



UNIVERSITY OF TORONTO
SCHOOL OF GRADUATE STUDIES

calendar 2011/2012



The School of Graduate Studies Calendar is available online in PDF and HTML formats. It is also available in print (limited copies). Every effort has been made to ensure the compatibility of the online and print versions.

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

Any post-publication corrections and/or updates will be posted at www.sgs.utoronto.ca/calendar/2011-12. Students are strongly advised to consult the web page regularly to keep informed of changes.

Composition by
School of Graduate Studies
University of Toronto

Printing by
Thistle Printing Limited

Published by
School of Graduate Studies
University of Toronto
September 2011

University of Toronto

School of Graduate Studies 2011/2012 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

The University of Toronto began in 1827 as King's College at York, York being the name of the city of Toronto at the time. 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 did not become a distinct academic division within the University of Toronto until 1922. In 1965 the School 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

J. J. B. Smith, BA, MA, PhD

Director of Quality Assessment and Governance

J. E. Alderdice, BDes

Director of Student Services

H. A. Kelly, BA, MA, EdD

Director of Information Systems

R. R. Branch, BA

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, more than 14,600 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 2011/2012 *School of Graduate Studies Calendar* is effective for the academic period September 1, 2011 to August 31, 2012. 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/2011-2012. 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 six sections.

Sections

General Regulations outlines admission, registration, enrolment, grading, and graduation policies and procedures. Selected policies and codes 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.

Services for Students outlines university services available to enhance graduate life at U of T. Look for student housing information in this section.

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 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, 2011, to August 31, 2012. 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 the school 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 Graduate Programs) of the academic year in which the student first registered in the graduate program.

All university policies can be found at www.governancouncil.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.

Contents

Graduate Studies at the University of Toronto.....	2	Admission Policies and Procedures	33
Mission Statement.....	2	Academic Requirements for Admission	33
Deans and Directors of the School of Graduate Studies.....	3	Master's Programs	33
Dean's Welcome	3	Doctor of Philosophy Programs.....	33
About this Calendar.....	4	Other Doctoral Programs	33
Important Notices.....	5	Diploma Programs.....	34
Sessional Dates 2011/2012	10	Special Students	34
Divisional Structure.....	12	Advanced Standing	34
Graduate Programs at a Glance	14	Students Holding Graduate Degrees	
General Regulations.....	29	Registered as Graduate Students.....	34
Organization of the School of Graduate Studies	29	Mature Students	34
The Divisions.....	29	Eligibility of Members of Teaching and	
Graduate Education Council	29	Administrative Staff	34
Graduate Units.....	29	English-Language Facility	34
School of Graduate Studies Centres and Institutes..	30	Admission Regulations	35
Graduate Programs	30	Master's Programs	35
Degree Programs	30	Doctor of Philosophy Programs.....	35
Collaborative Programs.....	30	Diploma Programs.....	35
Combined Programs	30	Special Students	36
Diploma Programs.....	30	Courses Taken as a Special Student.....	36
Conjoint Programs.....	30	English-Language Facility Tests	36
Joint Programs	30	Test of English as a Foreign Language	
Graduate Faculty	30	(TOEFL)	37
Student Categories	31	Michigan English Language Assessment	
Degree or Diploma Student	31	Battery (MELAB)	37
Degree or Diploma Student on Probation	31	International English Language Testing	
Special (Non-degree) Student	31	System (IELTS).....	37
Special Student, Full-Time	31	The Certificate of Proficiency in English	
Special Student, Part-Time	32	(COPE).....	37
Visiting Student.....	32	International ESL—Academic Preparation	
Application for Admission to a Degree Program	32	Level 60 (Advanced)	37
Procedures	32	Structure of Academic Programs.....	38
Application Deadlines.....	32	Academic Year.....	38
Financial Assistance.....	33	Academic Programs.....	38
Acceptance.....	33	Minimum Period of Registration	38
		Normal Program Length.....	38
		Residence	38
		Time Limit	38
		Registration and Enrolment	39
		Registration Policies and Procedures	39
		Registration Procedures.....	39
		Full-Time Studies.....	39
		Part-Time Studies	39
		Flexible-Time Studies	39
		Summer Session Courses.....	40
		First Registration	40
		Continuity of Registration.....	40
		Late Registration Fee	40
		Failure to Register.....	41
		Extension of Time for Completion of Degree	
		Requirements	41
		Concurrent Registration Option.....	41
		Dual Registration	41
		Simultaneous Registration	42
		Leave Policy.....	42
		Withdrawal from a Graduate Program.....	42

Policy on Graduate Courses and Other Academic Activities	43	Research Ethics.....	61
Enrolment Policies and Procedures.....	43	Policy on Academic Sanctions for Students Who Have Outstanding Obligations to the University	62
Enrolment.....	43	Code of Behaviour on Academic Matters	62
Deadlines for Enrolment Changes	44	Policy and Procedures: Sexual Harassment	62
Completion of Coursework and Grade Submission	44	Code of Student Conduct	62
Coursework Extensions	44	Policy on Access to Student Academic Records..	63
Extra Courses Not Required for the Degree.....	45	Policy on Official Correspondence with Students.....	63
Prerequisite Courses	45	Postal Addresses and Electronic Mail Accounts	63
Auditing of Graduate Courses.....	45	University Rights and Responsibilities Regarding Official Correspondence	63
Transfer Credit and Exemptions	46	Students' Rights and Responsibilities Regarding Retrieval of Official Correspondence.....	64
Good Academic Standing and Satisfactory Academic Progress, Time Limits, Supervision, and Candidacy	47	Safety in Field Research.....	64
All Degree Students.....	47	Statement on Appropriate Use of Information and Communication Technology	64
Full-Time Students.....	47	Statement on Human Rights.....	64
Timely Completion of Graduate Program Requirements	47		
Satisfactory Completion of Graduate Courses	47		
Doctoral Students.....	48		
Achieving Candidacy: Requirements and Time Limit.....	48		
Supervision and Satisfactory Progress	48		
Graduate Student Supervision	49	Degree Regulations.....	65
Thesis Topic and Supervision	49	Doctoral Degrees.....	65
Doctoral Supervision	49	Doctor of Philosophy (PhD).....	65
Doctoral Final Oral Examination	50	Admission Requirements	65
Submission of Theses	53	Transfers	66
Doctoral Thesis.....	53	Program Requirements	66
Master's Thesis.....	53	Doctor of Education (EdD).....	68
Graduation.....	54	Admission Requirements	68
Degree Recommendations	54	Program Requirements	68
Convocation Ceremonies.....	54	Doctor of Juridical Science (SJD)	69
Academic Appeals Policy	54	Doctor of Musical Arts (DMA)	69
General.....	54	Master's Degrees	69
Exception	54	Degrees in Multiple Graduate Programs	69
Informal Mediation.....	54	Master of Arts (MA).....	69
Steps	55	Master of Science (MSc)	69
Step 1: Informal.....	55	Master of Applied Science (MASc)	70
Step 2: Department Appeal.....	56	Master of Education (MEd).....	70
Step 3: Appeal to GAAB.....	56	Master of Engineering (MEng).....	71
Step 4: Governing Council Appeal.....	56	Master of Health Science (MHSc).....	71
Policies and Guidelines.....	56	Degrees in Single Graduate Programs	71
Graduate Grading and Evaluation Practices Policy.....	56	Master of Architecture (MArch).....	71
Purpose.....	56	Master of Biotechnology (MBiotech)	72
Application of Policy	56	Master of Business Administration (MBA)	72
Amendment to Policy	56	Master of Engineering in Design and Manufacturing (MEngDM)	72
Distribution of Policy	57	Master of Environmental Science (MEnvSc)	72
Part I: Grades.....	57	Master of Finance (MF).....	72
Part II: Grading Procedures	59	Master of Financial Economics (MFE)	72
Part III: Administrative Appendix.....	61	Master of Forest Conservation (MFC).....	72
Intellectual Property	61	Master of Global Affairs (MGA)	72
		Master of Health Informatics (MHI)	72
		Master of Industrial Relations and Human Resources (MIRHR)	72
		Master of Information (MI)	72

Contents

Master of Landscape Architecture (MLA).....	72
Master of Laws (LLM).....	72
Master of Management and Professional Accounting (MMPA).....	72
Master of Management of Innovation (MMI).....	72
Master of Mathematical Finance (MMF).....	72
Master of Museum Studies (MMS).....	72
Master of Music (MMus).....	73
Master of Nursing (MN).....	73
Master of Public Health Science (MPH).....	73
Master of Public Policy (MPP).....	73
Master of Science in Applied Computing (MScAC).....	73
Master of Science in Biomedical Communications (MScBMC).....	73
Master of Science in Community Health (MScCH).....	73
Master of Science in Forestry (MScF).....	73
Master of Science in Occupational Therapy (MScOT).....	73
Master of Science in Physical Therapy (MScPT).....	73
Master of Science in Planning (MScPl).....	73
Master of Social Work (MSW).....	73
Master of Studies in Law (MSL).....	73
Master of Teaching (MT).....	73
Master of Urban Design (MUD).....	73
Master of Urban Design Studies (MUDS).....	73
Master of Visual Studies (MVS).....	73
Calendars.....	76
Financial Support.....	77
Financial Aid.....	77
Internal Awards.....	77
External Awards.....	77
Ontario Student Assistance Program (OSAP).....	77
Awards for Non-Canadians.....	77
Other Funding Sources.....	77
Financial Need.....	77
Further Information on Financial Support.....	78
Services for Students.....	79
Academic Support and Professional Development.....	79
Campus Life—Finding Community.....	79
Equity and Diversity.....	79
Family Care.....	79
Health and Wellness.....	79
Housing.....	79
International Students.....	80
Legal.....	80
Money Matters.....	80
Recreation.....	80
Safety.....	80
Graduate Programs.....	81
Degree and Diploma Programs by Graduate Unit.....	82
Adult Education and Counselling Psychology.....	83
Aerospace Studies.....	91
Anthropology.....	94
Architecture, Landscape, and Design.....	98
Art.....	104
Astronomy and Astrophysics.....	109
Biochemistry.....	112
Biomedical Engineering.....	115
Cell and Systems Biology.....	118
Chemical Engineering and Applied Chemistry.....	121
Chemistry.....	124
Cinema Studies.....	128
Civil Engineering.....	130
Classics.....	133
Comparative Literature.....	137
Computer Science.....	140
Criminology and Sociolegal Studies.....	144
Curriculum, Teaching, and Learning.....	147
Dentistry.....	156
Doctor of Medicine/Doctor of Philosophy.....	162
Drama.....	163
East Asian Studies.....	166
Ecology and Evolutionary Biology.....	170
Economics.....	173
Electrical and Computer Engineering.....	177
English.....	182
European, Russian, and Eurasian Studies.....	189
Exercise Sciences.....	193
Fees and Financial Support.....	74
Fees.....	74
Schedule of Fees.....	74
Fees and Registration.....	74
Academic Fees Structure.....	74
Full-Time Student Fee.....	74
Dual Registrations.....	74
Full-Time Students Commencing a Degree Program in January.....	74
Summer Students.....	74
Part-Time Degree Students.....	74
Flexible-Time PhD Degree Students.....	75
Special Students.....	75
Fees for International Students.....	75
Incidental Fees.....	75
Minimum Payment.....	75
Service Charges.....	75
Late Registration.....	75
Balance of Degree Fee.....	75
Fees for Graduating Master's Students.....	75
Fees for Final-Year Doctoral Students.....	75
Fees for Students on Extension.....	76
Reinstatement Fees.....	76
Outstanding Fees and Charges.....	76
Receipts for Income Tax.....	76
Transcripts.....	76

Forestry 196
 French Language and Literature 200
 Geography 204
 Geology 211
 Germanic Languages and Literatures 214
 Global Affairs 217
 Health Policy, Management and Evaluation 220
 History 229
 History and Philosophy of Science and
 Technology 235
 Human Development and Applied Psychology 239
 Immunology 246
 Industrial Relations and Human Resources 248
 Information 253
 Italian Studies 260
 Laboratory Medicine and Pathobiology 263
 Law 268
 Linguistics 272
 Management 274
 Materials Science and Engineering 282
 Mathematical Finance 285
 Mathematics 287
 Mechanical and Industrial Engineering 291
 Medical Biophysics 295
 Medical Science 298
 Medieval Studies 308
 Molecular Genetics 314
 Music 317
 Near and Middle Eastern Civilizations 327
 Nursing Science 331
 Nutritional Sciences 337
 Occupational Science and Occupational
 Therapy 340
 Pharmaceutical Sciences 342
 Pharmacology and Toxicology 346
 Philosophy 349
 Physical and Environmental Sciences 355
 Physical Therapy 358
 Physics 360
 Physiology 363
 Political Science 367
 Professional Graduate Programs Centre
 (Mississauga) 374
 Psychology 377
 Public Health Sciences 381
 Public Policy and Governance 388
 Rehabilitation Science 391
 Religion 395
 Slavic Languages and Literatures 399
 Social Work 402
 Sociology 410
 Sociology and Equity Studies in Education 414
 Spanish 419
 Speech-Language Pathology 422
 Statistics 426
 Theoretical Astrophysics 429
 Theory and Policy Studies in Education 430
 Women and Gender Studies 441

Collaborative Programs 443

Aboriginal Health 444
 Addiction Studies 446
 Aging, Palliative and Supportive Care Across
 the Life Course 448
 Ancient and Medieval Philosophy 451
 Ancient Greek and Roman History 452
 Asia-Pacific Studies 453
 Astrophysics 455
 Bioethics 456
 Biomedical Engineering 458
 Biomedical Toxicology 461
 Biomolecular Structure 463
 Book History and Print Culture 464
 Cardiovascular Sciences 466
 Community Development 468
 Comparative, International and Development
 Education 470
 Developmental Biology 473
 Diaspora and Transnational Studies 475
 Dynamics of Global Change 477
 Editing Medieval Texts 478
 Educational Policy 479
 Environment and Health 481
 Environmental Engineering 483
 Environmental Studies 485
 Ethnic and Pluralism Studies 488
 Genome Biology and Bioinformatics 491
 Geology and Physics 493
 Global Health 495
 Health Care, Technology and Place 497
 Health Services and Policy Research 499
 Jewish Studies 501
 Knowledge Media Design 504
 Management and Economics 507
 Neuroscience 509
 Optics 512
 Resuscitation Sciences 513
 Sexual Diversity Studies 515
 South Asian Studies 517
 Women and Gender Studies 519
 Women's Health 522
 Workplace Learning and Social Change 524

Joint Programs 526

Advanced Design and Manufacturing 527
 Biotechnology 529
 Financial Economics 530

Index 532

Sessional Dates 2011/2012

Fall Session 2011

M August 1	Civic holiday
M August 8	Registration for fall session begins
August	Undergraduate course enrolment begins ⁽¹⁾
F August 26	Last date for payment of tuition fees to meet registration deadline
M September 5	Labour Day
M September 12	Most formal graduate courses and seminars begin in the week of September 12 ⁽²⁾
Th September 15	Final date to submit final doctoral theses to SGS to avoid fee charges for 2011–2012
F September 16	Coursework must be completed and grades submitted for summer session courses and extended courses ⁽⁴⁾
F September 16	Registration for fall session ends; after this date a late registration fee will be assessed
W September 21	Summer session grades available for viewing by students on the Student Web Service
M September 26	Final date to add full-year and fall session courses
F September 30	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⁾
F September 30	Final date to submit final doctoral thesis for fall convocation
M October 10	Thanksgiving Day
M October 31	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
W December 21	Winter break begins (for last day of classes before winter break, consult graduate units concerned)

Winter Session 2012

M January 9	Most formal graduate courses and seminars begin in the week of January 9 ⁽²⁾
F January 13	Final date for registration of students beginning program in winter session; after this date, a late registration fee will be assessed
F January 13	Coursework must be completed and grades submitted for fall session courses ⁽⁴⁾
M January 16	Final date to submit doctoral theses without fee payment for winter session
W January 18	Fall session grades available for viewing by students on the Student Web Service
M January 23	Final date to add winter session courses ⁽⁴⁾
F January 27	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 27	Final date for all students to request that their degrees be conferred in absentia in March
F January 27	Fall dual registrants must be recommended for the master's degree by this date to maintain their PhD registration ⁽⁵⁾
M February 20	Family Day
M February 27	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
April	For last day of winter classes, consult unit concerned

Summer Session 2012

F April 6	Good Friday
F April 20	For students obtaining degrees at June convocation, coursework must be completed and grades submitted for full-year and winter session courses
F April 20	Final date for receipt of degree recommendations and submission of any required theses for master's degrees for June convocation ⁽⁵⁾
F April 20	Final date for submission of final doctoral thesis for students whose degrees are to be conferred at the June convocation ⁽³⁾
F April 20	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 4	Final date for registration for May session
F May 11	Final date to enrol in May–June or May–August session courses
F May 11	Coursework must be completed and grades submitted for full-year and winter session courses (except for extended courses) ⁽⁴⁾
W May 16	Winter session grades available for viewing by students on the Student Web Service
M May 21	Victoria Day
June	June convocation information and dates are posted at www.convocation.utoronto.ca
F June 1	Final date to drop May–June F section courses without academic penalty ⁽⁶⁾
F June 22	Final date to enrol in July–August courses ⁽⁶⁾
F June 22	Final date to drop May–August session Y section courses without academic penalty ⁽⁶⁾
M July 2	Canada Day holiday
F July 20	Final date to drop July–August S section courses without academic penalty ⁽⁶⁾
F July 20	Coursework must be completed and grades submitted for May–June F section courses ⁽⁴⁾
W July 25	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 undergraduate *Faculty of Arts & Science 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. University of Toronto 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 28 to about 1½ hours after sunset on Friday, September 30) or on Yom Kippur (from about 1½ hours before sunset on Friday, October 7 to about 1½ hours after sunset on Saturday, October 8).
- (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. 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
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

Adult Education and Counselling Psychology
Anthropology
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
Human Development and Applied Psychology
Industrial Relations and Human Resources
Information
Law
Management
Management and Economics (CP)
Political Science
Professional Graduate Programs Centre
(Mississauga)
Public Policy and Governance
Sexual Diversity Studies (CP)
Social Work
Sociology
Sociology and Equity Studies in Education
Theory and Policy Studies in Education
Workplace Learning and Social Change (CP)

Division III: Physical Sciences

Advanced Design and Manufacturing (JP)
Aerospace Science and Engineering
Astronomy and Astrophysics
Astrophysics (CP)
Biomedical Engineering
Biomedical Engineering (CP)
Chemical Engineering and Applied Chemistry
Chemistry
Civil Engineering
Computer Science
Electrical and Computer Engineering
Environment and Health (CP)
Environmental Engineering (CP)
Environmental Studies (CP)
Geology
Geology and Physics (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)
Biotechnology (JP)
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 programs, collaborative programs, and diploma programs. All programs are offered full-time unless otherwise noted.

Degree Programs

Graduate Unit	Program	Degrees
Adult Education and Counselling Psychology	Adult Education and Community Development	MA ^p , MEd ^p , EdD [*] , PhD ^{flex}
	Counselling Psychology	MA ^p , MEd ^p , EdD, PhD ^{flex}
Advanced Design and Manufacturing	Advanced Design and Manufacturing	MEngDM ^{p~}
Aerospace Studies	Aerospace Science and Engineering	MASc, MEng ^p , PhD
Anthropology	Anthropology	MA ^p , MSc ^p , 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
Biotechnology	Biotechnology	MBiotech
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

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

flex Flexible-time program option available in addition to full-time program

* Admissions suspended

Graduate Unit	Program	Degrees
Civil Engineering	Civil Engineering	MASc, MEng ^p , PhD
Classics	Classics	MA, 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	Drama	MA ^p , PhD
East Asian Studies	East Asian Studies	MA, PhD
Ecology and Evolutionary Biology	Ecology and Evolutionary Biology	MSc, PhD
Economics	Economics	MA, PhD
	Economics/Law Combined Program	MA/JD, PhD/JD
Electrical and Computer Engineering	Electrical and Computer Engineering	MASc, MEng ^p , PhD
English	English	MA, PhD
	English/Law Combined Program	MA/JD
European, Russian, 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}
Financial Economics	Financial Economics	MFE
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	MScPI ^p , PhD
	Urban Design Studies	MUDS ^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
flex Flexible-time program option available in addition to full-time program
* Admissions suspended

Graduate Programs at a Glance

Graduate Unit	Program	Degrees
Geology	Geology	MASc, MSc ^p , PhD
Germanic Languages and Literatures	German Literature, Culture and Theory	MA ^p , PhD
Global Affairs	Global Affairs	MGA
	Global Affairs/Law Combined Program	MGA/JD
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
Human Development and Applied Psychology	Child Study and Education	MA
	Developmental Psychology and Education	MA, MEd ^p , PhD ^{flex}
	School and Clinical Child Psychology	MA, PhD
Immunology	Immunology	MSc, PhD
Industrial Relations and Human Resources	Industrial Relations and Human Resources	MIRHR, PhD
Information	Information	MI ^p
	Information Studies	PhD
	Information/Law Combined Program	MI/JD
	Museum Studies	MMSt ^p
Italian Studies	Italian Studies	MA ^p , PhD
Laboratory Medicine and Pathobiology	Laboratory Medicine and Pathobiology	MSc, PhD
Law	Law	LLM ^p , GPLLM, MSL, SJD
Linguistics	Linguistics	MA, 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

flex Flexible-time program option available in addition to full-time program

* Admissions suspended

Graduate Unit	Program	Degrees
Management	Finance	MFP
	Management	MBA ^p , PhD
	Management/Engineering Combined Program	MBA/BASc
	Management/Law Combined Program	MBA/JD
Materials Science and Engineering	Materials Science and Engineering	MASc, MEng ^p , PhD
Mathematical Finance	Mathematical Finance	MMF
Mathematics	Mathematics	MSc ^p , PhD
Mechanical and Industrial Engineering	Mechanical and Industrial Engineering	MASc, MEng ^p , PhD
Medical Biophysics	Medical Biophysics	MSc, PhD
Medical Science	Bioethics	MHSc
	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, PhD
Nursing	Nursing Science	MN, PhD ^{flex}
	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

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

flex Flexible-time program option available in addition to full-time program

* Admissions suspended

Graduate Programs at a Glance

Graduate Unit	Program	Degrees
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, PhD
	Political Science/Law Combined Program	MA/JD, PhD/JD
Professional Graduate Programs Centre	Management and Professional Accounting	MMPA
Psychology	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
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
Sociology and Equity Studies in Education	Sociology in Education	EdD ^p , MA ^p , MEd ^p , PhD ^{flex}
Spanish	Spanish	MA ^p , PhD
Speech-Language Pathology	Speech-Language Pathology	MHSc ^p , MSc, PhD
Statistics	Statistics	MSc ^p , PhD
Theory and Policy Studies in Education	Educational Administration	MA ^p , MEd ^p , EdD, PhD ^{flex}
	Higher Education	MA ^p , MEd ^p , EdD ^p , PhD ^{flex}
	History and Philosophy of Education	MA ^p , MEd ^p
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

flex Flexible-time program option available in addition to full-time program

*** Admissions suspended

Collaborative Programs

Program	Participating Degree Programs	Degrees
Aboriginal Health	Anthropology Counselling Psychology Geography Medical Science Nursing Science Nutritional Sciences Public Health Sciences Sociology in Education	MA, MSc, PhD MA, MEd, EdD, PhD MA, PhD MSc, PhD MN, PhD MHSc, MSc, PhD MPH, PhD MA, MEd, EdD, PhD
Addiction Studies	Adult Education and Community Development Anthropology Biomedical Engineering Criminology Exercise Sciences Information Medical Science Nursing Science Pharmacology Pharmaceutical Sciences Psychology Public Health Sciences Social Work Sociology Women and Gender Studies	MA, MEd, EdD, PhD MA, MSc, PhD MASc, PhD MA, PhD MSc, PhD MI, PhD MSc, PhD MN, PhD MSc, PhD MSc, PhD MA, PhD MSc, PhD MSW, PhD MA, PhD MA
Aging, Palliative and Supportive Care Across The Life Course	Adult Education and Community Development Anthropology Counselling Psychology Dentistry Exercise Sciences Health Administration Health, Policy, Management and Evaluation Information Medical Science Nursing Science Pharmaceutical Sciences Psychology Public Health Sciences Rehabilitation Science Social Work Sociology Speech-Language Pathology Women and Gender Studies	MA, MEd, EdD, PhD MA, MSc, PhD MA, MEd, EdD, PhD MSc, PhD MSc, PhD MHSc MSc, PhD MI, PhD MSc, PhD MN, PhD MSc, PhD MA, PhD MPH, MSc, PhD MSc, PhD MSW, PhD MA, PhD MSc, PhD MA
Ancient and Medieval Philosophy	Classics Medieval Studies Philosophy	PhD PhD PhD
Ancient Greek and Roman History	Classics (University of Toronto) History (York University)	PhD PhD

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

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

Program	Participating Degree Programs	Degrees
Diaspora and Transnational Studies	Anthropology Cinema Studies Comparative Literature Criminology and Sociolegal Studies Drama English Geography German Literature, Culture and Theory History History of Art Near and Middle Eastern Civilizations Political Science Religion Slavic Languages and Literatures Sociology Sociology in Education Spanish Women and Gender Studies	MA, MSc, PhD MA MA, PhD MA, PhD MA, PhD MA PhD MA, MSc, PhD MA, PhD MA, PhD MA, PhD MA, PhD MA, PhD MA, PhD MA, PhD MA, PhD MA, MEd, EdD, PhD MA, PhD MA
Dynamics of Global Change	Adult Education and Community Development Anthropology Computer Science Economics Education Administration Geography Health Policy, Management and Evaluation Law Management Medical Science Political Science	PhD PhD PhD PhD PhD PhD PhD SJD PhD PhD PhD
Editing Medieval Texts	Classics English History Italian Studies Medieval Studies Music Philosophy Religion Spanish	PhD PhD PhD PhD PhD PhD PhD PhD PhD
Educational Policy	Adult Education and Community Development Curriculum Studies and Teacher Development Developmental Psychology and Education Educational Administration Higher Education History and Philosophy of Education Second Language Education Sociology in Education	MA, MEd, PhD MA, MEd, PhD MA, MEd, PhD MA, MEd, EdD, PhD MA, MEd, EdD, PhD MA, MEd MA, MEd, PhD MA, MEd, EdD, PhD
Environment and Health	Geography Medical Science Planning Public Health Sciences Women and Gender Studies	MA, MSc, PhD MSc, PhD MScPi, PhD MPH, MSc, PhD MA

Program	Participating Degree Programs	Degrees
Environmental Engineering	Chemical Engineering and Applied Chemistry Civil Engineering Materials Science and Engineering Mechanical and Industrial Engineering	MAsc, MEng, PhD MAsc, MEng, PhD MAsc, MEng, PhD MAsc, MEng, PhD
Environmental Studies	Adult Education and Community Development Anthropology Chemical Engineering and Applied Chemistry Chemistry Counselling Psychology Ecology and Evolutionary Biology Economics Forestry Geography Geology Information Information Studies Management Philosophy Physics Planning Political Science Religion Sociology Sociology in Education Women and Gender Studies	MA, MEd, PhD MA, MSc, PhD MAsc, MEng, PhD MSc, PhD MA, MEd, EdD, PhD PhD MA MScF, MFC, PhD MA, MSc, PhD MAsc, MSc, PhD MI, PhD MBA, PhD MA, PhD MSc, PhD MScPI, PhD MA, PhD MA, PhD MA, PhD MA, MEEd, EdD, PhD MA
Ethnic and Pluralism Studies	Anthropology Educational Administration European, Russian and Eurasian Studies Geography History History and Philosophy of Education Industrial Relations and Human Resources Nursing Science Political Science Religion Social Work Sociology Sociology in Education Women and Gender Studies	MA, PhD MA, MEd, EdD, PhD MA MA, PhD MA, PhD MA, MEd MIRHR, PhD MN, PhD MA, PhD MA, PhD MSW, PhD MA, PhD MA, MEEd, EdD, PhD MA
Genome Biology and Bioinformatics	Biochemistry Biomedical Engineering Cell and Systems Biology Chemical Engineering and Applied Chemistry Computer Science Ecology and Evolutionary Biology Laboratory Medicine and Pathobiology Medical Biophysics Medical Science Molecular Genetics	PhD PhD PhD PhD PhD PhD PhD PhD PhD PhD
Geology and Physics	Geology Physics	MSc, PhD MSc, PhD

Graduate Programs at a Glance

Program	Participating Degree Programs	Degrees
Global Health	Anthropology	PhD
	Health Policy, Management and Evaluation	PhD
	Law	SJD
	Nursing Science	PhD
	Pharmaceutical Sciences	PhD
	Political Science	PhD
	Public Health Sciences	PhD
Health Care, Technology and Place	Rehabilitation Science	PhD
	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
Health Services and Policy Research	Social Work	PhD
	Exercise Sciences	MSc, PhD
	Health Policy, Management and Evaluation	MSc, PhD
	Medical Science	MSc, PhD
	Nursing Science	PhD
	Pharmaceutical Science	MSc, PhD
	Public Health Sciences	MSc, PhD
	Rehabilitation Sciences	MSc, PhD
Jewish Studies	Social Work	MSc, PhD
	Anthropology	MA, PhD
	Classics	MA, PhD
	Comparative Literature	MA
	Drama	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
	Near and Middle Eastern Civilizations	MA, PhD
	Philosophy	MA, PhD
	Political Science	MA, PhD
	Religion	MA
	Slavic Languages and Literatures	MA, PhD
	Sociology	MA, PhD
Women and Gender Studies	MA	

Program	Participating Degree Programs	Degrees
Knowledge Media Design	Architecture Computer Science Curriculum Studies and Teacher Development History and Philosophy of Education Information Information Studies Landscape Architecture Mechanical and Industrial Engineering Medical Science Sociology Urban Design Visual Studies	MArch MSc, PhD MA, MEd, PhD MA, MEd MI PhD MLA MASc, MEng, PhD MSc, PhD MA, PhD MUD MVS
Management and Economics	Economics Management	PhD PhD
Neuroscience	Biochemistry Biomedical Engineering Cell and Systems Biology Dentistry Developmental Psychology and Education Laboratory Medicine and Pathobiology Medical Biophysics Medical Science Molecular Genetics Pharmaceutical Sciences Pharmacology Physiology Psychology Rehabilitation Science Speech-Language Pathology	MSc, PhD MASc, MSc, PhD MSc, PhD MSc, PhD MA, PhD MSc, PhD MSc, PhD MSc, PhD MSc, PhD MSc, PhD MSc, PhD MSc, PhD MSc, PhD MSc, PhD MA, PhD MSc, PhD MSc, PhD
Optics	Chemistry Electrical and Computer Engineering Materials Science and Engineering Physics	MSc MASc MASc MSc
Resuscitation Science	Biomedical Engineering Clinical Engineering Community Health Health Policy, Management and Evaluation Immunology Laboratory Medicine and Pathobiology Mechanical and Industrial Engineering Medical Science Nursing Science Pharmaceutical Sciences Pharmacology Physiology Public Health Sciences Rehabilitation Science	PhD MHSc MHScCH MSc, PhD MSc, PhD MSc, PhD MASc, MEng, PhD MSc, PhD MN, PhD MSc, PhD MSc, PhD MSc, PhD MPH, MSc, PhD MSc, PhD

Program	Participating Degree Programs	Degrees
Sexual Diversity Studies	Anthropology Cinema Studies Classics Counselling Psychology Criminology Curriculum Studies and Teacher Development Drama East Asian Studies Educational Administration English Exercise Sciences Higher Education History History and Philosophy of Education History of Art History and Philosophy of Science and Technology Information Information Studies Italian Studies Law Linguistics Medieval Studies Museum Studies Music Near and Middle Eastern Civilizations Philosophy Political Science Psychology Public Health Sciences Public Policy Religion Social Work Sociology Sociology in Education Visual Studies Women and Gender Studies	MA, MSc, PhD MA MA, PhD MA, MEd, EdD, PhD MA, PhD MA, MEd, PhD MA, PhD MA, PhD MA, MEd, EdD, PhD MA, PhD MSc, PhD MA, MEd, EdD, PhD MA, PhD MA, MEd MA, PhD MA, PhD MI PhD MA, PhD LL.M, MSL, SJD MA, PhD MA, PhD MMSt MA, PhD MA, PhD MA, PhD MA, PhD MPH, MSc, PhD MPP MA, PhD MSW, PhD MA, PhD MA, MEd, EdD, PhD MVS MA
South Asian Studies	Anthropology East Asian Studies English Geography History Music Political Science Religion Sociology in Education Women and Gender Studies	MA, MSc, PhD MA, PhD MA, PhD MA, PhD MA, PhD MA, PhD PhD MA, PhD MA, MEd, EdD, PhD MA

Program	Participating Degree Programs	Degrees
Women and Gender Studies	Adult Education and Community Development Anthropology Cinema Studies Classics Comparative Literature Counselling Psychology Criminology Curriculum Studies and Teacher Development Drama Educational Administration English Exercise Sciences French Language and Literature Geography Germanic Literature, Culture and Theory Health Administration Health Policy, Management and Evaluation Higher Education History History and Philosophy of Education Information Law Medieval Studies Near and Middle Eastern Civilizations Nursing Science Philosophy Political Science Public Health Sciences Religion Second Language Education Social Work Sociology Sociology in Education Spanish	MA, MEd, EdD, PhD MA, MSc, PhD MA MA, PhD MA, PhD MA, MEd, EdD, PhD MA, PhD MA, MEd, EdD, PhD MA, PhD MA, MEd, EdD, PhD MA, PhD MSc, PhD MA, PhD MA, MSc, PhD MA, PhD MHSc, MSc, PhD MSc, PhD MA, MEd, EdD, PhD MA, PhD MA, MEd MI, PhD LL.M., SJD MA, PhD MA, PhD MN, PhD MA, PhD MA, PhD MPH, PhD MA, PhD MA, MEd, PhD MSW, PhD MA, PhD MA, MEd, EdD, PhD MA, PhD
Women's Health	Anthropology Dentistry English Exercise Sciences Health Policy, Management and Evaluation Immunology Information Medical Science Nursing Science Nutritional Sciences Occupational Therapy Pharmacology Psychology Public Health Sciences Rehabilitation Science Religion Women and Gender Studies	MA, MSc, PhD MSc, PhD MA, PhD MSc, PhD MSc, PhD MSc, PhD MI, PhD MSc, PhD MN, PhD MSc, PhD MScOT MSc, PhD MA, PhD MPH, PhD MSc, PhD MA, PhD MA
Workplace Learning and Social Change	Adult Education and Community Development Sociology in Education	MA, MEd, PhD MA, MEd, EdD, PhD

Diploma Programs

Graduate Unit	Program Name	Diploma
Information	Advanced Study in Information Studies	GDiplSt ^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 (PMNP)
Professional Graduate Programs Centre (Mississauga)	Investigative and Forensic Accounting	DIFA
Social Work	Advanced Diploma in Social Service Administration	DSSA

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

flex Flexible-time program option available in addition to full-time program

*** Admissions suspended

General Regulations

Exemptions

The Graduate Education Council of the School of Graduate Studies (SGS) 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 homepage.

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 approximately 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 fulfill 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 specialty. 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 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; as a member of thesis committees; 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 admit-

ted 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.

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. Admissions 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. Many graduate units have additional 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. Admissions 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

General Regulations

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, or its equivalent, 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 Students Holding Graduate Degrees Registered as Graduate Students

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

General Regulations

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 a 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, and 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
PO Box 6151
Princeton, New Jersey
08541-6151 USA
Web: www.toefl.org

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.

5.5.5 International ESL—Academic Preparation Level 60 (Advanced)

School of Continuing Studies
University of Toronto
158 St. George Street
Toronto, Ontario
M5S 2V8 Canada
E-mail: scs.registrar@utoronto.ca
Web: <http://learn.utoronto.ca/esl>
Required score: B

5.5.2 Michigan English Language Assessment Battery (MELAB)

English Language Institute (ELI)
University of Michigan
Ann Arbor, Michigan
48109-1057 USA
Web: www.lsa.umich.edu/eli/testing/melab
Required score: 85

5.5.3 International English Language Testing System (IELTS)

University of Cambridge Local Examinations
Syndicate
1 Hills Road
Cambridge, UK
CB1 2EU
Web: www.ielts.org

Applicants may also contact their nearest British Council Office. Note that applicants must take the academic module of this test.
Required score: 7.0

5.5.4 The Certificate of Proficiency in English (COPE)

COPE Testing Limited
429 Danforth Avenue
PO Box 462
Toronto, Ontario
M4K 1P1 Canada
E-mail: info@copetest.com
Web: www.copetest.com
Required score: 76 minimum total with at least 22 in each component and 32 in writing

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–December), the winter session (January–April), and the summer session (May–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 Graduate Programs 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 Graduate Programs 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 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 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 of the University of Toronto (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 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. See Degree Regulations, 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 for further information.

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–August or January–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–August session, the maximum possible load is 2.0 full-course equivalents (FCEs). The maximum load in the May–June or July–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 for Students on Extension, in the Fees and Financial Support 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 for Students on Extension in the Fees and Financial Support 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 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.

General Regulations

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–January 31 or January 1–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 27 for September dual registrants, or by April 20 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.

7.1.13 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.

7.1.14 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 department. 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.

7.1.15 Withdrawal from a Graduate Program

In order to withdraw from a program, students must submit a Program Withdrawal Form (www.sgs.utoronto.ca/informationfor/students/inform/stuforms.htm) to the School of Graduate Studies and return student cards to SGS. 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.

7.1.16 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).

7.1.16.1 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.

7.1.16.2 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.

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

General Regulations

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

Sep. 26, 2011	Deadline to add full courses (Y) and half courses (H).
Oct. 31, 2011	Deadline to drop a fall session full course or half course without academic penalty.
Jan. 23, 2012	Deadline to add winter session full courses (Y) and half courses (H).
Feb. 27, 2012	Deadline to drop a full course (Y) or winter session half course (H), or withdraw from a program 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 7.1.15 Withdrawal from a Graduate Program.

7.2.3 Completion of Coursework and Grade Submission

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

Jan. 13, 2012	Fall session (Y, H) courses
May 11, 2012	Fall/winter session (Y) and winter session (Y, H) courses <small>*For students receiving degrees at June convocation, grades must be submitted by April 24.</small>
Jul. 20, 2012	May/June summer session courses
Sept. 14, 2012	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.

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 extensions, 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 11, 2012	Fall session (Y, H) courses
Sept. 14, 2012	Fall/winter session (Y) and winter session (Y, H) courses
Jan. 11, 2013	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 toward 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 toward 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 time line 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 toward 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

General Regulations

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	within four years of initial registration

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 section 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 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 the 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 Graduate Programs 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 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* (available online at www.sgs.utoronto.ca/Assets/SGS+Digital+Assets/current/current+pdf/superv.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* (available online at www.sgs.utoronto.ca/Assets/SGS+Digital+Assets/current/current+pdf/superv.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 (SGS), 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 exami-

nation 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 one voting member 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. 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 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 commit-

tee. 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 fulfill the requirements of the doctoral degree. In addition to determining the adequacy of the thesis, the committee must satisfy itself that the thesis document meets the proper standards of scholarship.

The committee possesses the full authority of the School of Graduate Studies with respect to the examination.

11. A quorum for the final examination is four voting members, 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 examina-

General Regulations

- tion to obtain a quorum or may postpone the examination to another date.
12. The candidate passes on the first examination:
- if the decision is unanimous; or
 - if there is not more than one negative vote or abstention.
- If there is more than one negative vote or abstention, adjournment is mandatory.
- In the event of adjournment, the examination committee must provide the candidate, as soon as possible, with a written statement that indicates the reasons for adjournment and the committee's requirements for the reconvened oral examination. In addition, the examination committee must decide the approximate date of the reconvened examination. The time between the adjourned examination and the reconvened examination should be as short as circumstances will permit and in no case shall exceed one year.
- At the reconvened examination, no new committee members shall be added, except for necessary replacements. It is the obligation of the examiners to attend the reconvened examination.
- The candidate passes on the reconvened examination:
- if the decision is unanimous; or
 - if there is not more than one negative vote or abstention.
- No further adjournment will be allowed.
- If a candidate is not recommended for the degree by the committee in charge of the second examination, the candidate is ineligible for further doctoral candidacy at the university. The examination committee must provide the candidate, as soon as possible, with a written statement that explains clearly and directly why the examiners found the candidate's performance unsatisfactory on the written and/or oral components of the examination, as may be relevant.
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 & 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 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

STEPS AND TIMELINES		
TIMELINE FOR STUDENT ACTION AT EACH STAGE <i>See Note A below.</i>	STEP <i>See Note B below.</i>	TIMELINE FOR DECISION/ ACTION BY UNIVERSITY BODY AT EACH STAGE <i>See Note C below.</i>
	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

policy as “Graduate Coordinator”) and/or Chair of the department.

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 Graduate Grading and Evaluation Practices Policy

There are currently two grading policies affecting graduate students: the Graduate Grading and Evaluation Practices Policy (GGEPP) and the University Grading Practices Policy (UGPP). Both are under review. The text of the GGEPP is provided here. The university-wide UGPP is accessible at www.governingcouncil.utoronto.ca/policies/grading.htm.

Purpose

The purpose of the Graduate Grading and Evaluation Practices Policy is to ensure that:

1. grading practices in the School of Graduate Studies are consistent with those throughout the university and reflect appropriate academic standards;
2. the evaluation of student performance is made in a fair and objective manner against these academic standards; and
3. grade scales in the School of Graduate Studies are compatible with those in other divisions of the university.

Application of Policy

The policy applies to all individuals and committees taking part in the evaluation of student performance in courses in the School of Graduate Studies.

Amendment to Policy

Amendments to the policy shall be recommended by the School of Graduate Studies Council through the Committee on Academic Policy and Programs to the Academic Board.

Distribution of Policy

A copy of the Graduate Grading and Evaluation Practices Policy shall be published in the *SGS Calendar*. A copy of the calendar or other document containing the policy shall be given to all students upon initial registration and to all instructors and others involved in the evaluation of student performance.

The policy is in three parts: Part I deals with grades, Part II outlines grading procedures, and Part III is the administrative appendix from the University Grading Practices Policy for undergraduate divisions, available upon request from the Graduate Student Services Office.

Part I: Grades

Meaning of Grades

Grades are a measure of the performance of a student in individual courses. Each student shall be judged on the basis of how well he or she has command of the course materials.

- I.1 A grade assigned in a course is not an assessment of standing within a program of studies. To determine the requirements for credit and standing in a program of studies, the academic regulations of the School of Graduate Studies and the appropriate graduate department, centre, or institute should be consulted.
- I.2 Grades for each course shall be assigned with reference to the following meanings:
Excellent
Good
Adequate
Inadequate

Grade Scales

- I.3 Courses taken for graduate credit are assigned a letter grade according to the School of Graduate Studies usage as follows:

Letter Grade	Grade Meaning
A+	Excellent
A	
A-	
B+	Good
B	
B-	
FZ	Inadequate

Wherever an undergraduate course taken by a graduate student is assigned a numerical grade, the mark will be translated into a letter grade according to the following equivalencies:

Letter Grade	Grade Meaning
A+	90%–100%
A	85%–89%
A-	80%–84%
B+	77%–79%
B	73%–76%
B-	70%–72%
FZ	0–69%

Credit/No Credit Courses

A special category of graduate courses designated in graduate unit listings will be graded Credit (CR) or No Credit (NCR). Such courses are to be offered at the option of the graduate unit and must have the approval of the executive committee of the appropriate Division. CR and NCR evaluations are assigned for courses in which only very broad distinctions in assessing the quality of student performance are judged appropriate.

Non-grade Course Reports

The following non-grade course reports may appear on transcripts:

INC	Incomplete: Assigned as a final report by a graduate unit review committee or SGS Vice-Dean on the basis of incomplete coursework in special circumstances (e.g., medical reasons or when there are no grounds for assigning a failing grade). INC carries no credit for the course and is not considered for averaging purposes.
IPR	In Progress: Assigned by the instructor as the report for a course which is continued in a subsequent session or program. The final grade for the course will appear only once and only for the last enrollment period. IPR carries no credit for the course and is not considered for averaging purposes.
NGA	No Grade Available: Assigned by the division in the extraordinary case that a grade is not available for one of its students enrolled in a course. It must be replaced by a regular grade assigned by the instructor or by another symbol assigned during the divisional review. It carries no credit for the course and is not considered for averaging purposes.
SDF	Standing Deferred: Assigned by a graduate unit review committee to a student who has been granted an extension for the completion of coursework beyond the SGS deadline for completion of coursework, pending receipt from the instructor of a final course report. A 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, a final grade is not available and the student has not submitted the outstanding coursework, then the report of SDF will be replaced by a final report of INC. SDF carries no credit for the course and is not considered for averaging purposes.
TRF	Program Transfer: Assigned by the School of Graduate Studies to a continuing research/ seminar course begun but not completed in the first program and not required in the new program to which the student has been officially transferred.
WDR	Withdrawal without academic penalty: Assigned by the graduate unit review committee, when there are extenuating circumstances, upon approval of the student's request for late withdrawal from a course. It carries no credit for the course and is not considered for averaging purposes.

All grade revisions must be submitted to the School of Graduate Studies according to the SGS revised grade procedures.

I.4 A table of correspondence and a translation table are defined in the appendix for each letter grade scale included in the University Grading Practices Policy in order to allow the conversion, when necessary, of a grade assigned from one scale to the corresponding grade in the other.

Grade Reporting

I.5 All letter grades assigned to graduate students enrolled in School of Graduate Studies courses shall be from the same scale, but, where approved, the CR/ NCR scale may also be used. The grades assigned in a course must all be from the same scale except that non-SGS students in graduate courses will be assigned grades from the refined letter grade scale or the numerical scale of marks as found in Part III.

I.6 Grades in each course shall be reported according to the practice of the division administering the program in which the student is registered (the reporting division).

- Grades shall be reported as assigned when the division offering the course is also the reporting division, when the offering and reporting divisions use the same grade scale, and when the grades are assigned from the H/P/FL or CR/NCR scales.
- In all other cases, grades shall be reported as converted to the scale used by the reporting division, and the conversion shall be made according to the tables of correspondence and translation tables defined in the appendix.

I.7 A list of the currently approved non-grade symbols and their meanings is given in the appendix of the University Grading Practices Policy. Those used by the School of Graduate Studies appear in the table above and have in some cases been modified for graduate courses.

I.8 The information in grade reports and transcripts must be communicated to the user, whether within or outside the university, in a clear and meaningful way. To that end, transcripts issued by the School of Graduate Studies must indicate

the relationships between the graduate grade scale, the grade meanings, the basic letter grade scale, and the scale of numerical marks, as well as the translation table. A list of non-grade symbols and meanings shall also be included in the transcript.

Commentary, as appropriate in the instructor's judgement, on final examinations and time for discussion of it shall be made available to students at their request.

- e. Grades shall be recommended by the instructor in reference to the approved grade scales on the basis of each student's performance.

Part II: Grading Procedures

Course Procedures

II.1 To ensure that the method of evaluation in every course reflects appropriate academic standards and fairness to students, the School of Graduate Studies has adopted these regulations governing course procedures.

- a. As early as possible in each course (and no later than the School of Graduate Studies' last date for course enrolment), the instructor shall make available to the class and shall file with the department, centre, or institute the method(s) by which student performance shall be evaluated.

This information should describe the method(s) (essays, tests, examinations, seminar presentations, etc.), the relative weight of these method(s) in relation to the overall grade, and the timing of each major evaluation.

Any penalties for late completion of and for failure to complete work, should be announced at the time the instructor makes available to the class the method(s) by which student performance shall be evaluated.

- b. After the method(s) of evaluation have been made known, the instructor may not change them or their relative weight without the consent of at least a simple majority of the students enrolled in the course. Any changes shall be reported to the department, centre, or institute.
- c. The relative value of each part of an examination shall be indicated to the student at the time of the examination. In the case of a written examination, the value of each part shall be indicated on the examination paper.
- d. Commentary, as appropriate in the instructor's judgement, on assessed work other than final examinations and time for discussion of it shall be made available to students.

Examinations

II.2

- a. Students should be provided with clear information about the expectations of the examiners, including the types of anticipated questions.
- b. Students should have the opportunity to review their answers in written examinations within four months of the reporting of the grades. A recovery fee may be set to cover administrative costs, including photocopying.
- c. The School of Graduate Studies has developed a procedural guide for the re-reading, by an external reviewer, of examinations written for courses by graduate students. It is to be used only when departmental appeal mechanisms have been exhausted. Costs of preparing materials for the external reader are shared between the graduate unit and the student.

Other Departmental Assessments

II.3

Departments, centres, or institutes may expect graduate students to complete requirements for a degree other than coursework, such as departmental examinations, language examinations, fieldwork, or internships. Graduate students should be given a written statement describing the evaluation processes. It is appropriate that departmental evaluations of performance in these settings should accord with the principles enunciated in the other sections of this Graduate Grading and Evaluation Practices Policy, and that the effect upon deadlines of disruptions to academic programs, as described below, be taken into account. Students should also be informed of procedures for appeal.

Grade Review and Approval Process

II.4

- a. Grades shall be recommended by the instructor to the Chair or Director (or designate) of the graduate department, centre, or institute. The grades shall then be reviewed and approved following the graduate unit's procedure. Grades shall not be reported or released to students as official until this review procedure has been carried out. Normally, the graduate unit's review and approval by the Chair or Director constitutes final approval of grades, under the authority of the Dean of the School of Graduate Studies. Grades may be changed on appeal by the student, following the procedures of the School of Graduate Studies. Decisions regarding these matters will be made by the chair of the department.
- b. The distribution of grades in any course shall not be predetermined by any system of quotas that specifies the number or percentage of grades allowable at any grade level.
- c. The graduate unit's review of grades may result in the request for clarification of the evaluation methods used, or of apparent anomalies in the list of grades in a course. In the case of anomalies, the chair or director, or designate, must discuss the grade(s) with the instructor; no grade should be changed without such discussion. In the event the matter is not settled to the mutual satisfaction of the chair or director, or designate, and the instructor, the matter shall be referred to the Vice-Dean of the School of Graduate Studies. If it is not settled at that level it should be referred to the Dean of the School of Graduate Studies, whose authority for the assigning and reporting of grades is final (subject only to the formal SGS appeals procedures).
- d. At any time, the School of Graduate Studies may request an explanation of any grades for a course that appear not to be based on the approved grade scales or otherwise appear anomalous in reference to this policy.

Exceptional Circumstances and Academic Appeals

II.5

- a. Students with health problems or other personal circumstances that may adversely affect their performance in or their ability to complete coursework, examinations, or other departmental assessments may request special consideration. Requests, supported by a medical certificate or other appropriate evidence, should be submitted to the instructor or the Coordinator of Graduate Studies as soon as possible or within 48 hours of the deadline or date of assessment. The medical certificate must confirm the student was adversely affected by the health problems and must show the dates of illness and that the physician was consulted at the time of the illness.
- b. Students may on occasion dispute substantive or procedural academic matters, including grades. The recommended route for the resolution of such disputes is to discuss the matter first with the instructor or the person whose ruling is in question. If the dispute persists, the student may wish to pursue a formal academic appeal; see General Regulations section 11 Academic Appeals Policy.

Conflict of Interest

- II.6** When the instructor or a student has a conflict of interest, or is in a situation where a fair and objective assessment may not be possible, this should be disclosed to the chair or director, or designate, who shall take steps to ensure fairness and objectivity.

Procedures in the Event of Disruption

II.7

- a. In the event of disruption of the graduate academic program, the following principles shall apply:
 - i. the academic integrity of academic programs must be honoured; and
 - ii. students must be treated in a fair manner, recognizing their freedom of choice to attend class and to use academic facilities, or not, without penalty. Decisions regarding these matters will be made by the Chair of the department.

- b. The Vice-President and Provost, or the Academic Board, shall declare when a disruption of the graduate academic program has occurred. The Provost shall take steps to inform the university community at large of the changes to be implemented, and will report to the Committee on Academic Policy and Programs regarding the implementation of the procedures and changes to the status of the academic programs.
- c. Instructors responsible for courses that are disrupted shall determine, as the disruption proceeds, whether any changes to classroom procedures are needed to complete the course.
- d. Changes in classroom procedures should, where possible, first be discussed with students prior to the class meeting in which a vote is to be taken by the students present on the proposed changes. Changes agreed upon unanimously should be forwarded to the chair or director, or designate, with a report on the attendance at the class.

If unanimity on changes has not been arrived at, or where a vote is not feasible, the instructor, after the class discussion, will provide the chair or director, or designate, with his or her recommendation, along with the results of any classroom votes. The Chair or Director (or designate) shall then make a decision.
- e. If classes are not able to convene, the instructor, with the prior approval of the Chair or Director (or designate) shall make changes deemed necessary to the classroom procedures.
- f. In the absence of the instructor such changes will be made by the Dean in consultation with the Chair or Director (or designate) and with the approval of the Provost.
- g. If courses are to be cancelled, approval of the SGS Council is required. If the council cannot meet, the approval of the Dean—or in the absence of the Dean, the approval of the Provost—is required.
- h. Students must be informed of changes to classroom procedures. This may be done by circulating the changes in writing to the class, posting in the office of the graduate unit, reporting to SGS Council, as well as listing in the campus press. When classes resume, students must be informed, at class, of any changes made during the disruption.
- i. If changes to the classroom procedures are made, students who do not wish to complete the course under the revised procedures may withdraw without academic penalty. This must be done prior to the last day of classes.
- j. If students have not attended classes that are meeting, they nonetheless remain responsible for the coursework and for fulfilling course requirements. However, where possible, reasonable extension of deadlines for course requirements, or provision for make-up tests, shall be made. Reasonable alternative access to material covered should be provided.
- k. A student who feels, owing to his or her special circumstances, that changes to classroom procedures have unreasonably affected his or her grade may appeal the grade following procedures for appeal set out above.

Part III: Administrative Appendix

Available at www.governingcouncil.utoronto.ca/policies/grading.htm.

12.2 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/.

12.3 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 *SGS Student Guide on Ethical Conduct of Research Involving Human Subjects* on the SGS website at www.sgs.utoronto.ca/governance/policies/ethicresearch.htm.

12.4 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.

For a complete online text of this policy, see the Governing Council website: www.governingcouncil.utoronto.ca/policies/sanction.htm.

12.5 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, 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.

12.6 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 insures 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 the policy and procedures is available at www.governingcouncil.utoronto.ca/policies/sexual.htm.

12.7 Code of Student Conduct

Students have an obligation to make legal and responsible decisions concerning their conduct. The university has no gen-

eral 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.

12.8 Policy on Access to 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 Policy on Access to Student Academic Records establishes university-wide aims, objectives, criteria, and procedures that apply to the academic records of students.

The Policy ensures 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 Policy calls for basic university-wide consistency in the kinds of information collected, recorded, filed and made available.

The complete Policy on Access to Student Academic Records is available on the University of Toronto website at http://www.governingcouncil.utoronto.ca/policies/Guidelines_Concerning_Access_to_Official_Student_Academic_Records.

12.9 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.

12.9.1 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.

12.9.2 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.

12.9.3 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.

To read an online version of this policy, visit www.governingcouncil.utoronto.ca/policies/studentemail.htm.

12.10 Safety in Field Research

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 University of Toronto 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 policy 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.

12.11 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 guidelines is posted on the Provost's website at www.provost.utoronto.ca/policy/use.htm.

12.12 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 the Good Academic Standing requirements in the General Regulations section of this calendar.

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 has 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

Degree Regulations

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 section, including 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, Good Academic Standing section 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 final doctoral 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 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 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 to 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 Good 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 Graduate Programs 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 in General Regulations.

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:

- Adult Education and Counselling Psychology
- Sociology and Equity Studies in Education
- Theory and Policy Studies in Education

1.2.2 Program Requirements

For specific program and registration requirements, see the Graduate Programs 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 a 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 specific graduate-unit entry for details.
5. A thesis embodying the results of original investigation conducted by the student under the direction of an 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 section, including Good 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 section, including Good 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 section, including applicable good 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.

Degree Regulations

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
- 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:

- Adult Education and Counselling Psychology
- Curriculum, Teaching and Learning
- Human Development and Applied Psychology
- Sociology and Equity Studies in Education
- Theory and Policy Studies in 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 Graduate Programs section of this calendar unless otherwise noted. All master's students are subject to rules and regulations outlined in the General Regulations section, including good standing requirements, in addition to the degree requirements specified in the relevant graduate unit entry.

2.2.1 Master of Architecture (MArch)

See Architecture, Landscape and Design entry.

Degree Regulations

- 2.2.2 Master of Biotechnology (MBiotech)**
See Biotechnology entry in Joint Programs.
- 2.2.3 Master of Business Administration (MBA)**
Admission and program requirements for the following degree programs are outlined in the Management entry in Degree and Diploma Programs by Graduate Unit.
- Master of Business Administration in Management
 - Executive Master of Business Administration in Management
 - Global Executive Master of Business Administration in Management
- 2.2.4 Master of Engineering in Design and Manufacturing (MEngDM)**
See Advanced Design and Manufacturing entry in Joint Programs.
- 2.2.5 Master of Environmental Science (MEnvSc)**
See Physical and Environmental Sciences entry.
- 2.2.6 Master of Finance (MF)**
See Management entry.
- 2.2.7 Master of Financial Economics (MFE)**
See Financial Economics entry in Joint Programs.
- 2.2.8 Master of Forest Conservation (MFC)**
See Forestry entry.
- 2.2.9 Master of Global Affairs (MGA)**
See Global Affairs entry.
- 2.2.10 Master of Health Informatics (MHI)**
See Health Policy, Management and Evaluation entry.
- 2.2.11 Master of Industrial Relations and Human Resources (MIRHR)**
See Industrial Relations and Human Resources entry.
- 2.2.12 Master of Information (MI)**
See Information entry.
- 2.2.13 Master of Landscape Architecture (MLA)**
See Architecture, Landscape and Design entry.
- 2.2.14 Master of Laws (LLM)**
Admission and program requirements for the following degree programs are outlined in the Law entry in Degree and Diploma Programs by Graduate Unit.
- Master of Laws
 - Global Professional Master of Laws
- 2.2.15 Master of Management and Professional Accounting (MMPA)**
See Professional Graduate Programs Centre (UTM) entry.
- 2.2.16 Master of Management of Innovation (MMI)**
See Health, Policy, Management and Evaluation entry.
- 2.2.17 Master of Mathematical Finance (MMF)**
See Mathematical Finance entry.
- 2.2.18 Master of Museum Studies (MMSt)**
See Information entry.

- 2.2.19 Master of Music (MMus)**
See Music entry.
- 2.2.20 Master of Nursing (MN)**
See Nursing Science entry.
- 2.2.21 Master of Public Health Science (MPH)**
See Public Health Sciences entry.
- 2.2.22 Master of Public Policy (MPP)**
See Public Policy and Governance entry.
- 2.2.23 Master of Science in Applied Computing (MScAC)**
See Computer Science entry.
- 2.2.24 Master of Science in Biomedical Communications (MScBMC)**
See Medical Science entry.
- 2.2.25 Master of Science in Community Health (MScCH)**
See Public Health Sciences entry.
- 2.2.26 Master of Science in Forestry (MScF)**
See Forestry entry.
- 2.2.27 Master of Science in Occupational Therapy (MScOT)**
See Occupational Science and Occupational Therapy entry.
- 2.2.28 Master of Science in Physical Therapy (MScPT)**
See Physical Therapy entry.
- 2.2.29 Master of Science in Planning (MScPI)**
See Geography entry.
- 2.2.30 Master of Social Work (MSW)**
See Social Work entry.
- 2.2.31 Master of Studies in Law (MSL)**
See Law entry.
- 2.2.32 Master of Teaching (MT)**
See Curriculum, Teaching, and Learning entry.
- 2.2.33 Master of Urban Design (MUD)**
See Architecture, Landscape and Design entry.
- 2.2.34 Master of Urban Design Studies (MUDS)**
See Geography entry.
- 2.2.35 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 at www.fees.utoronto.ca.

Fees and Registration

Students are informed of fees payable online through ROSI (Repository of Student Information). University of Toronto students normally pay tuition fees at a branch of a financial institution (bank) 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. 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. 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 course work only, the length of program will be determined by the number of full-course equivalents (FCE) 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 7.1.14 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.

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 first fee payment is due by the end of the September registration period and consists of 60% of the academic fee and 100% of incidental fees. 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.

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), first assessed on November 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 normal program length must pay a balance of degree fee.

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 section 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 28, 2011, 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.

Fees and Financial Support

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.

Fees for Students on Extension

PhD students, full-time students in other doctoral programs, and full-time master's 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 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 12.4 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

Financial Aid

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 Scholarship 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. International students are eligible for the Vanier Canada Graduate Scholarships only.

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. Sixty of these awards are available to visa students.

Ontario Graduate Scholarships in Science and Technology (OGSST) 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 the tri-council websites 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. Sixty of these awards are available to visa students.

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 Need

Emergency Grant Program

The Emergency Grant Program is designed to assist currently registered, full-time graduate students beyond their first year of studies 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

Fees and Financial Support

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.

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.

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 email to graduate.awards@utoronto.ca.

Further Information on Financial Support

Visit

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

Contact

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

Telephone: (416) 978-2379

Fax: (416) 971-2864

Email: graduate.awards@utoronto.ca or
gradschool@utoronto.ca

Services for Students

The University of Toronto offers a variety of student support and opportunities to its graduate students on all three campuses.

<http://life.utoronto.ca/>

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

Listed here is a sampling, grouped by category, of many of the commonly sought-after organizations and services. The online version of the *SGS Calendar* provides current information and details: www.sgs.utoronto.ca/calendar/2011-12.htm.

Academic Support and Professional Development

The university helps graduate students face the challenges of succeeding in their studies by offering services, staffed by experts, to support scholars in meeting the demands of advanced research. Development programs are also offered to prepare students for life following graduation.

Academic Success Centre (ASC)
Career Centre (St. George, UTM, UTSC)
English Language and Writing Support (ELWS)
Graduate Professional Skills (GPS) Program
Research Ethics, Office of
Research Partnerships
Status of Women Office
Teaching Assistants' Training Program (TATP)

Campus Life—Finding Community

Connecting with the university community beyond your graduate program is part of a rewarding graduate school experience.

Community Partnerships, Centre for Governing Council (GC)
Grad Escapes
Grad Room
gradNAV
Graduate Education Council (GEC)
Graduate Students' Union (GSU)
Hart House Clubs, St. George
University of Toronto at Mississauga Clubs
University of Toronto at Scarborough Clubs

Equity and Diversity

As a university committed to human rights and equal opportunity, U of T offers a range of resources and services to foster an accessible and inclusive university experience, along with expert guidance in the event of harassment or discrimination.

Accessibility Services (St. George, UTM, UTSC)
Anti-Racism and Cultural Diversity Office
Centre for Women and Trans People
First Nations House
Multi-Faith Centre, St. George
Sexual and Gender Diversity Office
Sexual Harassment Office
Status of Women Office
Women's Centre (UTM)

Family Care

Programs enable parents to spend time with their children and interact with other student families. In addition, U of T has several licensed child-care centres that offer priority to U of T parents.

Child Care Resources, UTM
Child Care, UTSC
Family Care Office
Family Resource Centre

Health and Wellness

Services and advice to ensure the health and well-being of graduate students.

Counselling and Psychological Services (CAPS)
Dentistry Patient Clinic
St. George Health Service
University Health Insurance Plan (UHIP)
UTM Health and Counselling Centre
UTSC Health and Wellness Centre

Housing

Student housing is available on all three U of T campuses. Limited family housing is available near the St. George campus and at the University of Toronto Mississauga.

Graduate House
Knox College
St. George Student Family Housing
Student Housing Service
Temporary and Emergency Housing
UTM Student Housing and Residence Life
UTSC Student Housing and Residence Life
Wycliffe College

International Students

International graduate students can benefit from services that help them negotiate the sometimes confusing process of living and studying in a foreign country.

Centre for International Experience, St. George
Graduate Students' Union (GSU)
International Student Centre at UTSC
International Student Identity Card (ISIC)
International Centre at UTM
University Health Insurance Plan (UHIP)
University of Toronto Summer Abroad

Legal

U of T offers services that provide legal and procedural advice when the need arises.

Downtown Legal Services
Ombudsperson

Money Matters

Seek out U of T services to navigate the complex process of considering funding options and the benefits and responsibilities of each.

Graduate Awards Office
Graduate Students' Union (GSU)

Recreation

There are plenty of opportunities to engage in sports and athletic programs within the university community or to simply work out solo.

Athletic Centre, St. George
Centre for Physical Education at UTM
Graduate Students' Union (GSU) Gym
Hart House Athletics
UTSC Athletics & Recreation

Safety

Stay safe while living and studying on campus or when participating in a student internship or exchange abroad.

Campus Police
Community Safety Office
Fire Prevention
Environmental Health and Safety
Ridesafer @ UTSC
Safety Abroad Program
WALKsafer (St. George, UTM)
UTSC Patrol

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, approximately 40 collaborative (interdisciplinary) programs, and several 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.

Adult Education and Counselling Psychology

Faculty Affiliation

Ontario Institute for Studies in Education

Degree Programs Offered

Adult Education and Community Development – MA, MEd, PhD
Counselling Psychology – 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, PhD
 - Counselling Psychology, MA, PhD
2. **Addiction Studies**
 - Counselling Psychology, MA, PhD
3. **Aging, Palliative and Supportive Care Across the Life Course**
 - Adult Education and Community Development, MA, MEd, PhD
 - Counselling Psychology, MA, MEd, EdD, PhD
4. **Community Development**
 - Adult Education and Community Development, MA, MEd
 - Counselling Psychology, MA, MEd
5. **Comparative, International and Development Education**
 - Adult Education and Community Development, MA, MEd, PhD
6. **Dynamics of Global Change**
 - Adult Education and Community Development, PhD
7. **Educational Policy**
 - Adult Education and Community Development, MA, MEd, PhD
8. **Environmental Studies**
 - Adult Education and Community Development, MA, MEd, PhD
 - Counselling Psychology, MA, MEd, EdD, PhD
9. **Sexual Diversity Studies**
 - Counselling Psychology, MA, MEd, EdD, PhD
10. **Women and Gender Studies**
 - Adult Education and Community Development, MA, MEd, PhD
 - Counselling Psychology, MA, MEd, EdD, PhD
11. **Workplace Learning and Social Change**
 - Adult Education and Community Development, MA, MEd, PhD

Overview

The Department of Adult Education and Counselling Psychology is the second largest of the five departments within the Ontario Institute for Studies in Education (OISE) and offers a full range of graduate degrees—Master of Arts, Master of Education, **Doctor of Education**, and Doctor of Philosophy—in each of two major programs:

- Adult Education and Community Development
- Counselling Psychology

The Adult Education and Community Development (AECD) program provides a place to study and contribute to theory, practice, and policy concerning adult learning in organizations, communities, workplaces, and social movements in local, national, and international contexts. We are an interdisciplinary program which highlights critical social analysis, transformative learning, creative inquiry, and international/global awareness. Perspectives represented in the program include: aboriginal/indigenous; anti-racist/anti-colonial; feminist; environmental/ecological; socialist/Marxist.

The Adult Education and Community Development program faculty are involved in research in the following areas:

- Aboriginal/Indigenous Education
- Workplace Learning and Change
- Creative Inquiry and Adult Learning
- Community, International, and Transformative Learning

The Counselling Psychology program is designed to provide critical and scholarly skills in counselling and counsellor education and to train counsellors and psychologists in the general domain of human services. The Counselling Psychology program offers three fields of specialization:

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

Contact and Address

Admissions

For application information and forms, visit the Registrar's Office website, www.ro.oise.utoronto.ca.

Email: gradstudy@oise.utoronto.ca

Telephone: (416) 978-1682

The Ontario Institute for Studies in Education (OISE)
 University of Toronto
 Registrar's Office
 Graduate Studies, Admissions Unit
 Room 4-485, 252 Bloor Street West
 Toronto, Ontario M5S 1V6
 Canada

Degree and Diploma Programs by Graduate Unit

Admission enquiries should be made well in advance of the regular deadline for receipt of applications. Given the limited number of students the department may accept into the majority of its programs, not all eligible applicants will be admitted.

Program Information
Web: aecp.oise.utoronto.ca
Fax: (416) 926-4749

Department of Adult Education and Counselling
Psychology
The Ontario Institute for Studies in Education (OISE)
University of Toronto
7th Floor, 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

- An appropriate bachelor's degree in a relevant discipline or professional program from a recognized university, with a grade equivalent to a University of Toronto 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

- 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 a full-time and flexible-time PhD. Full-time PhD students must complete their degree within six years; flexible-time PhD students must complete their degree within eight years.

Minimum Admission Requirements

- 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 course 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 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

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

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

Degree and Diploma Programs by Graduate Unit

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 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

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-better in the final year.

Program Requirements

- The MA in Counselling Psychology for Psychology Specialists consists of 4.0 full-course equivalents (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 taken 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 program of study must be taken on a full-time basis and progress in the program will be reviewed annually.

The Counselling Psychology program offers both a full-time and flexible-time PhD. 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. See the *OISE Bulletin* for further information.

Program Requirements

- The PhD program requires a minimum of 5.0 full-course equivalents (FCEs), including practicum AEC 3217Y and internship AEC 3268Y. See below for details.
- Practicum: Complete a 500-hour practicum in conjunction with the doctoral practicum course AEC 3217Y.
- Internship (AEC 3268Y): 2,000 hours of internship. 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. MEd students can also pursue research in the area of Work and Career which is offered jointly by the Counselling Psychology program and the Adult Education and Community Development program.

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.

Degree and Diploma Programs by Graduate Unit

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 may be admitted to the EdD program via one of two routes:
 - from a bachelor's degree: an appropriate bachelor's degree of any background or discipline from a recognized university, with high academic standing
 - from 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 (AEC 3270H). Complete 500 hours of internship. 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

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

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.

Normal Program Length: 5 years full-time

Time Limit: 6 years full-time

Field Guidance and Counselling

Master of Education

This 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
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

- 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.

program's specialization requirements. For descriptions, see the relevant programs.

AEC 1173H	Creativity and Wellness: Learning to Thrive
AEC 3173H	Effecting Change: Creating Wellness
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
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

Graduate Faculty

Full Members

Antone, Eileen - AB, BE, MEd, EdD
 Burstow, Bonnie - BA, MEd, MA, PhD
 Chen, Charles - BA, MEd, MA, PhD
 Gillis, Joseph - BSc, MA, PhD
 Guttman, Mary Alice - BEd, MSc, PhD
 Jackson, Nancy - BA, MA, PhD (**Associate Chair**)
 Knowles, J Gary - MS, EdD
 Laiken, Marilyn - BA, MA, PhD
 Miles, Angela - BA, MA, PhD
 Mirchandani, Kiran - BA, MPH, PhD
 Mojab, Shahrzad - BA, MEd, EdD
 Moodley, Roy - BA, MA, PhD
 Mundy, Karen - AB, MA, PhD
 Ng, Roxana - BA, MA, PhD
 Piran, Niva - BA, PhD
 Quarter, Jack - PhD
 Schneider, Margaret - BA, MA, PhD
 Schugurensky, Daniel - BEd, MEd, EdD
 Stermac, Lana - BSc, MA, PhD
 Volpe, Richard - BA, MA, PhD
 Watson, Jeanne - PhD (**Chair and Graduate Chair**)

Members Emeriti

Gamlin, Peter - BA, MA, PhD
 Mieztis, Solveiga - BA, MA, PhD
 Sullivan, Edmund - MA, PhD

Associate Members

Akingbola, Olakunle - BSc, MIR, MA, PhD
 Akman, Donna - PhD
 Archer, Anne - DIPP
 Armstrong, Ann - MBA, PhD
 Bernstein, Lori - BA, MA, MPH, PhD
 Blanchard, Ray - MA, PhD
 Bodnar, Ana - DBA
 Church, Kathryn - PhD

Degree and Diploma Programs by Graduate Unit

Courbasson, Christine - PhD
Jasper, Karin - BA, MA
Josefowitz, Nina - BA, MSc, PhD
Kwan, Kenneth - MEd
Langton, Calvin - PhD
Minsky, Sam - BSc, MA
Restoule, Jean-Paul - BA, MA, DPhil
Silver, Judith - BSc, PhD
Stewart, Suzanne - BA, MA
Stuckless, Noreen - PhD
Toner, Brenda - BA, MA, PhD

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 the calendar of the School of Graduate Studies 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 SGS General Regulations.

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

- Admitted under the SGS General Regulations. 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 FCEs of which 0.5 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 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.

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 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 1401H	Introduction to Composite Materials
AER 1402H	The Finite Element Method and Applications
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 MSc students only)
AER 1810H	MEng Project (for MEng students only)
JDE 1000H	Ethics in Research (Students registered in the MSc 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

Barfoot, Tim - BSc, PhD
 Damaren, Christopher - BSc, MSc, PhD
 D'Eleuterio, Gabriele - BSc, MSc, PhD
 Emami, M. Reza - BSc, MSc, PhD
 Gottlieb, James - BSc, MSc, PhD
 Grant, Peter - BSc, MSc, PhD
 Groth, Clinton - BSc, MSc, PhD
 Gulder, Omer - BSc, MSc, PhD
 Haasz, Anthony - BSc, MSc, PhD
 Hansen, Jorn - BSc, MSc, PhD
 Liu, Hugh - BSc, MSc, PhD (*Interim Associate Director; Graduate Coordinator*)
 Martins, Joaquim - MEng, MSINAE, PhD
 Sislian, Jean - MSc, PhD, PhD
 Stangeby, Peter - BSc, MSc, PhD
 Steeves, Craig - BA, BSc, PhD
 Zee, Robert - BSc, MSc, PhD
 Zingg, David - BSc, MSc, PhD (*Director*)

Members Emeriti

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

Associate Members

Davis, James - BSc, MSc, PhD
 Fejtek, Ian - BSc, BEng, MSc, PhD
 Kleiman, Jacob - BS, MS, PhD, PhD
 Laurendeau, Eric - BEng, PhD
 Liu, Fengshan - BSc, PhD
 Ower, Cameron - BSc, MSc, PhD
 Sallaberger, Christian - BSc, 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, MSc, 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, PhD
13. **Women and Gender Studies**
 - Anthropology, MA, 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

Email: anthropology.graduate@utoronto.ca

Telephone: (416) 978-5416

Fax: (416) 978-3217

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

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 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 third session of the second year (e.g., August 31 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 third session of the third year (e.g., August 31 for students who start in September)

Degree and Diploma Programs by Graduate Unit

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 current year's offerings.

General

ANT 1000H	Anthropology: Theoretical Paradigms and Case Studies (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 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: Old World
ANT 4065H	Specific Problems: New World
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 3439H	Advanced Seminar in Forensic Anthropology
ANT 3440H	Molecular Anthropology: Theory and Practice

Linguistic 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 5143Y	Areal Studies in Linguistic Anthropology: Africa, East Asia, North America, Oceania
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
JSA 5147H	Language, Nationalism and Post-Nationalism

Medical Anthropology

ANT 7001H	Medical Anthropology I
ANT 7002H	Medical Anthropology II

Social and Cultural

ANT 6003H	Critical Issues in Ethnography I
ANT 6004H	Critical Issues in Ethnography II
ANT 6008H	Posthuman Anthropology
ANT 6009H	Magic and Modernity
ANT 6010H	Anthropology of Korea: History and Dialogues with Other Disciplines within Korean Studies
ANT 6011H	Anthropology of the Modern State
ANT 6012H	Metamorphosis of Citizenship
ANT 6013H	Language and Publics in the Ethnography of Speaking
ANT 6014H	Textuality and Technologies of Mass Mediation
ANT 6015H	Global Health: Anthropological Perspectives
ANT 6016H	Medicine and Globalization

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 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 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	Approaches to Fieldwork I
ANT 6041H	Approaches to Fieldwork II
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, ScD
 Banning, Edward - BA, MA, PhD
 Barker, Joshua - BA, MA, PhD
 Begun, David - PhD
 Boddy, Janice - BA, MA, PhD (*Chair and Graduate Chair*)
 Chazan, Michael - BA, BA, MA, PhD
 Coleman, Simon - BA, PhD
 Coupland, Gary - BA, MA, PhD
 Crawford, Gary - BSc, MA, PhD
 Cunningham, Hilary - PhD
 Danesi, Marcel - BA, MA, PhD
 Daswani, Girish - BA, BSc, MS, PhD
 Dave, Prakruti - BA, MA, PhD
 DuTour, Olivier - MD, PhD
 Friesen, T Max - BA, MA, PhD
 Gillison, Gillian - BA, PhD
 Jackson, Jennifer - BA, MPH, PhD
 Kalmar, Ivan - BA, MA, PhD, PhD (*Coordinator of Graduate Studies*)
 Krupa, Chris - BA, MA, PhD
 Lambek, Michael - BA, MA, PhD

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

Lehman, Shawn - PhD
 Li, Tania - BA, PhD
 Luong, Hy Van - BA, PhD
 McElhinny, Bonnie - PhD
 Miller, Heather - BA, MA, SM, PhD
 Mortensen, Lena - AB, PhD
 Muhlebach, Andrea - PhD
 Napolitano, Valentina - BSc, PhD
 Parra, Esteban - BSc, MS, PhD
 Paz, Alejandro - BA, MPA, MA
 Pfeiffer, Susan - AB, AM, PhD
 Rogers, Tracy - AB, MPA, DPhil
 Sanders, Todd - AB, AM, 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
 Siecechowicz, Krystyna - BA, MA, PhD
 Silcox, Mary Teresa - BSc, PhD
 Smith, David - AB, MA, PhD
 Song, Je Sook - BA, PhD
 Swenson, Edward - BA, MA, PhD
 Turner, David - BA, PhD
 Wardlow, Holly - BA, PhD
 Yao, Alice - PhD

Members Emeriti

Alderson-Smith, Gavin - BA, MA, DPhil
 Burton, Frances - BSc, MA, PhD
 Carstens, Peter - BA, 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
 Samarín, William - BA, PhD
 Sigmon, Becky - BA, MS, PhD
 Vanderburgh, Rosamond - BA, MA

Associate Members

Clark, Dylan - PhD
 Cummings, Maggie Irene - BA, MA, PhD
 Dewar, Genevieve - BS, MA, PhD
 Gibbs, Alison - BS, MS, PhD
 Gilbert, Andrew - PhD
 Harrison, Timothy - BA, MA, PhD
 Klassen, Pamela - BA, MA, PhD
 Knappett, Carl - MA, PhD
 Mittermaier, Amira - MA, PhD
 O'Neill, Kevin - PhD
 Parga, Joyce Ann - BSc, MA, PhD
 Schwarcz, Henry P. - AB, MSc, PhD
 Simich, Laura - PhD
 Williamson, Ronald - BA, MA, PhD
 Young, Donna Jean - AB, BA, AM, MA, MPA, DPhil, PhD
 Zubrow, Ezra - BA, MA

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

1. 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

Email: 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).
- 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

Degree and Diploma Programs by Graduate Unit

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
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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

Degree and Diploma Programs by Graduate Unit

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
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PROFESSIONAL PRACTICE

LAN 3051H	Professional Practice
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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
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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
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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 make-up 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 1.0 FCE 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
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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

Bessai, Tom - BArch, AB, MArch

Blackwell, Adrian - BArch, BES, MArch UD

Celik, Zeynep - MArch, PhD

Chaouni, Aziza - BSCCE, MArch

Fong, Steven - BArch, MArch

Lieberman, David - DiplngArch, BFA

Margolis, Liat - MLA

May, John Joseph - BA, MArch, PhD

Moukheiber, Carol Leila - BArch, BA

North, Alissa - BLA, MLA

North, Peter - BLA, MLA

Payne, Andrew - BA, MA, PhD

Petricone, Pina - MArch

Sampson, Barry - BArch

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 & 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:

- Book History and Print Culture**
 - History of Art, MA, PhD
 - Visual Studies, MVS
- Diaspora and Transnational Studies**
 - History of Art, MA, PhD
- Jewish Studies**
 - History of Art, MA, PhD
- Knowledge Media Design**
 - Visual Studies, MVS
- 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** 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

Email: 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 accepted 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 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); course-work must be chosen from at least three of four areas: Ancient, Medieval, Renaissance/Baroque, Modern. No more than 2.0 FCEs may be taken in any one of these areas. The equivalent of 1.0 FCE may be taken in another graduate department (e.g., Medieval Studies, Near and Middle Eastern Civilizations), subject to approval of the Department of Art and the other department concerned.
- Reading knowledge of 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 all courses is limited and subject to instructor's approval.
- Students without a MA in Art from the University of Toronto may be required to complete at least 1.0 additional full-course equivalent (FCE).
- Acceptance 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 areas: Ancient, Medieval, Renaissance/Baroque, Modern. Courses crossing boundaries will count as one area 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 areas, 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: 6 years full-time; 7 years direct-entry

Time Limit: 5 years full-time; 7 years direct-entry

Course List

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

Methods

FAH 1001H Methods of Art History

Ancient

FAH 2006H Art and Archaeology of the Prehistoric Aegean

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 2033H Triumphal Forms

FAH 2034H Topics in Roman Imperial Art

FAH 2039H The Roman Reception of Greek Art: Image Transfer and Cultural Translation

Medieval

FAH 1120H Medieval Pilgrimage Art and Architecture

FAH 1121H 12th-Century Renaissance?

Degree and Diploma Programs by Graduate Unit

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 1131H	Profane Medieval Art
FAH 1134H	Communal Painting and Propaganda in Italy during the 13th and 14th Centuries
FAH 1135H	Naples in the Later Middle Ages
FAH 1142H	Multicultural Middle Ages
FAH 1200H	Crusader Art

Renaissance and Baroque

FAH 1201H	Art, Space and Ritual in Renaissance Convents
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 1420H	Theories of the Sublime in Art
FAH 1458H	Viewing History: The Visual Experience of the Past, 1750–1900
FAH 1459H	Photography, Illusion, and Knowledge in 19th-Century Europe
FAH 1464H	The Recalcitrant Icon
FAH 1465H	Orientalism
FAH 1471H	The Aesthetics of Democracy
FAH 1474H	Avant-Garde, Neo-Avant-Garde
FAH 1475H	Picasso
FAH 1477H	Psychoanalysis and the Visual
FAH 1478H	Art and Animation
FAH 1490H	Art and Intersubjectivity
FAH 1492H	Retreating the Aesthetic
FAH 1493H	Queer Sexuality, Visuality & Theory
FAH 1494H	The Archive: Logics, Limits, Remains
FAH 1520H	Photography & Modernism
FAH 1752H	The Circulation of Architectural Knowledge
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 1934H	Cosmopolitan/Comparative Modernisms
FAH 1951H	Contemporary Chinese Art and its Discontents
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

Research Paper

FAH 4000Y	Research Paper
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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 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 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 examination was not English.

Program Requirements

- Full-time program normally begins in September.
- MVS Studio and Curatorial Studies: 4.5 full-course equivalents (FCEs) from 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
 Gu, Yi - BLitt, MMSt, 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 (**Director of Graduate Studies; Associate Chair**)
 Legge, Elizabeth MM - BA, BA, MA, PhD (**Chair and Graduate Chair**)
 Levy, Evonne - MFA, PhD
 Lloyd, Sue - BA, MFA
 Massey, John - AA
 Periti, Giancarla - PhD
 Pien, Edward - BFA, MFA
 Purtle, Jennifer - BA, MPH, MA, PhD
 Reid, Dennis - BA, MA
 Ricco, John - BA, MA, PhD
 Schelle, Susan - BFA
 Sohm, Philip - BA, MA, PhD
 Steele, Lisa - BA
 Syme, Alison - PhD
 Tod, Joanne - AA
 Tomczak, Kim - AA
 Wiitasalo, Shirley
 Wollesen, Jens - PhD

Degree and Diploma Programs by Graduate Unit

Members Emeriti

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

Associate Members

Abray, L Jane - BA, MA, MPH, PhD
Bartlett, Kenneth - BA, MA, PhD
Fischer, Barbara - BFA, MA
Hlynsky, David - BFA
Kwan, Will - BA, MFA
MacDonald, Ann - BA

Astronomy and Astrophysics

Faculty Affiliation

Arts and Science

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

Degree Programs Offered

Astronomy and Astrophysics – MSc, PhD

Collaborative Programs

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

1. 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

Email: grad.sec@astro.utoronto.ca

Telephone: (416) 978-2016

Fax: (416) 971-2026

Degree Programs

Astronomy and Astrophysics

Master of Science

Minimum Admission Requirements

- Students are accepted 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

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

Degree and Diploma Programs by Graduate Unit

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

- Students accepted into the PhD program through one of two routes:
 1. An appropriate master's degree, or its equivalent, 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 a 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, Fell Royal Society
Canada, Fell Royal Society London
Carlberg, Raymond - BSc, MS, PhD
Dyer, Charles - BS, MSc, PhD
Graham, James - DIC, BSc, PhD, Assoc Royal Coll of Sci
Jayawardhana, Ray - BS, PhD
Lester, John - BA, MS, PhD
Lowman, Julian - BSc, MS, DPhil
Martin, Peter - BSc, MSc, PhD
Matzner, Christopher - BA, MA, PhD
Mochnicki, 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, Fell Royal Society Canada
(*Chair and Graduate Chair*)

Members Emeriti

Bolton, Charles - BS, MS, PhD
Clement, Christine - BSc, MA, PhD
Clement, Maurice - BSc, MSc, PhD
Fernie, John - BSc, MSc, PhD, Fell Ryl Astronom Society
Garrison, Robert - BA, PhD
Percy, John - BSc, MA, 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 multi-component systems such as membranes and subcellular organelles.

Contact and Address

Web: <http://biochemistry.utoronto.ca>

Email: carrie.harber@utoronto.ca

Telephone: (416) 978-2702

Fax: (416) 946-8228

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

Degree Programs

Biochemistry

Master of Science

Minimum Admission Requirements

- Normally, minimum B+ average in last two years of study in an honours/specialist BSc program in biochemistry/molecular biology. Students with strong academic credentials in honours/specialist programs in disciplines related to biochemistry/molecular biology also considered.
- Applicant arranges for personal reference forms from three individuals familiar with 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 GRE examination results to be sent to the department.
- Applicants from outside Canada whose primary language is not English and who graduated from a university where the language of instruction was not English must provide TOEFL (Test of English as a Foreign Language) and TWE (Essay Writing) scores.
 - Paper-based TOEFL: minimum 580 score and 5 on the TWE.
 - Internet-based TOEFL: minimum 93/120 score and 22/30 on the writing and speaking sections.
 - In the absence of TOEFL results, an IELTS 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 2024H⁰ *Focused Topics in Biochemistry*.
- Participate in BCH 2020Y⁰ 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.

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

Normal Program Length: 6 sessions full-time

Time Limit: 3 years full-time

Doctor of Philosophy

Minimum Admission Requirements

- Applicant arranges for personal reference forms from three individuals familiar with 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 GRE examination 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 MELAB (Michigan English Language Arts Battery) 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*;

§ 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

BCH 2024H⁰ *Focused Topics in Biochemistry*. Students may fulfil the 1.5-FCE course requirement entirely from this list.

- Participate in BCH 2022Y⁰ 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
JNP 1017H ⁺	Molecular and Biochemical Basis of Toxicology
JNP 1018H ⁺	Current Topics in Molecular and Biochemical Toxicology

Degree and Diploma Programs by Graduate Unit

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
Baker, Robert - BSc, PhD
Bazett-Jones, David - BSc, MSc, PhD
Bear, Christine - BSc, MSc, PhD
Brown, Grant - BSc, PhD
Callahan, John - BSc, MSc
Chakrabarty, Avijit - BSc, MSc, PhD
Chan, Hue Sun - BSc, MA, PhD
Clarke, David - PhD
Davidson, Alan Richard - BSc, PhD
Deber, Charles - BSc, PhD
Forman-Kay, Julie - BSc, PhD
Glover, John - BSc, MSc, PhD
Grinstein, Sergio - BSc, PhD
Houry, Walid - BS, MS, PhD
Howell, Lynne - BSc, PhD
Ingles, C James - BSc, PhD
Isenman, David - BSc, BSc, PhD
Jorgensen, Annelise - MSc, PhD
Kay, Lewis - PhD
Keeley, Frederick - BSc, 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
Moraes, Trevor - BS, MSc, PhD
Moran, Laurence - BSc, PhD
Pai, Emil - PhD
Palazzo, Alexander - PhD
Parkinson, John - BS, PhD
Pomes, Regis - PhD
Privé, Gil - BSc, PhD
Pulleyblank, David - BSc, PhD
Rand, Margaret - BSc, PhD
Reithmeier, Reinhart - BSc, PhD (**Chair and Graduate Chair**)
Rini, James - BSc, PhD (**Coordinator of Graduate Studies**)
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
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, Fell Royal Society
Canada

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:

- Addiction Studies**
 - Biomedical Engineering, MAsC, PhD
- Cardiovascular Sciences**
 - Biomedical Engineering, MAsC, PhD
- Genome Biology and Bioinformatics**
 - Biomedical Engineering, PhD
- Health Care, Technology and Place**
 - Biomedical Engineering, PhD
- Neuroscience**
 - Biomedical Engineering, MAsC, PhD
- 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:

Email: admissions.ibbme@utoronto.ca

Telephone: (416) 978-4841

Fax: (416) 978-4317

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

Clinical Engineering Office:

Email: clinicaleng.ibbme@utoronto.ca

Telephone: (416) 978-6102

Fax: (416) 978-4317

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

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

- 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.

Degree and Diploma Programs by Graduate Unit

- 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*.

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
 Amon, Cristina - BASc, MSc, ScD
 Aubin, Jane - BSc, PhD
 Audet, Julie - MAsc, PhD
 Bardakjian, Berj - BSc, BEd, MAsc, PhD
 Black, Sandra - BSc, MD
 Bogoch, Earl - BA, MSc, MD
 Boynton, Erin - MD
 Brock, Kristy - PhD
 Caldarone, Christopher - BSc, 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
 Fernie, Geoffrey - BSc, PhD
 Frecker, Richard - BSc, MD, PhD
 Graham, Simon - BSc, PhD
 Grynepas, Marc - MSc, PhD
 Guenther, Axel - DIPING, DE
 Harrison, Robert - PhD, DSc
 Hinz, J. Boris - PhD
 Hynynen, Kullervo - BSc, MS, PhD
 Jaffray, David - BSc, PhD
 Johnston, K. Wayne - MD
 Joy, Michael - BSc, MAsc, PhD
 Kandel, Rita - MD
 Kelley, Shana - BA, PhD
 Keshavjee, Shafique - BA, MSc, LMCC, MD
 Levi, Ofer - BSc, MSc, PhD
 Mahadevan, Radhakrishnan - BTech, PhD
 Mihailidis, Alex - BASc, MAsc, PhD
 Milgram, Paul - BASc, MSc, PhD
 Morshead, Cindi Marie - BS, 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
 Santerre, Paul - BSc, MSc, PhD
 Sefton, Michael - BASc, ScD
 Shoichet, Molly - PhD
 Silverman, Melvin - BSc, MDCH

Simmons, Craig - BSc, MSc, PhD
 Skinner, Frances - PhD
 Sled, John - BASc, MS, PhD
 Slutsky, Arthur - BASc, MAsc, MD
 Stanford, William - BA, PhD
 Strauss, Bradley - MD
 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
 Wright, Graham - BSc, MSc, PhD
 Yee, Albert - MSc, LMCC, MD
 Yip, Christopher - BSc, PhD (**Associate Director; Graduate Coordinator**)
 You, Lidan - BS, MS, PhD
 Zandstra, Peter - BEng, PhD
 Zheng, Gang - MSc, 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
 Borschel, Gregory - BSc, DrMed
 Gemmell, Cynthia - PhD
 Grantcharov, Teodor - DrMed, PhD
 Howarth, David - LMCC, MD
 Kim, Peter - MDCM, PhD
 McConville, Kristiina - PhD
 Paul, Narinder - BM
 Sodhi, Rana - BSc, MSc, 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

Email: sue.taylor@utoronto.ca

Telephone: (416) 978-3477

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

- General admission requirements under the School of Graduate Studies General Regulations.
- 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** or its equivalent 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; and
 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 toward 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 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 (**Associate Chair, Graduate Studies**)
 Campbell, Malcolm - DPhil
 Chang, Belinda - AB, PhD
 Christendat, Dinesh - PhD
 Coleman, John - BSc, PhD
 Desveaux, Darrell - BSc, MSc, PhD
 Edwards, Elizabeth - BEng, PhD
 Ensminger, Ingo - PhD
 Espie, George - 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
 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
 Master, Emma - BSc, PhD
 McCourt, Peter - PhD
 McGowan, Patrick - PhD
 McMillen, David - BSc, MS, PhD
 Mitchell, Jennifer - DSc
 Moses, Alan - BA, PhD
 Nambara, Eiji - MS, PhD
 Nash, Joanne - BS, MSc, PhD
 O'Day, Danton - BSc, MSc, PhD
 Orchard, Ian - BSc, PhD, DSc
 Peever, John - MSc, PhD
 Provard, 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

Degree and Diploma Programs by Graduate Unit

Smith, J. J. Berry - BA, MA, PhD
Sokolowski, Marla - BSc, PhD
Stephenson, Richard - BSc, PhD
Stewart, Bryan - BSc, MS, DPhil
Takehara, Kaori - BSc, MSc, PhD
Tepass, Ulrich - MSc, PhD (**Chair and Graduate Chair**)
Terebiznik, Mauricio - BSc, PhD
Tobe, Stephen - BSc, MSc, PhD, Fell Royal Society
Canada
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

Revers, Leigh - PhD

Chemical Engineering and Applied Chemistry

Faculty Affiliation

Applied Science and Engineering

Degree Programs Offered

Chemical Engineering and Applied Chemistry – MSc, 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, MSc, PhD
2. **Environmental Engineering**
 - Chemical Engineering and Applied Chemistry, MSc, MEng, PhD
3. **Environmental Studies**
 - Chemical Engineering and Applied Chemistry, MSc, MEng, PhD
4. **Genome Biology and Bioinformatics**
 - 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 (MSc)**, **Master of Engineering (MEng)**, and **Doctor of Philosophy (PhD)**. The MEng program differs from the MSc and PhD programs in that it is oriented to learning through prescribed 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 government and industry, often by means of a consortium of companies. The experience of dealing with real world problems prepares graduates for successful professional careers.

Research and teaching are the foundations of the department. Research is clustered into eight major categories:

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

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

Contact and Address

Web: www.chem-eng.utoronto.ca

Email:

Admissions: admissgrad.chemeng@utoronto.ca

General: gradassist.chemeng@utoronto.ca

Telephone: (416) 976-3987

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

- Students are admitted under the SGS General Regulations.

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

- Students are admitted under the SGS General Regulations.

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-round 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 a master’s degree 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 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 to 12 months of starting the PhD program, students must pass a qualifying examination. Students normally remain in residence (full time, on campus) until the departmental recommendation for the doctoral final oral examination is made, unless special permission to do so has otherwise been granted by the departmental Graduate Studies Committee.

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 a two-day 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 1107H	Applied Mathematics
CHE 1140H	Topics in Process Identification and Control
CHE 1141H	Advanced Chemical Reaction Engineering
CHE 1142H	Applied Chemical Thermodynamics
CHE 1143H	Transport Phenomena
CHE 1144H	Separation Processes
CHE 1147H	Data Mining in Engineering
JTC 1135H	Applied Surface Chemistry
CHE 1180H	Advanced Topics in Chemical Engineering
CHE 1310H	Chemical Properties of Polymers
JCI 1503H	Advanced Topics in Computing and Information Systems

CHE 2504H Industrial Pollution Prevention

Category B: Specialized Courses

CHE 1118H Industrial Catalysis
 CHE 1134H Advances in Bioengineering
 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 1533H Nuclear Chemical Engineering
 CHE 1541H Two-Phase Flow and Heat Transfer
 JCC 1313H Environmental Microbiology
 JCI 1321H Wood Engineering
 JNC 2503H Environmental Pathways Engineering Management Courses
 APS 501H Leadership and Leading in Groups and Organizations
 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 1088H Entrepreneurship and Business for Engineers
 APS 1201H Topics in Engineering and Public Policy 500-level (undergraduate/graduate) Courses
 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 1211H Pulp and Paper Seminars (Credit/No Credit)
 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, D Grant - BSc, MSc, PhD (*Chair and Graduate Chair*)

Audet, Julie - MSc, PhD
 Bender, Timothy - PhD
 Cheng, Yu-Ling - SB, PhD
 Cluett, William - BSc, PhD
 Cooper, Paul - BEd, BSc, MSc, PhD
 Cormack, Donald - BSc, MSc, PhD
 Coyle, Thomas - BS, BA, ScD
 Diamond, Miriam - MSc, MSc, PhD
 Diosady, Levente - BSc, MSc, PhD
 Edwards, Elizabeth - BEng, PhD
 Evans, Gregory - PhD
 Farnood, Ramin - BSc, MSc, PhD
 Fulthorpe, Roberta - BSc, MSc, PhD
 Jia, Charles - BEng, MEng, PhD
 Kawaji, Masahiro - BSc, MSc, PhD
 Kirk, Donald - BSc, MSc, PhD
 Kortschot, Mark - BSc, MSc, PhD
 Kumacheva, Eugenia - MSc, PhD
 Lawryshyn, Yuri - DIPING, BSc, MSc, PhD
 McGuigan, Alison - MEng, PhD
 Mims, Charles - PhD
 Newman, Roger Charles - BA, PhD, DSc
 Papangelakis, Vladimiro - MEng, PhD (*Associate Chair*)
 Radisic, Milica - BEng, PhD
 Reeve, Douglas - BSc, MSc, PhD
 Saville, Bradley - BSc, PhD
 Sefton, Michael - BSc, ScD
 Shoichet, Molly - PhD
 Stanford, William - BA, PhD
 Thorpe, Steven - BSc, MSc, PhD
 Tran, Honghi - 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 - BSc, MSc, PhD
 Jarvis, Robert - BA, MA, PhD, Reg Professional Engineer, Fell Chem Inst of Canada
 Luus, Rein - BSc, MSc, AM, PhD
 Mackay, Donald - BSc, PhD
 Paradi, Joseph - BSc, PhD
 Phillips, Mary - BSc, BSc, MA, PhD
 Smith, James - BSc, MSc, PhD
 Trass, Olev - BSE, ScD

Associate Members

Bidleman, Terry - BSc, PhD
 Colcleugh, David - BSc, MSc, PhD
 Goodfellow, Howard - BSc, MSc, PhD
 Grace, Thomas Michael - BS, PhD
 Liss, Steven - BSc, MSc, PhD
 Sayad, Saed - MD, PhD
 Treiber, Steve - MSc, PhD
 Tremaine, Peter - BSc, 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. **Biomolecular Structure**
 - Chemistry, PhD
2. **Environmental Studies**
 - Chemistry, MSc, PhD
3. **Biomedical Engineering**
 - 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
Email: 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. Alternatively, transfer to the PhD program may be considered after a one-year MSc residency period.

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
 - InterdisciplinaryCombinations within these fields, or with other disciplines, are permitted under the category of an interdisciplinary program. Each program requires a minimum of 2.0 to 3.0 full-course equivalents (FCEs) from approved graduate courses offered in the School of Graduate Studies, depending on the student's academic background. The number of courses required will be determined in consultation with the supervisor and Graduate Studies Committee. Up to 1.0 FCE taken for credit in the master's program may be used to partially fulfil the PhD requirements.
Specific requirements for each field follow:

Analytical Chemistry

- 3.0 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 CHM 1190Y *Analytical Chemistry Seminar*.

Environmental Chemistry

- At least 2.0 FCEs to include CHM 1401H, at least one other course in environmental chemistry (CHM 1410H, CHM 1415H, CHM 1425H, CHM 1550H), 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	Biosensors and Chemical Sensors
CHM 1103H	Advanced Topics in Analytical Chemistry
CHM 1104H	Separation Science
CHM 1105H	Separations, Chromatography, and Microfluidics
CHM 1106H	Lab Instrumentation
CHM 1108H	Mass Spectrometry Fundamentals and Instrumentation

Degree and Diploma Programs by Graduate Unit

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
PHY 1406H	Microprocessor Interfacing Techniques

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 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 1442H	Current Directions in Experimental Physical Chemistry
CHM 1443H	Intermediate Quantum Mechanics
CHM 1444H	Statistical Mechanics of Condensed Phases
CHM 1445H	Coherent Control of Molecular Processes
CHM 1446H	Quantum Computation and Information Theory
CHM 1447H	Biophysical Chemistry
CHM 1448H	Modelling of Biochemical Systems
CHM 1450H	Nanoscale Characterization with Scan Probe Microscopy
CHM 1455H	NMR Spectroscopy I: Introduction to Theory and Application
CHM 1456H	NMR Spectroscopy II: Advanced Theory and Application
CHM 1464H	Topics in Statistical Mechanics
CHM 1478H	Quantum Mechanics for Physical Chemists (core course)
CHM 1479H	Thermodynamics (core course)
CHM 1480H	Basic Statistical Mechanics (core course)
CHM 1481H	Reaction Kinetics and Dynamics (core course)
CHM 1485H	Molecular Dynamics and Chemical Dynamics in Liquids
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 1300H	Polymer Chemistry
CHM 1301H	Organic and Inorganic Polymer Synthesis (core course)
CHM 1302H	Physical Chemistry of Polymers (core course)
CHM 1303H	Solids as Advanced Polymer Materials
CHM 1304H	Organic Materials 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 (**Associate Chair, Graduate Studies**)
 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
 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
 Krull, Ulrich - BSc, MSc, PhD
 Kumacheva, Eugenia - MSc, PhD
 Lautens, Mark - BSc, PhD
 Mabury, Scott - BS, PhD
 Macdonald, Peter - BS, MS, PhD
 Manners, Ian - BSc, PhD
 McMillen, David - BSc, MS, PhD
 Miller, R J Dwayne - BSc, PhD
 Morris, Robert - BSc, PhD, Fell North Atlantic Treaty Or (**Interim Chair and Graduate Chair**)
 Murphy, Jennifer - BCH, DChem
 Nitz, Mark - BSc, PhD
 Ozin, Geoffrey - BSc, PhD
 Polanyi, John - MSc, PhD, DSc, Fell Royal Society Canada, Fell 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, Fell Ryl Inst 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, Xiaolan - 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
 Tidwell, Thomas - BS, AM, PhD

Associate Members

Baranov, Vladimir - PhD
 Bidleman, Terry - 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

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** degree in Cinema Studies. Our faculty have expertise in several areas, including film history, film theory, and film and culture.

Contact and Address

Web: www.utoronto.ca/cinema
Email: gradcinema.studies@utoronto.ca
Telephone: (416) 978-5809
Fax: (416) 946-0168

Cinema Studies Institute
University of Toronto
Innis College
2 Sussex Avenue
Toronto, Ontario M5S 1J5
Canada

Degree Programs

Cinema Studies

Master of Arts

Minimum Admission Requirements

- Successful completion of an appropriate bachelor's degree.
- 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 (CIN 1006Y) or pursuing an internship (CIN 1007Y). The internship option also entails writing a paper based on the learning or research experience gained from the 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 1000H, CIN 1001H, and CIN 1002H.
 - 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

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.

Core Courses

- CIN 1000H Historiography of the Cinema
CIN 1001H Theories of the Cinema
CIN 1002H Cinema and Culture
Plus one of:
CIN 1006Y Major Research Paper in Cinema Studies
CIN 1007Y Internship in Cinema Studies

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 (sample
topics: Textuality of the Cinematic Body,
Colour and the Moving Image, Media/
Participation)
CIN 1008H Independent Research and Reading in
Cinema Studies
CIN 1100H One Film, Multiple Approaches
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
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

- Ambros, Veronika - MA, PhD
Columpar, Corinn - BA, PhD (**Coordinator of Graduate
Studies**)
Fenner, Angelica - BA, MA, PhD
Jain, Kajri - PhD
Kaplan, Louis - AB, AM, DPhil
Keil, Charles - BA, MA, PhD (**Director**)
King, Robert - AB, MA, PhD
Price, Brian - PhD
Ricco, John - BA, MA, PhD
Sammond, Nicholas - BA, MA, PhD
Tcheuyap, Alexie - PhD

Members Emeriti

- Armatage, Kay - BA, MA, PhD

Associate Members

- 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 programs are available to students in participating degree programs as listed below:

1. Environmental Engineering

- Civil Engineering, MEng, MAsc, 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 students are accepted for advanced studies in one of the following fields: Building Engineering, Environmental Engineering, Structural Engineering, Transportation Engineering, and Engineering Geoscience.

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

Email: 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

Email: shayni@civ.utoronto.ca

Telephone: (416) 978-5905

MAsc/PhD Inquiries

Email: 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

- Students are accepted under the General Regulations.
- 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 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

- Students are accepted under the General Regulations.
- 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 (10 half courses) for the coursework-only program. Up to 2 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 accepted 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 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 a 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 a MASc thesis must complete a total of 4.5 FCEs (nine half courses) beyond the bachelor's degree program.
- Students with a 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

Degree and Diploma Programs by Graduate Unit

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

Geoscience

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
Adams, Barry - BSc, MS, PhD
Andrews, Robert - BAsC, MASc, PhD
Andrews, Susan - BSc, MSc, PhD
Bawden, William - BSc, MSc, PhD
Bentz, Evan - BASc, PhD
Byer, Philip - BS, MS, PhD
Christopoulos, Constantin - BE, MASc, PhD
Collins, Michael - BE, PhD
Crawford, Adrian - BE, MASc, PhD
El-Diraby, Tamer - PhD
Gauvreau, Douglas Paul - BSc, MSc, PhD, Reg Professional Engineer
Grabinsky, Murray - BASc, MASc, PhD
Grasselli, Giovanni - PhD
Hadjigeorgiou, Ioannis (John) - DIPLGEOL, BASc, ME, DPhil
Harrison, John Paul - BSc, MSc, PhD
Hofmann, Ronald - BEng, MASc, PhD, Reg Professional Engineer
Hooton, R Douglas - BASc, MASc, PhD
Karney, Bryan - BSc, MEng, PhD
Kennedy, Christopher - BEng, MEC, MBA, MASc, PhD
Kwon, Oh-Sung - BS, MS, MS, PhD
MacLean, Heather - BASc, MASc, MBA, PhD
McCabe, Brenda - BSc, PhD, Reg Professional Engineer
(Chair and Graduate Chair)
Mercan, Oya - BS, MS, PhD
Miller, Eric - BASc, MASc, PhD
Nurul Habib, Khandker - MS, PhD
Packer, Jeffrey - BE, MSc, DSc, PhD
Panesar, Daman - BE, ME, PhD
Peterson, Karl - BS, MS, PhD
Pressnail, Kim - BASc, PhD
Roorda, Matthew - BEng, MASc, PhD
Shalaby, Amer - BSc, MASc, PhD
Sheikh, Shamim - BSE, MASc, PhD **(Associate Chair, Academic)**
Sleep, Brent - BSc, MASc, PhD
Vanderburg, Willem - BASc, MASc, PhD
Vecchio, Frank - BASc, MEng, PhD
Xia, Kaiwen - BASc, MS, PhD
Young, R. Paul - BSc, MSc, PhD, Chartered Engineer

Members Emeriti

Birkemoe, Peter - BS, MSc, PhD
Curran, John - BASc, MEng, 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

Fotopoulos, Georgia - BSc, MSc, PhD, Reg Professional Engineer

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. **Sexual Diversity Studies**
 - Classics, MA, PhD
6. **Women and Gender Studies**
 - Classics, MA, PhD
7. **Jewish 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 & Latin Literature, Ancient (Greek & Roman) Philosophy, and Greek & 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>

Email: grad.classics@utoronto.ca

Telephone: (416) 978-5513

Fax: (416) 978-7307

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

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.

2-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.

Degree and Diploma Programs by Graduate Unit

- 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.

1-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

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:

- 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. Student must maintain at least an A- average in seminars.
- Major field (CLA 4000Y⁰). 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

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

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 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	MA Special Essay
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

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 5001H	Early Greek Poetry

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

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 5011H	Satire and Satirical Writing
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 5017H	Latin Legal Texts and the History of Late Roman Institutions
CLA 5018H	Topics in Roman History
CLA 5019H	Topics in Later 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 1001H	Topics in Ancient Philosophical Commentators
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
 Bruun, Christer - BA, MA, PhD
 Burgess, Jonathan - BA, MA, PhD
 Dewar, Michael - BA, MA, DPhil
 Fantham, Elaine - BA, MA, PhD
 Gunderson, Erik - BA, MA, PhD
 Inwood, Brad - BA, MA, PhD, Fell Royal Society Canada
 Jones, Alexander - BA, PhD, Fell Royal Society Canada
 Keith, Alison - BA, MA, PhD (**Chair and Graduate Chair**)

Degree and Diploma Programs by Graduate Unit

Magee, John - BA, MA, PhD
Mason, Hugh - BA, AM, PhD
Revermann, Martin - PhD
Rubincam, Catherine - BA, BA, PhD

Members Emeriti

Barnes, Timothy - BA, MA, DPhil, Fell Royal Society
Canada
Beck, Roger - BA, MA, PhD
Grant, John - BA, MA, PhD
Irwin, Marjorie - BA, PhD, PhD
McDonough, Christopher - BA, MA, PhD
Rist, John - MA
Robbins, Emmet - BA, PhD
Traill, John - BA, MA, PhD

Associate Members

Balot, Ryan - BA, AM, PhD
Bendlin, Andreas - PhD
Edmondson, Jonathan - PhD
Ewald, Bjorn - AM, PhD
Hoeschele, Regina - MA, PhD
Kloppenborg, John - BA, MA, PhD
Knappett, Carl - MA, PhD
Marshall, John - BA, MA, PhD
Najman, Hindy - AB, MA, PhD
Orwin, Clifford - AB, AM, PhD
Townsend, David Robert - BA, MA, PhD
Weinrib, Ernest - BA, LLB, PhD
Welsh, Jarrett - BA, MA, 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: www.complit.utoronto.ca

Email: 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

Degree and Diploma Programs by Graduate Unit

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 8.5 full-course equivalents (FCEs), of which 4.5 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 course-

work, 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 2100H	Northrop Frye Professorship Course
COL 5012Y	Readings in Czech and Russian Literary Theory
COL 5016H	Art and Politics: Bertolt Brecht, Robert Lepage, Robert Wilson
COL 5027H	Memory, Trauma, and History
COL 5047H	The Two Avant-Gardes
COL 5056H	Autobiography, Photography, Narrativity
COL 5090H	Global Visual Culture
COL 5094H	Forms of Critical Writing
COL 5095H	Giorgio Agamben: Exception and Potentiality
COL 5096H	The Problem of Translation: Historical, Theoretical and Pragmatic Perspectives
JFC 5025H	Feminism and Postmodernism: Theory and Practice
JLA 5082H	The Rhetoric of Photography
JLA 5097H	Ecocriticism
JLF 1492H	Retreating the Aesthetic

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
 Kortenaar, Neil ten - PhD
 Lahusen, Thomas - MA, PhD
 Le Huenen, Roland - DESL
 LeBlanc, Julie - BA, PhD
 Li, Victor - BA, MA, PhD
 Meng, Yue - BA, MA, MA, PhD
 Revermann, Martin - PhD
 Ross, Jill - MA, PhD (**Coordinator of Graduate Studies**)
 Rupp, Stephen - BA, MA, MPH, MA, PhD
 Sakaki, Atsuko - PhD
 Sternberg, Ricardo - BA, MA, PhD
 Zilcosky, John - BA, MA, MA, PhD

Members Emeriti

Chamberlin, J Edward - BA, PhD
 Davis, Natalie - BA, MA, PhD
 Dolezel, Lubomir - BA, PhD, Fell Royal Society Canada

Fleming, John - BA, MA, PhD
 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
 Barnes, Christopher - BA, MA, 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
 Jackson, Heather - BA, MA, PhD
 Keith, Alison - BA, MA, PhD
 Kippen, James - BA, PhD
 Legge, Elizabeth MM - BA, BA, MA, PhD
 Leonard, Garry - BA, MA, PhD
 Mason, Hugh - BA, AM, 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
 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

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 at <http://web.cs.toronto.edu/program/grad>.

Contact and Address

Web: www.cs.toronto.edu
Email: gradprograms@cs.toronto.edu
Telephone: (416) 978-8762
Fax: (416) 946-7132

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 at 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 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

- 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: 3 sessions full-time; 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 at

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 TOEFL score of at least 580 on the paper-based test and 4 on the TWE; 93/120 on the Internet-based test and 22/90 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 2122H	Language and Compiler Design
CSC 2123H	Managing the Software Organization
CSC 2124H	Topics in Programming Languages
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 2204H	Operating Systems
CSC 2205H	Performance in Distributed Operating Systems
CSC 2206H	Computer Systems Modelling
CSC 2207H	Topics in Computer Organization
CSC 2208H	Advanced Operating Systems
CSC 2209H	Computer Networks
CSC 2221H	Introduction to Distributed Computing
CSC 2225H	Structure and Correctness in Operating Systems
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

Degree and Diploma Programs by Graduate Unit

CSC 2308H	Numerical Methods for Nonlinear Equations
CSC 2310H	Computational Methods for Partial Differential Equations
CSC 2312H	The Design and Assessment of Numerical Algorithms
CSC 2321H	Matrix Calculations
CSC 2322H	Boundary Problems for Ordinary Differential Equations
CSC 2324H	Advanced Methods for Partial 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 2423H	Finite Model Theory and Descriptive Complexity
CSC 2426H	Fundamentals of Cryptography
CSC 2428H	Logic and Automata
CSC 2429H	Topics in the Theory of Computation
MAT 1750H	Computational Mathematics

Applied Discrete Mathematics

CSC 2406H	Triple Systems
CSC 2410H	Introduction to Graph Theory
CSC 2412H	Computer Algebra
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
JST 4501Y	Belief Functions and the Assessment of Uncertainty

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
KMD 1001H	Fundamental Concepts in Knowledge Media Design

Information Systems

CSC 2231H	Special Topics in Computer Systems
CSC 2417H	Algorithms for Genome Sequence Analysis
CSC 2431H	Topics in Computational Molecular Biology
CSC 2507H	Conceptual Modelling
CSC 2508H	Advanced Management Systems
CSC 2509H	Data 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 2538H	Topics in Foundations of Databases
CSC 2543H	Research Topics in XML Retrieval

Special Courses

CSC 2199H	Special Reading Course in Programming
CSC 2299H	Special Reading Course in Computer Systems
CSC 2399H	Special Reading Course in Numerical Computation
CSC 2499H	Special Reading Course in Theoretical Aspects of Computer Science
CSC 2599H	Special Reading Course in Computer Applications
CSC 2600H	Topics in Computer Science
CSC 4000Y	MSc Research Project in Computer Science

Courses for MScAC Only

CSC 2701H Communication for Computer Scientists
 CSC 2702H Technical Entrepreneurship
 CSC 2703H MScAC Internship

Graduate Faculty**Full Members**

Abdelrahman, Tarek - BSc, MSc, PhD
 Amza, Cristiana - BS, MS, PhD
 Bacchus, Fahiem - PhD
 Baecker, Ronald - BS, MSc, PhD
 Balakrishnan, Ravin - PhD
 Beck, J. Christopher - BSc, MSc, PhD
 Birnholtz, Jeremy - 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
 Chignell, Mark - BSc, PhD
 Christara, Christina - BSc, MSc, PhD
 Consens, Mariano - BEng, 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
 Farzan, Azadeh - PhD
 Fiume, Eugene - BM, MSc, PhD
 Fleet, David James - BS, MS, PhD
 Fox, Mark - BSc, 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
 Liebeherr, Jorg - DIPING, PhD
 Lilien, Ryan - BS, MD, PhD

Marbach, Peter Josef - BS, MS, PhD
 McIlraith, Sheila - BSc, MSc, PhD
 Mendelsohn, Eric - BSc, MSc, PhD
 Mihailidis, Alex - BAsC, MAsC, PhD
 Miller, Renee - BS, BM, MS, PhD
 Molloy, Michael - BMath, MMath, PhD
 Morris, Quaid - BS, PhD
 Moses, Alan - BA, PhD
 Moshovos, Andreas - BSc, MS, PhD
 Neal, Radford - BSc, MSc, PhD
 Penn, Gerald - BS, MSc, PhD
 Pitassi, Toniann - PhD
 Rackoff, Charles - SB, SM, 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
 Veneris, Andreas - BSc, 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
 Mylopoulos, John - BE, MSc, PhD
 Urquhart, Alasdair - MA, MA, PhD
 Wortman, David - BE, MS, PhD

Associate Members

Braverman, Mark - BMath, MSc, PhD
 Buxton, William - MUSB
 Danahy, John - BLA, MRP
 Johnson, Frederick Ryan - BSc, MSEE, PhD
 Kim, Philip - BS, PhD
 Kreinin, Alexander - MSc, PhD
 Lyons, Kelly - BSc, MSc, PhD
 Mann, Steve - BSc, BAsC, MSc, PhD
 Reilly, Derek - BEd, BA, BA, PhD
 Sminchisescu, Cristian - MSc, PhD
 Trefler, Richard - 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 socio-legal studies. While there is no set career path for the MA graduates, they generally 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 postgraduate work, e.g. in Criminology, Public Health Sciences, Sociology, Law, and Social Work. On their part, PhD students have mainly found employment in tenure-track positions, most often in sociology departments or in criminology programs. Both graduate degrees 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 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 Visiting Junior Fellows.

Contact and Address

Web: www.criminology.utoronto.ca

Email: crim.grad@utoronto.ca

Telephone: (416) 978-7124 ext. 225

Fax: (416) 978-4195

Centre for Criminology and Sociolegal Studies
University of Toronto
14 Queen's Park Crescent West
University of Toronto
Toronto, Ontario M5S 3K9
Canada

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. 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 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 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 divides into two sections: compulsory and optional courses.
 - The compulsory section consists of a course on research methods (CRI 2010H).
 - 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 work 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 law school credits completed each year will be adjusted accordingly, 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 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 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 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

Degree and Diploma Programs by Graduate Unit

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, 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. Comprehensives 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 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 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 3240H Penology
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 3360Y⁰ Research Paper

Graduate Faculty

Full Members

Bucerius, Sandra - BA, MA, PhD
Doob, Anthony - AB, PhD, Fell Royal Society Canada
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 (**Coordinator of Graduate Studies**)
Light, Matthew - BA, MA, JD, PhD
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, Fell Royal Society Canada (**Director**)
Wortley, N. Scot - BA, MA, PhD

Members Emeriti

Beattie, John - BS, MA, PhD, Fell Royal Society Canada, Fell Ryl Historical Societ
Friedland, Martin - BCom, LLB, PhD
Solomon, Peter - BA, MA, PhD

Associate Members

Condon, Mary - BA, LLM, MA, SJD
Erickson, Patricia - BA, MA, PhD
Skilling, Tracey - BA, MASc, PhD

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

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 enquiries 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)
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
Email: 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)
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 the substance (subject matter, courses, programs of study), purposes, and practices used for bringing about learning in educational settings. Of concern are such fundamental issues as: What should be studied? Why? By whom? In what ways? And in what settings? Reflection upon such issues involves an interplay among the major components of education: learners, subject matter, learning, teaching, and the larger social, political, and economic contexts as well as the immediate instructional situation. Curriculum Studies and Teacher Development program course offerings and guided research opportunities reflect the diverse interests of faculty in a range of areas.

Faculty of the Curriculum Studies and Teacher Development program guide student work in a wide range of inquiry and data analysis methodologies, including qualitative and quantitative research, action research, naturalistic inquiry, teacher inquiry, performed and critical ethnography, and life history.

Interest areas reflect overlapping and intersecting areas of strength in the whole CSTD program, not separate sub-programs. Visit the list of CSTD research interests at www.oise.utoronto.ca/ctl/UserFiles/File/List-CSTD-Research-Interest.pdf for further information. Faculty members working in this program pursue research interests, and offer courses, in areas such as the following:

Curriculum Theories, Perspectives and Teacher Development include broad orientations and diverse settings for research in curriculum, schooling, teaching/learning, educational change:

Degree and Diploma Programs by Graduate Unit

- Assessment and Evaluation
- Comparative Education and Education in International Settings
- Cultural Studies and Critical Theory in Education
- Curriculum and Program Development and Implementation
- Dialogic and Social Constructivist Approaches to Curriculum
- Distance Education and Online Learning Environments
- Education in Non-school Settings
- Feminist Theories in Education
- Holistic Education, Imagination, and Spirituality
- Knowledge Media/Technology, Knowledge Building and Innovation
- Pre-service and In-service Education
- Queer Theories in Education
- School and District Policy, Environments, Change and Reform
- Teacher Education
- Teacher Knowledge/Teacher Identity
- Teacher Leadership
- Teacher Professional Learning, Teachers as Change Agents
- Teachers' Work, Lives, Narratives, Beliefs and Knowledge

Curriculum Subject Matter and Teaching/Learning Processes include subject area content and/or pedagogical approaches:

- Arts and Aesthetic Education
- Conflict/Peace Education
- Critical and Social Justice Pedagogies
- Democratic Citizenship, Global Perspectives, and Social Sciences Education
- Drama/Theatre Pedagogy
- English Language, Children's Literature, and Literacy Education
- Health and Physical Education
- Mathematics Education
- Pedagogy, Instructional Design and Student Assessment
- Science and/or Technology Education
- Student and/or Teacher Problem Solving and Critical Thinking

Diverse Student Populations and Curriculum Issues include challenges and issues in constructing and delivering curriculum for particular diverse students and/or for social change:

- Adaptive and Inclusive Classrooms
- Anti-racist, Multicultural and Anti-discriminatory Education
- Early Childhood Education

- Educating Immigrant and English as a Second Language Students
- Franco-Ontario and French Language Minority Education
- Gender and Education
- Gifted Learners
- Sexuality and Anti-homophobia Education
- Students' Identity Construction
- Urban Youth

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 accepted under the General Regulations, 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 program 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 accepted under the General Regulations. 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 ([www.oise.utoronto.ca/ctl/Prospective_Students/CTL_Graduate_Programs/Curriculum_Studies_and_Teacher_Development_\(CSTD\)/index.html](http://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/CSTD_Research-Courses_0910.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 accepted under the SGS General Regulations. 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. See the *OISE Bulletin* for more information.

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.)

Degree and Diploma Programs by Graduate Unit

- 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 at the CSTD program web page, www.oise.utoronto.ca/ctl/UserFiles/File/CSTD_Research-Courses_0910.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 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 de l'étude des programmes scolaires	CTL 1019H	Authentic Assessment
CTL 1000H	Foundations of Curriculum Studies	CTL 1020H	Teaching High Ability Students
CTL 1001H	Values and Schooling	CTL 1023H	Technology and Education: Critical Perspectives on Theory and Practice
CTL 1002H	Planification de la programmation pour un enseignement efficace	CTL 1024H	Poststructuralism and Education
CTL 1002H	Curriculum Development for Effective Teaching	CTL 1026H	Improving Teaching
CTL 1003H	Language Arts in Primary Education	CTL 1027H	Facilitating Reflective Professional Development
CTL 1005H	Language, Literacy, and the School Curriculum	CTL 1028H	Constructive Feedback in Teaching
CTL 1007H	Communities of Learning: Teachers Constructing Professional Knowledge	CTL 1029H	From Student to Teacher: Professional Induction
CTL 1008H	Children's Literature as a Foundation of Literate Behaviour Across the Curriculum	CTL 1031H	Language, Culture, and Identity: Using the Literary Text in Teacher Development
CTL 1009H	Theory and Practice in Elementary Literacy Instruction	CTL 1032H	Knowing and Teaching
CTL 1010H	Children's Literature Within a Multicultural Context	CTL 1033H	Multicultural Perspectives in Teacher Development: Reflective Practicum
CTL 1011H	Anti-discriminatory Education in School Settings	CTL 1036H	Thoughtful Teaching and Practitioner Inquiry
CTL 1012H	Curriculum for Girls and Young Women: Historical and Contemporary Issues	CTL 1037H	Teacher Development: Comparative and Cross-Cultural Perspectives
CTL 1014H	Evaluation of Curriculum and Instruction	CTL 1038H	Change and Curriculum Implementation
CTL 1016H	Cooperative Learning Research and Practice	CTL 1039H	Teaching Writing in the Classroom
CTL 1018H	Introduction to Qualitative Inquiry in Curriculum, Teaching, and Learning	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 1805H	Advanced Seminar in Language and Learning: Theory and Practice
CTL 1212H	Curriculum Making in Science: Some Considerations in the History, Philosophy and Sociology of Science	CTL 1808H	Curriculum Innovation in Teacher Education
CTL 1214H	Equity Issues in Science Education	CTL 1809H	Narrative and Story in Research and Professional Practice
CTL 1215H	Teaching and Learning About Science and Technology: Beyond Schools	CTL 1810H	Qualitative Research in Curriculum and Teaching
CTL 1216H	Teacher Leadership in Curriculum, Teaching and Technology Education	CTL 1811H	Writing Research/Research Writing: Moving from Idea to Reality
CTL 1217H	Integrating Science, Mathematics and Technology Curricula	CTL 1812H	Professional Ethics of Teaching and Schooling
CTL 1218H	Culture and Cognition in Mathematics, Science and Technology Education	CTL 1816H	Official Discourses and Minority Education
CTL 1219H	Making Secondary Mathematics Meaningful	CTL 1817H	Current Issues in Teacher Education
CTL 1220H	Sociocultural Theories of Learning	CTL 1818H	Arts in Education: Concepts, Contexts and Frameworks
CTL 1221H	Experiencing Science Education as a Global Educational and Development Endeavour	CTL 1819H	Multicultural Literature in the Schools: Critical Perspectives and Practices
CTL 1304H	Cultural Studies and Education	CTL 1822H	Urban School Research: Youth, Pedagogy, and the Arts
CTL 1306H	La recherche qualitative en éducation: bases théoriques et pratiques	CTL 1825H	The Teacher as a Contemplative Practitioner
CTL 1306H	Qualitative Research Methods in Education: Concepts and Methods	CTL 1841H	Research Seminar in Science, Mathematics and Technology Education
CTL 1307H	Identité collective et éducation minoritaire de langue française	CTL 1842H	Mixed Methods Research in Education: Combining Qualitative and Quantitative Inquiries
CTL 1307H	Identity Construction and Education of Minorities	CTL 1844H	Seminar in Evaluation Problems Prerequisite: CTL 2803H, CTL 1843H, or equivalent
CTL 1309H	Les stéréotypes sexuels dans les programmes scolaires	CTL 1846H	Assessment for Teaching and Learning
CTL 1312H	Democratic Citizenship Education	CTL 1847H	Data Analysis and Integration in Mixed Methods Research
CTL 1313H	Gender Equity in the Classroom	CTL 1861H	Critical Ethnography
CTL 1316H	Global Education: Theory and Practice	CTL 1864H	Methodologies for Comparing Educational Systems
CTL 1318H	Teaching Conflict and Conflict Resolution	CTL 1923H	Technology Supported in Situ Learning
CTL 1400H	Classroom Adaptations and Instructional Strategies	CTL 1926H	Knowledge Media and Learning
CTL 1402H	Adaptive Instruction in Inclusive Classrooms	CTL 1997H	Practicum in Curriculum: Doctoral Level
CTL 1403H	Special Education and Social Representation of Difference	CTL 1998H,Y	Individual Reading and Research in Curriculum: Doctoral Level
CTL 1602H	Introduction to Computers in Education	CTL 1999H	Special Topics in Curriculum: Doctoral Level
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		

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 rigor, combined with increased

Degree and Diploma Programs by Graduate Unit

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. Please refer to the *OISE Bulletin* for more information.
- Students must successfully complete a comprehensive examination 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.

Normal Program Length: 6 sessions full-time

Time Limit: 3 years full-time

Course List

The following courses include core and specific courses. Please refer to the *OISE Bulletin* for more information.

CTL 7000H	Curriculum and Teaching in Literacy
CTL 7002H	Curriculum and Teaching in Mathematics
CTL 7003H	Curriculum and Teaching in Social Studies and Science
CTL 7004Y	Practicum in the Schools
CTL 7005Y	Practicum Internship
CTL 7006H	Reflective Teaching and Inquiry into Research in Education
CTL 7007H	Authentic Assessment
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 7012H	Issues in Secondary Education
CTL 7013H	Arts in Education
CTL 7014H	Fundamentals of Teaching
CTL 7015H	From Student to Professional
CTL 7016H	Integrating Technology into the Classroom: Issues and Activities
CTL 7020Y	Curriculum and Teaching in English - Intermediate/Senior
CTL 7021Y	Curriculum and Teaching in History - Intermediate/Senior
CTL 7022H	Curriculum and Teaching in Mathematics—Secondary
CTL 7023Y	Curriculum and Teaching in Science: Biology—Intermediate/Senior

Elective Courses

The one elective course is normally selected from other graduate courses offered at OISE. This course is taken in the summer after the first year or in the second year. Choice of electives is contingent upon the approval of the student's faculty advisor.

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 accepted under the General Regulations, 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 resume and a Statement of Intent describing their reasons for wishing to take the program, previous qualifications and professional experiences, particular research or professional interests, and future 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 accepted under the General Regulations. 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.
- Enrolment in the MA (rather than MEd) program is advisable for applicants expecting to pursue a doctorate in the future.
- All applicants are required to submit a resume and a Statement of Intent describing their reasons for wishing to take the program, previous qualifications and professional experiences, particular research or professional interests, and future career goals.

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 1030H, 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 accepted under the SGS General Regulations. 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 relevant professional experience prior to applying.
- All applicants are required to submit a resume and a Statement of Intent describing their reasons for wishing to take the program, previous qualifications

Degree and Diploma Programs by Graduate Unit

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. See the *OISE Bulletin* for more information.

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 1030H, 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 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

Beattie, Mary - BA, BA, MA, MEd, EdD
 Bencze, Lawrence - BEd, BSc, MSc, PhD
 Bennett, Barrie - BPHE, MEd, 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
 Cohen, Rina - MSc, PhD
 Conle, Carola - BA, MEd, PhD
 Cooper, Karyn - PhD
 Cumming, Alister - BA, MA, PhD
 Cummins, James - BA, PhD
 Danesi, Marcel - BA, MA, PhD
 Davie, Lynn - BA, MA, PhD
 Diamond, Colin - BA, PhD
 Earl, Lorna - PhD
 Evans, Mark - BE, BA, MA, PhD
 Farrell, Joseph - BSc, PhD
 Feuerverger, Grace - BA, MA, PhD
 Gagne, Antoinette - BEd, MEd, PhD
 Gallagher, Kathleen Marie - PhD
 Gerin-Lajoie, Diane - BSc, MA, PhD
 Gitari, Wanja - BEd, MA, PhD
 Goldstein, Tara - BA, PhD
 Helms-Park, Rena - BA, MA, AM, DPhil
 Hewitt, James - BEd, BMath, MEd, PhD (**Associate Chair, Graduate Studies**)
 Hidi, Suzanne - BA, MA, PhD
 Hodson, Derek - BSc, MEd, PhD
 Kerekes, Julie - BA, MA, PhD
 Kilbourn, Brent - BS, PhD
 Kooy, Mary - BA, MA, PhD
 Kosnik, Clare - DPhil, DPhil
 Labrie, Normand - BA, MA, PhD
 Lam, Tony - BA, MA, PhD
 McDougall, Douglas - BM, BEd, MEd, EdD (**Chair and Graduate Chair**)
 Miller, John - BA, MAT, PhD
 Pedretti, Erminia - BE, MEd, PhD
 Piccardo, Enrica - MA, PhD
 Rolheiser, N Carol - BEd, MEd, PhD
 Scardamalia, Marlene - PhD
 Simon, Roger - BS, 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

Thiessen, Dennis - AB, MEd, DPhil
 Trifonas, Peter - BE, BA, PhD
 Wahlstrom, Merlin - BEd, MEd, PhD
 Wallace, John - BSc, BEd, MSc, PhD
 Willows, Dale - PhD
 Wilson, David - BA, MSc, PhD
 Wolfe, Richard - BA

Members Emeriti

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

Associate Members

Allen, Guy - BA, MA, PhD
 Broad, Kathy - BEd, BA, MEd, PhD
 Burnaby, Barbara - BA, BA, MA, PhD
 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, AM
 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 Toxicology**
 - Dentistry, MSc, PhD
3. **Cardiovascular Sciences**
 - Dentistry, MSc, PhD
4. **Biomedical Engineering**
 - Dentistry, MSc, PhD
5. **Neuroscience**
 - Dentistry, MSc, PhD
6. **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 Master of Science and the Doctor of Philosophy 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

Email: carolynn.mar@dentistry.utoronto.ca

Telephone: (416) 979-4901 ext. 1-4482

Fax: (416) 979-4944

Graduate Department of Dentistry
University of Toronto
Room 104, 124 Edward Street
Toronto, Ontario M5G 1G6
Canada

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 1001Y⁰ *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 or equivalent degree with at least a mid-B standing in the final year from a recognized university.

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

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 1001Y⁰ 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

- Doctor of dental surgery, 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 1001Y⁰ 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.
- 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 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 Graduate Department of Dentistry.

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 degree with at least an A standing from a recognized university.

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

Program Requirements

- Students undertake customized programs, approved by an advisory committee and the Graduate Chair of Dentistry, comprising advanced study and original research culminating in the defence of a thesis.
- Minimum course requirements: completion of the course DEN 1100Y⁰ *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 Graduate Chair of Dentistry who will appoint a committee to plan and arrange their coursework 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 annually to the Graduate Chair 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 clinician/

scientists, aspiring to teaching and research careers in the dental field, are considered on an individual basis.

Minimum Admission Requirements

- Doctor of Dental Surgery 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.
- Completion of the course DEN 1100Y⁰ *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 Graduate Chair of Dentistry 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 Graduate Chair of Dentistry 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 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.

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

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 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
 - 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 Graduate Chair of Dentistry, will be in place at program commencement. The Graduate Chair 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 1100Y⁰ *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 to 24 months after commencement to demonstrate an adequate capacity for oral health sciences research at the doctoral level.
- Participate in all graduate research activities of the advisor's research group.
- Present at meetings and publish original research findings in timely fashion.
- Participate as members of departmental and student committees as applicable.

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

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

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 Prosthesis
DEN 1044Y	Prosthodontics IV: The Edentulous Milieu and its Management by Removable or Implant Supported Prosthesis
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 Maxillofacial Surgery
DEN 3003Y	Oral and Maxillofacial Surgery 3: Evidence-based Literature Reviews in Oral and Maxillofacial Surgery
DEN 3004Y	Oral and Maxillofacial Surgery 4: Applied Surgical Anatomy of the Head and Neck
DEN 3005H	Head and Neck Anatomy
DEN 4001Y	Paediatric Dentistry 1: Theoretical Paediatric Dentistry
DEN 4002Y	Paediatric Dentistry 2: Journal Review
DEN 4003Y	Paediatric Dentistry 3: Facial and Dental Growth and Development in Paediatric Dentistry
DEN 4004H	Paediatric Dentistry 4: Child Behaviour Management
DEN 4005Y	Paediatric Dentistry 5: Clinical Paediatric Dentistry
DEN 4006Y	Paediatric Dentistry 6: Oral and Maxillofacial Surgery as Applied to Paediatric Dentistry
DEN 4007H	Paediatric Dentistry 7: 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
Barnett Foster, Debora E - BSc, MSc, PhD
Bressmann, Tim - MPH, PhD
Casas, Michael - MSc, DDS
Casper, Robert - MD
Clokic, 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
Grynepas, Marc - MSc, PhD
Haas, Daniel - BSc, BSCD, DDS, PhD

Hinz, J. Boris - PhD
 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 (*Interim Director, Postgraduate Studies*)
 McCulloch, Christopher - BSc, DDS, PhD
 Mock, David - DDS, PhD, Fell Ryl Coll Dent Canada
 Peel, Sean - BSc, PhD
 Santerre, Paul - BSc, MSc, PhD
 Seltzer, Ze'ev - DMD, BMedSc
 Sessle, Barry - BS, MSD, BDS, PhD
 Sherman, Phillip - MD
 Simmons, Craig - BSc, MSc, PhD
 Sone, Eli - BSc, MS, PhD
 Tenenbaum, Howard - DDS, PhD (*Interim Coordinator of Graduate Studies*)

Metaxas, Angelos - DIPORH, MSc, DDS, DDSC
 Moriarty, Tara - BA, BSc
 Nainar, Hashim - BDS, MSCD
 Pharoah, Michael - BSc, DDS
 Quinonez, Carlos R. - MS, DMD
 Saltzman, Brett - BA, MSc, DDS
 Sigal, Michael - MSc, DDS
 Suri, Sanjay - BDS, MDS
 Sutherland, Susan - BScN, MSc, DDS
 Talwar, Reena - BSc, DDS, PhD
 Tam, Laura - BSc, MSc, DDS
 Tompson, Bryan - DDS

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
 Avivi-Arber, Limor - MSc, PhD
 Baker, Gerald - DDS, MS, Fell Ryl Coll Dentistry
 Barrett, Edward - BSc, MSc, DDS
 Barzilay, Issac - MS, DDS
 Basrani, Bettina - PhD
 Bradley, Grace - MSc, DDS
 Carmichael, Robert - BSc, MSc, DMD
 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

Doctor of Medicine/Doctor of Philosophy (Combined Program)

Faculty Affiliation

Medicine

Degree Programs Offered

Medicine – MD/PhD

Overview

The 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

Email: mdphd.program@utoronto.ca

Telephone: (416) 978-8885

Fax: (416) 971-2132

MD/PhD Program

University of Toronto
Medical Sciences Building
Room 7205, 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

Faculty Affiliation

Arts and Science

Degree Programs Offered

Drama – 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, MA, PhD
2. **Sexual Diversity Studies**
 - Drama, MA, PhD
3. **Jewish Studies**
 - Drama, MA, PhD
4. **South Asian Studies**
 - Drama, MA
5. **Women and Gender Studies**
 - Drama, MA, PhD

Overview

The Centre for Study of Drama 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

Email: graduate.drama@utoronto.ca (general);
gc.graddrama@utoronto.ca (Coordinator of Graduate Studies)

Telephone: (416) 978-7980

Fax: (416) 971-1378

Centre for Study of Drama
University of Toronto
Koffler Student Services Centre
214 College Street
Toronto, Ontario M5T 2Z9
Canada

Degree Programs

Drama

Master of Arts

Minimum Admission Requirements

- Applicants for admission to the Centre for Study of Drama are considered under the General Regulations. 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 4.5 full-course equivalents (FCEs), as approved by the Centre for Study of Drama, including both DRA 1003Y *Introduction to Theatre, Drama, and Performance Studies* and DRA 5000Y *Theatre Practice*.
- 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 Study of Drama are considered under the General Regulations. 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 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 the Centre for Study of Drama must be recommended for further study by the instructors whose courses they have taken. Applicants holding the MA of this university in a subject other than drama, or its equivalent from another university, will be considered for admission to the PhD program in the 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.

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 3.5 full-course equivalents (FCEs) in addition to the PhD requirements listed above, including DRA 1003Y for a total of 7.5 FCEs, and satisfy the centre's dramaturgical and performance practice requirements as determined on admission.
- must maintain an A- average in their first 3.5 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 1003Y	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
DDRA 1099H	Dramaturgy of Sound in Drama, Film, Performance Art, and Music
DRA 1105H	Performing History
DRA 2011H	Theatrical Performance and Reception
DRA 3019H	Shakespeare in Modern Production
DRA 3021H	Elizabethan Performance: History and Practice
DRA 3120H	The Way of the Actress
DRA 3211H	Performing the 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 5000Y	Theatre Practice I
DRA 5001Y	Theatre Practice II (Credit/No Credit)
DRA 6000Y	Research Seminar (Credit/No Credit)

Cross-Listed Courses

The Graduate Centre for Study of Drama also cross-lists courses in drama, theatre, and performance offered by other graduate units of the University of Toronto.

A listing of 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
 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
 Gallagher, Kathleen Marie - PhD
 Johnson, Stephen - BA, MA, PhD
 Justice, Daniel - BA, MA, PhD
 Kanaganayakam, Chelvanayakam (Chelva) - PhD
 Keil, Charles - BA, MA, PhD
 Kingwell, Mark - AB, BA, AM, MPH, PhD
 Klausner, David - AB, PhD
 Kleber, Pia - BA, MA, MA, PhD
 Lancashire, Anne - BA, AM, PhD
 Lancashire, D Ian - BA, MA, PhD
 Lettieri, Michael - BA, MA, PhD
 Levenson, Jill - PhD
 Lopez, Jeremy - BA, MA, DPhil
 MacLean, Sarah - BA, MA, PhD
 Michelucci, Pascal - BA, MA, PhD

Most, Andrea - BA, MA, PhD
 Parker, Mary Ann - BA, MM, PhD, Assoc Royal Conserv
 Tor
 Pietropaolo, Domenico - BSc, MA, PhD
 Quayson, Ato - BA, PhD (**Director**)
 Revermann, Martin - 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
 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
 Plant, Richard - PhD
 Schonberg, Michal - BA, MA, PhD
 Sidnell, Michael - BA, MA, PhD

Associate Members

Filewod, Alan - PhD
 Freeman, Barry - BA, MA, PhD
 Freeman, Sarah Jane - PhD, PhD
 Hill, Colin - BA, MA, PhD
 Houston, Andrew - DPhil
 King, Robert - AB, MA, PhD
 Knowles, Richard - DPhil
 Odom, Selma - PhD
 Pietropaolo, Damiano - AM
 Rankin, Katharine - BA, MA, PhD
 Ruti, Marjut - BA, MA, PhD
 Schotzko, T. Nikki - PhD
 Syme, Holger Schott - BA, AM, PhD
 Testa, Bart - BA, MA
 Warner, Mary Jane - MA, PhD

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
Email: celia.sevilla@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

- Accepted 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 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. 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.
- Application deadline is January 31 for admission the following September.

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

- Accepted 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 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. 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.
- Application deadline is January 31 for admission the following September.

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 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 3380H	Globalization and Culture
COL 5040H	Marx, Deleuze and Empire
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 & Marx
EAS 1429H	Topics in Marxism and Japan
EAS 1430H	Introduction to the Countryside
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)

Degree and Diploma Programs by Graduate Unit

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

Philosophy and Religion

EAS 1228H	Topics in Chinese Ethical Theories
EAS 1226H	Topics in Modern Chinese Philosophy
EAS1227H	Topics in Chinese Religions
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
PHL 2015H	Confucianism
PHL 2016H	Taoism: Philosophy and Religion
PHL 2017H	Buddhism in China
RLG 3423H	Religion in the Japanese Tradition

Politics

POL 2416Y	Politics and Society in Contemporary China
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Sanskrit and Hindi

EAS 1379H	The History, Structure, and Politics of the Hindi Language
EAS 1500Y	The Structure of the Classical Sanskrit Language

EAS 1502H	Sanskrit Narrative Literature
EAS 1503H	Sanskrit Epic Literature
EAS 1505H	Buddhist Narrative Literature in Buddhist Hybrid Sanskrit
EAS 1506H	Aspects of Classical and Medieval Indian Culture through Sanskrit Texts
EAS 2007H	Advanced Sanskrit Texts I
EAS 2006Y	Advanced Sanskrit Texts II
EAS 1488Y	Hinduism and Politics

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 1999Y	East Asian Studies Bibliography, Reference, and Research Methodology

Graduate Faculty

Full Members

Ahn, Juhn - BA, MA, PhD
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
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, AM, MPH, PhD
Purtle, Jennifer - BA, MPH, MA, PhD
Sakaki, Atsuko - PhD
Sandahl, Stella - MA, MA, PhD
Sanders, Graham - BA, PhD (<i>Acting Chair and Graduate Chair</i>)
Schmid, Andre - BA, BA, MA, PhD
Shen, Vincent Tsing-song - PhD
Tran, Nhung - 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
Ko, Kyoungrok - BA, MA, MSc
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, MSc, 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

Email: 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 accepted 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 accepted 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 or its equivalent 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 or equivalent, 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.
- All students are examined 18 to 20 months into the program on both their mastery of concepts in ecology and evolutionary biology and a submitted research proposal.
- 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
 Agrawal, Aneil - BSc, PhD
 Andrade, Maydianne - BSc, MS, PhD
 Arhonditsis, Georgios - BSc, MSc, DSCA
 Baker, Allan - MSc, PhD
 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
 Caron, Jean-Bernard - MSc, PhD
 Caspersen, John - BA, PhD
 Chang, Belinda - AB, PhD
 Collins, Nicholas - BA, PhD (*Associate Chair, Graduate Studies*)
 Currie, Douglas - BSc, PhD
 Cutter, Asher - PhD
 Cyr, Helene - BSc, MSc, PhD
 Darling, D. Christopher - MSc, PhD
 Dickinson, Timothy - BSc, MSc, PhD
 Eckenwalder, James - BA, PhD
 Engstrom, Mark - BSc, MSc, PhD
 Evans, David - BSc, PhD
 Fortin, Marie-Josée - MSc, PhD
 Frederickson, Megan - AB, 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

Degree and Diploma Programs by Graduate Unit

McLennan, Deborah - BSc, PhD
Moncalvo, Jean-Marc - PhD
Murphy, Robert - BSc, MA, PhD
Reisz, Robert - BSc, MSc, PhD
Rodd, F. Helen - MSc, PhD
Rowe, Locke - BSc, MS, PhD (*Chair and Graduate Chair, Jan.–June 2012*)
Sage, Rowan - PhD (*Acting Chair and Graduate Chair, July–Dec. 2011*)
Sage, Tammy - BA, MS, PhD
Short, Steven - BSc, PhD
Smith, Sandy - BAgSc, 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
Williams, D Dudley - DipEd, BSc, MSc, PhD, DSc
Winterbottom, Richard - 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
Zimmerman, Ann - BA, PhD

Associate Members

Dunlop, Erin - BSc, PhD
Johnson, Timothy - BSc, MSc, PhD
Lester, Nigel Paul - BA, MSc, PhD
Mandrak, Nicholas - BSc, MSc, PhD
Minns, Charles - BSc, 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

Email: ecograd@chass.utoronto.ca

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

Time Limit: 3 years full-time

Doctor of Philosophy

Minimum Admission Requirements

- Minimum B+ standing in an MA program in economics. Admission is competitive, so accepted

Degree and Diploma Programs by Graduate Unit

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 4060Y⁰).
- 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.

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 the mathematics and statistics course (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; 7 years direct-entry

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

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

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

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

Industrial Organization

ECO 2900H	Industrial Organization I
ECO 2901H	Industrial Organization II

Law and Economics

ECO 3501H	Economic Analysis of Law
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 4060Y ⁰	Graduate Research Seminar (Credit/No Credit)

Graduate Faculty**Full Members**

Aguirregabiria, Victor - BA, MSc, PhD
Aivazian, Varouj - BS, MA, PhD

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.

Degree and Diploma Programs by Graduate Unit

Alexopoulos, Michelle - BSc, MA, PhD
Anderson, Gordon - BA, MSc, PhD
Baker, Michael - BComm, MA, PhD
Benjamin, Dwayne - BSc, MA, PhD
Brandt, Loren - BS, MS, PhD
Carr, Jack - BCom, MA, PhD
Damiano, Ettore Vincenzo - AB, MA, MPH, PhD
Deweese, Donald - LLB, BScEE, 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 - 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, Phillip - BA, MA, PhD
Osborne, Martin - BA, PhD (**Associate Chair, Graduate Studies**)
Park, Andreas - MEC, MPH, PhD
Pesando, James - BA, MA, PhD
Pitchik, Carolyn - BA, MSc, PhD
Reid, Frank - BA, MSc, PhD
Restuccia, Diego - BA, MA, PhD
Shi, Shouyong - BSc, MA, PhD
Siow, Aloysius - BA, PhD
Smart, Michael - BA, MA, PhD
Stabile, Mark - MA, MPH, 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
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
Rotstein, Abraham - BA, PhD
Watson, Andrew - BComm, BA, MA
Wilson, Thomas - BA, AM, PhD

Associate Members

Bobonis, Gustavo - BA, PhD
Burda, Martin - BSc, MA, PhD
Dasgupta, Kunal - BS, MA, MS, PhD

Indart, Gustavo - BA, MA, PhD
Malinova, Ekaterina - BS, MA, PhD
Masson, Paul - PhD
Mondria, Jordi - BA, MA, PhD
Morrow, Peter - BA, MA, PhD
Serrano, Carlos - BS, MA, MS, PhD
Shi, Xianwen - PhD
Stewart, Colin - BSc, MPH, MA, MSc, PhD
Suzuki, Junichi - BA, MA, 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

Email: 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.

Degree and Diploma Programs by Graduate Unit

- 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	EMC in Power Engineering
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 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

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

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	Photonics II
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

Degree and Diploma Programs by Graduate Unit

ECE 1508H	Special Topics in Communications
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 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	Digital Hardware Design Using Programmable Logic Devices
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

Master of Engineering

ECE 2500Y	Master of Engineering Project
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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
Baecker, Ronald - BS, MSc, PhD
Bardakjian, Berj - BSc, BEd, MAsC, PhD
Ben Amara, Foued - BSE, MSc, MSEE, PhD
Benhabib, Bensiyon - BSc, MSc, PhD
Betz, Vaughn - BSc, MS, PhD
Broucke, Mireille - BScEE, MS, PhD
Brown, Stephen - BSE, MAsC, PhD
Chan Carusone, Anthony - BAsC, PhD
Chechik, Marsha - BS, MS, PhD
Chow, Paul - BAsC, MAsC, PhD
Dawson, Francis - BSc, BAsC, MAsC, PhD
De Lara, Eyal - BS, MS, PhD
Easterbrook, Stephen Michael - BSc, PhD
Eizenman, Moshe - BAsC, MAsC, PhD
Eleftheriades, George - DIPING, MSEE, PhD
Enright Jerger, Natalie - BSc, MSc, PhD
Fiume, Eugene - BM, MSc, PhD

Francis, Bruce - BAsC, MEng, PhD
 Frey, Brendan - BSc, MSc, PhD
 Genov, Roman - BS, MS, PhD
 Goel, Ashvin - BTech, MS, PhD
 Gulak, Glenn - BAsC, MSc, PhD
 Hatzinakos, Dimitrios - DIPING, MSc, PhD
 Helmy, Amr - BSc, MSc, PhD
 Herman, Peter - BEng, MSc, PhD
 Hum, Sean - BSc, MSc, PhD, Reg Professional Engineer
 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
 Liebeherr, Jorg - DIPING, PhD
 Lim, Teng Joon - BEng, PhD
 Lo, Hoi-Kwong - BA, MA, MS, PhD
 Maggiore, Manfredi - MS, PhD
 Mandelis, Andreas - BSc, MA, MSc, PhD
 Mann, Steve - BSc, BAsC, MSc, PhD
 Martin, Kenneth - BAsC, MAsC, 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, Lacro - 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
 Sedra, Adel - BSc, MAsC, 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
 Truong, Kien (Kevin) - BAsC, PhD
 Valaee, Shahrokh - BScEE, MSEE, PhD
 Veneris, Andreas - BSc, MSc, PhD
 Vicente, Joaquim Jose - BSc, MS, PhD
 Voinigescu, Sorin - MS, PhD
 Wong, Willy - BSc, MSc, PhD (**Associate Chair, Graduate Studies**)
 Yu, Wei - BAsC, MSEE, PhD
 Zhu, Jianwen - BS, MS, PhD

Members Emeriti

Balmain, Keith - BSc, MS, PhD
 Blake, Ian - BAsC, MAsC, PhD
 Bonert, Richard - DIPING, DE
 Cobbold, Richard - PhD
 Davison, Edward - BAsC, MA, PhD, Assoc Royal Conserv Tor
 Iizuka, Keigo - BS, ME, MS, PhD
 Joy, Michael - BSc, MAsC, PhD
 Kunov, Hans - MSc, PhD
 Lavers, Douglas - BSc, MAsC, PhD
 Lee, E Stewart - BEng, MEng, PhD
 Pasupathy, Subbarayan - BE, MPH, PhD
 Salama, Andre - BAsC, MAsC, PhD
 Semlyen, Adam - PhD, PhD
 Slemmon, Gordon - DIC, MAsC, PhD, DSc
 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

Apkarian, Jacob - BE, MAsC, PhD
 Demke Brown, Angela - PhD
 Doostnejad, Roya - BSc, MAsC, PhD
 Eckford, Andrew - BE, MAsC, PhD
 Hussein, Ali - BSc, BSc, MSc, PhD
 LOSTANLEN, Yves - MSc, PhD
 Stergiopoulos, Stergios - BSc, MSc, 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 & Eighteenth-Century Literature
- Romantic & 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:

- Book History and Print Culture**
 - English, MA, PhD
- Diaspora and Transnational Studies**
 - English, MA, PhD
- Editing Medieval Texts**
 - English, PhD
- Health Care, Technology and Place**
 - English, PhD
- Jewish Studies**
 - English, MA, PhD
- Sexual Diversity Studies**
 - English, MA, PhD
- South Asian Studies**
 - English, MA, PhD
- Women and Gender Studies**
 - English, MA, PhD
- Women's Health**
 - English, MA, PhD

Overview

One of the strongest and most diverse graduate English programs in North America, the University of Toronto's Graduate English Department 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 MA and PhD programs offer a broad background in British, Canadian, Aboriginal, American, and Postcolonial literatures, a sophisticated command of current theoretical approaches, and exceptional support for significant research projects.

Contact and Address

Web: www.english.utoronto.ca

Email: deptofenglish.graduate@utoronto.ca

Telephone: (416) 978-2526

Fax: (416) 978-2836

Department of English
University of Toronto
Jackman Humanities Building
6th Floor, 170 St. George Street
Toronto, Ontario M5R 2M8
Canada

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.

- Students are accepted 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.

- Applicants are encouraged to take the Graduate Record Examination (GRE) and to have a report sent to the department.
- 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 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 may elect to take the degree by coursework only or, with permission of the Director, by coursework and thesis. In either case, students must attain a B standing in each graduate course.
- **MA by coursework.** This is the preferred option for most students, and especially for those going on to the PhD. 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
- **MA by thesis.** The thesis option requires ENG 6999Y *Critical Topographies: Theory and Practice of Contemporary Literary Studies in English*, 1.5 graduate FCEs in English, and a thesis of approximately 30,000 words on a topic approved by the department.

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 non-fiction. Each student is assigned a faculty member or adjunct faculty member with whom to consult on

a regular basis about the Project. All advisors are published writers.

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

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

Degree and Diploma Programs by Graduate Unit

- 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:
 - 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, or
 - a master's degree in English from a recognized university, with an average grade equivalent to at least a University of Toronto A- in the applicant's overall program.
- Applicants must satisfy the department that they are capable of independent research in English at an advanced level. Applicants who have taken the Graduate Record Examination are encouraged to have a report sent to the department.
- 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 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 9500Y *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 9500Y *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 9500Y *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 fulfilment 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 September of their second year. Students entering the program directly from a bachelor's degree take the examination in September 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 admit-

ted 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 eight 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,

Degree and Diploma Programs by Graduate Unit

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 5275H	Elizabeth Bishop and Marianne Moore Studies in Poetics
ENG 1002H	Old English II	ENG 5276H	The Vietnam War Era and Canadian Literature
ENG 1008H	Medieval Entertainers	ENG 5280H	American Realism and Reform
ENG 1009H	Writing the Nation: Pre-Modern Historiographies	ENG 5318H	Catastrophe, Community, Commodity, and Control in the 1930s: Studies in Historical Analysis
ENG 1551H	The Canterbury Tales	ENG 5519H	Narrative, Narratology, and Modernist Fiction: Studies in Narrative
ENG 2001H	Animal/Human Interfaces in Early Modern Culture	ENG 5540H	Modernism and its Media: Fiction and Theatre in an Age of Film and Radio
ENG 2002H	Early Modern Ecologies	ENG 5572H	The City as Archive: Social Memory, Missing Histories, Writing
ENG 2007H	Gender and Song in the Early Modern Context	ENG 5580H	American Pastoral: Agriculture and Environment in Literary Imagination
JEH 2020H	Early Modern Diaspora: A Cross-disciplinary Seminar on the Literature and History of Exile	ENG 5581H	The Idea of the Modern
ENG 2225H	Renaissance Lyric, in Theory	ENG 5608H	Modernist Narrative, and Embodied Cognition
ENG 2235H	"1594"	ENG 5751H	Novelists and Terrorists
ENG 2429H	Gender, Courtesy, and Civility in Early Modern England	ENG 5787H	The Poetics of Haunting in Canadian Fiction
ENG 2467H	Milton's Early Modern Nation	ENG 5810H	Rethinking Literary History: South Asian Writing in English
ENG 2485H	London Drama 1190–1590	ENG 5905H	Introduction to African-Canadian Literature
ENG 2533H	Historicizing Shakespeare's Language: Discourse Analysis and Early Modern Studies	ENG 5963H	James Joyce: Modernism, Modernity, Mythology
ENG 2586H	Popular Drama in Early Modern England	ENG 6043H	Introduction to Contemporary Literary Theory
ENG 2583H	Popular Legend in the Plays of Shakespeare and His Contemporaries	ENG 6044H	The Literature of Protection
ENG 2653H	Renaissance Tragedy	ENG 6056H	Ideologies
ENG 3044H	English Comedy, 1660–1737	ENG 6062H	The Human Condition: Arendt, Adorno, Derrida, Kristeva
ENG 3403H	Literature of the Seven Years War	ENG 6065H	Repetition in Modern Thought and Culture
ENG 4216H	Romanticism and the Literature of Mobility	ENG 6154H	Race and Cinema
ENG 4503H	Darwin and Darwinism	ENG 6160H	The Politics of Poetic Form: Studies in Poetics
ENG 4665H	Romantic Cities	ENG 6163H	The Fate of Culture in an Age of Globalization
ENG 4881H	Victorian Realism and the Victorian Realist Novel: Studies in Narrative	ENG 6193H	Communities of Readers
ENG 4885H	Sociality and its Discontents: the Social and Anti-social in the Victorian Novel	ENG 6200H	The World is Too Much With Us: Witnessing and Creativity in Contemporary Long-Form Reporting
ENG 4906H	Novel, Reconstruction, and the Civil War Amendments	ENG 6223H	The Text of Donne: The Variorum Donne
ENG 4947H	Studies in Victorian Poetry (Ballads and Romances)	ENG 6362H	History and Structure of the English Language: Post-1500
ENG 5024H	Anglo-Jewish Fiction and Poetry of the Twentieth Century	ENG 6496H	Spatializing Marxism: the Postmodern "Spatial Turn"
ENG 5040H	Pathological Forgetting in Canadian Literature	ENG 6522H	Transnational Masculinity in Literature and Culture
ENG 5050H	Literature, Law and Liberal Culture in the United States 1776–1865	ENG 6525H	Environmental Criticism and Postcolonial Discourse
ENG 5058H	Magical Realism(s): Postcolonialism and Postmodernism	ENG 6546H	Literature and the Resistance to Being
ENG 5206H	"Sir Beelzebub's Syllabus": The Poetry of Edith Sitwell	ENG 6530H	Death in Theory
		ENG 6817H	Text, Context, Intertext: the Touch of Evil Project
		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
 Cuddy-Keane, Melba - BA, MA, PhD
 de Quehen, A Hugh - BA, BA, 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 (Chelva) - PhD
 Keymer, Thomas - BA, MA, PhD
 Klausner, David - AB, PhD
 Lamb, Susan - BA, AM, DA
 Lancashire, Anne - BA, AM, PhD
 Lancashire, D Ian - BA, MA, PhD
 Landon, Richard - BA, BLS
 Leonard, Garry - BA, MA, PhD
 Levene, Mark - BA, MA, PhD
 Levenson, Jill - 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
 McLeod, Randall - AB, MA, PhD
 Morgenstern, Naomi - BA, MA, PhD
 Most, Andrea - BA, MA, PhD
 Mount, Nick - AM, PhD
 Murray, Heather - BA, MA, PhD

Nyquist, Mary - BA, MA, PhD
 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
 Solecki, Samuel - 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

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
 de Groot, Hans - MA, PhD
 Domville, Eric William - BA, PhD
 Duffy, Dennis - AB, MA, PhD
 Dutka, JoAnna - BA, MA, PhD, Assoc Royal Conserv Tor
 Flahiff, Frederick - BA, PhD
 Graziani, René - 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
 Jackson, James - BA, MA, AM, PhD, PhD
 Johnston, Alexandra - PhD
 Kirkham, Michael - BA, MPH
 Leggatt, Alexander - BA, MA, PhD
 Macpherson, Jay - PhD
 Marker, Frederick - AB, DFA
 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

Degree and Diploma Programs by Graduate Unit

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
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
Vernon, Karina Joan - BA, MA, PhD
Xie, Ming - 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 specialisation in the European, Russian and Eurasian area.

The Combined **Juris Doctor/Master of Arts** Program provides specialised 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
Email: 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 accepted 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 his or her major discipline.
 - ERE 2001H, taken in the first year of the program.
 - ERE 2000Y, the interdisciplinary core course, taken in the second year of the program. As part of ERE 2000Y, each student must write a 30- to 40-page master's essay, based on original research.
 - The remaining 2.5 FCEs must be drawn from at least two disciplines other than the major discipline.

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.

Degree and Diploma Programs by Graduate Unit

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
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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

Degree and Diploma Programs by Graduate Unit

- 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
Johnson, Robert - BA, PhD
Kivimae, Juri - AM, PhD
Knop, Karen - BSc, LLB, LLM, SJD
Komaromi, Ann - MA, DPhil
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, Fell Royal Society Canada
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 (**Coordinator of Graduate Studies**)
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
Dyck, Harvey - BA, MA, PhD
Eddie, Scott - BS, PhD
Gregor, Richard - BA, MA, PhD
Griffiths, Franklyn Jc - BA, MIA, PhD
Isajiw, Wsevolod - BA, MA, 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
Klein, Edith - BA, MA, PhD
Korteweg, Anna - BA, MA, PhD (**Acting Director**)
Schatz, Edward - PhD
Schonberg, Michal - BA, MA, PhD
Way, Lucan Alan - BA, PhD

Exercise Sciences

Faculty Affiliation

Physical Education and Health

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: www.exs.utoronto.ca

Email: exs.fpeh@utoronto.ca

Telephone: (416) 978-6087

Fax: (416) 971-2118

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

Degree Programs

Exercise Sciences

Master of Science

Minimum Admission Requirements

- 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

- General Regulations of the School of Graduate Studies.

Degree and Diploma Programs by Graduate Unit

- Completion of a 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.
- 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 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
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

Sonnadara, Ranil - DPhil

Forestry

Faculty Affiliation

Forestry

Degree Programs Offered

Forest Conservation – MFC

Forestry – MScF, PhD

Collaborative Programs

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

1. 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 foreign residential field courses, practical internships and individual and group research. It provides a strong, coherent professional education in forest conservation to students from diverse 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

Email: 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

- General Regulations of the School of Graduate Studies.
- An appropriate bachelor's degree or its equivalent from a recognized university with an average in 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 resume. 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.
- A core of 10 integrated half courses (5.0 FCEs), 4 elective half courses (2.0 FCEs), and an internship FOR 3007H (0.5 FCE) during the summer session in which students work on practical forest conservation projects, either in Canada or abroad. Elective course selection will include the successful completion of 1 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. Enrolment in field courses outside of the Faculty of Forestry will be subject to the requirements and admission by the academic unit offering the course.
- It is also possible to earn the MFC degree through part-time studies. Information on specific course requirements and program schedules is included on the Faculty's website.

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

- General Regulations of the School of Graduate Studies.
- An appropriate bachelor's degree or its equivalent 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 completed application form, including transcripts, three references, a letter of intent, a resume, and a writing sample. Full instructions and forms are available via the Faculty's website.

Program Requirements

- 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 and the School of Graduate Studies.
- Minimal requirements for this degree are:
 - 12 months of residence including two academic sessions.
 - 1.5 FCEs, of which at least 0.5 FCE is taken within the Faculty, plus, in the case of students with non-forestry backgrounds, one of FOR 3000H, FOR 3002H, FOR 3003H, FOR 3004H, FOR 3009H, or FOR 3010H, on the recommendation of the student's supervisory committee and approval of the Graduate Coordinator. 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 or its equivalent from a recognized univer-

sity 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 or its equivalent 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 resume, and a writing sample. Full instructions and forms are available via the Faculty's website.

Program Requirements

- Minimum PhD program requirements:
 - A minimum of four half courses (2.0 FCEs) must be taken. Depending on the student's background and academic goals, additional or alternative coursework may be required by the student's supervisory committee, including courses outside the Faculty of Forestry.
 - Credit in FOR 1000H and FOR 1001H.
 - Students approved for transfer from the MScF to the PhD are required to complete, as a minimum, the MScF course requirements (including FOR 1000H and FOR 1001H, plus 1.5 FCEs) plus 0.5 additional FCE.
 - For students with a non-forestry background, credit in one of FOR 3000H, FOR 3002H, FOR 3003H, FOR 3004H, FOR 3009H, or FOR 3010H, on the recommendation of the student's supervisory committee and approval of the Graduate Coordinator.
 - Successful completion of a comprehensive examination. This will ordinarily be taken early in the second year of 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 toward 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 1900H	Advanced Topics in Forestry I (Directed Studies Course)
FOR 1901H	Advanced Topics in Forestry II (Directed Studies Course)
FOR 3000H	Current Issues in Forest Conservation
FOR 3001H	Biodiversity of Forest Organisms
FOR 3002H	Applied Forest Ecology and Silviculture
FOR 3003H	Economics of Forest Ecosystems
FOR 3004H	Forest Management Decision Support Systems
FOR 3005H	Stresses in the Forest Environment
FOR 3006H	Case Study Analysis in Forest Management
FOR 3007H ⁺	Internship in Forest Conservation (Credit/No Credit)
FOR 3008H	Research Paper in Forest Conservation
FOR 3009H	Forest Conservation Biology
FOR 3010H	Society and Forest Conservation

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 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
 Martell, David - BAsC, MASc, PhD
 Price, Anthony - BSc, MSc, PhD
 Sain, Mohini - PhD
 Singh, Neera - BSc, MF, PhD
 Smith, C. Tattersall - BA, MS, PhD
 Smith, Sandy - BAgSc, MSc, PhD (**Dean**)
 Thomas, Sean - BA, PhD
 Yan, Ning - BSc, PhD, Reg Professional Engineer
(Coordinator of Graduate Studies)

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
 Campbell, Malcolm - DPhil
 Cole, William - BSCF, MSCF, PhD
 Colombo, Stephen - BSCF, MSCF, PhD
 Couto, Laercio - PhD
 de Groot, W.J. - BSc, PhD
 Drapeau, Pierre - BSc, MSc, 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
 Maynard, Alex - BA, MA, MPH, PhD
 McKenney, Daniel - BSc, MSc, PhD
 Moola, Faisal - BSc, MSc, PhD
 Morris, Dave - BSCF, MSc, PhD

Nanang, David - BSc, MSCF, PhD
Navar, Jose de Jesus - BSCF, MSCF, PhD
Naylor, Brian - BSCF, PhD
Nol, Erica - BS, MSc, PhD
Oksman, Kristiina - MSc, 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
Wotton, Brian Michael - BSc, PhD
Wylie, Stephen - BSc, PhD
Zhang, S.Y. Tony - 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/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

Email: 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

Students 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 four full-course equivalents as follows:
 - Students in **literature** take the graduate seminar in literature (FRE 1200Y) and
 - 3.0 full-course equivalents (FCEs) from the regular graduate course offerings; or
 - 2.5 FCEs and the 0.5-FCE FRE 5001H *Research Essay*, a memoire of approximately 35 pages; or
 - 2.0 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 seminar in literature (FRE 1200Y) 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 seminar 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 seven 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 one full-course equivalent in the first year of the program, and one full-course equivalent in the second year, outside the department. Students in literature

take FRE 1200Y 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 one full-course equivalent outside the department. Students in literature take FRE 1200Y, unless this course or its equivalent has 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 to 20 pages, plus bibliography, designed to test

Degree and Diploma Programs by Graduate Unit

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 1140H	La syllabe : études expérimentales et théoriques

Linguistic and Literature Courses

FRE 1201H	Méthodes de recherche (Credit/No Credit)
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Literature Courses

FRE 1200Y	Séminaire de littérature
FRE 1612H	Satire et parole libre dans la littérature des XVI ^e et XVII ^e siècles
FRE 1813H	Littérature de contact et pensée anthropologique en France du XVI ^e au XVIII ^e siècle
FRE 1901H	Le récit de voyage au XIX ^e siècle
FRE 2004H	Formes et voies romanesques de l'extrême contemporain
FRE 2035H	Autour de l'intime en France: les écrits contemporains des femmes
FRE 2037H	Écriture et folie
FRE 2039H	Roman et critique sociale aux XX ^e et XXI ^e siècles
FRE 2078H	Altérité : formes et significations
FRE 2107H	Le récit fantastique québécois : formes et transformations

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

FRE 3004H	Rencontres et compagnonnages au cœur de l'œuvre
FRE 3005H	Méthodologie de l'analyse du dialogue romanesque
JFF 1100H	Surrealism & 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
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 (**Associate Chair; Coordinator of Graduate Studies**)
Motsch, Andreas - PhD
Ndayiragije, Juvenal - PhD
Nikiema, Emmanuel - PhD
Paterson, Janet - BA, MA, PhD
Pirvulescu, Mihaela - MA, PhD
Portebois, Yannick - BA, MA, PhD
Riendeau, Pascal - BA, MA, PhD
Roberge, Yves - BA, MA, PhD
Steele, Jeffrey - BA, MA, PhD (**Chair and Graduate Chair**)
Tcheuyap, Alexie - PhD (**Coordinator, Graduate Admissions and Funding**)

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, Fell Royal Society Canada
Nesselroth, Peter - BA, MA, PhD
Perron, Paul - PhD
Shek, Ben-Zion - BA, MA, PhD
Smith, David - BA, PhD, PhD
Taylor, Robert - PhD
Tolton, Cameron - PhD
Wooldridge, Terence - BA, DDELUN

Associate Members

Ahmed, Maroussia - MA, LESL, DDELUN
Astrington, John - BA, MA, PhD
Auger, Julie - BA, MA, PhD
Baudot, Alain - DipdESup, LESL
Berube, Georges - BA, MA, PhD
Cahill, James - PhD
Cobb, Michael - BA, MA, AM, PhD
Cocheilin, Isabelle - DipdESup, BA, MA, PhD
Colantoni, Laura - MA, PhD
Crosta, Suzanne - BA, MA, PhD
Cuervo, Maria Cristina - PhD
Gliinoer, Anthony - BA, MA, PhD
Heller, Monica - 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
Rosienki-Pellerin, Sylvie - BA, MA, MA, PhD
Roulston, Christine - BA, MA, PhD
Sarabia, Rosa - BA, PhD
Schallert, Joseph - PhD
Spada, Nina - BA, BA, MA
Teixeira, Carlos - BA, AB, AM
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 & Natural Systems
- Environmental Geography & Resource Management
- Historical, Social, & Cultural Geography
- Spatial Information Systems

Planning – MScPI, PhD

Fields (MScPI):

- Urban Planning & Development
- Environmental Planning
- Social Planning & Policy
- Economic Planning & Policy
- Urban Design

Fields (PhD):

- Cities in Global Context: Economic Development & Social Planning
- Environmental & 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:

- Aboriginal Health**
 - Geography, MA, MSc, PhD
- Asia-Pacific Studies**
 - Geography, MA, MSc
 - Planning, MScPI
- Community Development**
 - Planning, MScPI
- Diaspora and Transnational Studies**
 - Geography, MA, MSc, PhD
- Environment and Health**
 - Geography, MA, MSc, PhD
 - Planning, MScPI
- Environmental Studies**
 - Geography, MA, MSc, PhD
 - Planning, MScPI
- Ethnic and Pluralism Studies**
 - Geography, MA, PhD
- South Asian Studies**
 - Geography, MA, PhD
- 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 (MScPI)**, 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

Email: geograd@geog.utoronto.ca

Telephone: (416) 978-3377

Fax: (416) 946-3886

Department of Geography
University of Toronto
Sidney Smith Hall
Room 5045, 100 St. George Street
Toronto, Ontario M5S 3G3
Canada

Degree Programs

Geography

Master of Arts and Master of Science

Minimum Admission Requirements

- Students 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*.
- **Program I: Thesis.** Students undertake research leading to the preparation of a thesis, in conjunction with at least the equivalent of 1.5 graduate FCEs including any required core courses.
- **Program II: Research Paper.** Students will take the equivalent of 3.0 graduate FCEs and pursue a research project, normally during the summer, leading to the preparation of a research paper (GGR 1100Y).
- **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 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.

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

- Students 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.
- Students must:
 - complete a minimum of 2.0 FCEs and, depending on the field of specialization, up to an additional 1.0 FCE. A minimum of 0.5 FCE must be, and a maximum of 1.5 FCEs may be, taken 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. Students who enter the PhD program from a bachelor's degree must complete 1.5 FCEs in addition to the doctoral coursework requirements. Applicants who hold an appropriate master's degree but are changing disciplines or require further preparatory work, may be required to complete an additional year of graduate-level coursework.)
 - submit a research statement concerning the proposed PhD topic and the scope of the PhD examination by the end of April in year one

Degree and Diploma Programs by Graduate Unit

- 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.

GGR 1100Y⁰ Research Paper (Credit/No Credit)
 GGR 1110H Issues of Geographic Thought and Practice
 JPG 1111H Research Practice in Geography
 GGR 1149H Readings in Selected Topics
 GGR 2149H Readings in Selected Topics
 GGR 2150H,Y Advanced Seminar in Selected Topics

Physical Geography

GGR 1200H Introduction to Physical Geography
 GGR 1202H Sedimentation and Fluvial Geomorphology
 JGE 1212H Fate of Contaminants in the Environment
 GGR 1214H Global Ecology and Biogeochemical Cycles
 GGR 1216H Advanced Biogeochemical Processes
 GGR 1302H Advanced Hydrology and Water Quality
 GGR 1303H Topics in Paleoenvironmental Research
 GGR 1305H Biogeography
 GGR 1306H Measurement and Modelling of Surface Environments
 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 Energy Supply and Use
 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 1507H 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 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

Historical, Social, and Cultural Geography

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 Use 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

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

JPG 1804H	Space, Power and Geography: Understanding Spatiality
JPG 1805H	Transnationalism, Diaspora and Gender
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

- Students 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, 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

- Students 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 MScPI

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)

Degree and Diploma Programs by Graduate Unit

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	Energy Supply and Use
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
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 1517H	Special Topics in Planning III (Credit/No Credit)
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
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 1810H	Globalization and Postmodernism
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 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

- Students 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 at University of

Toronto B+ (or upper second class) in the final year is required.

- o **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 Workshop in Urban Design
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
Boland, Alana - BA, MA, PhD
Buliung, Ronald - MA, PhD
Bunce, Michael - BA, PhD
Bunce, Susannah - BA, MES, 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
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

Degree and Diploma Programs by Graduate Unit

Goonewardena, Kanishka - BSc, MCP, PhD (**Director, Program in Planning**)

Gough, William - BSc, MSc, PhD
Hackworth, Jason - BA, MA, MCP, PhD
Harvey, Leslie - BSc, MSc, PhD
He, Yuhong - PhD
Hess, Paul - BA, MA, PhD
Hunter, Mark - BA, MSS, PhD
Isaac, Marney Elizabeth - BS, MES, PhD
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
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
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
Davis, Anthony - 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
White, Rodney - BA, MSc, PhD
Whitney, Joseph - BA, PhD

Associate Members

Bathelt, Harald - MA, PhD
Boyes, Donald - BS, MA, PhD
Brail, Shauna - BA, MA, PhD
Feldman, Maryann - BA, MS, PhD
Grima, Angelo - BA, MA, PhD
Kumar, Kundan - BSc, MF
Leydon, Joseph - BA, MA, PhD
Murck, Barbara - AB, PhD
Poland, Blake - BA, PhD
Roorda, Matthew - BEng, MASc, PhD
Savan, Beth - BSc, PhD
Shakir-Raza, Uzma - MA

Shear, Harvey - PhD
Valverde, Mariana - BA, MA, PhD, Fell Royal Society
Canada
Wilson, Dana - BES, MA, PhD

Geology

Faculty Affiliation

Arts and Science

Degree Programs Offered

Geology – MAsc, MSc, PhD

Collaborative Programs

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

1. **Environmental Studies**
 - Geology, MSc, PhD
2. **Geology and Physics**
 - Geology, MSc, PhD

Overview

The Department of Geology accepts students for advanced degrees—**Master of Applied Science**, **Master of Science**, and **Doctor of Philosophy**—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
Email: grad@geology.utoronto.ca
Telephone: (416) 978-1240
Fax: (416) 978-3938

Department of Geology
 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

Geology

Master of Applied Science

Minimum Admission Requirements

- Students are accepted under the General Regulations.
- 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

- Students are accepted under the General Regulations.
- 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-geology courses.
- Students may proceed on a part-time basis.

Degree and Diploma Programs by Graduate Unit

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

- Students are accepted under the General Regulations.
- 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 FCEs. The additional half course may be taken in departments other than Geology 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 current year's offerings.

GLG 1100Y Seminars in Geology Y

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

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
Cruden, Alexander - BSc, PhD
Davis, Donald - BSc, MSc, PhD
Dittrich, Maria B. - BES, MSc, PhD
Eyles, Nicholas - BSc, MSc, PhD, DSc
Ferris, Grant - BSc, 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
Milkereit, Bernd - DrRerNat
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**)
Srinivasan, Gopalan - BSc, MSc, PhD
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, MSc, 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

Rudkin, David - BSc

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. **Diaspora and Transnational Studies**
 - Germanic Languages and Literatures, MA, PhD
2. **Jewish Studies**
 - Germanic Languages and Literatures, MA, PhD
3. **Women and Gender Studies**
 - Germanic Languages and Literatures, 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 postcolonial, 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>

Email: german@chass.utoronto.ca

Telephone: (416) 926-2321

Fax: (416) 926-2329

Department of Germanic Languages and Literatures
3rd Floor, 50 St. Joseph Street
University of Toronto
Toronto, Ontario M5S 1J4
Canada

Degree Programs

German Literature, Culture and Theory

Master of Arts

Minimum Admission Requirements

- Applicants are accepted under the General Regulations 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 accepted under the General Regulations 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 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.
 - 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's conditions (see Degree Regulations, Doctor of Philosophy, Thesis).

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 1501H	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
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

Degree and Diploma Programs by Graduate Unit

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

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: www.globalaffairs.utoronto.ca

Email: mga@utoronto.ca

Telephone: (416) 946-8917

Fax: (416) 946-8915

Munk School of Global Affairs
University of Toronto
1 Devonshire Place
Toronto, Ontario M5S 3K7
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 FCEs 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 PPG 1003H; 0.5 FCE each). They must also take GLA 1001H *International Economics* in the second year (replacing a second-year elective course) instead of the first year (making a total of 4.5 FCEs in the 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
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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 2004H	Technology, Innovation and Globalization
GLA 2005H	Negotiating Internationally
GLA 2006H	The Politics of Money and Trade
GLA 2090H	Topics in Global Affairs I

Degree and Diploma Programs by Graduate Unit

GLA 2091H Topics in Global Affairs II
JRG 2050H Religion, Culture, and Global Politics

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 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 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 School of Global Affairs

Summer between years 2 and 3: full-time in School of Global Affairs

Year 3: full-time in Faculty of Law and part-time in School of Global Affairs

Year 4: full-time in Faculty of Law and part-time in 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 years three and four, successfully complete:
 - a further 3.5 FCEs at the 2000-level from the School of Global Affairs (including the MGA capstone seminar GLA 2000Y or graduate-level courses approved by the Director of the MGA)
 - 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 one of the program, the Rotman School of Management for year two of the program, and in both for year three 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 School of Global Affairs

Summer between years 1 and 2: full-time in School of Global Affairs

Year 2: full-time in Management

Year 3: full-time in Management and part-time in the School of Global Affairs

Within this combined three-year degree students must:

1. In the first year, successfully complete all first-year courses at the 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 years one and two, students must successfully complete a summer global internship with the MGA (GLA 1007H).
3. In the second year, 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 year three, successfully complete 2.5 FCEs (five electives) in Management and 1.5 FCEs (3 electives) in the MGA program or other graduate courses in cognate units approved by the Director plus the required MGA capstone seminar (GLA 2008Y).
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
 Bertoldi, Nancy - BA, MA, PhD
 Brunnee, Jutta - LL.M, SJD
 Cameron, David - PhD, Graduate Chair, Fell Royal Society Canada (**Graduate Chair**)
 Deibert, Ronald - BA, MA, DrRerPol
 Durantton, Gilles - BSc, MSc, MA, PhD
 Friedmann, Harriet - AB, MA, PhD
 Gertler, Meric - AB, MCP, PhD
 Hoffmann, Matthew - BSc, PhD
 Kirton, John - BA, MA, PhD
 Kohler, Jillian - BA, MA, PhD
 Kopstein, Jeffrey - BA, MA, PhD
 Levi, Ron - BCL, LLB, LL.M, SJD

McGahan, Anita - BA, MA, MBA, PhD
 Mundy, Karen - AB, MA, PhD
 Nevitte, Neil - BA, MA, PhD, Fell Royal Society Canada
 Orbinski, James - MA, MD
 Pauly, Louis - BA, MA, MSc, MSc, PhD, Canada Research Chair
 Polanyi, John - MSc, PhD, DSc, Fell Royal Society Canada, Fell Royal Society London
 Pruessen, Ronald - BA, MA, PhD
 Reitz, Jeffrey - PhD
 Shachar, Ayelet - LLB, BA, LL.M, SJD
 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, Fell Royal Society Canada
 Griffiths, Franklyn Jc - BA, MIA, PhD

Associate Members

Gilady, Lilach - BA, MPH, MA, PhD
 Hejazi, Walid - PhD
 Morrow, Peter - BA, MA, PhD
 Wong, Wendy - PhD

Health Policy, Management and Evaluation

Faculty Affiliation

Medicine

Degree Programs Offered

Health Policy, Management and Evaluation

– MSc, PhD

Fields (MSc):

Clinical Epidemiology and Health Care Research
Health Services Research
Health Technology Assessment and Management

Fields (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. Global Health**
 - Health Policy, Management and Evaluation, PhD
- 5. Health Care, Technology and Place**
 - Health Policy, Management and Evaluation, PhD
- 6. Health Services and Policy Research**
 - Health Policy, Management and Evaluation, MSc, PhD
- 7. Resuscitation Sciences**
 - Health Policy, Management and Evaluation, MSc, PhD
- 8. Women and Gender Studies**
 - Health Administration, MHSc
 - Health Policy, Management and Evaluation, MSc, PhD
- 9. Women's Health**
 - Health Policy, Management and Evaluation, MSc, PhD

Overview

The Department of Health Policy, Management and Evaluation (HPME) 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

HPME 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 HPME programs is available on the website www.hpme.utoronto.ca. Please note the **application deadlines**.

November 15

MSc in Health Policy, Management, and Evaluation
Fields: Clinical Epidemiology and Health Care Research; Health Services Research

PhD in Health Policy, Management, and Evaluation
Fields: 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
Field: Health Technology Assessment and Management

Contact and Address

Health Policy, Management and Evaluation

Web: www.hpme.utoronto.ca
Email: dept.hpme@utoronto.ca
Telephone: (416) 978-4326
Fax: (416) 978-7350

Department of Health Policy, Management and Evaluation
 Faculty of Medicine
 University of Toronto
 4th Floor, 155 College Street
 Toronto, Ontario M5T 3M6
 Canada

Management of Innovation

Web: www.utm.utoronto.ca/mmi
Email: 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 three fields leading to the Master of Science: Clinical Epidemiology and Health Care Research, Health Services Research, and Health Technology Assessment and Management.

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

Field 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

Field 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.

Field Health Technology Assessment and Management

- 3.0 FCEs (HAD 5308H, HAD 5730H, HAD 5760H, HAD 5763H, HAD 5727H, and 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: 5 years full-time; 6 years part-time

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 field 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.

Degree and Diploma Programs by Graduate Unit

- Outstanding students with a non-thesis master's degree may be admitted to the PhD upon the recommendation of the appropriate HPME 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 field 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; 6 years flexible-time

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

Course List

Field: 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 HPME courses or extra-departmental courses may be considered as elective courses and are subject to approval of the department.

Field: Health Services Research

HAD 5011H	Canada's Health Care System (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 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 Research Stream Students
HAD 6760Y	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.hpme.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

Degree and Diploma Programs by Graduate Unit

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 Department 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 HPME 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 HPME or Nursing.

- Year 3: 1.0 FCE taken in HPME.

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 Department 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 in Social Work degree
- Further details available on the website at www.hpme.utoronto.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, graduate-level program which provides graduates with expertise in clinical, information and communication technologies required to lead organizational and health system change. The MHI degree program prepares health informaticians to bridge the gaps between clinicians and information and communication technology (ICT) specialists.

Minimum Admission Requirements

- Students 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 specialty, 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	Introduction to 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 HPME Chair.

MHI 3000H	Independent Reading for Health Informatics
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Management of Innovation

Master of Management of Innovation

The Master of Management of Innovation, designed for students with a background in science and technology, is an accelerated 12-month professional degree for individuals pursuing management careers in technology-focused organizations.

Minimum Admission Requirements

- SGS General Regulations
- 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 resume, a letter of intent, and at least two 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

Degree and Diploma Programs by Graduate Unit

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
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
Cote, Pierre - MSc, PhD
Coyte, Peter C - BA, MA, PhD
Culyer, Tony - BA
Davis, Aileen - BSc(PT), MSc, PhD
Davis, David - BA, MD
Deber, Raisa - BS, MS, PhD
Detsky, Allan - BS, MD, PhD
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
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
Martin, Douglas - BSc, PhD
McCordle, Brian - MD
McGeer, Allison - BSc, MSc, MD
McLaughlin, John Ross - BSc, MSc, PhD
McLeod, Robin - BSc, LMCC, MD
Miller, Fiona - BSc, MA, DPhil
Myers, Ted - BA, MSW, MSc, PhD
Naglie, I. Gary - BSc, MDCM
Naylor, C. David - MD, PhD
O'Brien-Pallas, Linda-Lee - BSN, MSN, DPhil
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
Bell, Chaim - MD
Berger, Howard - BSc, MD
Berta, Whitney - BS, MBA, PhD
Beyene, Joseph - BSc, MSc, PhD

Degree and Diploma Programs by Graduate Unit

Beznak, 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
 Brown, Adalsteinn - AB, PhD
 Browne, Janis Lynne - BSc, MD
 Bryant, Sally - LLB
 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, MD
 Dick, Paul - MDCM
 Dobrow, Mark - PhD
 Donnelly, Sandra - BSc, MSc, MDCM
 Doria, Andrea - MSc, MD, PhD
 Durbin, Janet - MSc
 Easson, Alexandra - MSc, MD
 Fehlings, Darcy - MD
 Feig, Denice - MD
 Fisman, David - MPH, MD
 Fowler, Robert - MDCM
 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
 Hoch, Jeffrey - BA, MA, PhD
 Hodgson, David - MD
 Howard, Andrew - BA, CSPO, MSc, LMCC, MD
 Hudak, Pam - PhD
 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
 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, MSc, 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
 Mahomed, Nizar - MPH, MD, ScD
 Malach, Faith - MHSA
 Markel, Frank - BA, MSc, PhD
 Marshall, Debra - AA
 Matlow, Anne - MSc, MD, MD
 Mcgowan, Thomas - MBA, MD
 Mitchell, Leslie - MSc
 Moore, Aileen - MBChB
 Moore, Lynn - MHSA
 Morrison, Laurie - BSc
 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
 O'Connor, Paul - MD
 Oliver, Matthew - MD
 Pace, Kenneth - DrMed
 Pain, Clare - BSc, MSc, MD
 Palda, Valerie - MD
 Parker, Diane - DPM
 Paszat, Lawrence - MS, MD
 Paterson, Michael - MS
 Philippon, Donald - MD
 Pritchard, Kathleen - BA, MD
 Pron, Gaylene - BSc, MSc, PhD
 Pullenayegum, Eleanor - PhD
 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
 Stanbrook, Matthew - MSc, MD
 Steinhart, A. Hillary - MD
 Stergiopoulos, Vicky - MD
 Subbarao, Padmaj - MD
 Sullivan, Terrence - BS, MA, PhD
 Szold, John - MBA

Degree and Diploma Programs by Graduate Unit

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
Wiljer, David - PhD
Willison, Donald - MSc, MSc, ScD
Windrim, Rory - MB
Wobeser, Wendy - MSc, DrMed
Wong, Rebecca - MBChB
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 medi-

eval 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.chass.utoronto.ca/history

Email: histgrad@chass.utoronto.ca

Telephone: (416) 978-3369

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

Degree and Diploma Programs by Graduate Unit

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
- 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
 - 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, 1.0 of which must be HIS 1997H. 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 7 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 1112H	Canada in Comparative Contexts, Gender, Labour, Migration
HIS 1006H	Historiography "From Below": Comparative and Critical Perspectives	HIS 1113H	Politics and Society in North American History
HIS 1009H	Colonial Governmentality: Governing Economy and Culture	HIS 1114H	Indigenous Histories in North America
HIS 1010H	History by Numbers: The Uses and Misuses of Quantitative Evidence in History	HIS 1115H	The World Car
HIS 1015H	Colonial Encounters and Postcolonial Theory	HIS 1142Y	Canadian Foreign Relations, 1940–2003 (joint graduate/undergraduate)
HIS 1016H	Readings in the History of Gender and Sexuality	HIS 1201H	The Materials of Medieval History (Credit/No Credit)
HIS 1020H	Cultural Theory/Cultural History	HIS 1207H	Pastoralia: The Medieval History of Pastoral Care
HIS 1026H	Modernity and Its Others: History and Postcolonial (joint graduate/undergraduate)	HIS 1208H	Writings of Robert Grosseteste
HIS 1030H	Oral History: Theory, Methods, Practice	HIS 1209H	The Anglo-Saxons
HIS 1035H	Historiography and Film Studies (joint graduate/undergraduate)	HIS 1210H	Gregory of Tours and the Sixth Century
HIS 1036H	Early Cinema	HIS 1213H	Medieval Institutes of Perfection (joint graduate/undergraduate)
HIS 1101H	Race and Gender in the Northern Colonies of North America	HIS 1214H	The Merovingians
HIS 1104H	Natives and Empires: Colonial History of the Americas, 1492–1800	HIS 1215H	Social Change in Medieval England, 1154–1279
HIS 1105H	Colonial North America, 1600–1783	HIS 1218H	The Mediaeval Church (joint graduate/undergraduate)
HIS 1106H	Topics in Canadian Social History	HIS 1220H	Mediaeval Canon Law (joint graduate/undergraduate)
HIS 1107H	Religion, Culture and Society in Canada (joint graduate/undergraduate)	HIS 1221H	Topics in Early Modern European Social History
HIS 1109H	Readings in Canadian History	HIS 1222H	Ritual in Renaissance and Early Modern Europe
HIS 1111H	Topics in North American Environmental History (joint graduate/undergraduate)	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 1264H	Jewish Identity
		HIS 1265H	Atrocities and Memory in Postwar Europe and North America
		HIS 1267H	Nationalism
		HIS 1268H	The Holocaust and World War II
		HIS 1269H	The Social History of Medicine in the Nineteenth and Twentieth Centuries (joint graduate/undergraduate)
		HIS 1270H	History of Psychiatry and Psychiatric Illness (joint graduate/undergraduate)
		HIS 1271H	Modern Political Trials
		HIS 1272H	Topics in Twentieth-Century European History
		HIS 1275H	Imperial Germany, 1871–1918
		HIS 1276H	The Third Reich and the Holocaust
		HIS 1277H	Topics in Jewish History
		HIS 1278H	Topics in Twentieth-Century German History

Degree and Diploma Programs by Graduate Unit

HIS 1279H	World War II in East Central Europe (joint graduate/undergraduate)	HIS 1540H	Cultures of American Capitalism
HIS 1280Y	History and Soviet Cinema (joint graduate/undergraduate)	HIS 1541H	Cultural History and the American Empire
HIS 1281H	History of Real Socialism	HIS 1543H	Topics in Material Culture
HIS 1282H	Totalitarian Culture	HIS 1545H	Race, Segregation and Protest: South Africa and the United States
HIS 1283H	Crusades, Conversion and Colonization in the Medieval Baltic (joint graduate/undergraduate)	HIS 1550H	Atlantic Labour Migrations
HIS 1284H	The Baltic World	HIS 1555H	Gender and Slavery in the Atlantic World, Seventeenth to Nineteenth Century
HIS 1285Y	The Ukrainian National Revival (joint graduate/undergraduate)	HIS 1630H	Appeasement
HIS 1286H	Categories of Imperial Russian Social History	HIS 1632H	International Relations Field Seminar
HIS 1287H	Polish Jews Since the Partitions of Poland (joint graduate/undergraduate)	HIS 1637H	Culture and the Cold War (joint graduate/undergraduate)
HIS 1288H	The Age of Experiments (joint graduate/undergraduate)	HIS 1663H	Gender in East and Southeast Asia
HIS 1289H	The Cold War Through Its Archives	HIS 1664H	Religion and Society in Southeast Asia
HIS 1290H	Topics in Imperial Russian History	HIS 1665H	Gender and History in Colonial South Asia
HIS 1291H	Topics in Russian and Soviet Social History (joint graduate/undergraduate)	HIS 1667H	Transnational Gender Histories
HIS 1292H	The Russian Revolution (joint graduate/undergraduate)	HIS 1668H	Topics in Early Modern Asian History
HIS 1293Y	Kievan Rus' (joint graduate/undergraduate)	HIS 1673H	Critical Historiography of Late Imperial and Modern China
HIS 1294H	In the Soviet Archives: Text and History (joint graduate/undergraduate)	HIS 1675H	Imperial Circulation and Diasporic Flows in the British Empire
HIS 1295H	Soviet History Seminar	HIS 1677H	Empire and Nation in Modern East Asia
HIS 1296H	Stalinism and After: Beyond Cold War History	HIS 1678H	War and Memory in Twentieth-Century East Asia
HIS 1297H	Problems of National Survival in Eastern Europe Since 1848 (joint graduate/undergraduate)	HIS 1701H	Religion, Society and Empire in the Colonial Spanish Americas, 1492–1800
HIS 1299H	Topics in Russian Intellectual History	HIS 1704H	Latin America in the Age of Independence
HIS 1411H	Theory and Practice in Early Modern British History	HIS 1705H	Africa: Writing, Colonialism and Memory
HIS 1425H	British Social Realism and Cinema	HIS 1706H	Decolonizing Research Methodologies
HIS 1435H	Studies in Victorian Society	HIS 1707H	Topics in African History
HIS 1440H	Irish Nationalism in Canada and the United States (joint graduate/undergraduate)	HIS 1708H	Labour in the Age of Imperialism
HIS 1510H	Readings in Early American Political and Intellectual History	HIS 1709H	Conversion and Christianities in the Early Modern Spanish World (joint graduate/undergraduate)
HIS 1519H	Thinking of Diversity: Historical Perspectives on American and Canadian Pluralisms	HIS 1710H	Comparative Slavery in the Caribbean and Latin America
HIS 1522H	Topics in Twentieth-Century U.S. History: Transnational Commodity Culture	HIS 1720H	Emancipate Yourself from Mental Slavery? Historical Narratives of Caribbean Decolonization
HIS 1524H	Topics in the History of Black America	HIS 1784H	The Islamic Revolution
HIS 1530H	Readings in Twentieth Century American Foreign Policy	HIS 1785H	International Relations in the Middle East
HIS 1531H	American Political History Since 1877	HIS 1997H	The Practice of History (Credit/No Credit)
HIS 1532H	American Foreign Policy in the Cold War	HIS 1998H, Y	Reading Course
HIS 1533H	Gender and International Relations (joint graduate/undergraduate)	HIS 1999H, Y	Reading Course
HIS 1535H	Readings in International Relations History	HIS 2000Y ⁰	Directed Research
HIS 1538H	Reading in U.S. History	JBP 2230H	Topics in International Politics
HIS 1539H	Film Comedy and Popular Culture	JHP 1289Y	Twentieth Century Ukraine (joint graduate/undergraduate)
		JHP 1631H	Intelligence and International Relations
		JHP 2231H	The History and Philosophy of International Relations Thought
		JHP 2301Y	Linguistic and Cultural Minorities in Europe (joint graduate/undergraduate)

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

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

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 (**Chair and Graduate Chair**)
 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
 Chen, Li - BA, MA, AM, JD, 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
 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
 Iacovetta, Franca - AB, AM, PhD
 Ingham, John - BA, MA, PhD
 Jenkins, Jennifer - BA, MA, PhD
 Jennings, Eric - BA, PhD
 Johnson, Robert - BA, PhD
 Kasturi, Malavika - DPhil
 Kawashima, Ken - BA, MA, PhD
 Kazal, Russell - AB, MA, PhD
 Keil, Charles - BA, MA, PhD
 Kidd, Bruce - BA, AM, MA, PhD
 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 (**Coordinator of Graduate Studies**)
 MacDowell, Laurel - BA, MSc, PhD
 MacMillan, Margaret - BPhil, DPhil
 Magocsi, Paul - BA, MA, MA, PhD, Fell Royal Society Canada
 Marrus, Michael - BA, MA, LL.M., PhD
 McGowan, Mark - BA, MA, PhD
 Meyerson, Mark - BA, PhD
 Mills, Kenneth - MA, PhD
 Morgan, Cecilia Louise - BA, BA, MA, PhD
 Mori, Jennifer - PhD
 Murphy, Michelle - BA, PhD
 Murray, Alexander - 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
 Rossos, Andrew - BA, MA, PhD
 Rothman, Ella Natalie - MA, DPhil
 Rutherford, Paul - BA, MA, PhD
 Schmid, Andre - BA, BA, 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
 Wayne, Michael - BA, BA, 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, Fell Royal Society Canada, Fell Ryl Historical Societ
 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

Degree and Diploma Programs by Graduate Unit

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
Klein, Martin - BS, MA, PhD
Kornberg, Jacques - BA, PhD
Levere, Trevor - BA, MA, DPhil
Lloyd, Trevor - BA, MA, DPhil
Morton, Desmond - BA, MA, PhD
Nelson, Wendy - BS, MHSc
Raby, David - BA, PhD
Robertson, Ian - BA, MA, PhD
Robson, Ann - BA, MA, PhD
Van Kirk, Sylvia - BA, MA, PhD
Wagle, Narendra - BA, MA, PhD

Associate Members

Hanssen, Jens - BPhil, DPhil
Kwee, Hui Kian - BA, MA, PhD
Mills, Sean - 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

Overview

The Institute for the History and Philosophy of Science and Technology (IHPST) offers two degree programs: **Master of Arts** and **Doctor of Philosophy**. The Institute 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
Email: 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

- 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:

Degree and Diploma Programs by Graduate Unit

- 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

- 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 22/33 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
HPS 1001H	Individual Reading and Research
HPS 1002H	Individual Reading and Research
HPS 1003H	Individual Reading and Research
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

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

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 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 & 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	Historiography of Science and Technology
HPS 3001H	The Marxist Theory of Knowledge and History
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
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

Degree and Diploma Programs by Graduate Unit

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 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
Chakravartty, Anjan - BSc, MPH, MA, PhD
Chazan, Michael - BA, MA, PhD
Dacome, Lucia - BA, MPH, PhD

Fehige, Yiftach - MA, PhD, DTH
Fraser, Craig - BA, MA, PhD (**Director of Graduate Studies**)

Gayon, Jean - MA, MPH, PhD
Gillon, Brendan - BA, MA, AM, 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, Fell Royal Society Canada
Krementsov, Nikolai - PhD
Langins, Janis - BEng, MEng, MA, PhD
Lightman, Bernard - BA, MA, PhD
Matthen, Mohan - PhD
Morrison, Margaret - BA, MA, PhD
Murphy, Michelle - BA, PhD
Penfold, Steven - MA, PhD
Seager, William Edward - BA, MA, PhD
Stefanovic, Ingrid - BA, MA, 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
Solomon, Susan - BA, MA, PhD
Winsor, Mary - AB, MPH, PhD

Human Development and Applied Psychology

Faculty Affiliation

Ontario Institute for Studies in Education

Degree Programs Offered

Child Study and Education – MA
 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. **Educational Policy**
 - Developmental Psychology and Education, MEd, MA, PhD
2. **Neuroscience**
 - Developmental Psychology and Education, MA, PhD
 - School and Clinical Child Psychology, MA, PhD

Overview

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

1. Child Study and Education
2. Developmental Psychology and Education
3. School and Clinical Child Psychology
 Consult the *OISE Bulletin* 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.

Students may begin the MEd program in Developmental Psychology and Education in September, January, or July, but all other programs in the department commence in September.

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

Contact and Address

Web: <http://hdap.oise.utoronto.ca>
 Telephone: (416) 978-0917
 Fax: (416) 926-4713

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

Degree Programs

Child Study and Education

The MA in Child Study and Education program is offered at the Dr. Eric Jackman Institute of Child Study, a centre of professional teacher training and research in childhood and education, which includes a nursery-through-grade-6 Laboratory School. 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–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 Human Development and Applied Psychology 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.

Degree and Diploma Programs by Graduate Unit

- 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 Human Development and Applied Psychology and, in some cases, other departments. Elective courses that are especially recommended to CSE students are listed in the Human Development and Applied Psychology 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

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 had 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 had 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 undertaken 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 Human Development and Applied Psychology Program Guidelines.
- 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 Master of Arts in Developmental Psychology and Education. Students who have not completed a master's thesis will be required to submit a Qualifying Research Paper 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. See the *OISE Bulletin* for more information.

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 DPE 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 program (SCCP) 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 Human Development and Applied Psychology 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 SCCP 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. See the *OISE Bulletin* for more information.

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 undergraduate level approved by the program may substitute an elective course for this requirement. 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 listing of courses in these menus is available on the department website and in the Human Development and Applied Psychology Program Guidelines.
- a comprehensive examination
- a doctoral dissertation
- Students must have successfully completed all coursework, passed the comprehensive examination, and have their dissertation completed or well underway, prior to commencing their internship.
- 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

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

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
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

Degree and Diploma Programs by Graduate Unit

HDP 2214H	Introduction to Curriculum II: 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

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

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, Xi (Becky) - BA, MEd, MA, PhD
 Childs, Ruth - BS, MA, PhD
 Cohen, Nancy - BSc, MSc, PhD
 Corter, Carl - BA, PhD
 Cumming, Alistair - BA, MA, PhD
 Ducharme, Joseph - BA, MPSY, PhD
 Ferrari, Michel - BA, MA, PhD
 Geva, Esther - BA, MA, PhD (**Chair and Graduate Chair**)
 Grusec, Joan - BA, PhD
 Helwig, Charles - BA, PhD
 Humphries, Thomas - PhD
 Jenkins, Jennifer - BA, MA, PhD
 Keating, Daniel - BA, MA, PhD
 Lee, Kang - BSc, MEd, PhD
 Lewis, Marc - BA, MA, PhD
 Manassis-Krumma, Katharina - MD
 Mendlowitz, Sandra - 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
 Rovet, Joanne - BSc, PhD
 Scardamalia, Marlene - PhD
 Schachar, Russell James - MD

Schmuckler, Mark - BA, PhD
Scott, Katreena - BA, MA, PhD
Tannock, Rosemary - BSc, MA, PhD
Taylor, Margot - BA, MA, PhD
Volpe, Richard - BA, MA, 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

Lindsay, Peter - BA, MA, PhD
Miezitis, Solveiga - BA, MA, PhD
Oatley, Keith - BA, PhD
Olson, David - BEd, MEd, PhD

Associate Members

Arnold, Paul - BSc, MD
Caspary, Arthur - BSc, MSc, 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
Link, Nancy - BA, PhD
Martinussen, Rhonda - BE, MEd, PhD
McBride, Hazel - BA, BEd, MPSY, PhD
Milligan, Karen - BA, MA, PhD
Moran, Greg - BA, MA, PhD
Moss, Joan - BA, MA, PhD
O'Connor, Tom - BA, MA, PhD
Roncadin, Caroline - BSc, MA, PhD
Tackett, Jennifer - BA, MA, PhD
Toneatto, Anthony - PhD
Wade-Woolley, Lesly - MA, PhD
Wilansky-Traynor, Pamela - PhD
Wu, Helen Xiaoyan - MA, 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 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

Email: graduate.immunology@utoronto.ca

Telephone: (416) 978-6382

Fax: (416) 978-1938

Department of Immunology
University of Toronto
Medical Sciences Building
Room 5271, 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 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, or equivalent, 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 - MSc, 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 (**Chair and Graduate Chair**)
 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

Members Emeriti

Hay, John - BSc, MSc, PhD
 Painter, Robert - BSc, PhD
 Shulman, Marc - AB, PhD

Associate Members

Ehrhardt, Rudolf - MS, PhD
 Jongstra-Bilen, Jenny - BSc, MSc, PhD
 Keystone, Edward - BSc, MD
 Mallevaey, Thierry - MSc, PhD
 Rast, Jonathan - MS, PhD

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

1. 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, human resources management and labour market analysis. The degree provides specialized study of the employment relationship using an interdisciplinary approach. Integral to the MIRHR degree is training in the essential analytical, research and interpersonal skills required of the effective industrial relations professional.

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

Email: cir.info@utoronto.ca

Telephone: (416) 978-0551

Fax: (416) 978-5696

Centre for Industrial Relations and Human Resources
University of Toronto
121 St. George Street
Toronto, Ontario M5S 2E8
Canada

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 TWE
 - Internet-based TOEFL exam: 100/120 and 22/30 on the writing and speaking sections
- Note: Due to space limitations, applicants meeting the minimum admission requirements are not guaranteed admission. Applicants are evaluated on their individual merits; the Centre for Industrial Relations and Human Resources 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.

Geology and Physics

Lead Faculty

Arts and Science

Participating Degree Programs

Geology – MSc, PhD

Physics – MSc, PhD

Overview

The graduate programs listed above participate in the Collaborative MSc and PhD Programs in Geology 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 Geology and Physics” on their transcript.

Contact and Address

Email: bailey@geology.utoronto.ca

Telephone: (416) 978-3231

Fax: (416) 978-7606

Collaborative Program in Geology and Physics
c/o R. C. Bailey
University of Toronto
McLennan Physical Laboratories
Room 501, 60 St. George Street
Toronto, Ontario M5S 1A7
Canada

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 Geology or Physics, and to the collaborative program. Note that MSc students enrolled in Option I in Physics or in the course-only option in Geology are not eligible to enrol in the collaborative program.
- Applicants must submit a supplementary brief application form, available from either home department or the 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 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 FCEs as follows:
 - The core course GLG 1101H (0.5 FCE)
 - Two lecture courses in Geology (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 geology (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 Geology Department and the Geophysics Lab in the Physics Department and to participate in the graduate student seminar programs of both the Geology 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 Geology or Physics, and to the collaborative program.
- Applicants must submit a supplementary brief application form, available from either home department or the 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.

Collaborative Programs

- The lecture course requirements are the Geology 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

Pysklywec, Russell - BSc, PhD – Geology

Bailey, Richard - BSc, PhD – Geology and Physics

(Director)

Shepherd, Theodore - BSc, PhD – Physics

Global Health

Lead Faculty

Medicine

Participating Degree Programs

Anthropology – PhD

Health Policy, Management and Evaluation – PhD

Law – SJD

Nursing Science – PhD

Pharmaceutical Science – 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

Email:

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

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 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

Collaborative Programs

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

Sellen, Daniel - BA, MA, PhD, CRC – Anthropology
Wardlow, Holly - BA, MPH, PhD – Anthropology
Howard, Andrew - MD, MSc, FRCS(C) – Health Policy, Management & Evaluation
Lemmens, Trudo - LLM, DCL – Law
Muntaner, Carles - MD, PhD – Nursing Science
Cohen-Kohler, Jillian - BA, MA, PhD – Pharmaceutical Sciences
Birn, Anne-Emanuelle - BA, MA, DSc – Public Health Sciences
Cole, Donald C. - MSc, MD – Public Health Sciences
(Director)
Orbinski, James - MA, MSc, MD – Public Health Sciences
Samuels, Jeannie - MA – Public Health Sciences
Taleski, Sarah - MHSc – Public Health Sciences
Nixon, Stephanie - BHSc, MSc, PhD – Rehabilitation Sciences

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 HCTP Collaborative Program. The objectives of the Health Care, Technology and Place (HCTP) 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 Health Care, Technology and Place 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

Email: hctp.program@utoronto.ca

Telephone: (416) 978-2067

Fax: (416) 978-7350

Collaborative Program in Health Care, Technology and Place

University of Toronto

Suite 425, 155 College Street

Toronto, Ontario M5T 3M6

Canada

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 resume or curriculum vitae;
 - 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."

Collaborative Programs

- 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 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

Fernie, Geoffrey - BSc, PhD, PEng, CCE – Biomedical Engineering
Bewell, Alan - BA, MA, PhD – English
Coyte, Peter C. - BA, MA, PhD – Health Policy, Management & Evaluation (**Director**)
Rotstein, Ori - MSc, MD, FRCS(C) – Medical Science
O'Brien-Pallas, Lind - RN, PhD, FCAHS – Nursing Science
MacKeigan, Linda - BScPhm, PhD – Pharmaceutical Sciences
Ahmad, Farah - MBBS, MPH, PhD – Public Health Sciences
Reid, Denise - BSc(OT), MEd, PhD – Rehabilitation Science
Newman, Peter - BA, MSW, MS, PhD – Social Work

our calendar is online
www.sgs.utoronto.ca/calendar



UNIVERSITY OF TORONTO
SCHOOL OF GRADUATE STUDIES

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