Master of Science degree student registered in the collaborative program must meet the requirements of the collaborating department and will normally comprise at least 2.0 full-course equivalents (FCEs) and a thesis in the biomedical field.
- The examination committee will be constituted according to procedures in the home graduate department and will include a member from that collaborating department.

Doctoral Level

Admission Requirements

- Applicants who wish to enrol in the collaborative program must apply to and be admitted to both the collaborative program and a graduate degree program in one of the collaborating departments.
- 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 Program in Biomedical Engineering through one of the collaborating graduate departments (home departments) listed above.
- Before PhD students are accepted, the Program Committee must be satisfied with the applicant's ability to undertake advanced graduate studies.

Program Requirements

- A qualifying examination may be required by the collaborating department.
- Students admitted to the collaborative program who are admitted to a PhD program in their home unit will be subject to the requirements of the collaborating unit. The program of study for each PhD student registered in the Collaborative Program in Biomedical Engineering must be approved by the collaborating department and the Program Committee; the program will normally comprise at least 2.0 full-course equivalents (FCEs) and a thesis.
- 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 department. 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.

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

- For doctoral degrees, the examination committee will be constituted according to procedures in the home graduate department and will include a member from that collaborating department.

Course List

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
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 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	Statistical Communication Theory
ECE 1647H	Nonlinear Control System Analysis
JCB 1349H	Molecular Assemblies: Structure/Function/Properties
JEB 1365H	Ultrasound: Theory and Applications in Biology and Medicine
JEB 1375H	Practical Optimization
JEB 1433H	Medical Imaging
JEB 1444H	Neural Engineering
JEB 1447H	Sensory Communications
JEB 1451H	Neural Bioelectricity
JNP 1017H+	Molecular and Biochemical Basis of Toxicology
JNP 1018H+	Current Topics in Molecular and Biochemical 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
JTC 1135H	Applied Surface Chemistry

JTC 1331H	Biomaterials Science
MBP 1007H	Fundamentals in Molecular and Cell Biology I
MBP 1008H	Fundamentals in Molecular and Cell Biology II
MBP 1022H	Advanced Cell Biology for Physical Scientists
MIE 1001H	Dynamics II
MIE 1062H	Robot Kinematics and Dynamics
MIE 1101H	Thermodynamics II
MIE 1201H	Fluid Mechanics III
MMS 1026H	Analytical Electron Microscopy
PHM 1109H	Recent Developments in Dosage Form Design
PHM 1110H	Chemical Basis of Drug Metabolism
PHM 1117H	DNA-Drug Interactions
PSL 1432H	Theoretical Physiology
PSL 1052H	Fundamentals of Ion Channel Function
REH 1100H	Theory and Research in Rehabilitation

Program Committee

Biochemistry
   Rini, James - PhD
Biomedical Engineering
   Chan, Warren - BSc, PhD *(Graduate Coordinator, Collaborative Program)*
   Dolan, Alf - BSc, MSc
   Popovic, Milos - MSc, MASc, PhD
   Yip, Christopher - BASc, MSc, PhD, PEng
Chemical Engineering and Applied Chemistry
   Papangelakis, Vladimiros G. - Dipl Eng, MEng, PhD
Chemistry
   Donaldson, James - PhD
Dentistry
   Santerre, Paul - BSc, MScEng, PhD
Electrical and Computer Engineering
   Wong, Willy - BSc, MSc, PhD
   Bardakjian, Berj - BSc, BEd, MASc, PhD, PEng
Laboratory Medicine and Pathobiology
   Elsholtz, Harry - BSc, MSc, PhD
Materials Science and Engineering
   Wang, Zhirui - BEng, MSc, PhD
Mechanical and Industrial Engineering
   Sullivan, Pierre - BSME, MSME, PhD, PEng
Medical Science
   Liu, Mingyao - MSc, MD
Pharmaceutical Sciences
   Lee, Ping - PhD
   Pang, K Sandy - BScPhm, PhD
Physics
   Shepherd, Theodore - BSc, PhD
Physiology
   Charlton, Milton - PhD
   MacDonald, John - BSc, PhD

Biomedical Toxicology

Lead Faculty

Medicine

Participating Degree Programs

Ecology and Evolutionary Biology – MSc, PhD
Laboratory Medicine and Pathobiology – MSc, PhD
Medical Science – MSc, PhD
Nutritional Sciences – MSc, PhD
Pharmaceutical Sciences – MSc, PhD
Pharmacology – MSc, PhD

Overview

The Collaborative Program 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 program 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 program. 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 departments other than the participating units listed who are interested in pursuing a program in toxicology should speak to the Director of the Collaborative Program in Biomedical Toxicology and the graduate advisor(s) in their home department to discuss the possibility. Detailed program information is available on the collaborative program's website and from the Department of Pharmacology and Toxicology.

Upon successful completion, the student receives, in addition to the MSc or PhD degree in their departmental area, a notation on the transcript reading "Completed MSc Collaborative Program in Biomedical Toxicology" or "Completed PhD Collaborative Program in Biomedical Toxicology."

Contact and Address

Web: www.pharmtox.utoronto.ca/programs/cpbt.htm
E-mail: pharmtox.dept@utoronto.ca
Telephone: (416) 978-5244
Fax: (416) 978-6395

Collaborative Program 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

Programs

Master's Level

Admission Requirements

- Applicants who wish to enrol in the collaborative program must first apply to and be admitted by one of the participating home departments under its regulations. Once students have been admitted to their home department, they should register in the Collaborative Program in Biomedical Toxicology by contacting the Program Director.

Program 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 department. It is understood that the research topic will be in the area of biomedical toxicology.

Doctoral Level

Admission Requirements

- Applicants who wish to enrol in the collaborative program must first apply to and be accepted by one of the participating home departments under its regulations. Once students have been admitted to their home department, they should register in the Collaborative Program in Biomedical Toxicology by contacting the Program Director.

Program 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 Director of the collaborative program). The home department and the Director of the Collaborative Program in Biomedical Toxicology will decide whether these courses are in addition to home departmental requirements or substitutions for home departmental requirements.
- Attend a minimum of 12 academic seminars related to toxicology during the doctoral program.
- Complete a research thesis or project as required by the home department. It is understood that the research topic will be in the area of biomedical toxicology.

Course List

JNP 1014Y   Interdisciplinary Toxicology
JNP 1016H   Graduate Seminar in Toxicology

Program Committee

Ecology and Evolutionary Biology
    Jackson, Donald - BSc, MSc, PhD
Laboratory Medicine and Pathobiology
    Elsholtz, Harry - BSc, MSc, PhD
Medical Science
    Davis, Karen - BSc, MSc, PhD
Nutritional Sciences
    Wolever, Thomas - BA, MSc, MA, BM, BCh, PhD
Pharmaceutical Sciences
    Wells, Peter - BScPhm, DP
Pharmacology and Toxicology
    Grant, Denis - BSc, PhD
    McPherson, J. Peter - MSc, PhD
    Woodland, Cindy - BSc, MSc, PhD *(Director)*

Biomolecular Structure

Lead Faculty

Medicine

Participating Degree Programs

Biochemistry – PhD
Chemistry – PhD
Medical Biophysics – PhD
Molecular Genetics – PhD

Overview

The Collaborative Program in Biomolecular Structure involves the graduate programs listed above. The program is open to PhD students wishing to train under the supervision of one of the participating investigators. The program will appeal to students from a wide variety of backgrounds with an interest in studying the structure and function of biomolecules.

Admissions have ceased for the Collaborative Program in Biomolecular Structure.

Contact and Address

Web: http://biochemistry.utoronto.ca/BMS
E-mail: james.rini@utoronto.ca
Telephone: (416) 978-0557
Fax: (416) 978-6885

J. M. Rini, Coordinator
Collaborative Program in Biomolecular Structure
Department of Molecular Genetics
University of Toronto
Medical Sciences Building
Room 5360, 1 King's College Circle
Toronto, Ontario M5S 1A8
Canada

Programs

Doctoral Level

Admission Requirements

- Applicants who wish to enrol in the collaborative program must apply to and be admitted to both the collaborative program and a graduate degree program in one of the collaborating departments. Applicants must first be admitted to one of the collaborating graduate units before applying to the collaborative program.

Program Requirements

- Complete JBB 2026H *Protein Structure, Folding and Design* and an additional 0.5 full-course equivalent (FCE) in a specialized topic.

- Participate in the Biomolecular Structure program seminar series.

Course List

Not all courses will be offered every year. Departments should be consulted each year to confirm course offerings.

JBB 2026H   Protein Structure, Folding and Design
JBB 2025H   Protein Crystallography

Program Committee

Biochemistry
    Forman-Kay, Julie - BSc, PhD
Chemistry
    Woolley, G Andrew - PhD
Medical Biophysics
    Rose, David - BA
Molecular Genetics
    Kay, Lewis - PhD
    Rini, James - BSc, PhD *(Coordinator)*

Book History and Print Culture

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
German Literature, Culture and Theory – MA, PhD
History – MA, PhD
History and Philosophy of Science and Technology – MA, PhD
History of Art – MA, PhD
Information – MI
Information Studies – 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 program 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 program, 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 unit and then apply to the collaborative program. If they satisfy the requirements of both programs, they receive their degree with the notation "Collaborative Program in Book History and Print Culture" on the transcript.

Contact and Address

Web: http://bookhistory.ischool.utoronto.ca
E-mail: book.history@utoronto.ca
Telephone: (416) 946-3560
Fax: (416) 978-1759

William Robins, Acting Director
Collaborative Program in Book History and Print Culture
University of Toronto
Massey College
4 Devonshire Place
Toronto, Ontario M5S 2E1
Canada

Programs

Master's Level

Admission Requirements

- Applicants who wish to enrol in the collaborative program must apply to and be admitted to both the collaborative program and one of the participating degree programs (home unit). Applicants to the collaborative program 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 program of study by April 1 for September admission. Applicants need not wait for a final decision from the home unit before applying to the collaborative program. Academic transcript(s) should be included in the application; unofficial transcripts are acceptable and may be sent either as scans attached to your e-mail or as printouts from a student web service mailed to the program office. Advice is available from the Director and the Program Committee.

- Applications from the participating units have priority in admissions. If there is space in the program, students from other units may apply; they should consult the graduate coordinator in their home unit and the Director of the BHPC program. Since course requirements vary from unit to unit, it is essential that there be close consultation between the collaborative program and the home unit at the time of the application.

Program Requirements

- 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 the first year of study.
- At least 1.0 FCE in additional courses related to book history and print culture. The additional 1.0 FCE will come from our roster of cross-listed courses, though students may substitute other courses with the approval of the Director. Students

are encouraged, if possible, to take courses outside their home unit.

- Depending on the regulations of the home unit, a master's thesis in the area of book history and print culture may be substituted for the additional 1.0 FCE beyond BKS 1001H and BKS 1002H.

Doctoral Level

Admission Requirements

- Applicants who wish to enrol in the collaborative program must apply to and be admitted to both the collaborative program and one of the participating degree programs (home unit). Applicants to the collaborative program 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 program of study by April 1 for September admission. Applicants need not wait for a final decision from the home unit before applying to the collaborative program. Academic transcript(s) should be included in the application; unofficial transcripts are acceptable and may be sent either as scans attached to your e-mail or as printouts from a student web service mailed to the program office. Advice is available from the Director and the Program Committee.
- Applications from the participating units have priority in admissions. If there is space in the program, students from other units may apply; they should consult the Graduate Coordinator in their home unit and the Director of the BHPC program. Since course requirements vary from unit to unit, it is essential that there be close consultation between the collaborative program and the home unit at the time of the application.

Program Requirements

- Students must fulfil the degree requirements of the unit in which they are enrolled. Their program of study must also be approved by the BHPC Program Committee.
- The program 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 program may be completed on a flexible-time basis only by Faculty of Information students registered for the Information flexible-time PhD.

Course List

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

For further details and listings of appropriate courses in various graduate units, visit http://bookhistory.ischool.utoronto.ca.

Program Committee

Art
    Cohen, Adam - PhD
English
    Robins, William - BA, MPH, PhD
History; Book and Media Studies
    McGowan, Mark - BA, MA, PhD
Information
    Galey, Alan - BA, MA, PhD

Master's Delegate - BA, MS – Massey College
Master's Student Representative
Doctoral Student Representative

Cardiovascular Sciences

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 Biophysics – MSc, PhD
Medical Science – MSc, PhD
Nursing Science – MN, PhD
Pharmaceutical Sciences – MSc, PhD
Pharmacology – MSc, PhD
Physiology – MSc, PhD
Public Health Sciences – MSc, PhD
Rehabilitation Science – MSc, PhD

Overview

The graduate programs listed above, together with the clinical departments of Anesthesia, Medicine, and Surgery, participate in the graduate Cardiovascular Sciences Collaborative Program at the University of Toronto. Units participating in the program 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 program.

Students follow a program of study acceptable to both the participating unit and the Cardiovascular Sciences program. Upon successful completion of the requirements, students receive, in addition to the master's or doctoral degree in their home graduate unit, a separate certificate from the program and the notation "Completed Collaborative Program in Cardiovascular Sciences" on their transcript.

Contact and Address

Web: www.cscp.utoronto.ca
E-mail: cv.program@utoronto.ca
Telephone: (416) 978-0746
Fax: (416) 946-5713

Cardiovascular Sciences Collaborative Program
University of Toronto
FitzGerald Building
Room 83E, 150 College Street
Toronto, Ontario M5S 3E2
Canada

Programs

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 Program.
- Acceptance by a supervisor who is a faculty member of the Cardiovascular Sciences Collaborative Program.
- Research area falls within the mandate of the Cardiovascular Sciences Collaborative Program.

Program 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 program. The thesis topic will be in the area of cardiovascular sciences. An unbound copy of the accepted thesis in final form must be submitted to the Cardiovascular Sciences Collaborative Program.
- To qualify for the Cardiovascular Sciences specialization, students obtaining their master's degree must complete 0.5 full-course equivalent (FCE) in an approved cardiovascular course listed under approved "Courses of Instruction."
- Attend and make a presentation, demonstrating excellence in cardiovascular research, at the annual Student Research Day.

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 Program.
- Acceptance by a supervisor who is a faculty member of the Cardiovascular Sciences Collaborative Program.
- Research area falls within the mandate of the Cardiovascular Sciences Collaborative Program.

Program 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 program. The thesis topic will be in the area of cardiovascular sciences. An unbound copy of the accepted thesis in final form must be submitted to the Cardiovascular Sciences Collaborative Program.
- To qualify for the Cardiovascular Sciences specialization, students obtaining their doctoral degree must have 1.0 full-course equivalent (FCE; 1.0 FCE = two half courses) chosen from among the following four courses: JCV 3060H, JCV 3061H, JCV 3062H, and JCV 3063H.
- Attend and make a presentation, demonstrating excellence in cardiovascular research, at the annual Student Research Day.

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 program's website, www.cscp.utoronto.ca.

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
JCV 3062H	Advanced Topics in Cardiovascular Sciences—Heart Function
JCV 3063H	Advanced Topics in Cardiovascular Sciences—Vascular
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

Program Committee

Biomedical Engineering
    Steinman, David - BASc, MASc, PhD
Exercise Sciences
    Thomas, Scott - BSc, MSc, PhD
Laboratory Medicine and Pathobiology
    Rand, Margaret - BSc, PhD
Medical Biophysics
    Wright, Graham - BSc, MSc, PhD
Medical Science
    Li, Ren-Ke - MHSc, MSc, MD, PhD
Medical Science; Physiology
    Wittnich, Carin - MSc, DVM *(Director)*

Nursing Science
    Clarke, Sean - MSN, PhD
Pharmaceutical Sciences
    Wu, Xiao Yu - PhD
Pharmacology and Toxicology
    Parker, John - BA, MD
Physiology
    Heximer, Scott - PhD
Public Health Sciences
    Silverman, Frances - PhD
Rehabilitation Science
    Brooks, Dina - BSc(PT), MSc, PhD
Student Representatives

Community Development

Lead Faculty

Architecture, Landscape, and Design

Participating Degree Programs

Adult Education and Community Development –
 MA, MEd
Counselling Psychology – MEd
Nursing Science – MN
Planning – MScPl
Public Health Sciences – MPH
Social Work – MSW

Overview

The Collaborative Program 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 program. Students must follow a course of study acceptable to both the home unit and the collaborative program. Upon completion of both programs, the student receives the degree from their home unit and the following notation on their transcript: "Completed the Collaborative Program in Community Development."

Contact and Address

Web: www.citiescentre.utoronto.ca/programs/
commdev.htm
E-mail: citiescentre@utoronto.ca
Telephone: (416) 978-0808
Fax: (416) 978-7162

Collaborative Program in Community Development
Cities Centre
University of Toronto
Suite 400, 455 Spadina Avenue
Toronto, Ontario M5S 2G8
Canada

Programs

Master's Level

Admission Requirements

- Collaborative programs 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 Program in Community Development.
- Applicants must submit the following to the Program Committee of the Collaborative Program in Community Development:
  - 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 program of study, your specific interests, and your career goals relate to community development (i.e., why you want to enrol in the Collaborative Program in Community Development); maximum length: 500 words. Include reference to any relevant experience (volunteer, work, education, etc.).

Program 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 Program in Community Development, they 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 program, to be approved by the Collaborative Program in Community Development 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 program.
- Normally, the required courses listed below are taken as options within regular departmental or faculty degree requirements, not as additional courses.

Course List

Core Course

UCS 1000H   Community Development

Students must take an additional 1.0 FCE in the subject area of the collaborative program, to be approved by the Collaborative Program in Community Development Director. The following is a list of the currently approved courses; the list is reviewed annually and posted on the program website.

Adult Education

AEC 1102H	Community Development: Innovative Models
AEC 1104H	Community Education and Organizing
AEC 1131H	Special Topics in Adult Education (with approval of the Director)
AEC 1182H	Nonprofits, Co-operatives and the Social Economy
AEC 1408H	Working with Survivors of Trauma
AEC 3119H	Global Perspectives on Feminist Education, Community Development and Community Transformation
AEC 3131H	Special Topics in Adult Education (with approval of the Director)
AEC 3182H	Citizenship Learning and Participatory Democracy

Counselling Psychology

AEC 1275H	Special Topics in Counselling Psychology (with approval of the Director)
AEC 1290H	Indigenous Healing in Counselling and Psychoeducation
AEC 1409H	Creative Empowerment Work with the Disenfranchised: Healing and Collective Action

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
PLA 1503H	Planning and Social Policy
JPG 1507H	Housing and Housing Policy
JPG 1508H	Planning with 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

Public Health Sciences

CHL 5801H	Health Promotion
CHL 5112H	Community Development in Health
CHL 5126H	Building Community Resilience
CHL 5411H	International Health
CHL 7001H	Directed Reading in an Approved Field of Community Health

Social Work

SWK 4210H	Promoting Empowerment: Working at the Margins
SWK 4304H	Globalization and Trans-nationalization: Social Work Responses Locally and Globally
SWK 4306H	Process of Social Exclusion, Marginalization, and Resistance
SWK 4422H	Social Housing and Homelessness

Program Committee

Applied Psychology and Human Development
    Stewart, Suzanne - BA, MA
Geography
    Wakefield, Sarah - BA, MA, PhD
Leadership, Higher and Adult Education
    Quarter, Jack - PhD
Public Health Sciences
    Poland, Blake - BA, PhD
Social Work
    Hulchanski, J David - BA, MSc, PhD

Comparative, International and Development Education

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 Administration – MA, MEd, EdD, PhD
Higher Education – MA, MEd, EdD, PhD
History and Philosophy of Education – MA, MEd
Second Language Education – MA, MEd, PhD
Sociology in 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. We approach these issues from a range of theoretical and disciplinary frames: more traditional, sociological, historical, and philosophical approaches are taught alongside vibrant interpretations of feminist, critical, post-structuralist, and cultural theories.

The CIDE program will interest Canadian students who wish to work and live in other cultures. It will also interest international students who wish to relate their studies at OISE directly to their own societies and learning systems.

Students can take courses in such fields as political science, feminist studies, sociology, and geography. The CIDE program is linked with events and programs at the Munk School of Global Affairs at the University of Toronto.

Successful students receive a notation on their transcript identifying their specialization in Comparative, International and Development Education.

Contact and Address

Web: www.oise.utoronto.ca/cidec
E-mail: cidec.oise@utoronto.ca
Telephone: (416) 978-0892
Fax: (416) 926-4749

Comparative, International and Development Education Centre (CIDEC)
The Ontario Institute for Studies in Education (OISE)
University of Toronto
7th Floor, 252 Bloor Street West
Toronto, Ontario M5S 1V6
Canada

Programs

Master's Level

Admission Requirements

- Applicants who wish to enrol in the collaborative program must apply to and be admitted to both the collaborative program and a graduate degree program in one of the collaborating departments. Applicants should apply to the appropriate degree program in one (or more) of the collaborating departments that corresponds most closely to their general background and interests.
- Applicants to the CIDE collaborative program are normally expected to have had at least one year of international or cross-cultural experience.
- Prospective applicants should review the detailed information about the CIDE program at www.oise.utoronto.ca/cidec.

Program Requirements

- Individual student programs of study must meet the requirements of both the home department and the collaborative program. 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.*
  ○ 0.5 core FCE CIDE master's-level course
  ○ 1.0 FCE (equivalent to two half courses) other core CIDE or affiliated master's-level courses
- Regular participation in and attendance at the CIDE Seminar Series. Participation at a minimum of five seminars required.
- 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 department must be represented on the thesis committee.

Doctoral Level

Admission Requirements

- Applicants who wish to enrol in the collaborative program must apply to and be admitted to both the collaborative program and a graduate degree program in one of the collaborating departments. Applicants should apply to the appropriate degree program in one (or more) of the collaborating departments that corresponds most closely to their general background and interests.
- Applicants to the CIDE collaborative program are normally expected to have had at least one year of international or cross-cultural experience.
- Prospective applicants should review the detailed information about the CIDE program at www.oise. utoronto.ca/cidec.They are strongly advised to contact one of the core CIDE faculty members in their home department to discuss their research interests and goals.

Program Requirements

- Individual student programs of study must meet the requirements of both the home department and the collaborative program. 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 intro-duction: CIE 1001H *Introduction to Comparative, International and Development Education*, if not already taken, or equivalent if transferring from another university.
  - 0.5 FCE core CIDE doctoral-level course
  - 1.0 FCE (equivalent to two half courses) other core CIDE or affiliated doctoral-level courses
  - Regular participation in and contribution to the CIDE Seminar Series (at least one major pres-entation 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 department must be represented on the thesis committee.

Course List

Not all courses are offered each year. Refer to www. oise.utoronto.ca/cidec 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 1005H	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 1318H	Teaching Conflict and Conflict Resolution
CTL 1864H	Methodologies for Comparing Educational Systems
CTL 3015H	Seminar in Second-Language Literacy Education

Humanities, Social Sciences and Social Justice Education

SES 1924H	Modernization, Development, and Education in African Contexts
SES 1927H	Migration and Globalization
SES 3911H	Cultural Knowledges, Representation and Colonial Education

Leadership, Higher and Adult Education

AEC 1114H	Comparative and International Perspectives in Adult Education
AEC 1146H	Women, War and Learning
AEC 3104H	Adult Education and Marxism
AEC 3131H	Special Topics in Adult Education
AEC 3180H	Global Governance and Educational Change: the Politics of International Cooperation in Education
AEC 3182H	Citizenship Learning and Participatory Democracy
TPS 1016H	School Program Development and Implementation
TPS 1019H	Diversity and the Ethics of Educational Administration
TPS 1807H	Strategic and Long-Range Planning for Postsecondary Systems
TPS 1825H	Comparative Education: Theory and Methodology
TPS 1826H	Comparative Higher Education
TPS 3810H	International Academic Relations

Affiliated Courses

The list of CIDE-affiliated courses may change. Please refer to www.oise.utoronto.ca/cidec for the current list.

Curriculum, Teaching and Learning

CTL 1010H   Children's Literature Within a Multicultural Context

CTL 1031H   Language, Culture, and Identity: Using the Literary Text in Teacher Development

CTL 1033H   Multicultural Perspectives in Teacher Development: Reflective Practicum

CTL 1307H   Identity Construction and Education of Minorities

CTL 1816H   Official Discourses and Minority Education (Doctoral students only)

CTL 1819H   Multicultural Literature in the Schools: Critical Perspectives and Practices

CTL 3008H   Critical Pedagogy, Language, and Cultural Diversity

CTL 3015H   Seminar in Second-Language Literacy Education

CTL 3018H   Language Planning and Policy (Politique et aménagement linguistique)

CTL 3024H   Second Language Teacher Education

Humanities, Social Sciences and Social Justice Education

SES 1912H   Foucault and Research in Education and Culture: Discourse, Power and the Subject

SES 1921Y   The Principles of Anti-Racism Education

SES 1922H   Sociology of Race and Ethnicity

SES 1925H   Indigenous Knowledge and Decolonization: Pedagogical Implications

SES 1926H   Race, Space and Citizenship: Research Methods

SES 1956H   Social Relations of Cultural Production in Education

SES 3910H   Advanced Seminar on Race and Anti-Racism Research Methodology in Education

SES 3912H   Race and Knowledge Production: Research Methods

SES 3933H   Theorizing Transnationality: Feminist Perspectives

TPS 1400H   The Origins of Modern Schooling I: Problems in Education Before the Industrial Revolution

TPS 1401H   The Origins of Modern Schooling II: Problems in Nineteenth- and Twentieth-Century Educational History, Focus on Canada and the U.S.A.

TPS 1420H   European Popular Culture and the Social History of Education I

TPS 1422H   Education and Family Life in the Modern World I

TPS 1427H   History and Commemoration: Canada and Beyond, 1800s–1900s

TPS 1430H   Gendered Colonialisms, Imperialisms and Nationalisms in History

TPS 1438H   Democratic Approaches to Pedagogy

TPS 1447H   Technology in Education: Philosophical Issues

TPS 1448H   Popular Culture and the Social History of Education II

Leadership, Higher and Adult Education

AEC 1102H   Community Development: Innovative Models

AEC 1131H   Special Topics in Adult Education

AEC 1145H   Participatory Research in the Community and the Workplace

AEC 1180H   Aboriginal World Views: Implications for Education

AEC 1181H   Embodied Learning and Qi Gong

AEC 1184H   Aboriginal Knowledge: Implications for Education

AEC 1190H   Community Healing and Peacebuilding

AEC 3103H   Teaching about Global and Social Issues

AEC 3119H   Global Perspectives on Feminist Education, Community Development, and Community Transformation

AEC 3132H   Special Topics in Women in Development and Community Transformation

AEC 3140H   Post-Colonial Relations and Transformative Education

TPS 1020H   Teachers and Educational Change

TPS 1027H   The Search for Educational Quality and Excellence in a Global Economy

TPS 1029H   Special Applications of the Administrative Process: Improving Student Outcomes on a System Wide Scale

TPS 1041H   Educational Administration II: Social and Policy Context of Schooling

TPS 1047H   Managing Changes in Classroom Practice

TPS 1803Y   Recurring Issues in Postsecondary Education

TPS 1806H   Systems of Higher Education

TPS 1820H   Special Topics in Higher Education: Master's Level

TPS 1846H   Internationalization of Higher Education in a Comparative Perspective

TPS 2006H   Educational Finance and Economics (Exclusion: Students who have taken TPS 1017H or TPS 1841H are not eligible to take TPS 2006H)

TPS 3029H   Special Topics in Educational Administration: Advanced Topics for Educational Administration

TPS 3041H   Administrative Theory and Educational Problems II: Doctoral Seminar on Policy Issues in Education

TPS 3045H   Educational Policy and Program Evaluation

TPS 3055H   Democratic Values, Student Engagement and Democratic Leadership

Geography

JPG 1509H   Feminism, Postcoloniality and Development

Political Science

JPE 2408Y   Political Economy of International
                Development

Program Committee

Curriculum, Teaching and Learning
    Bickmore, Kathy - BA, MA, PhD
    Cumming, Alister - BA, MA, PhD
    Evans, Mark - PhD
    Feuerverger, Grace - BA, MA, PhD
    Niyozov, Sarfaroz - BA, MA, PhD *(Co-director)*
Humanities, Social Sciences and Social Justice
 Education
    Coloma, Roland – BA, MA, PhD
    Dei, George J. S. - BA, MA, PhD
    Olson, Paul - BA, MA
Leadership, Higher and Adult Education
    Anderson, Stephen - PhD
    Hayhoe, Ruth - BA, MA, PhD
    Joshee, Reva - BA, MA, PhD
    Mojab, Shahrzad - MEd, PhD
    Mundy, Karen - BA, MA, PhD, Canada Research
    Chair *(Co-director)*

Developmental Biology

Lead Faculty

Medicine

Participating Degree Programs

Biochemistry – MSc, PhD
Cell and Systems Biology – MSc, PhD
Immunology – MSc, PhD
Laboratory Medicine and Pathobiology – MSc, PhD
Molecular Genetics – MSc, PhD
Physiology – MSc, PhD

Overview

The graduate programs listed above participate in the Collaborative Program in Developmental Biology. The objectives of the program are to:

1. promote and foster excellence in developmental biology research in Toronto;

2. provide a means for MSc 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 departments;

4. provide a forum for interaction between investigators in developmental biology in different departments via participation in student seminars, supervisory committees, journal clubs, retreats, and seminars/symposia.

Upon successful completion of the MSc or PhD requirements of the host department and the program, students receive the notation "Completed Program in Developmental Biology" on their transcript.

Contact and Address

Web: www.utoronto.ca/devbiol
E-mail: dev.bio@utoronto.ca
Telephone: (416) 586-8267
Fax: (416) 586-8857

Dr. Helen McNeill, Director
Collaborative Program in Developmental Biology
Department of Molecular Genetics
University of Toronto
Room 884, 600 University Avenue
Toronto, Ontario M5G 1X5
Canada

Programs

Master's Level

Admission Requirements

- Students who wish to enrol in the collaborative program must apply to and be admitted to both the collaborative program and a graduate degree program in one of the collaborating departments.

Program Requirements

Students must:

- Be registered in the master's program of one of the participating departments and must be undertaking research in developmental biology under the supervision of a member of the collaborative program.

- Complete all degree program requirements of the participating department. In addition, they must complete the interdepartmental course JDB 1024Y.

- Complete an MSc thesis in the topic area of developmental biology.

Doctoral Level

Admission Requirements

- Students who wish to enrol in the collaborative program must apply to and be admitted to both the collaborative program and a graduate degree program in one of the collaborating departments.

- Prospective students should contact the Collaborative Program 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 department, and the collaborative program.

- Be registered in the doctoral program of one of the host departments and must be undertaking research in developmental biology under the supervision of a member of the program.

- Complete all degree requirements of the participating department. 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 department courses.

- Complete a PhD thesis in the topic area of developmental biology.

Course List

The following courses are offered by the program every year:

JDB 1024Y   Topics in Developmental Biology
JDB 1025H   Developmental Biology
JDB 1026Y[0]   Student Seminars in Developmental
           Biology

Program Committee

Cell and Systems Biology
    Harris, Tony - BSc, PhD
Immunology
    Zuniga-Pflucker, Juan Carlos - BSc, PhD
Molecular Genetics
    Biechele, Steffen *(Student Representative)*
    Borovina, Antonia *(Student Representative)*
    Brill, Julie - PhD
    McNeill, Helen - PhD *(Director)*
    Roy, Peter John - BSc, PhD
    Zhen, Mei - PhD

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

Diaspora and Transnational Studies

Lead Faculty

Arts and Science

Participating Degree Programs

Anthropology – MA, MSc, PhD
Cinema Studies – MA
Comparative Literature – MA, PhD
Criminology – MA, PhD
Drama, Theatre and Performance Studies – MA, PhD
English – MA, PhD
Geography – MA, MSc, PhD
German Literature, Culture, and Theory – MA, 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
Sociology – MA, PhD
Sociology in Education – MA, MEd, EdD, PhD
Spanish – MA, PhD
Women and Gender Studies – MA

Supporting Units

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 program 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 program.

Contact and Address

Web: www.utoronto.ca/cdts/graduate.html
E-mail: cdts@utoronto.ca
Telephone: (416) 946 8464
Fax: (416) 978 7045

Diaspora and Transnational Studies Collaborative Program
University of Toronto
Suite 230, 170 St. George Street
Toronto, Ontario M5R 2M8
Canada

Programs

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 program.

Program 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 program 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 Program Committee. With the approval of the Program 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.
  - If the student undertakes a major paper or thesis in their home department, this will be on a topic

in diaspora and transnational studies, approved by the Program Committee.

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 program.
- Students who complete the collaborative program at the master's level will not be eligible for the program at the doctoral level.

Program Requirements

- Meet all respective degree requirements of the School of Graduate Studies and the participating unit.
- Meet the requirement of the collaborative program 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 Program Committee. With the approval of the Program 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 Program Committee.

Course List

DTS 1000H   Comparative Research Methods in Diaspora and Transnationalism
DTS 2000H   Graduate Topics in Diaspora Studies (Entrepreneurial Diasporas)

Program Committee

Anthropology
    Lambek, Michael - BA, MA, PhD
Cinema Studies
    Columpar, Corinn - BA, PhD
Drama, Theatre and Performance Studies
    Johnson, Stephen - BA, MA, PhD
English
    Most, Andrea - BA, MA, PhD
    Quayson, Ato - BA, PhD *(Director)*
Geography
    MacDonald, Ken - BA, MA, PhD
History
    Kwee, Hui Kian - BA, MA, PhD
    Terpstra, Nicholas - BA, MA, PhD
Humanities, Social Sciences and Social Justice
 Education
    Dehli, Kari - BA, MA, PhD
Religion
    Klassen, Pamela - BA, MA, PhD
    Najman, Hindy - AB, MA, PhD
    O'Neill, Kevin - BA, MA, PhD
Sociology
    Reitz, Jeffrey - PhD
Spanish
    Blackmore, Josiah - PhD

Dynamics of Global Change

Lead Faculty

Arts and Science

Participating Degree Programs

Adult Education and Community Development – PhD
Anthropology – PhD
Chemical Engineering and Applied Chemistry – PhD
Computer Science – PhD
Economics – PhD
Educational Administration – PhD
Geography – PhD
Health Policy, Management and Evaluation – PhD
Higher Education – PhD
Law – SJD
Management – PhD
Medical Science – PhD
Political Science – PhD

Overview

The Collaborative Program in the Dynamics of Global Change is a multidisciplinary program that explores the frontiers of global change across a wide range of issues and identifies the underlying dynamics of change. In a rapidly evolving, complex, and loosely structured global system that engages new actors, change occurs at multiple levels and can have amplifying effects in unexpected ways. This program explores these complex interconnections across disciplinary fields and issue areas. From their home departments, students may take up questions from their own disciplines but explore them through the theoretical and methodological lens of global change.

Contact and Address

Web: www.utoronto.ca/mcis/dgc
E-mail: cis.mair@utoronto.ca
Telephone: (416) 946-8917

Megan Ball, Program Administrator
Collaborative Program in the Dynamics of Global Change
Munk School of Global Affairs
University of Toronto
1 Devonshire Place
Toronto, Ontario M5S 3K7
Canada

Doctoral Level

Admission Requirements

- Each graduate student in the program 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 program.

Program Requirements

- Students must meet all respective degree requirements of the School of Graduate Studies, the participating graduate unit, and the collaborative program.
- Collaborative program course requirements:
  ○ 0.5 full-course equivalent (FCE) core course in the Dynamics of Global Change
  ○ 0.5 FCE comprising two intensive, modular courses in the Dynamics of Global Change
- Students will pursue a dissertation topic related to the dynamics of global change. Normally, the dissertation supervisor will be a core faculty member of the program. At least one member of the dissertation committee should be drawn from a graduate unit different from and cognate to the student's home unit.
- Each student's course of study and overall progress will be reviewed annually by the Collaborative Program Director, though ultimate responsibility for the student's progress will remain with the Graduate Chair of the home program.

Course List

DGC 1000H	Core Issues in the Dynamics of Global Change
DGC 2000H	Special Topics in the Dynamics of Global Change
DGC 2001H	Special Topics in the Dynamics of Global Change
DGC 2002H	Special Topics in the Dynamics of Global Change
DGC 2003H	Special Topics in the Dynamics of Global Change

Program Committee

Anthropology
    Boddy, Janice - BA, MA, PhD
Computer Science
    Easterbrook, Stephen Michael - BSc, PhD
Economics
    Hosios, Arthur - BEng, MA, MEng, PhD
Geography
    Daniere, Amrita - AB, PhD
Health Policy, Management and Evaluation
    Lemieux-Charles, Louise - PhD
Law
    Dyzenhaus, David - BA, LLB, PhD

Leadership, Higher and Adult Education
    Joshee, Reva - BLitt, MA, PhD
    Levin, Benjamin - BA, MEd, PhD
    Mundy, Karen - AB, MA, PhD
Management
    Pauly, Peter - MA, PhD
Political Science
    Cameron, David - PhD, Graduate Chair, FRSC

Earth Sciences and Physics

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 MSc and PhD programs in Earth Sciences and Physics. These programs foster graduate education in those areas of study that overlap traditional departmental boundaries.

Students who successfully complete the requirements of the collaborative program will receive the notation "Completed Collaborative Program in Earth Sciences and Physics" on their transcript.

Contact and Address

E-mail: bailey@geology.utoronto.ca
Telephone: (416) 978-3231
Fax: (416) 978-7606

Collaborative Program 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

Programs

Master's Level

Admission Requirements

- Applicants who wish to enrol in the collaborative program must apply to and be admitted to both a graduate degree program in one of the collaborating departments, this being either Earth Sciences or Physics, and to the collaborative program. 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 program.
- Applicants must submit a supplementary brief application form, available from either the home department or collaborative program office, to the collaborative program Director.
- Normal deadlines for application to the School of Graduate Studies apply. Students who have already been admitted to one of the two home depart-

ments may apply to the collaborative program until October 1.

Program Requirements

- Students must meet all respective degree requirements of the School of Graduate Studies, the home department, and the collaborative program.
- The MSc research, thesis, and thesis defence requirements are the same as those of the home department.
- 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 department.
- 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.
- Program requirements are normally completed within 12 months of entry to the program.

Doctoral Level

Admission Requirements

- Applicants who wish to enrol in the collaborative program must apply to and be admitted to both a graduate degree program in one of the collaborating departments, this being either Earth Sciences or Physics, and to the collaborative program.
- Applicants must submit a supplementary brief application form, available from either the home department or collaborative program office, to the collaborative program Director.
- Normal deadlines for application to the School of Graduate Studies apply. Students who have already been admitted to one of the two home departments may apply to the collaborative program until October 1.

Program Requirements

- Students must meet all respective degree requirements of the School of Graduate Studies, the home department, and the collaborative program.

- The PhD research, thesis, and thesis defence requirements are the same as those of the home department.
- The lecture course requirements are the Earth Sciences graduate seminar course in addition to the course requirements of the home department, and at least 1.0 FCE in the non-home department.
- The student's research supervisor will normally be a faculty member in the student's home department, unless an explicit exception is approved by both departments.

Program Committee

Earth Sciences
    Pysklywec, Russell - BSc, MSc, PhD
Earth Sciences and Physics
    Bailey, Richard - BSc, PhD *(Director)*
Physics
    Shepherd, Theodore - BSc, PhD

Editing Medieval Texts

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 Program 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 in the program complete a series of courses that deal with the techniques of reading, transcribing, and editing manuscripts, and then complete an editorial project.

Contact and Address

Web: http://medievaltexts.utoronto.ca
E-mail: medieval.studies@utoronto.ca
Telephone: (416) 978-4884
Fax: (416) 978-8294

Collaborative Program in Editing Medieval Texts
Centre for Medieval Studies
University of Toronto
3rd Floor, 125 Queen's Park
Toronto, Ontario M5S 2C7
Canada

Programs

Doctoral Level

Admission Requirements

- The Collaborative Program in Editing Medieval Texts is only available to doctoral students in one of the collaborating departments.
- Students who wish to be admitted to the program must have passed the Centre for Medieval Studies' Level One Latin examination.

Program Requirements

- MST 1104H and either MST 1105H or MST 1115H.
- 1.0 full-course equivalent (FCE) chosen from MST 1101H, MST 1107H, MST 1110H, MST 1113H, MST 1385H, ENG 1093H, or another approved course.
- An approved editorial project, which can be a paper for a course in any of the collaborating departments, an independent publishable project, or the student's dissertation.

Course List

Courses marked (PR) have prerequisites; further information may be obained from the centre's 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   Introductory Medieval Latin
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

Program Committee

Classics
    Magee, John - BA, MA, PhD
English
    Robins, William - BA, MPH, PhD
History
    Meyerson, Mark - BA, PhD
Italian Studies
    Lettieri, Michael - BA, MA, PhD
Medieval Studies
    Andrée, U.O. Alexander - BA, PhD
    Orchard, Andrew - DPhil, PhD
    Townsend, David Robert - BA, MA, PhD
Music
    Bowen, William - BA, BMus, MA, PhD
Philosophy
    King, Peter - AB, PhD

Religion
    Goering, Joseph - BA, MA, MSL, PhD
Spanish
    Blackmore, Josiah - PhD

Educational Policy

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 Administration – MA, MEd, EdD, PhD
Higher Education – MA, MEd, EdD, PhD
History and Philosophy of Education – MA, MEd
Second Language Education – MA, MEd, PhD
Sociology in Education – MA, MEd, EdD, PhD

Overview

The Collaborative Program 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 program'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.

Annual activities including a lecture series, conferences for educators and researchers, publications, and cross-specialization research initiatives both enhance the intellectual infrastructure of the academic program and provide a basis for collaborative work. Canada Research Chairs, the Ontario Research Chair, endowed chairs, and others with policy expertise in Theory and Policy Studies (TPS), across OISE, the University of Toronto, and other educational institutions link their work through these program-related activities.

Upon successful completion of the degree requirements of the home department and the collaborative program, students receive the notation "Completed Collaborative Program in Educational Policy" on their transcript.

Contact and Address

Web: www.oise.utoronto.ca

Collaborative Program in Educational Policy
The Ontario institute for Studies in Education (OISE)
University of Toronto
252 Bloor Street West
Toronto, Ontario M5S 1V6
Canada

Programs

Master's Level

Admission Requirements

- Applicants must apply to and be accepted by both their "home" program and the Collaborative Program 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 Program 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 program 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 program.
- Students who develop an interest in admission to the collaborative program after they have been admitted to their home program may also apply during their course of study. Requests from students already enrolled will be considered once a year at the same time as initial admission files are reviewed.

Program Requirements

- All master's students in the collaborative program:
  - Take the core half course TPS 3045H *Policy and Program Evaluation.*
  - Attend the Collaborative Program 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 program 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.
- MA program: The total number of courses required for graduation will equal 6 or 8.

Course List

Master's-Level Electives

AEC 1171H	Aboriginal Education: Contemporary Policies and Programs
CTL 1816H	Official Discourses and Minority Education
CTL 3000H	Foundations of Bilingual and Multicultural Education
CTL 3008H	Critical Pedagogy, Language and Cultural Diversity
CTL 3018H	Language Planning and Policy
HDP 1211H	Psychological Foundations of Early Development and Education
HDP 1241H	Outcomes of Early Education and Child Care
HDP 1259H	Child and Family Relationships – Implications for Education
SES 1902H	Introduction to Sociological Methods in Education
SES 1903H	Introduction to Sociological Theory in Education
SES 1912H	Foucault and Research in Education
SES 1948H	Sociology of Race and Ethnicity
SES 1951H	School and Community
SES 1954H	Marginality and the Politics of Resistance
SES 2942H	Education and Work
TPS 1020H	Teachers and Educational Change
TPS 1428H	Immigration and the History of Canadian Education
TPS 1429H	Ethnicity and the History of Canadian Education

Doctoral Level

Admission Requirements

- Students interested in participating in the Collaborative Program in Educational Policy at the doctoral level must apply to and be accepted by both their "home" program and the collaborative program.
- 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 Program 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 program 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 program.
- Students who develop an interest in admission to the collaborative program after they have been admitted to their home program may also apply during their course of study. Requests from students already enrolled will be considered once a year at the same time as initial admission files are reviewed.

Program Requirements

- All doctoral students in the collaborative program:
  - Take the core half course: TPS 3045H *Policy and Program Evaluation,* if not already taken.
  - Take the core half course TPS 3145 *Advanced Issues in Educational Policy Analysis and Program Evaluation.*
  - Attend the Collaborative Program 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 program 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 8, depending on the requirements of the student's home program.

Course List

Doctoral-Level Electives

CTL 1816H	Official Discourses and Minority Education
CTL 3008H	Critical Pedagogy, Language and Cultural Diversity
CTL 3018H	Language Planning and Policy

SES 2941H   Social Inequality in Education
SES 2999H   Aboriginal Peoples and Citizenship
JSA 5147H   Language, Nationalism and
                   Postnationalism
WPL 3931H   Doctoral Seminar in Workplace Learning
                   and Social Change

Environment and Health

Lead Faculty

Arts and Science

Participating Degree Programs

Geography – MA, MSc, PhD
Medical Science – MSc, PhD
Planning – MScPl, PhD
Public Health Sciences – MPH, MSc, PhD
Women and Gender Studies – MA

Overview

The graduate degree programs listed above participate in the Environment and Health (EH) Collaborative Program. 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 Program 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.

Students who complete the collaborative program receive the following notation on their transcript: "Completed the Collaborative Program in Environment and Health" and an official parchment from the School of Graduate Studies.

Contact and Address

Web: www.environment.utoronto.ca/Graduate/
Programs/EnvironmentHealthCollaborativeProgram.
aspx
E-mail: centre.environment@utoronto.ca
Telephone: (416) 978-3475
Fax: (416) 978-3884

Environment and Health (EH) Collaborative Program
School of the Environment, Earth Sciences Centre
University of Toronto
Room 1016V, 33 Willcocks Street
Toronto, Ontario M5S 3E8
Canada

Programs

Master's Level and Doctoral Level

Admission Requirements

- Students who wish to enrol in the EH Collaborative Program offered by the School of the Environment must first apply to and be accepted into a master's or doctoral program in a degree granting unit, also called a "home department." Information about applying to a home department can be found at the School of Graduate Studies website, www.sgs.utoronto.ca.

- Prospective students who are planning to enrol in the EH Collaborative Program are strongly encouraged to submit copies of the documents indicated on the School of the Environment's website by the application deadline established by the home department. Please contact the home department to which you 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 Program beyond the deadline set by their home department.

Program Requirements

- Students must complete the requirements below in addition to the degree requirements of their home departments. Typically, students complete up to 1.0 full-course equivalent (FCE) and conduct research on an environment and health topic. Specific collaborative program requirements for each participating degree program are listed on the centre's website under the Environment and Health Collaborative Program.

Master's Degrees

- Complete the core course ENV 4001H (0.5 FCE).
- Complete one elective half course (0.5 FCE) from the list of approved electives below.
- For degree programs that require a thesis or research project, the topic should be within the field of environment and health, as approved by the home department and the Collaborative Program Committee. A copy of the final thesis or project must be submitted to the School of the Environment.

Doctor of Philosophy Degrees

- Complete the core course ENV 4001H (0.5 FCE), unless already completed at the master's level.
- Complete one elective half course (0.5 FCE) from the list of approved electives below.

- 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 department who is a member of the core faculty of the collaborative program 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.

Course List

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 Program are also allowed to take elective courses listed under the Environmental Studies Collaborative Program towards completing their Environment and Health Collaborative Program requirements (these are listed under Environmental Studies Collaborative Program in this calendar).

Core Course

ENV 4001H   Graduate Seminars in Environment and Health

Elective Courses

CHL 5416H   Environmental Epidemiology
CHL 5902H   Advanced Occupational Hygiene
CHL 5903H   Environmental Health
CHL 5916H   Environmental Health Policy
ENV 1703H   Water Resources Management and Policy
ENV 1704H   Environmental Risk Analysis and Management
ENV 3000H   Special Topics—Environmental and Health
ENV 4002H   Environment and Health of Vulnerable Populations
JGE 1212H   Fate of Contaminants in the Environment
JNC 2503H   Environmental Pathways
JNP 1014Y   Interdisciplinary Toxicology
JNP 1016H   Graduate Seminar in Toxicology
JPG 1421H   Health in Urban Environments
TPS 1837H   Environmental Health, Transformative Higher Education and Policy Changes

Program Committee

Ecology and Evolutionary Biology; Environment
    Jackson, Donald - BSc, MSc, PhD
Environment
    Wiseman, Clare - BS, MSc, PhD
Geography
    Maclaren, Virginia - BA, MRP, MSc, PhD

Medical Science
    Rotstein, Ori - MSc, MD
Planning
    Rankin, Katharine - BA, MA, PhD
Public Health Sciences
    Lemieux-Charles, Louise - PhD *(Acting Director)*
Women and Gender Studies
    McElhinny, Bonnie - BA, MA, MA, PhD, PhD

Environmental Engineering

Lead Faculty

Applied Science and Engineering

Participating Degree Programs

Chemical Engineering and Applied Chemistry –
 MASc, MEng, PhD
Civil Engineering – MASc, MEng, PhD
Materials Science and Engineering – MASc, MEng,
 PhD
Mechanical and Industrial Engineering – MASc,
 MEng, PhD

Overview

The Environmental Engineering Collaborative
Program (EECP) is an interdisciplinary collaborative
program designed for students interested in taking a
concentration of courses and conducting research in
environmental engineering. It is open to MASc, MEng,
and PhD students in the collaborating graduate pro-
grams listed above in the Faculty of Applied Science
and Engineering.

About 50 full-time faculty members in these depart-
ments carry out advanced research and teach post-
graduate courses in a wide range of environmental
engineering specialities.

The collaborative program is administered and co-
ordinated by the Division of Environmental Engineering
and Energy Systems in conjunction with the participat-
ing departments and the School of the Environment.

Students who complete the EECP requirements
will obtain the following statement on their transcript:
"Completed Collaborative Program in Environmental
Engineering."

Contact and Address

Web: www.energy.engineering.utoronto.ca
E-mail: eep@ecf.utoronto.ca
Telephone: (416) 978-3532
Fax: (416) 946-0371

Environmental Engineering Collaborative Program
Division of Environmental Engineering and Energy
Systems
University of Toronto

Office address:
Room 1015, 44 St. George Street
University of Toronto

Mailing address:
35 St. George Street
Toronto, Ontario M5S 1A4
Canada

Programs

Master's Level

Admission Requirements

- Students who wish to enrol in the collaborative
  program must first apply to and be accepted into
  a master's program in one of the collaborating
  departments. (See the departmental entries in this
  calendar for details on admission requirements and
  degree programs.) Students should generally apply
  to the department that most closely matches their
  undergraduate degree.

- Once a student has registered in one of the col-
  laborating departments, he or she may apply to and
  enrol in the EECP; this should be done no later than
  the end of the first session of study.

- Application forms for the collaborative program are
  available from the division or any of the collaborat-
  ing departments.

Program Requirements

- Degree requirements include coursework and
  generally a research thesis or project, with details
  varying among the collaborating departments (see
  the departmental entries in this calendar).

- Graduate courses and research are available in a
  wide range of environmental engineering speci-
  alities offered by the collaborating departments.
  Many additional courses relevant to environmen-
  tal engineering are offered by the School of the
  Environment. See the calendar entries for the
  collaborating departments and the School of the
  Environment for lists of courses. More detailed in-
  formation on faculty, areas of research, and courses
  is available on the division's website and from the
  division.

- The EECP requirements are:
  - Completion of a concentration of study in en-
    vironmental engineering as demonstrated in
    coursework and, where it is part of the degree
    requirement, a thesis or project. This is gener-
    ally met through the student's home department
    degree requirements.
  - Completion of one non-engineering course with
    substantial interdisciplinary content and student
    interaction that is related to the environment but
    is outside the student's technical field. A list of
    approved courses is available on the division's
    website.
  - Participation in EDE 3000H, the Environmental
    Engineering Research Seminar Series, for at
    least two sessions. This is mandatory for MASc
    students and recommended for MEng students.

Doctoral Level

Admission Requirements

- Students who wish to enrol in the collaborative program must first apply to and be accepted into a doctoral program in one of the collaborating departments. (See the departmental entries in this calendar for details on admission requirements and degree programs.) Students should generally apply to the department that most closely matches their undergraduate or master's degree.
- Once a student has registered in one of the collaborating departments, he or she may apply to and enrol in the EECP; this should be done no later than the end of the first session of study.
- Application forms for the collaborative program are available from the division or any of the collaborating departments.

Program Requirements

- Degree requirements include coursework and a research thesis, with details varying among the collaborating departments (see the departmental entries in this calendar).
- Graduate courses and research are available in a wide range of environmental engineering specialities offered by the collaborating departments. Many additional courses relevant to environmental engineering are offered by the School of the Environment. See the calendar entries for the collaborating departments and the School of the Environment for lists of courses. More detailed information on faculty, areas of research, and courses is available on the division's website and from the division.
- The EECP requirements are:
  - Completion of a concentration of study in environmental engineering as demonstrated in coursework and a thesis. This is generally met through the student's home department degree requirements.
  - Completion of one non-engineering course with substantial interdisciplinary content and student interaction that is related to the environment but is outside the student's technical field. A list of approved courses is available on the division's website.
  - Participation in EDE 3000H, the Environmental Engineering Research Seminar Series, for at least two sessions.

Program Committee

Chemical Engineering and Applied Chemistry
 Kirk, Donald - BASc, MASc, PhD, PEng

Civil Engineering
 Hofmann, Ronald - BEng, MASc, PhD, Reg Professional Engineer
 Karney, Bryan - BASc, MEng, PhD, PEng *(Director)*
Materials Science and Engineering
 TBA
Mechanical and Industrial Engineering
 Bussmann, Markus - BASc, MASc, PhD

Environmental Studies

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
Counselling Psychology – MA, MEd, EdD, PhD
Earth Sciences – MASc, MSc, PhD
Ecology and Evolutionary Biology – PhD
Economics – MA
Forest Conservation – MFC
Forestry – MScF, PhD
Geography – MA, MSc, PhD
Information – MI
Information Studies – PhD
Management – MBA, PhD
Philosophy – MA, PhD
Physics – MSc, PhD
Planning – MScPl, PhD
Political Science – MA, PhD
Religion – MA, PhD
Sociology – MA, PhD
Sociology in Education – MA, MEd, EdD, PhD
Women and Gender Studies – MA

Overview

The graduate programs listed above participate in the Environmental Studies (ES) Collaborative Program which is offered through the School of the Environment at the University of Toronto. Graduate students admitted to a participating "home" department can apply to the collaborative program and pursue coursework and research in environmental areas. The School of the Environment currently has graduate students from across the disciplinary spectrum.

The School of the Environment offers a unique and comprehensive program of graduate study. By utilizing the University's extensive library holdings and faculty resources, it offers one of North America's most engaging and cross-disciplinary programs in the environment. One of the compelling strengths of the program is the interdisciplinary environment in which teaching and research are conducted. For example, in its core courses, professors from the humanities team teach with faculty from the social sciences, engineering, biology, and chemistry. 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.

Students who complete the collaborative program receive the following notation on their transcript:

"Completed Collaborative Program in Environmental Studies" and an official parchment from the School of Graduate Studies.

Contact and Address

Web: www.environment.utoronto.ca/Graduate/
Programs/EnvironmentalStudiesCollaborativeProgram.
aspx
E-mail: centre.environment@utoronto.ca
Telephone: (416) 978-3475
Fax: (416) 978-3884

Environmental Studies Collaborative Program
School of the Environment, Earth Sciences Centre
University of Toronto
Room 1016V, 33 Willcocks Street
Toronto, Ontario M5S 3E8
Canada

Programs

Master's Level and Doctoral Level

Admission Requirements

- Students who wish to enrol in the Environmental Studies (ES) Collaborative Program offered by the School of the Environment must first apply to and be accepted into a master's or doctoral program in a degree granting unit, also called a "home department." Information about applying to a home department can be found at the School of Graduate Studies website, www.sgs.utoronto.ca.

- Prospective students are strongly encouraged to submit copies of the documents indicated on the School of the Environment's website by the application deadline established by the home department. Please contact the home department to which you 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 Program beyond the deadline set by their home department.

Program Requirements

- Students must complete the requirements below in addition to the degree requirements of their home departments. 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, we encourage students to check the calendar entries for their respective "home" department 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 program. Specific collaborative program requirements for each participating degree program are listed on the School of the Environment's website under the Environmental Studies Collaborative Program.

Master's Degrees Coursework Option

- Complete the core course ENV 1001H (0.5 FCE).
- Complete one half-course elective (0.5 FCE)
- Complete internship of approximately three months (ENV 4444Y; 1.0 FCE).
- Produce a research paper related to the internship (ENV 5555Y; 1.0 FCE).
- Note: For a complete and most up-to-date list of collaborative program requirements by each participating degree program for master's students in the coursework option, please visit www.environment.utoronto.ca/Graduate/Programs/EnvironmentalStudiesCollaborativeProgram.aspx.

Master's Degrees Thesis Option

- Complete the core course ENV 1001H (0.5 FCE).
- Complete one half-course elective (0.5 FCE).
- Write a thesis in the home department on an environment-related topic.

Doctor of Philosophy Degrees

- Complete the core course ENV 1001H (0.5 FCE), unless already completed at the master's level.
- Complete one half-course elective (0.5 FCE).
- Complete a thesis on an environmental topic in the home department.
- Present a seminar on thesis research, either in the School of the Environment's seminar series or at the School of the Environment Research Day.
- Additional courses may be required by the home department and/or by the supervisor or supervisory committee, depending on academic and/or career goals of the student, as well as departmental regulations.
- A supervisor or supervisory committee may be appointed for each student by the home department and the School of the Environment.

Course List

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 Program are also allowed to take elective courses listed under the

Environment and Health Collaborative Program towards completing their Environmental Studies Collaborative Program requirements (these are listed under Environmental Health Collaborative Program in this calendar). For a current graduate course listing, please refer to the School of the Environment website at www.environment.utoronto.ca/Graduate/CourseSchedules.aspx.

Core Course

ENV 1001H   Environmental Decision Making

CFE 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 1444H   Capitalist Nature
ENV 1701H   Environmental Law
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

Other Elective Courses

Chemical Engineering and Applied Chemistry

JNC 2503H   Environmental Pathways

Forestry and Social Work

JFS 1460H   Community-Based Natural Resource Management

Geography

JGE 1413H   Environmental Impact Assessment
JGE 1420H   Urban Waste Management
GGR 1214H   Global Ecology and Biogeochemical Cycles

Geography and Planning

JPG 1402H   Environment and Development
JPG 1403H   Political Ecology of African Environments
JPG 1404H   Issues in Global Warming
JPG 1406H   Sustainable Building Energy Use and Supply
JPG 1407H   Efficient Use of Energy
JPG 1408H   Carbon-Free Energy
JPG 1414H   Cities as Ecosystems
JPG 1415H   Global Environmental Justice and Social Movements
JPG 1419H   Aboriginal/Canadian Relations in Environment and Resource Management
JGE 1609H   Cities, Industry and Environment

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

History

HIS 1111H	Topics in North American Environmental History

Humanities, Social Sciences and Social Justice Education

SES 1909H	Environmental Sustainability and Social Justice I

Leadership, Higher and Adult Education

AEC 1104H	Community Education and Organizing
AEC 1131H	Special Topics in Adult Education: Adult Education for Sustainability
AEC 1160H	Introduction to Transformative Learning Studies
AEC 1178H	Practitioner/Ecological Identity and Reflexive Inquiry

Mechanical and Industrial Engineering

JEI 1901H	Technology, Society, and the Environment I
JEI 1902H	Technology, Society, and the Environment II

Political Science

JPV 1201H	Politics, Bureaucracy, and the Environment

Philosophy

JVP 2147H	Environmental Philosophy

Program Committee

Anthropology
    Boddy, Janice - BA, MA, PhD
Applied Psychology and Human Development
    Watson, Jeanne - PhD
Chemical Engineering and Applied Chemistry
    Reeve, Douglas - BSc, MASc, PhD
Chemistry
    Morris, Robert - BSc, PhD, Fell North Atlantic Treaty Or
Earth Sciences
    Spooner, Edward - BA, PhD
Ecology and Evolutionary Biology
    Rowe, Locke - BSc, MSc, PhD
Ecology and Evolutionary Biology; Environment
    Jackson, Donald - BSc, MSc, PhD *(Director)*
Economics
    Hosios, Arthur - BEng, MA, MEng, PhD
Forestry
    Smith, Sandy - BAgrSc, MSc, PhD
Geography
    Maclaren, Virginia - BA, MRP, MSc, PhD
Humanities, Social Sciences and Social Justice
 Education
    Dehli, Kari - BA, MA, PhD
Information
    Ross, Seamus - BA, MA, DPhil
Management
    Martin, Roger - AB, MBA
Philosophy
    Boyle, Joseph - BA, PhD

Physics
    Shepherd, Theodore - BSc, PhD
Planning
    Rankin, Katharine - BA, MA, PhD
Political Science
    Cameron, David - PhD, Graduate Chair, FRSC
Religion
    Kloppenborg, John - BA, MA, PhD
Sociology
    Wheaton, Blair - PhD
Women and Gender Studies
    McElhinny, Bonnie - BA, MA, MA, PhD, PhD

Ethnic and Pluralism Studies

Lead Faculty

Arts and Science

Participating Degree Programs

Anthropology – MA, PhD
Educational Administration – MA, MEd, EdD, PhD
European, Russian, and Eurasian Studies – MA
Geography – MA, PhD
History – MA, PhD
History and Philosophy of Education – MA, MEd
Industrial Relations and Human Resources –
 MIRHR, PhD
Nursing Science – MN, PhD
Political Science – MA, PhD
Public Policy – MPP
Religion – MA, PhD
Social Work – MSW, PhD
Sociology – MA, PhD
Sociology in Education – MA, MEd, EdD, PhD
Women and Gender Studies – MA

Overview

The graduate programs listed above participate in the Collaborative Program in Ethnic and Pluralism Studies at the University of Toronto. Participating graduate units in the program contribute courses and provide facilities and supervision for graduate research.

Upon successful completion of the requirements, students receive the notation "Completed Collaborative Program in Ethnic and Pluralism Studies" on their transcript, in addition to the master's or doctoral degree in their departmental area.

Contact and Address

Web: www.utoronto.ca/ethnicstudies
E-mail: ethnic.studies@utoronto.ca
Telephone: (416) 978-4783
Fax: (416) 978-3963

Collaborative Program in Ethnic and Pluralism Studies
Department of Sociology
University of Toronto
725 Spadina Avenue
Toronto, Ontario M5S 2J4
Canada

Programs

Master's Level

Admission Requirements

- Applicants who wish to enrol in the collaborative program must apply to and be admitted to both the collaborative program and a graduate degree program in one of the collaborating graduate units.
- Applicants to the Master of Arts, Master of Industrial Relations and Human Resources, Master of Nursing, Master of Science, and Master of Social Work are admitted by the participating graduate unit under the General Regulations of the School of Graduate Studies.

Program Requirements

- Students must follow a program of studies acceptable to both the participating graduate unit and the Ethnic and Pluralism Studies program.
- Collaborative program requirements may be met concurrent with, or in addition to, departmental requirements. Students should consult specific departmental 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 departmental 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.

Doctoral Level

Admission Requirements

- Applicants who wish to enrol in the collaborative program must apply to and be admitted to both the collaborative program and a graduate degree program in one of the collaborating graduate units.
- Applicants to the Doctor of Philosophy degree program are admitted under the General Regulations of the School of Graduate Studies.

Program Requirements

- Students must follow a program of studies acceptable to both the participating graduate unit and the Ethnic and Pluralism Studies program.
- Collaborative program requirements may be met concurrent with, or in addition to, departmental requirements. Students should consult specific departmental 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 departmental 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.

Course List

1. Courses eligible for credit towards meeting program 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 program office or the appropriate graduate unit for course availability.
4. Students wishing to use courses other than those listed below for credit towards meeting program requirements must submit a formal request in writing.

Coordinating Seminar

JTH 3000H   Ethnic Relations Theory, Research, and Policy

Anthropology

ANT 6003H   Critical Issues in Ethnography I
ANT 6004H   Critical Issues in Ethnography II
ANT 6034H   Advanced Research Seminar IV (Ethnicity)
ANT 6040H   Approaches to Field Work I
ANT 6041H   Approaches to Field Work II
ANT 6050H   Reading Course in Specific Area and Theory I

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   Identity, Ethnicity, and Cultural Change in Eastern Europe

Geography

PLA 1503H   Planning and Social Policy
JPG 1505H   The Multicultural City: Diversity, Policy, and Planning
JPG 1506H   State/Space/Difference: Understanding the New Social Geography
GGR 1712H   Historical Geography of Ethnic Groups in Canada

History

HIS 1102H   Spiritual Invasion: Natives of the Americas Confront Christianity
HIS 1120H   Topics in Aboriginal/Non-Aboriginal Relations in Canada
HIS 1164H   Irish Migration to Canada: Sources and Methods
HIS 1166H   Immigrants, Minorities, and the Racialized Other: Canada in a Comparative Context (Prerequisite: any previous course in the history of Canada.)
HIS 1274H   The Nazis, Occupied Europe, and the Jews
HIS 1287H   Polish Jews Since the Partitions of Poland (joint graduate/undergraduate)
HIS 1297H   Problems of National Survival in Eastern Europe Since 1848
HIS 1528H   Crossing Boundaries: Race, Ethnicity, Class, and Gender in America, 1880–1930
HIS 1545H   Race, Segregation and Protest: South Africa and the United States

Humanities, Social Sciences and Social Justice Education

SES 1921Y   The Principles of Anti-Racism Education
SES 1926H   Race, Space and Citizenship: Research Methods
SES 1952H   Language, Culture, and Education
SES 3933H   Theorizing Transnationality: Feminist Perspectives
JSA 5147H   Language, Nationalism and Post-Nationalism

Industrial Relations and Human Resources

IRE 3630H   Workplace Diversity and Inclusivity

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 department. 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 117H	Introduction to Islamic Law
LAW 261H	Citizenship: Inside and Out
LAW 370H	Aboriginal and Treaty Rights in Canada
LAW 410H	Discrimination Law: Equality in the Private Sector
LAW 456H	Canadian Migration Law
LAW 547H	Law of Forced Migration

Nursing Science

NUR 1013H	Transcultural Health Care Issues
NUR 1014H	Politics of Aboriginal Health
NUR 1068H	Youth and Mental Health Promotion

Political Science

POL 2001Y	Problems of Political Community
POL 2026H	Topics in Political Thought I: Nationalism and Political Philosophy
POL 2038Y	Problems of Pluralism and Equality
POL 2127H	Canadian Theories of Multiculturalism
POL 2321H	Topics in Comparative Politics I: Citizenship and Immigration in Europe and North America
POL 2324H	Ethnonationalism and State-Building: The Communist and Post-Communist Experience
POL 2413Y	Politics, Culture, and Identity in Southeast Asia

Religion

RLG 2037H	Religion and Healing
RLG 3236H	Religious Pluralism and the Church
RLG 3512H	Introduction to Islamic Law
RLG 3931H	Topics in North American Religions

Social Work

SWK 4210H	Promoting Empowerment: Working at the Margins
SWK 4304H	Globalization and Trans-nationalization: Social Work Responses Locally and Globally
SWK 4617H	Cross-Cultural Social Work Practice
SWK 4658H	Social Work with Immigrants and Refugees
SWK 4801H	Special Studies I
SWK 4802H	Special Studies II

Sociology

SOC 6002H	Immigration I: Contemporary International Migration
SOC 6003H	Immigration II: Sociology of Immigration, Ethnicity and Employment
SOC 6009H	Ethnicity I
SOC 6016H	Social Demography I
SOC 6109H	Ethnicity II
SOC 6116H	Social Demography II

Theory and Policy Studies in Education

TPS 1029H	Special Topics in Educational Administration: Multicultural and Diversity Politics in Comparative Perspective
TPS 1042H	Educational Leadership and Cultural Diversity
TPS 1428H	Immigration and the History of Canadian Education
TPS 1429H	Ethnicity and the History of Canadian Education
TPS 3042H	Field Research in Educational Administration
TPS 3428H	Minority Concerns and Education in Canadian History: Selected Topics

Program Committee

Anthropology
    Levin, Michael - BA, MA, PhD
Curriculum, Teaching and Learning
    Troper, Harold - BA, MA, PhD
Economics
    Baker, Michael - BComm, MA, PhD
European, Russian, and Eurasian Studies
    Korteweg, Anna - BA, MA, PhD
Geography
    Mahtani, Minelle - BA, PhD
History
    Iacovetta, Franca - AB, AM, PhD
Humanities, Social Sciences and Social Justice Education
    Razack, Sherene - BA, MA, PhD
Industrial Relations and Human Resources
    Verma, Anil - BTech, MBA, DPhil
Law
    Macklin, Audrey - BSc, LLB, LLM
Nursing Science
    Gastaldo, Denise - BSN, MA, PhD
Political Science
    Triadafilopoulos, Phil - BA, MA, PhD
Religion
    Mittermaier, Amira - MA, PhD
Sociology
    Fong, Eric - BA, MA, PhD *(Acting Director)*
    Reitz, Jeffrey - PhD
Social Work
    Bhuyan, Rupaleem - BA, MA, PhD
Women and Gender Studies
    McElhinny, Bonnie - BA, MA, MA, PhD, PhD

Genome Biology and Bioinformatics

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 Program 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 program 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 Program in Genome Biology and Bioinformatics. Upon successful completion of the PhD requirements of the host department and the program, students receive the notation "Completed Program in Genome Biology and Bioinformatics" on their transcript.

Contact and Address

Web: www.gbb.utoronto.ca
E-mail: rob.reedijk@utoronto.ca
Telephone: (416) 978-0774

Mr. Rob Reedijk, Administrative Coordinator
Collaborative Program in Genome Biology and Bioinformatics
Department of Biochemistry
University of Toronto
Room 5207, Medical Sciences Building
Toronto, Ontario M5S 1A8
Canada

Programs

Doctoral Level

Admission Requirements

- Applicants who wish to enrol in the collaborative program must apply to and be admitted to both the collaborative program and a graduate degree program in one of the collaborating departments. Since this is a PhD program, students must be registered in the doctoral program of one of the host departments and must be undertaking research with a significant genome biology and/or bioinformatics component under the supervision of a member of the program.

Program Requirements

- Complete a PhD thesis and any core courses as required by the student's host department.
- 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 2418H, CSC 2515H, or JTB 2020H*). The interdepartmental courses may be taken in place of some host department PhD course requirements after a student obtains written permission from the host department. Courses not included in the course list below will be considered by the 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.

Course List

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 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 program 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 2418H	Computational Structural Biology
CSC 2515H	Machine Learning
JTB 2020H*	Applied Bioinformatics

Program Committee

Biochemistry
    Steipe, Boris - MD, PhD
Biomaterials and Biomedical Engineering
    Yip, Christopher - BSc, PhD
Cell and Systems Biology
    Provart, Nicholas - PhD *(Director)*
Chemical Engineering and Applied Chemistry
    Mahadevan, Radhakrishnan - BTech, PhD
Computer Science
    Brudno, Michael (Mikhail) - AB, MSc, PhD
Ecology and Evolutionary Biology
    Chang, Belinda - AB, PhD
Laboratory Medicine and Pathobiology
    Irwin, David - BSc, PhD
Medical Biophysics
    Tillier, Elisabeth - BSc, MS, PhD
Medical Science
    Stanford, William - BA, PhD
Molecular Genetics
    Emili, Andrew - DPM

Global Health

Lead Faculty

Medicine

Participating Degree Programs

Anthropology – PhD
Chemical Engineering and Applied Chemistry – PhD
Health Policy, Management and Evaluation – PhD
Law – SJD
Management – PhD
Medical Science – PhD
Nursing Science – PhD
Pharmaceutical Sciences – PhD
Political Science – PhD
Public Health Sciences – PhD
Rehabilitation Science – PhD

Overview

The graduate programs listed above participate in the Collaborative Doctoral Program in Global Health. This program offers doctoral students the opportunity to develop cooperative and interdisciplinary graduate education and research in global health. We view global health as an integrative construct that focuses on the inter-relationships between local, regional, national, and international factors influencing health and effective interventions and policies that will address these factors. This collaborative program enhances the student experience by offering a broad base of faculty expertise and an opportunity to share research ideas and results from multiple disciplinary perspectives. The Collaborative Doctoral Program in Global Health 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.

Student research is supervised by a member of the graduate faculty in the home unit. Normally, students in the collaborative program are supervised by a member of the collaborative program's core faculty, or have a core faculty member serve on the supervisory committee. The home unit shall recommend the granting of the degree. With the approval of the Collaborative Program Director, upon completion of the program requirements, the designation "Completed the Collaborative Graduate Program in Global Health" shall be shown on the transcript.

Contact and Address

Web: www.phs.utoronto.ca/PhD_Global_Health.asp
E-mail:
Assistant: elayna.fremes@utoronto.ca
Director: donald.cole@utoronto.ca
Telephone: (416) 978-2058
Fax: (416) 978-1883

Collaborative Doctoral Program in Global Health
c/o Department of Public Health Sciences
University of Toronto
Health Sciences Building
6th floor, 155 College Street
Toronto, Ontario M5T 3M7
Canada

Programs

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 program.
- Applicants must be admitted to a doctoral program in one of the home departments before they may apply to the Collaborative Doctoral Program in Global Health.

Program Requirements

- Meet all the degree requirements of the School of Graduate Studies, the home graduate unit, and the Collaborative Doctoral Program in Global Health.
- Successfully complete:
  - NUR 1083H *Comparative Politics of Health and Health Policy in a Globalizing World*
  - one elective (outside of the home department) selected from the list below
  - participation in CHL 5701H (0.5 full-course equivalent [FCE]) global health research seminar series for the equivalent of three academic sessions
  - a thesis on an issue related to global health, to be approved by both the home unit and the Collaborative Program Committee

Course List

Not all courses are offered every year. Please refer to the participating graduate units' websites for a current list of course offerings.

Core Course

CHL 5701H   Doctoral Seminar, Collaborative Program in Global Health.

NUR 1083H   Comparative Politics of Health Policy in a Globalizing World (Where possible, this required core course may be taken as an elective within regular departmental degree requirements, not as an additional course.)

Elective Courses

Anthropology

ANT 6003H   Critical Issues in Ethnography I
ANT 6004H   Critical Issues in Ethnography II
ANT 6023H   Governmentality, Development and the Improvement of the World
ANT 6032H   Social Movements: Interrogating Power and Protest in a Global Context
ANT 6040H   Approaches to Fieldwork I
ANT 7001H   Medical Anthropology I
ANT 7002H   Medical Anthropology II

Bioethics

CHL 5121H   Genomics, Bioethics and Public Policy
MSC 3003Y   Empirical Approaches to Bioethics
MSC 3010Y   International Research Ethics
PHL 2146Y   Topics in Bioethics
JHM 1000H   Issues Analysis in Interdisciplinary International Health Research

Health Policy, Management and Evaluation

HAD 5768H   International Perspectives on Health Services Management
HAD 5770H   Program Planning and Evaluation
HAD 5771H   Resource Allocation Ethics
HAD 5774H   Comparative Health Care Systems

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 department. 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 294H   The Law and Praxis of International Human Rights
LAW 301H   Women's Rights in International Law
LAW 386H   Reproductive and Sexual Health Law
LAW 388H   Public Health Law
LAW 576H   Can there be Universal Human Rights

Nursing

NUR 1024H   Foundations of Qualitative Inquiry
NUR 1025H   Doing Qualitative Research: Design and Data Collection
NUR 1082H   Knowledge Production in Nursing and Health
NUR 1083H   Comparative Politics of Health Policy in a Globalizing World (required course)

Pharmacy

PHM 1124H   The Power and Politics of Global Pharmaceutical Policy
PHM 1125H   Complementary/Alternative Medicine: Health System and Policy Issues

Political Science

JPD 2232H   International Governance
JPE 2408Y   Political Economy of International Development
JPF 2430Y   Cities
POL 2205H   Topics in International Politics I
POL 2207H   Topics in International Politics III
POL 2212Y   Canada and the Third World
POL 2217Y   Politics of the International System
POL 2226H   Ethics and International Relations
POL 2318H   Comparative Public Policy: Selected areas
POL 2409Y   Politics and Planning in third world Cities

Public Health Sciences

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 5411H   International Health
CHL 5419H   Empirical Perspectives on Social Organization and Health
CHL 5420H   Global Health Research
CHL 5421H   Aboriginal Health
CHL 5702H   History of International Health
CHL 5903H   Environmental Health
CHL 7001H   History of International Health

Program Committee

Anthropology
   Sellen, Daniel - BA, AM, PhD
   Wardlow, Holly - BA, MA, MPH, PhD
Health Policy, Management and Evaluation
   Howard, Andrew - BA, CSPO, MSC, LMCC, MD
Law
   Lemmens, Trudo - LLM, DCL
Nursing Science
   Muntaner, Carles - MHSc, MD, PhD
Pharmaceutical Sciences
   Kohler, Jillian - BA, MA, PhD
Public Health Sciences
   Birn, Anne-Emanuelle - BA, MA, DSc
   Cole, Donald C. - MSc, MD *(Director)*
   Orbinski, James - MA, MD
   Taleski, Sarah - MHSc *(Student Representative)*
Rehabilitation Sciences
   Nixon, Stephanie - BHSc (P/T), BA, PhD

Health Care, Technology, and Place

Lead Faculty

Medicine

Participating Degree Programs

Biomedical Engineering – PhD
English – PhD
Health Policy, Management and Evaluation – PhD
Mechanical and Industrial Engineering – PhD
Medical Science – PhD
Nursing 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 Program in Health Care, Technology, and Place (HCTP) . The objectives of this collaborative program are to:

1. prepare doctoral students to understand, explain, and improve health outcomes associated with geographically dispersed and 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 the interconnectedness of bodies, technologies, places, and modes of work in contemporary health care; and

3. provide mentorship in interdisciplinary scholarship, including leadership skills, collaboration, grant writing, and knowledge exchange. Ultimately, the goal is to facilitate research conducted by scientifically informed humanists and philosophically informed physical and social scientists.

Collaborative programs are administered under the auspices of the School of Graduate Studies. Students who wish to enrol in the collaborative program must apply to and be admitted to both the collaborative program and a graduate degree program in one of the collaborating departments. Applicants may apply concurrently to the participating home graduate unit and to the HCTP collaborative program. Students follow a course of study acceptable to both the home unit and the HCTP collaborative program.

Contact and Address

Web: www.hctp.utoronto.ca
E-mail: hctp.program@utoronto.ca
Telephone: (416) 978-2067
Fax: (416) 978-7350

Collaborative Doctoral Program in Health Care, Technology, and Place
University of Toronto
Suite 425, 155 College Street
Toronto, Ontario M5T 3M6
Canada

Programs

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 Program Committee of the HCTP collaborative program:
  - 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 program 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.

Program Requirements

- At least 0.5 HCTP full-course equivalent (FCE).
- Students must participate actively in the seminar series 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

department. The dissertation must address the theme of health care, technology, and place.

- It is the objective of this collaborative program to enrich the PhD experience without unduly extending the duration of students' graduate education. Every student enrolled in the collaborative doctoral program must complete the requirements of the collaborative program and the requirements of the doctoral program in their home graduate unit. It will be up to each participating home department to determine whether HCTP courses are completed in addition to the department's customary course requirements or as a part of those requirements.

Core List

Core Courses

JNH 5001H	Health Care Settings, Sites and Human Well-Being
JNH 5002H	The Body, Health Care, Technology and Place
BME 1456H	Changing Health Care Technologies, People and Places
NUR 1031H	Technology and Place in Contemporary Health Care Work

Program Committee

Biomedical Engineering
    Fernie, Geoffrey - BSc, PhD
English
    Bewell, Alan - MA, PhD
Health Policy, Management and Evaluation
    Coyte, Peter C. - BA, MA, PhD *(Director)*
Mechanical and Industrial Engineering
    Carter, Michael - BM, MMath, PhD
Medical Science
    Rotstein, Ori - MSc, MD
Nursing Science
    TBA
Pharmaceutical Sciences
    MacKeigan, Linda - BScPhm, PhD
Public Health Sciences
    Ahmad, Farah - MBBS, MPH, PhD
Rehabilitation Science
    Reid, Denise - BSc(OT), MEd, PhD
Social Work
    Newman, Peter - BA, MA, MSW, PhD

Health Services and Policy Research

Lead Faculty

Medicine

Participating Degree Programs

Exercise Sciences – MSc, PhD
Health Policy, Management and Evaluation –
 MSc, PhD
Medical Science – MSc, PhD
Nursing Science – PhD
Pharmaceutical Sciences – MSc, PhD
Public Health Sciences – MPH, PhD
Rehabilitation Science – MSc, PhD
Social Work – MSW, PhD

Overview

The Collaborative Program in Health Services and Policy Research is part of the Ontario Training Centre in Health Services and Policy Research (OTC). The OTC is a consortium of six Ontario universities seeking to improve graduate education for students who are interested in becoming health services and policy researchers. The consortium includes Lakehead, Laurentian, McMaster, and York Universities as well as the Universities of Ottawa and Toronto. Participating graduate programs at the University of Toronto are listed above.

Graduates of the collaborative program demonstrate knowledge of Canada's health care system, health services and policy research tools, and theories of population health, knowledge production, and knowledge transfer. Students complete relevant courses required by the collaborative program as well as by the home unit. Students must complete a dissertation under the supervision of a core faculty member of the collaborative program in the student's home department that addresses the theme of health services and policy research.

Contact and Address

Web: www.ihpme.utoronto.ca
E-mail: rhonda.cockerill@utoronto.ca
Telephone: (416) 978-7721
Fax: (416) 978-7350

Collaborative Graduate Program in Health Services and Policy Research
c/o Professor R. W. Cockerill
Department of Health Policy, Management and Evaluation
Faculty of Medicine
University of Toronto
Suite 428, 4th Floor, 55 College Street
Toronto, Ontario M5T 3M6
Canada

Programs

Master's Level

Admission Requirements

- Applicants who wish to enrol in the collaborative program must apply to and be admitted to both the collaborative program and a graduate degree program in one of the collaborating departments.
- 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.

Program Requirements

- Students follow a program of study acceptable to both the participating unit and the collaborative program.
- Students must complete the requirements of the collaborative program (completion of a practicum and participation in one Summer Institute) in addition to those requirements for the master's degree program specified by their home graduate unit.
- Students are required to write a thesis under the supervision of a core faculty member of the collaborative program. The thesis must address the theme of health services and policy research.
- In addition to the requirements for the degree program specified by the home graduate unit, students must complete a practicum and participate in one Summer Institute hosted by the OTC.

Doctoral Level

Admission Requirements

- Applicants who wish to enrol in the collaborative program must apply to and be admitted to both the collaborative program and a graduate degree program in one of the collaborating departments.
- 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 program.

• Students who complete the collaborative program at the master's level are not eligible to participate at the PhD level.

Program Requirements

• Students follow a program of study acceptable to both the participating unit and the collaborative program.

• Students must complete the requirements of the collaborative program (completion of a practicum and participation in one Summer Institute) in addition to those requirements for the doctoral degree program specified by their home graduate unit.

• Students are required to complete a dissertation under the supervision of a core faculty member of the collaborative program. The dissertation must address the theme of health services and policy research.

• In addition to the requirements for the degree program specified by the home graduate unit, students must complete a practicum and participate in one Summer Institute hosted by the OTC.

Course List

1. Courses offered by the University of Toronto departments involved in the OTC are listed in the separate calendar entries of Health Policy, Management and Evaluation; Medical Science; Nursing Science; Pharmaceutical Sciences; Public Health Sciences; Rehabilitation Science; and Social Work.

2. Research and Policy Practicum: HSR 1000H *Research and/or Policy Practicum.* By working with a health services and policy research team, the student develops practical skills in completing a research and/or policy project and effectively communicating the results of that research to stakeholders.

3. Summer Institute: a five-day workshop held at one of the participating universities. All students must participate and are graded on a Credit/No Credit (CR/NCR) basis.
HSR 1002H *HSR Summer Institute*

Program Committee

Exercise Sciences
Thomas, Scott - BSc, MSc, PhD
Health Policy, Management and Evaluation
Cockerill, Rhonda - BA, MA, PhD *(Director)*
Coyte, Peter C. - BA, MA, PhD
Nursing Science
Doran, Diane - BA, PhD
Goering, Paula - BSc, MSc, PhD
Pharmaceutical Sciences
Boon, Heather - PhD
Public Health Sciences
Harvey, Bart - BA, MD, MSc, FRCP(C), FACPM, PhD
Rehabilitation Science
Jaglal, Susan - BSc, MSc, PhD
Social Work
Williams, Charmaine - BA, BSc, MSW, PhD

Jewish Studies

Lead Faculty

Arts and Science

Participating Degree Programs

Anthropology – MA, PhD
Classics – MA, PhD
Comparative Literature – MA
Drama, Theatre and Performance Studies – MA, PhD
English – MA, PhD
European, Russian, and Eurasian Studies – MA
German Literature, Culture, and Theory – MA, PhD
History – MA, PhD
History of Art – MA, PhD
Medieval Studies – MA, PhD
Museum Studies – MMSt
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 Program 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 program involves the graduate master's and doctoral programs listed above. Upon successful completion of the master's requirements of the home department and the program, students receive the designation "Completed Collaborative Program in Jewish Studies" on their transcript. Upon successful completion of the doctoral requirements of the home department and the program, students receive, in addition to the doctoral degree in their home department, the notation "Completed Collaborative Program in Jewish Studies."

Contact and Address

Web: www.cjs.utoronto.ca
E-mail: cjs.director@utoronto.ca
Telephone: (416) 978-1624
Fax: (416) 946-7719

Collaborative Program in Jewish Studies
University of Toronto
Sidney Smith Hall
Room 5016F, 100 St. George Street
Toronto, Ontario M5S 3G3
Canada

Programs

Master's Level

Admission Requirements

- In addition to the admission requirements of the home department, 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.

Program 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 department or in another department (may count towards the course requirements of the student's home department).
- 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 department, 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 Director of the Collaborative Master's Program.

Doctoral Level

Admission Requirements

- In addition to the admission requirements of the home department, 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.

Program Requirements

- Completion of CJS 2000H, the core research colloquium in Jewish Studies that runs biweekly throughout the year.

- Two half courses (1.0 FCE), one within and one outside of the student's home department, taught by a member of the CJS faculty (may count towards the course requirements of the student's home department).
- A doctoral dissertation that deals substantively with topics in Jewish Studies and is supervised or co-supervised by a CJS 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 needs to be completed before the completion of the doctoral program.

Course List

Not all courses are offered every year. Please consult the graduate unit for information about course availability.

Courses marked with # are taught by program faculty 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 1027H#   Construction of the Other in Medieval Literature (Jews and Muslims)
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   Soviet and Kosher: Jewish Popular Culture in the Soviet Union, 1917-1991
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

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 1300Y   Intensive Prerequisite Hebrew
NMC 1304Y   Biblical Narrative
NMC 1306H   Scribes, Manuscripts, and Translations of the Hebrew Bible
NMC 1308H#   Prophecy in Ancient Israel
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 1313H   Mishna and Tosefta
NMC 1316H   Modern Hebrew Poetry
NMC 1317H   Modern Hebrew Prose
NMC 1318Y   Midreshei Halakha
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 1609Y#   Gender-related Topics in Law and Religion

Philosophy

Various courses, depending upon their content in a given year. Consult the Collaborative Program Director.

PHL 2084H#   Seminar in Nineteenth-Century Continental Philosophy
PHL 2089H#   Seminar in Twentieth-Century Continental Philosophy
PHL 2090H   Hermeneutics

Political Science

POL 2021Y#   Topics in Comparative Jewish and Non-Jewish Political Thought

Religion

RLG 2012Y   Natural Law in Judaism and Christianity
RLG 2018H#   Religion and Bioethics
RLG 3103H   Problems in Israelite Religion
RLG 3611H   Topics in Rabbinic Midrash
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

Slavic Languages and Literatures

SLA 1207H   The Imaginary Jew

Program Committee

Anthropology
    Kalmar, Ivan - BA, MA, PhD
Art
    Cohen, Adam - BA, MA, PhD
Classics
    Inwood, Brad - BA, MA, PhD
Comparative Literature
    Ross, Jill - BA, MA, PhD
English
    Most, Andrea - BA, MA, PhD
German
    Goetschel, Willi - LicPhil, PhD
History
    Penslar, Derek - BA, MA, PhD
Medieval Studies
    Meyerson, Mark - BA, MA, PhD
Near and Middle Eastern Civilizations
    Meacham, Tirzah - BA, MA, PhD
Philosophy
    Gibbs, Robert - BA, MA, PhD
Political Science
    Kopstein, Jeffrey - BA, MA, PhD
Religion
    Novak, David - AB, MHL, rabbinical diploma, PhD
Slavic Languages and Literatures
    Livak, Leonid - BA, MA, PhD
Sociology
    Bodemann, Michal - MA, PhD

Knowledge Media Design

Lead Faculty

Information

Participating Degree Programs

Architecture – MArch
Computer Science – MSc, PhD
Curriculum Studies and Teacher Development – MA, MEd, PhD
History and Philosophy of Education – MA, MEd
Information – MI
Information Studies – PhD
Landscape Architecture – MLA
Mechanical and Industrial Engineering – MASc, MEng, PhD
Medical Science – MSc, PhD
Second Language Education – MA, MEd, PhD
Sociology – MA, PhD
Urban Design – MUD
Visual Studies – MVS

Overview

The Collaborative Program in Knowledge Media Design (KMD) was launched in 2002 as the teaching arm of the Knowledge Media Design Institute (KMDI). The collaborative program 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 program is open to master's and PhD students in the collaborating graduate programs listed above.

Contact and Address

Web: http://kmdi.utoronto.ca/graduate-study
E-mail: admissions@kmdi.utoronto.ca
Telephone: (416) 946-8515
Fax: (416) 978-5634

Collaborative Program in Knowledge Media Design
Knowledge Media Design Institute
University of Toronto
Robarts Library
Rooms 1153 and 1155, 130 St. George Street
Toronto, Ontario M5S 1A5
Canada

Programs

Master's Level

Admission Requirements

- Students wishing to apply to the collaborative program must be enrolled, or anticipate being enrolled, in a collaborating degree program in one of the collaborating graduate programs. Applying to the collaborative program is a separate procedure. A collaborative program application includes: a completed Application for Admission Form, a statement of research interest, a resumé, two letters of reference, and academic transcripts. Consult the KMDI website for application guidelines. Admission will be subject to the approval of the graduate department concerned and the Program Committee of the collaborative program.

Program Requirements

- Students must meet all the requirements of their home department.
- Master's students must successfully complete KMD 1001H, KMD 1002H, and 0.5 full-course equivalent (FCE) from the KMD 2001–2004 series or a list of recognized affiliate courses. They also must submit a portfolio that includes completed student research in knowledge media design. The program committee of the collaborative program will review all portfolios for their quality and contribution to the field.
- Master's students are encouraged, but not obligated, to complete a thesis/research project component in their home department, the topic of which should be relevant to the field of knowledge media design. Students' KMD portfolio will be a component of their thesis/research project.
- Collaborative program courses may count towards the home department degree requirements or may be in addition to the degree requirements, depending on the participating department's individual program regulations.

Doctoral Level

Admission Requirements

- Students wishing to apply to the collaborative program must be enrolled, or anticipate being enrolled, in a collaborating degree program in one of the collaborating graduate programs. Applying to the collaborative program is a separate procedure. Consult the KMDI website for application guidelines. Admission will be subject to the approval of the graduate department concerned and the Program Committee of the collaborative program.

Program Requirements

- Doctoral students are required to take KMD 1001H and KMD 1002H if not already taken in the master's program, and 0.5 full-course equivalent (FCE) from the KMD 2001–2004 series or a list of recognized affiliate courses. They also must submit a portfolio that includes completed student research in knowledge media design. The Program Committee of the collaborative program will review all portfolios for their quality and contribution to the field.
- The dissertation topic must be in the field of knowledge media design. The thesis advisor and at least one other committee member must be from participating units. Students' KMD portfolio will most often be connected with their dissertation proposal.
- The home graduate unit and the student's supervising committee will determine further requirements. The collaborating units cooperate in jointly developing a program that is individually tailored to meet the needs of each student.

Course List

For courses offered in a particular year, check the collaborative program website, http://kmdi.utoronto.ca/graduate-study.

Knowledge Media Design

Required

KMD 1001H	Core Seminar in Knowledge Media Design I—Fundamental Concepts
KMD 1002H	Pro-seminar in Knowledge Media Design II—Contexts and Practices

Electives

KMD 2001H	Human-centred Design
KMD 2002H	Technologies for Knowledge Media
KMD 2003H	Knowledge Media and Learning (exclusion: CTL 1926H)
KMD 2004H	Knowledge Media, Culture and Society

Participating Department Electives

Existing courses from the participating departments that satisfy KMD requirements are listed below. These courses may not be offered every year. Courses that are mandatory for a student's degree from the home department 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.

ARC 1033H	Architecture, Media and Communications
C&T 1006H	Media, Mind and Society I
C&T 1009H	New Media and Policy
CSC 2501H	Computational Linguistics
CSC 2502H	Knowledge Representation and Reasoning
CSC 2504H	Computer Graphics
CSC 2507H	Conceptual Modelling
CSC 2511H	Natural Language Computing
CSC 2514H	Human-Computer Interaction
CSC 2518H	Spoken Language Processing
CSC 2527H	The Business of Software
CTL 1602H	Introduction to Computers in Education
CTL 1603H	Introduction to Knowledge Building
CTL 1608H	Constructive Learning and Design of Online Environments
CTL 1609H	Educational Applications of Computer Mediated Communication
CTL 1923H	Technology Supported in Situ Learning
CTL 1926H	Knowledge Media and Learning (exclusion: KMD 2003H)
FAH 1478H	Art and Animation
INF 1230H	Management of Information Organizations
INF 1341H	Analyzing Information Systems
INF 1342H	Designing Information Systems
INF 1343H	Data Modeling and Database Design
INF 2149H	Administrative Decision-Making in Information Organizations
INF 2150H	Advanced Management of Information Organizations
INF 2164H	Authority and Credibility in Online Communications
INF 2169H	User-Centred Information Systems Development
INF 2183H	Knowledge Management and Systems
INF 2241H	Critical Making: Information Studies, Social Values and Physical Computing
MIE 1402H	Experimental Methods in Human Factors Research
MIE 1403H	Analytical Methods in Human Factors Research
MIE 1407H	Engineering Psychology and Human Performance
MSL 2325H	Museums and New Media Practice
SOC 6008H	Network Analysis I
SOC 6108H	Network Analysis II
SOC 6303H	Field Methods
SOC 6312H	Social Aspects of Technology and Work
SOC 6501H	Research Design and Hypothesis Testing in Sociology
TPS 1447H	Technology in Education: Philosophical Issues

TPS 1839H	Administration of Technology in Higher Education
TPS 1005H	The Computer in Educational Administration
VIS 1010H	Contemporary Art Since 1960
VIS 1020H	Contemporary Art: Theory and Criticism
VIS 2002H	Contemporary Art Issues

Program Committee

Architecture, Landscape, and Design
  Danahy, John – BLA, CUrbDes, MScUrb&DesPl
Computer Science
  Easterbrook, Steve – BSc, PhD
Curriculum, Teaching and Learning
  Brett, Clare – BA, MA, PhD
Knowledge Media Design
  Kostas Plataniotis - PhD, PEng *(Director)*
Mechanical and Industrial Engineering
  Chignell, Mark - BSc, MSc, PhD
Medical Science
  Mount, Howard – BSc, PhD
Museum Studies; Information
  Cantwell-Smith, Brian - BS, MS, PhD
Pharmaceutical Sciences
  Pennefather, Peter - BSc, PhD
Sociology
  Wellman, Barry - Hon BA, MA, PhD
Visual Studies; Art
  Steele, Lisa - RCA, honourary PhD OCAD

Management and Economics

Lead Faculty

Arts and Science

Participating Degree Programs

Economics – PhD
Management – PhD

Overview

The Rotman School of Management and the Department of Economics offer a limited enrolment collaborative program in Management and Economics. The student will undertake a program of study that includes: developing a basic understanding in one of the core areas of management (accounting, economics, finance, marketing, operations management, organizational behaviour); developing an in-depth understanding of economics and econometrics (PhD-level work); and carrying out PhD-level work in one of the areas of management. At present, only finance is available in the collaborative program.

Admissions have ceased for the Collaborative Program in Management and Economics.

Contact and Address

Web: www.economics.utoronto.ca
E-mail: ecograd@chass.utoronto.ca
Telephone: (416) 978-7169
Fax: (416) 978-6713

Collaborative Program in Management and Economics
Department of Economics
University of Toronto
Room 4072, Sidney Smith Hall
Toronto, Ontario M5S 3G3
Canada

Programs

Doctoral Level

Admission Requirements

- Admission to the program is by permission of graduate coordinators in Economics and Management. Prospective applicants should apply to the Department of Economics, and must meet admission requirements of the Department of Economics.
- Minimum admission requirements are the same as for the PhD program in Economics. Students should have a strong undergraduate and master's background in economic theory and mathematics.

- Preference is given to students with undergraduate or other previous coursework in commerce or business, especially finance and accounting.

Program Requirements

- The PhD is a full-time program. Applicants must be registered as full-time students for a minimum period of three years.
- The PhD is a research degree that requires:
  - demonstrated competence in core economics, in finance, and a second special field in economics;
  - fulfilment of a breadth/distribution requirement in management and finance;
  - a thesis based on original research.
- To fulfil the program requirements outlined below, students will complete all of their comprehensive exams in two years, and their required coursework in 2.5 years.
  - **Year 1:** Students must take the Math-Stat Review (ECO 1011H), the PhD microeconomic theory sequence (ECO 2020H and ECO 2030H), the PhD econometrics sequence (ECO 2400H and ECO 2401H), and the first two courses of the Rotman Finance sequence (MGT 3030H and MGT 3031H). They must also complete (or be exempt from) Financial Accounting (MGT 1221H or MGT 1222H), and Business Finance by the end of Year 1. Students can satisfy the Business Finance requirement by taking ECO 2503H. Students must pass the microeconomic theory comprehensive exam by the end of Year 1.
  - **Year 2:** Students complete the PhD sequence in macroeconomics (ECO 2021H and ECO 2031H), and satisfy their main field requirement by completing the PhD Finance sequence (MGT 3032H, MGT 3033H, and MGT 3034H). Students must pass the comprehensive exam in macro, as well as the Rotman Finance comprehensive exam. Students satisfy the distributional requirement in economics by taking two courses from a list approved by the Department of Economics. This comprises the minor field; note that the Financial Economics field is excluded from this list. Students should also attend the Finance seminar on a regular basis, beginning in Year 2.
  - **Year 3:** Students complete their management distributional requirement by taking two courses in a stream approved by the Rotman School of Management, drawn from the second-year MBA courses (i.e., MGT 2300 series). Students must participate in the *Graduate Research Seminar* (ECO 4060Y), and present a "second year" paper proposal by February of Year 3. The completed "second year" paper must be presented in the Finance seminar by the fall of Year 4.

○ **Years 4 and 5:** Students complete their dissertation.

Course List

See the separate entries in this calendar for the Economics and Management PhD programs.

Program Committee

Economics
Yatchew, Adonis - BA, MA, PhD
Management
Pauly, Peter - MA, PhD

Neuroscience

Lead Faculty

Medicine

Participating Degree Programs

Biochemistry – MSc, PhD
Biomedical Engineering – MASc, MSc, PhD
Cell and Systems Biology – MSc, PhD
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
Molecular Genetics – MSc, PhD
Pharmaceutical Sciences – MSc, PhD
Pharmacology – MSc, PhD
Physiology – MSc, PhD
Psychology – MA, PhD
Rehabilitation Science – MSc, PhD
Speech-Language Pathology – MSc, PhD

Overview

The graduate programs listed above participate in the Collaborative Program in Neuroscience (CPIN). Participating graduate units contribute courses and provide facilities and supervision for graduate research. Students must follow a program of studies acceptable to both the participating unit and the Neuroscience program. Upon successful completion of the requirements, students receive, in addition to the master's or PhD degree in their discipline, the notation "Completed Collaborative Program in Neuroscience" on their transcripts as well as a certificate.

Students interested in joining the program should contact the Collaborative Program in Neuroscience office to obtain an application form. Students should register within one month of initial registration in the participating unit. The Neuroscience website provides areas of research for all the faculty in the collaborative program and their graduate unit affiliations and contact information, as well as additional information on neuroscience courses.

Students in the program receive the University of Toronto Neuroscience Program (UTNP) newsletter and a monthly calendar listing neuroscience lectures held on campus. The program runs a Distinguished Lecturer Series of talks by eminent neuroscientists and an annual poster day which students are required to attend.

Contact and Address

Web: www.neuroscience.utoronto.ca
E-mail: p.neuroscience@utoronto.ca
Telephone: (416) 978-8761
Fax: (416) 978-8511

Collaborative Program in Neuroscience
University of Toronto
Leslie Dan Faculty of Pharmacy Building
Room 904, 144 College Street
Toronto, Ontario M5S 3M2
Canada

Programs

Master's Level

Admission Requirements

- Applicants who wish to enrol in the collaborative program must apply to and be admitted to both the collaborative program and a graduate degree program in one of the collaborating units.

Program Requirements

- The thesis topic must be in the neuroscience area.
- The student's supervisor must be a member of the Collaborative Program in Neuroscience (CPIN).
- The student must complete at least 0.5 full-course equivalent (FCE) for the master's degree chosen from the list of courses approved by the Collaborative Program in Neuroscience, which is listed below.
- The student must attend the Annual Poster Day and present his/her work at least once.
- The student must attend at least 75% of the lectures in the UTNP Distinguished Lecturers Series for a minimum of one year in consecutive sessions during their studies.

Doctoral Level

Admission Requirements

- Applicants who wish to enrol in the collaborative program must apply to and be admitted to both the collaborative program and a graduate degree program in one of the collaborating units.

Program Requirements

- The thesis topic must be in the neuroscience area.
- The student's supervisor must be a member of the Collaborative Program in Neuroscience (CPIN).

- All PhD students must take 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 (1.0 FCE) to be determined by the CPIN Program Committee and posted on the CPIN website in July of each year.
- The student must attend the Annual PIN Poster Day and present his/her work at least twice.
- The student must attend at least 75% of the lectures in the UTNP Distinguished Lecturers Series for a minimum of three consecutive years during their studies.
- After completing the MSc or MA, students who wish to continue on to a PhD degree in Neuroscience must register again and fulfil all the program requirements (e.g., students must again present posters in the doctoral program).

Course List

Neuroscience courses offered by the participating units are listed below. Not all courses are offered each year.

DEN 1060H	Oral Physiology: Sensory and Neuromuscular Function
HDP 3286H	Developmental Neurobiology
JNR 1444Y	Fundamentals of Neuroscience: Cellular and Molecular
JNS 1000Y	Fundamentals of Neuroscience: Systems and Behaviour
JPM 1005Y	Behavioural Pharmacology
JPY 1007Y	Neuropharmacology of Neurotransmitter Receptors
JYG 1555H	Topics in Cellular and Molecular Neurobiology
MSC 1006H	Advanced Neuroanatomy
MSC 1085H	Molecular Approaches to Mental Health and Addictions
MSC 6000H	Special Topics in Anatomy (Requires prior permission of the Neuroscience Program Director)
PCL 1012H	Cognitive Neuropharmacology
PSL 1024H	Advanced Topics: Endocrinology and Neuroendocrinology
PSL 1026H	Advanced Topics: Experimental Cell Physiology
PSL 1047H	Advanced Topics: Somatosensory and Pain Neuroscience
PSL 1053H	Advanced Topics: Critical Assessment of Ion Channel Function
PSL 1068H	Advanced Topics: Molecular Basis of Behaviour
PSY 4706H	Human Brain Neuroanatomy
PSY 5101H	Mechanisms of Behaviour
PSY 5103H	Learning and Plasticity

PSY 5104H	Neuropsychology
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 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 5311H	Advanced Topics in Developmental Neuroscience II
REH 1510H	Disordered Restorative Motor Control
JEB 1444H	Neural Engineering
JEB 1451H	Neural Bioelectricity
MSC 1081H	Studies in Schizophrenia
MSC 1086H	Integrative perspectives in Consciousness and Self-Awareness
MSC 1087H	Neuroimaging Methods Using Magnetic Resonance Imaging
MSC 1088H	Brain Positron Emission Tomography
PSL 1050H	Advanced Topics: The Hippocampus from Cell to Behaviour
PSL 1071H	Advanced Topics: Computational Neuroscience
PSL 1441H	Systems Level Neuroplasticity
PSL 1445H	Mechanistic Molecular & Cellular Neuroscience
PSL 1446H	Molecular & Cellular Aspects of Neural Disorders

Other Courses

Courses not specifically in neuroscience which do not fulfil the program requirements as neuroscience courses but might be useful for neuroscience students.

JBL 1507H	Biochemistry of Inherited Disease
JDB 1025Y	Developmental Biology
JNP 1017H+	The Molecular and Biochemical Basis of Toxicology
JNP 1018H+	Current Topics in Molecular and Biochemical Toxicology
PHM 1122H	Fundamentals of Drug Discovery
PSL 1054H	Physiological Instrumentation and Electronics
PSL 1472H	Sleep Physiology and Chronobiology
PSY 5102H	Motivational Processes

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

SLP 1522Y	Speech Physiology and Acoustics
SLP 1533Y	Aphasia
SLP 1534Y	Motor Speech Disorders
SLP 3001H	Theoretical Foundations of Communication Sciences

Program Committee

Applied Psychology and Human Development
　　Lewis, Marc - BA, MA, PhD
Biochemistry
　　Trimble, William - BSc, PhD
Biomedical Engineering
　　Shoichet, Molly - PhD
Cell and Systems Biology
　　Peever, John - MSc, PhD
Dentistry
　　Sessle, Barry - BS, MSD, BDS, PHD
Laboratory Medicine and Pathobiology
　　Schmitt-Ulms, Gerold - BSc, MSc, DrRerNat
Medical Biophysics
　　Stefanovic, Bojana - BASc, PhD
Medical Science
　　Carlen, Peter - MD
Molecular Genetics
　　Roder, John - PhD
Pharmaceutical Sciences
　　Hampson, David - PhD *(CPIN Director)*
　　Wells, James - BSC, MSc, PhD
Pharmacology
　　Burnham, Willets - PhD
Physiology
　　Dostrovsky, Jonathan - BSc, MSc, PhD *(CPIN Advisor)*
　　Jia, Zhengping - PhD
Psychology
　　Yeomans, John - BA, PhD
Rehabilitation Science
　　Zabjec, Karl - BSc, MClSc, PhD
Speech-Language Pathology
　　De Nil, Luc - MSc, PhD

Optics

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 Program in Optics. The program 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 program allows students to explore these multidisciplinary aspects.

Students who wish to participate in the collaborative program must be admitted to both a master's program in one of the collaborating graduate departments mentioned above and the collaborative program. Submit an application form, available from the collaborative program 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 department may apply to the collaborative program within the first month of their program.

Upon certification by the Director that all requirements of the collaborative program have been fulfilled, the home department recommends the granting of the MSc or MASc degree; the designation "Completed Collaborative Program in Optics" will appear on the transcript.

Contact and Address

Web: www.optics.utoronto.ca
E-mail: eistrate@optics.utoronto.ca
Telephone: (416) 978-1804
Fax: (416) 978-3936

Collaborative Master's Program in Optics
Institute for Optical Sciences
University of Toronto
Suite 331, 60 St. George Street
Toronto, Ontario M5S 1A7
Canada

Programs

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 program.

Program Requirements

- Meet all respective degree requirements of the School of Graduate Studies and the home department.
- Successful completion of the collaborative program 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 program's faculty must be part of the examination committee.

Course List

IOS 1500H   Selected Topics in Optics

See also full course listings in the Departments of Chemistry, Electrical and Computer Engineering, Materials Science and Engineering, and Physics.

Program Committee

Chemistry
    Walker, Gilbert - BCh, PhD
Chemistry; Physics
    Miller, R J Dwayne - BSc, PhD
Electrical and Computer Engineering
    Helmy, Amr - BSc, MSc, PhD
Materials Science and Engineering
    Lu, Zheng-Hong - BSc, MSc, PhD
Medical Science
    Goh, Cynthia - PhD **(Director)**
Physics
    Sipe, John - BSc, MSc, PhD

Resuscitation Sciences

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
Pharmaceutical Sciences – MSc, PhD
Pharmacology – MSc, PhD
Physiology – MSc, PhD
Public Health Sciences – MPH, MSc, PhD
Rehabilitation Science – MSc, PhD

Overview

The goal of the Collaborative Program 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 program 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, anesthesia, 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 program. 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 program. Students must follow a course of study acceptable to both the home unit and the collaborative program. Upon successful completion of the requirements of the host department and the program, students receive the degree from their home unit and the notation "Completed the Collaborative Program in Resuscitation Sciences" on their transcript.

Contact and Address

Web: www.rescu.ca (click on CPRS)
E-mail: cprsinfo@smh.ca
Telephone: (416) 864-6060 ext. 7843
Fax: (416) 864-5934

Collaborative Program in Resuscitation Sciences
c/o Rescu, St. Michael's Hospital
30 Bond Street
Toronto, Ontario M5B 1W8
Canada

Programs

Master's Level

Admission Requirements

- Collaborative programs 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 Program in Resuscitation Sciences.
- Applicants must submit the following to the Program Committee of the Collaborative Program in Resuscitation Sciences:
  ○ a resumé or curriculum vitae (CV)
  ○ a personal statement explaining how their program 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

Program 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 program of study) in the area of resuscitation sciences under the supervision of a faculty member affiliated with the program
- present their research at the annual CPRS Scientific Meeting at least once, and attend the annual Scientific Meeting each year of their enrolment in the program

Doctoral Level

Admission Requirements

- Collaborative programs 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 Program in Resuscitation Sciences.
- Applicants must submit the following to the Program Committee of the Collaborative Program in Resuscitation Sciences:
  - a resumé or curriculum vitae (CV)
  - a personal statement explaining how their program 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

Program 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 SRD4444H *Resuscitation Sciences Graduate Seminar Series* over two consecutive years
- present their research at the annual CPRS Scientific Meeting at least twice, and attend the annual Scientific Meeting each year of their enrolment in the program

Course List

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)

Program Committee

Biomaterials and Biomedical Engineering
    Mihailidis, Alex - PhD
Health Policy, Management and Evaluation
    Redelmeier, Don - MD, MSHSR
Immunology
    Ratcliffe, Michael - PhD
Laboratory Medicine and Pathobiology
    Palaniyar, Nades - MSc, PhD
Mechanical and Industrial Engineering
    Carter, Michael - PhD
Medical Science
    Morrison, Laurie - BSc *(Director)*
    Rotstein, Ori - MD, MSc
Nursing Science
    Rose, Louise - MN, PhD
Pharmaceutical Sciences
    Mamdani, Muhammad - MPH, MA, PharmD
Pharmacology and Toxicology
    Dorian, Paul - MD, MSc
Physiology
    Hare, Greg - MD, PhD
Public Health Sciences
    Thorpe, Kevin - PhD

Sexual Diversity Studies

Lead Faculty

Arts and Science

Participating Degree Programs

Anthropology – MA, MSc, PhD
Cinema Studies – MA
Classics – MA, PhD
Counselling Psychology – MA, MEd, EdD, 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 Administration – MA, MEd, EdD, PhD
English – MA, PhD
Exercise Sciences – MSc, PhD
Higher Education – MA, MEd, EdD, PhD
History – MA, PhD
History and Philosophy of Education – MA, MEd
History and Philosophy of Science and Technology – MA, PhD
History of Art – MA, PhD
Information – MI
Information Studies – 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 Work – MSW, PhD
Sociology – MA, PhD
Sociology in Education – MA, MEd, EdD, PhD
Visual Studies – MVS
Women and Gender Studies – MA

Supporting Unit

Jewish Studies Collaborative Program

Overview

The Collaborative Program in Sexual Diversity Studies, offered by the Mark S. Bonham Centre for Sexual Diversity Studies, is a rigorously interdisciplinary program recognizing 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 program. From their home departments, students may take up questions from their own disciplinary or programmatic perspective, but explore it through the theoretical and methodological lens of sexuality studies.

Contact and Address

Web: www.utoronto.ca/sexualdiversity
E-mail: sexual.diversity@utoronto.ca
Telephone: (416) 978-6276 for general inquiries
Fax: (416) 971-2027

Director
Sexual Diversity Studies Collaborative Program
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

Programs

Master's Level

Admission Requirements

- Each graduate student in the program 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 program.

Program 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 program 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 Program Director.

Doctoral Level

Admission Requirements

- Each graduate student in the program 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 program.

Program 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 program 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 program 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 Program Director.
- The doctoral thesis committee should include at least one faculty member associated with SDS. In most cases, the supervisor would be associated with SDS, 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 Program Director, though ultimate responsibility for the student's progress will remain with the Graduate Chair of the home program.

Course List

SDS 1000H   Theoretical and Methodological Issues in Sexual Diversity Studies
SDS 1999H   Special Topics in Sexual Diversity Studies

Program Executive Committee

The full Graduate Committee includes one representative of each partner program. That committee has approved the creation of a Graduate Program Executive Committee, composed as follows:

Criminology and Sociolegal Studies
    Valverde, Mariana - BA, MA, PhD, FRSC
Drama, Theatre and Performance Studies
    Johnson, Stephen - BA, MA, PhD
English
    Ruti, Marjut - BA, MA, PhD
Humanities, Social Sciences and Social Justice Education
    Walcott, Rinaldo - BA, MA, PhD
Law
    Cossman, Brenda - LLB, LLM
Political Science
    Rayside, David - BA, MA, PhD
Women and Gender Studies
    Georgis, Dina - PhD
Two graduate students (committee members for other than admission decisions)

South Asian Studies

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
Sociology in Education – MA, MEd, EdD, PhD
Women and Gender Studies – MA

Overview

The interdisciplinary Collaborative Master's and Doctoral Program 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 this program 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 program, 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 program must apply to one of the participating graduate programs.

Students who successfully complete the requirements of the collaborative program will receive the notation "Completed Collaborative Program in South Asian Studies" on their transcript, in addition to the master's or doctoral degree from their graduate unit.

Contact and Address

Web: www.utoronto.ca/csas
E-mail: southasian.grad@utoronto.ca
Telephone: (416) 946-8832
Fax: (416) 946-8838

Collaborative Program 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

Programs

Master's Level

Admission Requirements

- Applicants who wish to enrol in the collaborative program must apply to and be admitted to both the collaborative program and a graduate degree program in one of the collaborating departments. 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 Program Committee of the collaborative program.

Program 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 the visiting lecture series organized by the Centre for South Asian Studies during the academic year in which the student takes the core course.
- 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.

Doctoral Level

Admission Requirements

- Applicants who wish to enrol in the collaborative program must apply to and be admitted to both the collaborative program and a graduate degree

program in one of the collaborating departments. 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 program committee of the collaborative program.

Program 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 the visiting lecture series organized by the Centre for South Asian Studies for a total of two years, including the academic year in which the student takes the core course.
- The dissertation to include a significant South Asian component.
- A research presentation to the Program Committee on a South Asian topic in Year 3 or Year 4 of the program.
- Language requirement, depending on the student's area of specialization.

Course List

Core Course

SAS 2004H   Issues in South Asian Studies

Program Committee

Anthropology
    Cody, Francis - PhD
    Miller, Heather - BA, MSc, MA, PhD
Comparative Literature
    Ten Kortenaar, Neil - PhD
East Asian Studies
    Sandahl, Stella - MA, MA, PhD
English
    Kanaganayakam, Chelvanayakam - PhD
Geography
    Goonewardena, Kanishka - BSc, MCP, PhD
    MacDonald, Ken - BA, MA, PhD
    Mahtani, Minelle - BA, PhD
    Narayana Reddy, Rajyashree - BA, MEc, MS, PhD
    Rankin, Katharine - BA, MA, PhD
History
    Birla, Ritu - BA, MPH, PhD
    Kasturi, Malavika - DPhil
    Sharma, Jayeeta - BA, MPH, MA, PhD
    Tambe, Ashwini - BA, MA, PhD
Religion
    Dhand, Arti - MA, PhD
    Emmrich, Christoph - PhD
    Garrett, Frances - BA, MA, PhD
    Raman, Srilata - BA, MPH, PhD
    Virani, Shafique - PhD

Sociology
    Baber, Zaheer - PhD
Women and Gender Studies
    Tambe, Ashwini - BA, MA, PhD

Women and Gender Studies

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 Psychology – MA, MEd, EdD, PhD
Criminology – MA, PhD
Curriculum Studies and Teacher Development –
  MA, MEd, PhD
Drama, Theatre and Performance Studies – MA,
  PhD
Educational Administration – MA, MEd, EdD, PhD
English – MA, PhD
Exercise Sciences – MSc, PhD
French Language and Literature – MA, PhD
Geography – MA, MSc, PhD
Germanic Literature, Culture, and Theory – MA,
  PhD
Health Administration – MHSc
Health Policy, Management and Evaluation –
  MSc, PhD
Higher Education – MA, MEd, EdD, PhD
History – MA, PhD
History and Philosophy of Education – MA, MEd
Information – MI
Information Studies – PhD
Law – LLM, SJD
Medieval Studies – MA, PhD
Near and Middle Eastern Civilizations – MA, PhD
Nursing Science – MN, PhD
Philosophy – MA, PhD
Political Science – MA, PhD
Public Health Sciences – MPH, PhD
Religion – MA, PhD
Second Language Education – MA, MEd, PhD
Social Work – MSW, PhD
Sociology – MA, PhD
Sociology in Education – MA, MEd, EdD, PhD
Spanish – MA, PhD

Overview

The Graduate Collaborative Program 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 program offers a rich interdisciplinary environment in which to grapple with how gender and sexuality are tangled with questions of race, citizenship, embodiment, colonialism, nation, global capitalism, violence, aesthetics, and other pressing concerns.

The graduate programs listed above participate in the Collaborative Program in Women and Gender Studies at the University of Toronto. The collaborating units contribute courses and provide facilities and supervision for graduate research. The program is administered by the Women and Gender Studies Institute (WGSI). The CWGS brings together 34 graduate programs, more than 100 courses, and more than 100 graduate faculty members. Our 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. Students who successfully complete the requirements of the collaborative program will receive the notation "Completed Collaborative Program in Women and Gender Studies" on their transcript, in addition to the master's or doctoral degree from their home graduate unit.

Contact and Address

Web: www.wgsi.utoronto.ca/graduate/
collaborative-program
E-mail: grad.womenstudies@utoronto.ca
Telephone: (416) 978-3668
Fax: (416) 946-5561

Graduate Collaborative Program in Women and Gender Studies
Women and Gender Studies Institute
University of Toronto
Room 2036, Wilson Hall, New College
Toronto, Ontario M5S 1C6
Canada

Programs

Master's Level

Admission Requirements

- Applicants who wish to enrol in the collaborative program must apply to and be admitted to both the collaborative program and a graduate degree program in one of the collaborating departments. Applicants must fulfil all the degree requirements in the home department.
- Applicants to the collaborative program should have a substantial undergraduate background in gender and feminist studies or an equivalent focus within a discipline. In exceptional cases, extensive work or activist experience which also requires academic knowledge of research on women and/or gender will also be considered.
- Two-page statement of research intent explaining how the applicant's program of study and specific

research interests relate to women and gender studies at the master's level.

- Two letters of reference outlining the applicant's background in women and gender studies.

Program Requirements

- Programs of study should be planned in consultation with the CWGS Graduate Coordinator as well as the Coordinator of Graduate Studies in the student's home graduate unit.
- Courses should be selected from the established cross-listed courses or approved by the Graduate Coordinator of the collaborative program.

Non-thesis Master's

- A required 0.5 full-course equivalent (FCE) selected from WGS 1000H, WGS 1001H, or WGS 1002H.
- 1.0 FCE of cross-listed or approved courses with a focus on women/gender/feminist/sexuality/critical race/postcolonial studies.
- Regular attendance at the WGS Research Seminar.

Thesis Master's

- A required 0.5 FCE selected from WGS 1000H, WGS 1001H, or WGS 1002H.
- 0.5 FCE course cross-listed or approved with a focus on women/gender/feminist/sexuality/critical race/postcolonial studies.
- Regular attendance at the WGS Research Seminar
- The thesis, or major paper, dealing with a subject in the field of women and gender studies.
- Theses will be supervised and evaluated in the same manner as those in the home graduate unit. Normally, at least one cross-listed or core graduate faculty member of WGSI will be a member of the thesis or supervisory committee of students in the program.

Doctoral Level

Admission Requirements

- Applicants who wish to enrol in the collaborative program must apply to and be admitted to both the collaborative program and a graduate degree program in one of the collaborating departments. Students must fulfil all the degree requirements in the home department.
- Applicants to the collaborative program should have a substantial undergraduate or graduate background in gender and feminist studies or an equivalent focus within a discipline. In exceptional cases, extensive work or activist experience which also requires academic knowledge of research on women and/or gender will also be considered.
- Two-page statement of research intent explaining how the applicant's program of study and specific

research interests relate to women and gender Studies at the doctoral level.

- Two letters of reference outlining the applicant's background in women and gender studies.

Program Requirements

- Programs of study should be planned in consultation with the CWGS Graduate Coordinator as well as the Coordinator of Graduate Studies in the student's home graduate unit.
- Courses should be selected from the established cross-listed courses approved by the Graduate Coordinator of the collaborative program.
- A required 0.5 FCE selected from WGS 1000H, WGS 1001H, or WGS 1002H.
- Any other 0.5 FCE course in women and gender studies.
- 1.0 FCE of courses cross-listed or approved with a focus on women/gender/feminist/sexuality/critical race/postcolonial studies.
- Regularly participate in the WGS Research Seminar. Students are required to present their work in the seminar at least once before graduating.
- Doctoral thesis dealing with a subject in the field of women and gender studies. Theses will be supervised and evaluated in the same manner as those in the home graduate unit. Normally, at least one cross-listed or core graduate faculty member with WGSI will be a member of the thesis or supervisory committee of students in the program.

Course List

Core Courses

WGS 1000H	Theories, Histories, Feminisms
WGS 1001H	Feminism, Transnationalism and Postcolonialism
WGS 1002H	Feminist Methodologies and Epistemologies

Elective Courses

For courses offered by WGSI and cross-listed by the participating units offered in a particular year, check the collaborative program website, www.wgsi.utoronto.ca/graduate/collaborative-program.

Program Committee

Anthropology; Women and Gender Studies
    McElhinny, Bonnie - BA, MA, MA, PhD PhD
    (Director)
Anthropology
    Kalmar, Ivan - BA, MA, PhD
Applied Psychology and Human Development
    Geva, Esther – BA, MA, PhD
Cinema Studies
    Sammond, Nicholas - BA, MA, PhD

Classics
    Keith, Alison - BA, MA, PhD
Comparative Literature
    Esonwanne, Uzoma - BA, MA, PhD
Criminology and Sociolegal Studies
    Levi, Ron - BCL, LLB, LLM, SJD
Curriculum, Teaching and Learning
    McDougall, Doug - BM, BEd, MEd, PhD
Drama, Theatre and Performance Studies
    Barton, Bruce - BA, MA, PhD
English
    Murray, Heather - BA, MA, PhD
Exercise Sciences
    Thomas, Scott - BSc, MSc, PhD
French Language and Literature
    Havercroft, Barbara - BA, MA, PhD
Geography
    DiFrancesco, Richard - PhD
Germanic Languages and Literatures
    Stock, Markus - MA, PhD
Health Policy, Management and Evaluation
    Cockerill, Rhonda W - BA, MA, PhD
History
    Kazal, Russell - AB, MA, PhD
Humanities, Social Sciences and Social Justice
 Education
    Walcott, Rinaldo – BA, MA, PhD
Information
    Choo, Chun Wei - BA, MSc, PhD
Law
    Brunnee, Jutta - LLM, SJD
Leadership, Higher and Adult Education
    Bredo, Eric - BA, MA, PhD
Medieval Studies
    Caskey, Jill - AB, MA, MPH, PHD
Near and Middle Eastern Civilizations
    Beaulieu, Paul-Alain - LLB, BA, MA, PhD
Nursing Science
    Tourangeau, Ann - BScN, MN, PHD
Philosophy
    Raffman, Diana - PhD
Political Science
    Chambers, Simone - BA, MPH, MA, PHD
Public Health Sciences
    Sass-Kortsak, Andrea - BSc, MHSc, PhD
Religion
    Harris, Jennifer - BA, MA, PhD
Sociology
    Andersen, Robert - BA, MA, PhD
Social Work
    Litvack, Andrea - BSW, MSW
Spanish
    Rodriguez, Nestor - MA, PhD
Women and Gender Studies
    Song, Je Sook - BA, PhD *(Coordinator, Graduate Programs)*

Women's Health

Lead Faculty

Medicine

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 – MI
Information Studies – 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

Overview

The graduate programs listed above, together with the support of the Centre for Girls' and Women's Health and Physical Education, Philosophy, and the International Programme on Reproductive and Sexual Health Law, participate in the Collaborative Graduate Program in Women's Health. The program's objectives are twofold:

1. to provide interdisciplinary training in women's health research and practice for graduate students at the University of Toronto; and
2. to facilitate mutually beneficial relationships between researchers and practitioners of women's health across the University and its 10 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 Graduate Program in Women's Health. Applicants must comply with the admission procedures of that unit.

Contact and Address

Web: www.womensresearch.ca/learning-centre
E-mail: CPWH@womensresearch.ca
Telephone: (416) 351-3732 ext. 2331
Fax: (416) 351-3746

Collaborative Graduate Program in Women's Health
c/o Women's College Research Institute
7th floor, 790 Bay Street
Toronto, Ontario M5G 1N8
Canada

Dr. Gillian Einstein, Director
Department of Psychology
100 St. George Street
University of Toronto
Toronto, Ontario M5S 3G3
Canada

Programs

Master's Level

Admission Requirements

- Applicants must submit the following to the program committee of the Collaborative Graduate Program in Women's Health:
  - a personal statement or letter, no longer than one page, describing relevant personal and/or professional experiences, a career plan, and motivation in seeking advanced training in women's health
  - photocopies of application materials submitted to their home unit including a curriculum vitae (CV), transcripts, and letters of reference.

Program Requirements

- 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.
- In instances where home graduate units require a thesis, it is desirable, but not required, that this work be relevant to women's health.
- Complete the program requirements of the collaborative program as well as those of the home graduate unit.

Doctoral Level

Admission Requirements

- Applicants must submit the following to the program committee of the Collaborative Graduate Program in Women's Health:
  - a personal statement or letter, no longer than one page, describing relevant personal and/or professional experiences, a career plan, and mo-

tivation in seeking advanced training in women's health

- ○ photocopies of application materials submitted to their home unit including a curriculum vitae (CV), transcripts, and letters of reference

Program Requirements

- 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.

- 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.

- 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 co-mentor (a core faculty member of the collaborative program); both mentors must sign this plan.

- Complete a dissertation on a topic relevant to women's health.

Course List

Core Course

CHL 5109H   Gender and Health

Program Committee

Anthropology
    Boddy, Janice - BA, MA, PhD
Dentistry
    Seltzer, Ze'ev - DMD, BMedSc
English
    Harvey, Elisabeth Ruth - PhD
Exercise Sciences
    MacNeill, Margaret - BPHE, MA, PhD
Immunology
    Fish, Eleanor - BSc, MPH, PhD
Medical Science
    Stewart, Donna - DPsych, MD
Nursing Science
    Bierman, Arlene - MS, MD
Nutritional Sciences
    Ward, Wendy - BASc, MSc, PhD
Pharmacology and Toxicology
    Riddick, David - BSc, PhD
Occupational Science and Occupational Therapy
    Polatajko-Howell, Helene - PhD
Psychology
    Fleming, Alison - BS, PhD
    Polivy, Janet - BS, MA, PhD
Public Health Sciences
    Einstein, Gillian - AB, PhD *(Director)*

Rehabilitation Science
    Brooks, Dina - BScPT, MSc, PhD
Religion
    Klassen, Pamela - BA, MA, PhD
Women and Gender Studies
    Morgan, Kathryn - BA, MA, MEd, PhD

Workplace Learning and Social Change

Lead Faculty

Ontario Institute for Studies in Education (OISE)

Participating Degree Programs

Adult Education and Community Development – MA, MEd, PhD
Sociology in Education – MA, MEd, PhD, EdD

Overview

The Collaborative Program 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 program 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 Adult Education and Community Development or Sociology in Education who are interested in participating in the collaborative program at either the master's or doctoral level must apply to and be accepted by both the departmental and the collaborative program. Applicants must also submit a statement of interest, as detailed below.

Upon successful completion of the requirements of the host department and the program, students receive the notation "Completed Collaborative Program in Workplace Learning and Social Change" on their transcript.

Contact and Address

Web: www.oise.utoronto.ca

Collaborative Program in Workplace Learning and Social Change
The Ontario Institute for Studies in Education (OISE)
University of Toronto
252 Bloor Street West
Toronto, Ontario M5S 1V6
Canada

Programs

Master's Level

Admission Requirements

- Applicants must apply to and be admitted to both the collaborative program and a graduate degree program in one of the collaborating departments.
- 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)

Program Requirements

Master of Education

- 5.0 full-course equivalents (FCEs) as follows:
  - 0.5 core FCE (WPL 1131H)
  - 0.5 elective FCE in the area of workplace learning and social change
  - 4.0 FCEs to fulfil the degree requirements of the program of admission
- No thesis requirement.

Master of Arts

- 3.0 full-course equivalents (FCEs) for the Sociology in Education program or 4.0 FCEs for the Adult Education and Community Development program, as follows:
  - 0.5 core FCE (WPL 1131H)
  - 0.5 elective FCE in the area of workplace learning and social change
  - 2.0 FCEs to fulfil the requirements of the Sociology in Education program or 3.0 FCEs to fulfil the requirements of the Adult Education and Community Development program
- In addition, thesis students will be required to complete a thesis which incorporates issues of workplace learning and social change. A member of the collaborative program core faculty will serve as supervisor or committee member.

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

Program Requirements

Doctor of Education

(Offered to students in the Sociology in Education program only.)
- 4.0 full-course equivalents (FCEs), as follows:
  - 0.5 core FCE (WPL 3931H)
  - 0.5 elective FCE in the area of workplace learning and social change
  - 3.0 FCEs to complete the requirements of the program of admission
- In addition, students will be required to complete a thesis which incorporates issues of workplace learning and social change. A member of the collaborative program core faculty will serve as supervisor or committee member.

Doctor of Philosophy

- 3.0 full-course equivalents (FCEs), as follows:
  - 0.5 core FCE (WPL 3931H)
  - 0.5 elective FCE in the area of workplace learning and social change
  - 2.0 FCEs to complete the requirements of the program of admission
- In addition, students will be required to complete a thesis which incorporates issues of workplace learning and social change. A member of the collaborative program core faculty will serve as supervisor or committee member.

Course List

Master's-Level Required Course

WPL 1131H   Master's Seminar in Workplace Learning and Social Change

Master's-Stream Electives

The list of electives is subject to change.

AEC 1107H   Developing and Leading High Performing Teams: Theory and Practice
AEC 1113H   Gender and Hierarchy at Work
AEC 1117H   Consulting Skills for Adult Educators
AEC 1119H   Creating a Learning Organization
AEC 1131H   Special Topics in Adult Education (Master's)
AEC 1135H   Practicum in Organization Development (Credit/No Credit)

AEC 1141H   Organizations and the Adult Educator: Historical and Theoretical Perspectives on Organization Development
AEC 1145H   Participatory Research in the Community and the Workplace
AEC 1148H   An Introduction to Workplace, Organizational, and Economic Democracy
AEC 1150H   Critical Perspectives on Organization Theory, Development, and Practice
AEC 1156H   Power and Difference in the Workplace
AEC 1182H   Teaching, Learning and Working in Non-profit and Public Sector Organizations
AEC 1186H   Perspectives on Organizational Change
SES 2942H   Education and Work
SES 2999H   Special Topics in Sociological Research in Education: Sociology of Learning and Social Movements
JTE 2912H   Teachers' Work: Classrooms, Careers, Cultures, and Change

Doctoral-Level Required Course

WPL 3931H   Doctoral Seminar in Workplace Learning and Social Change

Doctoral-Stream 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:

AEC 3131H   Special Topics in Adult Education: Rethinking Skills: Theory, Policy and Practice (Doctoral)
AEC 3140H   Post-Colonial Relations and Transformative Education
AEC 3182H   Work, Technology and Knowledge Economy
AEC 3182H   Citizenship Learning and Participatory Democracy
AEC 3183H   Mapping Social and Organizational Relations in Education
SES 3999H   Special Topics in Advanced Sociological Research in Education

Program Committee

Humanities, Social Sciences and Social Justice Education
    Livingstone, David - BA, PhD
    Ng, Roxana - BA, MA, PhD
    Quarter, Jack - PhD
    Sawchuck, Peter - BSc, BEd, MA, PhD
Leadership, Higher and Adult Education
    Jackson, Nancy - BA, MA, PhD
    Laiken, Marilyn - BA, MA, PhD
    Mirchandani, Kiran - BA, MPH, PhD *(Director)*
    Mojab, Shahrzad - BA, MEd, EdD

Joint Programs

The University of Toronto participates in several joint degree programs involving partnership between two or more graduate units or universities.

Design and Manufacturing

Faculty Affiliation

Applied Science and Engineering

Participating Degree Programs at U of T

Design and Manufacturing – MEngDM

Overview

The Advanced Design and Manufacturing Institute (ADMI) is the administrative home for the joint program in Design and Manufacturing offered at the master's level. The program is offered through the joint efforts of five Ontario universities: University of Toronto, McMaster University, Queen's University, the University of Waterloo, and the University of Western Ontario. The joint nature of the program ensures that the very best expertise available at each of the participating schools is integrated into the program's course offerings.

Within the University of Toronto, the degree designation is **Master of Engineering in Design and Manufacturing.** The joint program, fully described on www.admicanada.com, is structured to address the engineering design, manufacturing, and management expertise and knowledge base required by young graduate professionals actively engaged within industry, government, and business.

Due to the part-time modular nature of the program, it is available only to Canadian citizens and permanent residents of Canada. The program allows individuals to participate in graduate studies over four-day weekend periods that can be effectively incorporated into a regular working schedule. The ADMI courses are offered at various locations within southern Ontario, typically Toronto, Waterloo, Mississauga, Hamilton, and London. Courses are offered throughout the year and do not conform to the regular university semester structures.

Contact and Address

For information regarding ADMI admission at the University of Toronto, contact by mail:

Graduate Studies Office
Department of Mechanical and Industrial Engineering
5 Kings College Road
University of Toronto
Toronto, Ontario M5S 3G8
Canada

E-mail: admi@mie.utoronto.ca
Telephone: (416) 978-8823
Fax: (416) 978-3453

For information regarding ADMI admission at the University of Toronto, visit in person:

Graduate Studies Office
Department of Mechanical and Industrial Engineering
Room 108, Mechanical Building
5 King's College Road

For information on the program's long-term goals as well as details of other universities participating in ADMI, contact:

Mr. David Heaslip
Executive Director
Advanced Design and Manufacturing Institute
40 Sheppard Avenue West, Suite 101
Toronto, Ontario M2N 6K9 Canada

Web: www.admicanada.com
E-mail: info@admicanada.com
Telephone: (647) 259-2261

Master of Engineering in Design and Manufacturing

Minimum Admission Requirements

- Students entering the program at the University of Toronto are required to register in the Department of Mechanical and Industrial Engineering.
- An appropriate bachelor's degree in engineering from a recognized university, with grades equivalent to a mid-B or better, is required. Individuals with undergraduate and/or graduate degrees in the related fields of computer science, physics, etc. are also invited to apply.
- Applicants will normally have three years of post-baccalaureate experience in the industry, or its equivalent.

Program Requirements

- 10 ADMI course offerings; details at www.admicanada.com.
- Two of the required 10 courses may be replaced by an approved industry project, with University supervision.
- Whether or not a project is undertaken, program participants are required to complete a minimum of five courses from the Technology and Process stream and a minimum of two from the Business and Management stream.
- Participants must complete a minimum of two ADMI courses per calendar year to maintain program registration status.

Normal Program Length: 4 years part-time

Time Limit: 6 years part-time

Course List

A list of course offerings, along with course descriptions and a current schedule, is available on the ADMI website, www.admicanada.com.

Program Committee

The committee of the Advanced Design and Manufacturing Institute (ADMI) comprises eight members: six from the participating member universities plus two members from industry. The Executive Director of ADMI, D. Heaslip, chairs the Program Committee.

University of Toronto Program Committee Representative: Markus Bussmann, PhD, PEng – Mechanical and Industrial Engineering.

Financial Economics

Faculty Affiliation

Arts and Science, Management

Participating Degree Programs at U of T

Financial Economics – MFE

Overview

The Master of Financial Economics Program is a small enrolment joint program of the Department of Economics and the Rotman School of Management. Graduates of the program receive a professional degree called the **Master of Financial Economics** (MFE). 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
E-mail: mfe@chass.utoronto.ca
Telephone: (416) 978-8623
Fax: (416) 978-6713

Master of Financial Economics Program
Department of Economics
University of Toronto
150 St. George Street
Toronto, Ontario M5S 3G7
Canada

Master of Financial Economics

Admission Requirements

- Applicants must have completed or must be in the final year of an appropriate honours 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

- 6.0 full-course equivalents (FCEs) or 12 half courses, a four-month summer internship, and an intensive mathematics, statistics, and accounting review.
- The core program consists of 2.0 FCEs from the Department of Economics and 1.5 FCEs from the Rotman School. The core courses drawn from the Department of Economics are the same as the core courses required for the MA degree in Economics plus ECO 2503H *Financial Economics I.* The core courses from the Rotman School RSM 2306H *Options and Futures Markets,* RSM 2300H *Corporate Financing,* RSM 2302H *Security Analysis and Portfolio Management*) are drawn from the second-year MBA-level courses and provide students with training in key areas of finance.
- In addition to the core courses, students are free to choose 2.5 FCEs in electives from either the Department of Economics or the Rotman School, subject to the condition that at least 3.5 out of the 6.0 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.

Normal Program Length: 4 sessions full-time

Time Limit: 3 years full-time

Graduate Faculty

Economics
Aivazian, Varouj - BS, MA, PhD
Alexopoulos, Michelle - BSc, MA, PhD
Maheu, John - BA, MEc, DPhil
Malinova, Ekaterina - BS, MA, PhD
Melino, Angelo - BA, PhD *(Co-director)*
Park, Andreas - MEc, MPh, PhD *(Co-director)*
Stewart, Colin - BSc, MPH, MA, MSc, PhD
Zhu, Xiaodong - PhD
Management
Booth, Laurence - BSc, MA, MBA, DBA
Christoffersen, Peter - BEc, PhD
McCurdy, Thomas - AB, MEc, DPhil
White, Alan - BE, MBA, DPhil

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find our calendar online
sgs.utoronto.ca/calendar

UNIVERSITY OF TORONTO
SCHOOL OF GRADUATE STUDIES

63 St. George Street
Toronto, ON Canada
M5S 2Z9