



**School of Graduate Studies**

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To : Members of Graduate Council

From : Christina Bryce  
Assistant Graduate Secretary

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The next meeting of Graduate Council will be held on **Tuesday March 22<sup>nd</sup> at 9:30 am in Council Chambers (GH-111)**

Listed below are the agenda items for discussion.

Please email [cbryce@mcmaster.ca](mailto:cbryce@mcmaster.ca) if you are unable to attend the meeting.

## **A G E N D A**

- I. Minutes of the meeting of March 22<sup>nd</sup>, 2016**
- II. Business arising**
- III. Report from the Associate Vice-President and Dean of Graduate Studies**
- IV. Report from the Graduate Associate Deans**
- V. Report from the Associate Registrar and Graduate Secretary**
- VI. Report from the Assistant Dean, Graduate Student Life and Research Training**
- VII. Faculty of Engineering Graduate Curriculum and Policy Committee Report**
- VIII. Faculty of Health Sciences Graduate Curriculum and Policy Committee Report**
- IX. Graduate Calendar Revisions**
- X. Discussion of Revised Supervisory Committee Report Form**
- XI. New Scholarship**
- XII. Faculty of Health Sciences Spring 2016 Graduands (to be distributed)**



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Graduate Council  
March 22<sup>nd</sup>, 9:30 am  
GH 111

Present: Mr. P. Self, Dr. P. Swett, Dr. M. Thompson, Dr. C. Hayward, Dr. T. Porter, Dr. B. Milliken, Dr. J. Richardson, Ms. V. Lewis, Ms. C. Brown, Mr. P. DeMaio, Dr. D. Gillespie, Dr. A. Fudge Schormans, Dr. E. Gedge, Mr. R. Mah, Mr. D. Finnerty, Dr. E. Badone, Dr. A. Roddick, Ms. B. Gordon

Regrets: Dr. N. Agarwal, Dr. S. McCracken, Dr. A. Deza, Dr. A. Guarne, Dr. A. Holloway, Dr. A. Dean, Dr. A. Shi, Ms. R. Pereira

By Invitation: Dr. R. Friendly

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## **A G E N D A**

### **I. Minutes of the meeting of February 23<sup>rd</sup>, 2016**

The minutes of the meeting of February 23<sup>rd</sup> 2016 were approved on a motion by Dr. Hayward, seconded by Dr. Porter.

### **II. Business arising**

There was no business arising.

### **III. Report from the Associate Vice-President and Dean of Graduate Studies**

Dr. Welch thanked Dr. Milliken for chairing the previous meeting and noted that a meeting had been set up to deal with the outcome of the discussion of the supervisory committee report revision discussion at the previous meeting of Graduate Council.

Dr. Welch noted that the ability to deal with payments to and from graduate students had been an issue. Students were getting double-charged or an additional payment was being applied to their accounts. This issue has now been solved. Ms. Gordon said that there had been quite a bit of development over the past couple of weeks. SGS has been working very closely with UTS and Accounts and Cashiers and Financial Aid. They have been looking at the root causes of why some of the things have happened. She also noted that there has been a transition of employment issues from SGS to HR. Human Resources is now the department responsible for dealing with any benefits issues.

Dr. Welch provided updates on a couple of working groups, noting that the Graduate Pay group had an upcoming meeting and that there is work ongoing with respect to the Risk Management in Grad Student Travel with some of the key meetings coming up.

Dr. Welch reported that there are a number of issues that have shown up on the provincial radar including a budget with some interesting new challenges and thrusts for funding students in the future. The university is still seeking clarity on whether these initial elements of net tuition are going to be first at the undergraduate level or if there will be a simultaneous push for similar efforts at the graduate level.

#### **IV. Report from the Graduate Associate Deans**

Dr. Thompson reported that the Faculty of Engineering had just held an innovation retreat during which they worked to figure out where they can insert the ideas of entrepreneurship into programs.

Dr. Hayward noted that Faculty of Health Sciences had hosted two sessions for undergraduate students interested in pursuing graduate studies in FHS fields. Student ambassadors were in attendance to provide an overview of their programs and answer questions that the undergraduate students had. Feedback will inform future sessions as the Faculty is looking to meet needs of undergraduate students interested in learning about graduate programs. She also reported that the Faculty is up applications by 3% and recognized the efforts of all staff working on admissions. FHS is holding their Research Plenary coming up in May and it will include an element of web conferencing to meet the needs of students who are full time off campus. She also reported that Dr. Raha will be holding an interactive workshop for graduate students on how to make an effective presentation.

Dr. Milliken highlighted the work of a student group within the Faculty of Science who have organized a survey that will be given to TAs and undergraduate students to get a read on how well supported TAs are and how undergraduate students view their TAs. The Faculty is also holding a workshop on Latex to help students format their theses as well as alumni events with the aim of trying to connect students with alumni so they can learn about various paths to industry. Dr. Swett reported that Dean Welch and Dean Cruikshank sponsored students to attend a conference on the Future of the Humanities. They will report back on what they've learned. The conference happened last year at McGill and TRACE grew out of that. They are repeating the conference this year with new themes.

#### **V. Report from the Associate Registrar and Graduate Secretary**

There was no report from the Associate Registrar and Graduate Secretary.

#### **VI. Report from the Assistant Dean, Graduate Student Life and Research Training**

There was no report from the Assistant Dean, Graduate Student Life and Research Training.

#### **VII. Faculty of Business Graduate Curriculum and Policy Committee Report**

Dr. Welch explained that a previous iteration of the EMBA calendar copy had been submitted to the previous meeting for approval and that the version included in this meeting package was the correct one.

Dr. Milliken moved and Dr. Swett seconded, 'that Graduate Council approve the clarified calendar copy as described in the document.'

The motion was carried.

### **VIII. Faculty of Humanities Graduate Curriculum and Policy Committee Report**

Dr. Swett presented the proposed changes. She noted that the Classics program had found that good students that they want in the program have less Greek and Latin preparation than they used to have. They've proposed a change to their admission requirements accordingly as well as a change to their overall course requirements in the program so that once they're here they get the language training they need. They have added a sentence to their calendar copy to note that students lacking language training should expect to take the two year program to allow for the additional training.

The changes proposed by the French program were not fundamental program changes, but simply clarifications to language in the calendar copy. For the Masters program, they wanted to change the language they used to describe their MRP. With respect to the Ph.D. they clarified the following items: for coursework they wanted to be specific about what number of units is required for coursework, for language requirements they wanted to provide more flexibility around the third language requirement, allowing their students the option of completing a MIIETL course or graduate seminar in another department outside of French in place of that third language requirement. The comprehensive exam in the program can be achieved in two different ways and they have added additional language clarifying that. The final change to their calendar copy for the Ph.D. was the inclusion of a timeline so that their students would have a clearer sense of the progress through their degree.

History proposed changing the administration of their comp exam. The Major field reading component will be the same process, including an exam in the preparation class. The comprehensive exam itself will now be evaluated through their dissertation proposal. They are getting the exact same training but are being evaluated in different ways.

Gender Studies and Feminist Research proposed changing three points in their calendar copy. They wanted students to be clearer that their elective course is in addition to the requirements of their Ph.D. program. The program also wanted to strengthen language about the expectation around attendance at the department symposium. The final change proposed was to make it more clear in their calendar copy that GSFR had to be central to their dissertation as well as their work in the diploma.

Philosophy proposed some minor changes for clarification to their calendar copy around Ph.D. requirements and added headings so students could find material more readily.

Dr. Hayward asked about the comprehensive examination change for History. She noted that it seemed the program was calling the end of first year Ph.D. committee meeting an exam. Students are only being examined by their committee, not an external and it doesn't indicate how they're required to show comprehensive knowledge. Dr. Swett responded that in History it has always been the supervisory committee that did the oral and written exam in History.

Dr. Hayward noted that it's hard to compare what different programs require but that she was concerned that a lot of programs might want to move in the direction that History had proposed. Dr. Welch responded that he thought that the question raised was reasonable but that this had already been approved internally at the relevant Faculty committees. He proposed that Graduate Council review the general process around comprehensive exams at McMaster generally. He also noted that the change doesn't seem dramatically different from previous practice.

A council member agreed that a committee or some other group where there can be a broad discussion of the comprehensive examination process across the board is a good idea, noting that there is significant variation between departments even within the same faculty. She had a sense that there has been a trend to de-emphasize the comprehensive exam generally and that that might be something worth moving towards and discussing at the institution level.

Dr. Welch responded that he thought that there should be a meeting with the associate deans to discuss this. They would also need input from a variety of people from within each Faculty to get a full sense of what happens across campus and that there needs to have a bigger discussion of where McMaster is going with it. He suggested that there would be a discussion of the comprehensive exam, based on a scan of what is currently done at McMaster and that they would come back to Graduate Council with steps forward. He also said that the history item is not that different from what is done in some other programs.

A council member emphasized the point of about an external committee member. Dr. Welch responded that he knew that there are a large fraction of programs where comprehensive exam committees are distinct from supervisory committees but that this isn't always the case. He didn't have a sense of the ratios. If it is the case that there needs to be someone from outside the committee on the comprehensive committee that that is something that needs to be decided as an institution, methodically.

Dr. Hayward asked if the current proposal meet calendar requirements. She read a portion of the calendar copy related to comprehensive exam and it seemed to suggest that the comprehensive committee should be distinct from the supervisory committee. Dr. Welch responded that he understood the section differently, noting that it said that the program is responsible for making that determination about who participates.

Dr. Swett responded that she recalled that in History that the Graduate Director does participate in these meetings in the past and will do so in future state. So, there is one external member to the supervisory committee. The Graduate Director sits in to compare and contrast across committees.

Dr. Hayward agreed that a review of comprehensive examination procedures at McMaster is timely and suggested a friendly amendment in the wording around the History change noting how the exam would be testing breadth and comprehensive knowledge.

Dr. Swett moved and Dr. Porter seconded: 'that Graduate Council approve the proposed curriculum changes as described in the documents, with the friendly amendment to the language around the change to the History comprehensive exam procedure noted.'

The motion was carried.

#### **IX. Discussion of Graduate Supervision Document for Incoming Students**

Dr. Welch introduced this item, noting that one of the things the university has been doing in recent years under the AVP Faculty office is holding a number of training sessions for new faculty and chairs and directors. This document that Peter has been shepherding along has been discussed as a way to improve the overall quality of graduate supervision and reduce misunderstandings at the earliest possible juncture in a student's academic career.

Mr. Self said that he'd been working with Dr. Rayna Friendly, a postdoc working in the School of Graduate Studies, on the document. He noted that this is not a new concept and a number of universities in North America have taken it on board. The intention is to ensure students and supervisors are on the same page as to what they can expect their experience to be. The intent is for it to be a living document. It is not something that Graduate Council is going to approve and will stay in the same format for many years; the document is meant to be a tool to start a conversation. They are looking for more input as to how they can make this more effective. Some of the comments they have received in previous requests for feedback include that the document should be more discussion oriented, as well as a concern highlighted around having students and supervisors sign the document. They have tried to keep the document as short as possible to make sure it's useful.

Dr. Hayward said that she would like to take it to the programs and get their input. She noted there is a lot of diversity among programs and that they may need to use the document as a template and use it to make a program-specific version. Mr. Self agreed that modifications made sense, particularly as there would be some language specific to lab environments, for example. Dr. Hayward said she would put them on the agenda for the Faculty of Health Sciences meeting next month.

A council member commented that he thought it was great and would have loved to have had this when he started out as a student. He noted that the form gives a student structure and would help to encourage them to ask questions that might come up in the course of their studies. He asked if there was any merit to not keeping it small. He suggested it might be worthwhile to include everything and then a program could

cut out what they want and keep what they want. Mr. Self responded that he thought that might be a good idea, particularly if it's going to be a modifiable document.

The council member wondered if health and safety might be worth including, noting that this might be department-specific. Dr. Hayward responded suggesting that health and safety material should be omitted from the form. The current safety training is on Mosaic and the supervisor is required by McMaster to do due diligence to provide appropriate training to students. Dr. Welch suggested that it might be worthwhile to mention it in the document but not to bring up the entire health and safety code. The council member agreed, noting that there could be a check box to mark that it had been discussed. Dr. Thompson said that if there was a conflict between the two documents it could create some strife. The graduate supervision document should be informational only, noting who the safety officer of the department is and where records are kept.

A council member asked if the intent is that the document would be completed when the student starts the program. Mr. Self replied that he believed that that is the point in time where it would be of the most value initially but that it could be revisited over time. The council member responded that perhaps a shorter version of the form could be used at supervisory committee meetings, particularly discussing the information around careers and intellectual property. Dr. Welch responded that the document could be broken up to address different phases of what a student should be concentrating on at different points in their academic career. He emphasized the importance of department Chairs and Associate Chairs in making it known to faculty and incoming students that this is a discussion that should happen in the first few weeks. At the moment there is nothing on the student record ensuring that there is a culture of communication where all students are treated equally.

A council member noted a concern that the form is addressed to science and engineering, particularly in the sections on conferences and scholarships. The departments that the council member belongs to hold competitions for travel to conferences and, therefore, they are unable to say at the outset of a student's academic career whether they will or will not receive travel money.

Dr. Welch didn't want there to be the impression that it actually is a contract. If people believe it is, it can displace other things. He said that the signatures and dates should come out.

Ms. Friendly asked if the Council had any thoughts on whether they should be asking about career goals.

A council member thought that it might be worth developing Individual Development Plan as part of this.

Another council member agreed that discussing career goals from the outset is a good idea. She noted that this was an important part of the mentoring process and said that there is a lot of disparity to the degree to which it's done by supervisors.

Dr. Welch noted he had come from an IQAP meeting that morning and suggested that it would be great to be able to say in every IQAP review that this document exists and that students have taken it as their responsibility to ensure they have the discussions at the beginning of a student's career.

Dr. Milliken asked what the potential concerns with talking about career goals were. Ms. Friendly responded that sometimes students might fear that if they divulge to their supervisor that they don't intend to carry on in academia they might receive less attention from supervisor. Dr. Welch responded that this is something that he had heard before – students in this case might fear that they will be treated differently from other students. Dr. Milliken responded that the university would want to get rid of that culture of fear as quickly as possible and get students and supervisors on the same page as quickly as possible. The student and supervisor having different visions for goals after the program may invite problems. Dr. Porter noted the importance of changing the faculty perspective in this respect and agreed that it's good to include career goals in the document.

Ms. Friendly said that on page six they thought they would include an editable template part for program to include program requirements. Dr. Welch responded that it should not just be requirements but also other opportunities that are available to the student. He wanted to ensure that degree requirements aren't confused with available experiential education. He assumed the document would be revised and circulated for further review/discussion at a future meeting of Graduate Council.

Mr. Self responded that they would share it widely after some revisions are made and that programs can start using it whenever they want.

Dr. Hayward noted that Nursing had a similar tool that was intended to be a guide for discussion but it was never actually used. Dr. Welch responded that this is where the feedback from the chairs to faculty members that the document is useful will be important. Dr. Swett asked why it wasn't used. Dr. Hayward responded that she thought it was that the formality around the contract was off-putting. She also said that she could see the issues for petitions and appeals if it's seen as a contract.

A council member noted that it would still be useful to have a document given to entering students ensuring that these issues are discussed but not signed. Dr. Swett raised the issue of students being tentative in asking question. She would like the onus to be on the supervisor.

Dr. Hayward noted that her Faculty had conducted a study on different types of supervisory committee forms. It was quite short and it was taken to focus groups of faculty and students. The main concern that supervisors expressed was not about the content of the document but about the volume of paperwork if they had a lot of students. She emphasized the importance of being able to tailor the document for particular programs. Dr. Welch responded that if a supervisor had three or four incoming students they could have a group meeting.

Dr. Hayward noted that some of the issues in the form are dealt with in the program handbooks.



A council member said that he thinks that something like this the document is needed on the student's side as it helps to set an expectation for establishing relationship between students and supervisors. Students coming in feel like they are solely tied to supervisors and their rights need to be addressed.

Dr. Hayward said that, having been involved in legal cases, the university is legally held to the content that is in the graduate calendar and program handbooks. Dr. Welch suggested that there may be conflict, that isn't related to the graduate calendar or the handbook that could be headed off by early conversation.

A council member noted that the experiences of graduate students vary between faculties. In her program there are two annual supervisory committee meetings with a written record of the discussion. In some ways this stipulation that they should arrange and attend regular meetings with a formal written record seems a little redundant. In departments where there are two supervisory committees meetings per year this is already done. She suggested that the form would mandate a certain level of required official interaction and thought that unofficial informal interaction is either going to happen or not regardless of how it's mandated on the form. She noted some hesitation about increasing the level of bureaucratization. She said she understood the need of students to feel they can raise issues but was not convinced that adding another form is the most effective way of dealing with it. She was not sure that the form would make a difference in the case of supervisors who were going to behave irresponsibly in any case. Dr. Welch responded that the goal is to affect those supervisors and to help students not getting effective help. He agreed that there is a whole range of how well people do this across the university. He still thought there was enormous value to setting up an expectation of early communication on these matters.

Dr. Welch asked the University Librarian, Ms. Vivian Lewis, to provide an update. She said that Graduate Council members should drop into Mills – there's a display that includes images of what the library would look like in ten years if they had certain amount of money. She noted that she had mentioned previously that the budget was a bit of a concern and she wanted to confirm that they're doing okay: journals won't be cancelled. She also reported that March 23<sup>rd</sup> was the closing event of the writers in residence program.

#### **X. New Scholarships**

Dr. Welch explained that there were several to be approved today. All of these awards will also be going to TFOC. Ms. Gordon confirmed that these are standard awards and there's nothing in them of any concern to SGS.

Dr. Swett moved and Dr. Hayward seconded, 'that Graduate Council approve the proposed new scholarships as described in the document, subject to TFOC approval.'

The motion was carried.

To : Graduate Council

From : Christina Bryce  
Assistant Graduate Secretary

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At its meetings on February 8th and March 10th, 2016 the Faculty of Engineering Graduate Curriculum and Policy Committee approved the following graduate curriculum recommendations.

Please note that these recommendations were approved at the March 23<sup>rd</sup> meeting of the Faculty of Engineering.

**FOR APPROVAL OF GRADUATE COUNCIL:**

- **Industrial Ph.D. Proposal**
- **School of Engineering Practice**
  - **Revision to Calendar Copy**
  - **Engineering Design**
    - **Change to Admission Requirements**
    - **Change to Course Requirements and Calendar Copy**
  - **Engineering and Public Policy**
    - **Change to Admission Requirements and Course Requirements**
  - **Engineering Entrepreneurship and Innovation**
    - **Change to Calendar Copy and Admission Requirements**
  - **Technology Entrepreneurship and Innovation**  
**Change to Calendar Copy**

**FOR INFORMATION OF GRADUATE COUNCIL:**

- **Computing and Software**
  - **New Courses:**
    - 770 Modern Cryptography
    - 771 Introduction to Big Data Systems and Applications
  - **Course Title Changes:**
    - 6O03 Operations Research
    - 6TE3 Continuous Optimization Algorithms



**RECOMMENDATION FOR CHANGE IN GRADUATE CURRICULUM - FOR CHANGE(S) INVOLVING DEGREE PROGRAM REQUIREMENTS / PROCEDURES**

<b>IMPORTANT: PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:</b>								
<p>1. This form must be completed for <b>ALL</b> changes involving degree program requirements/procedures. <b>All</b> sections of this form <b>must</b> be completed.</p> <p>2. An electronic version of this form (must be in MS WORD <b>not</b> PDF) should be emailed to the Assistant Secretary, School of Graduate Studies.</p> <p>3. A representative from the department is <b>required to attend</b> the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.</p>								
<b>DEPARTMENT</b>		All departments/programs in the School of Engineering and Applied Sciences						
<b>NAME OF PROGRAM</b>		Industrial Ph.D. Option						
<b>PROGRAM DEGREE</b>	Ph.D. ( <input checked="" type="checkbox"/> )	M.A. ( )	M.A.Sc. ( )	M.B.A. ( )	M. Eng. ( )	M.Sc. ( )	Diploma Program ( )	Other (Specify)
<b>NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)</b>								
<b>CHANGE IN ADMISSION REQUIREMENTS</b>		<input type="checkbox"/>	<b>CHANGE IN COMPREHENSIVE EXAMINATION PROCEDURE</b>		<input type="checkbox"/>	<b>CHANGE IN COURSE REQUIREMENTS</b>		<input checked="" type="checkbox"/>
<b>CHANGE IN THE DESCRIPTION OF A SECTION IN THE GRADUATE CALENDAR</b>			<input checked="" type="checkbox"/>	<b>EXPLAIN:</b> Each program will include a description of the industrial PhD option in their calendar section.				
<b>OTHER CHANGES</b>		<b>EXPLAIN:</b>						
<b>DESCRIBE THE EXISTING REQUIREMENT/PROCEDURE:</b>  Each department offers a PhD degree with the requirement of 3-4 courses and a thesis project.								

**PROVIDE A DETAILED DESCRIPTION OF THE RECOMMENDED CHANGE (*Attach additional pages if space is not sufficient.*)**

Introduction of an Industrial PhD option is proposed under each department in Engineering. This is not a new degree and the degree name will not be changed from the regular doctoral option in each program. Eligible candidates must be employed at a company or research institute under the Industrial PhD option, be self-funded by themselves or their employer, and will be expected to (but not required) to conduct much of their research towards the thesis project at their company/institute. **All normal doctoral degree requirements must still be fulfilled by taking this option including the regular course load, milestones and exams.** To accommodate the degree requirements, this option will exempt these students from seminar requirements under the program but does not alter any other requirements of the degree. To facilitate timely completion of the degree as well as recognize the time to degree completion done at the company, the student must be enrolled full-time under this option. The full-time requirement is also recommended so as to ensure transition to the regular option should employment cease for the student; transitioning with funding is not guaranteed if taking one's doctoral degree on a part-time basis. A *memorandum of understanding* is required from those electing to complete their doctoral degree requirements under the option to ensure that the employer, student, faculty supervisor and program administration are in full agreement with the expectations of degree program completion.

Details of the program change are included in the attached document.

**RATIONALE FOR THE RECOMMENDED CHANGE:**

To facilitate a structured framework for eligible doctoral candidate already employed but with access to the necessary facilities to complete their thesis research on site. There have been over the years several doctoral candidates who have completed their degree in our faculty but usually on a part-time basis and by going considerably over-time (up to 10 years was noted by one former student). The faculty believes we are missing out on mentoring some highly qualified, mature candidates under the normal degree option due to a lack of time on their part to routinely come onto campus to do their research even though their companies maintain substantial or superior resources to carry out that work. By setting up a structured framework for the work to progress off-campus, we are ensuring that all stakeholders understand the needs to create novel scientific contribution, publically disclose those contributions, conduct independent analyses of the data, be reviewed for progress on a regular basis, and communicate results to a broader audience. Essentially, this option allows research studies to be carried on off-campus, which is not typically acceptably in the faculty, within a framework that maintains our expectations of research integrity and research excellence. It is expected that this option will have a small increase on our domestic doctoral enrollment for the School of Engineering and Applied Sciences (1-5 per year).

The curriculum requirements will be the same under this option. The only change will be exemption from seminars within the departments, should they be mandatory. For most programs, seminars are required but without credit value. The rationale for this exemption is that routinely coming onto campus so routinely is difficult and while attendance will be necessary to complete the course requirements of the program, the seminars are too frequent every year and place an unrealistic burden on students under the industrial option. Since these students are more often in close touch with recent technologies and trends through their companies, in order to remain competitive, we do not feel that the exemption is diminishing the knowledge acquisition expected of our doctoral students.

**PROVIDE IMPLEMENTATION DATE: (*Implementation date should be at the beginning of the academic year*)**

September 2016

**ARE THERE ANY OTHER DETAILS OF THE RECOMMENDED CHANGE THAT THE CURRICULUM AND POLICY COMMITTEE SHOULD BE AWARE OF? IF YES, EXPLAIN.**

All details are included in the attachment.

**PROVIDE A DESCRIPTION OF THE RECOMMENDED CHANGE TO BE INCLUDED IN THE CALENDAR:**

**Industrial PhD Option (listed for each department)**

The general Regulations for Degree Doctor of Philosophy appear earlier in the Calendar. This program option offers the candidate the potential to conduct all or a portion of their research at their company or research institute of employment. To be enrolled under the option, the candidate must be a full-time student in the degree program, have previously completed a Masters of Applied Science or its equivalence, and be employed by a company or research institute outside of McMaster continuously till degree completion. A candidate is required to complete the normal course requirements of their enrolled department as well as any milestones, but is exempt from seminar requirements. As a doctoral candidate they must take the Ph.D. Comprehensive Examination that is designed to test the breadth of knowledge and the ability to synthesize and integrate ideas from within and peripheral to the candidate's research area. The Comprehensive Examination will normally take place between 6 and 18 months after the candidate initially registers in the Ph.D. program. A supervisory committee monitors the progress of a Ph.D. candidate and determines when he/she is ready to write the thesis. The student is required to defend the thesis at a Final Oral Examination.

**CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:**

Michael Thompson, Associate Dean of Graduate Studies (Engineering) Email: [adeangse@mcmaster.ca](mailto:adeangse@mcmaster.ca)

Extension: 23213                      Date submitted: March 4, 2016

If you have any questions regarding this form, please contact the Assistant Secretary, School of Graduate Studies, [cbryce@mcmaster.ca](mailto:cbryce@mcmaster.ca)

SGS/2016



Dr. Michael R. Thompson  
**Associate Dean, Graduate**  
**Faculty of Engineering**  
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## MEMORANDUM

**To:** Graduate Council

**From:** Dr. Michael Thompson  
Associate Dean of Graduate Studies, Engineering

**Date:** Friday March 4, 2016

**Re: Proposed 'Industrial Doctoral Option' for the School of Engineering and Applied Sciences**

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The attached policy matter has been fully considered by the Faculty of Engineering committee and has been endorsed by all departments. The policy is being forwarded to Graduate Council for vote as a regular motion.

## INTRODUCTION

This policy outlines the creation of an option under the current doctoral programs offered within the Faculty of Engineering to provide enrolled students who remain employed full-time at a company or research institute with the ability to recognize the research done in their company's labs towards their thesis requirements. These mature doctoral students have access to often comparable or superior laboratory resources, are situated within a dynamic and technological environment, and are highly motivated to succeed. Their main limitations to completing a doctoral degree are often related to the difficulties of coming onto campus regularly. Current degree requirements in Appendix A.

In earlier times, companies would pay for their employees to take off time to complete these degrees; however, that practice has since been stopped despite the increasing need to grow profits through technology and innovation. Nowadays, these same employees must negotiate time off work at their own expense, even when the company endorses and often values the opportunity to improve the skills of their employees. For the faculty, these motivated employees are an overlooked potential pool of highly qualified domestic students that is being lost due to inflexibilities built into its regular program path which were meant to assist students to complete their degree requirements on time while using the resources on campus. However, in many other faculties, doctoral students routinely carry out their research off campus, often in teams, to meet their thesis requirements; in fact, a similar industrial option exists now at University of Toronto (Appendix B). This

policy is meant to outline a framework where the research is being done off campus, in the labs of the employer, may be used towards the thesis requirements of the doctoral degree in Engineering. A student completing their program requirements under the option will receive a Doctor of Philosophy with no distinctive difference in the degree from a comparable student under the regular program.

## **POLICY OUTLINE**

Currently, the few doctoral students in our faculty who remain full-time employees at a company take considerably longer than their peers to complete their degrees (7-10 years), if they complete the degree at all. These students are normally enrolled as part-time students and have no option to do their work off-campus, meaning that their employer must be located in Hamilton or nearby. Their main cited issue with completing their degree requirements is that it is difficult to come on campus. On the faculty side, the concerns with these students include maintaining regular communication, ensuring all critical milestones (i.e. comprehensive examination, annual supervisory committee meetings, final thesis defense) occur, and keeping intellectual property well separated so that publications and a publically disclosed thesis can be produced. The industrial option as a policy places demands upon the employee, employer and faculty supervisor to expedite the fulfillment of the doctoral program requirement corresponding the home department of the student. By approving this policy, it does not mean that a student may not follow the regular part-time path instead.

The key points for the industrial doctoral option are:

- Student must be employed at a private company or research institute
- Self-funded, enrolled full-time for the first four years
- Supervisor is expected to meet the student regularly, including frequent visits to the company (simple email communication will not be acceptable in place of face-to-face, video conferencing or teleconferencing)
- Research may be conducted on campus, but the majority of lab time is expected off-site at the employer's facilities
- Signed memorandum of understanding between the employer, employee, department and faculty supervisor in regards to the requirements/milestones of the program, the project scope (which will recognize the need for public disclosure of the research),<sup>1</sup> resources offered at the company and at the university, as well as the manner and frequency of meetings with the faculty supervisor. See Appendix C for considerations to work off campus. Example of the draft memorandum proposed is given in Appendix D. A formal study plan is required before the signing of the memorandum of understanding and will be affixed to the signed document.
- Student will be required to generate monthly reports sent to their faculty supervisor and department, to identify and track research progress – these reports will be archived for auditing purposes. A form identifying learning outcomes

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<sup>1</sup> Research project is ideally focused on fundamentals to keep separate from intellectual property issues and must demonstrate a significant new contribution to the field but should also be of value to the company.

- should be attached to each report and identifying the dates of supervisory meetings (with the supervisor or the supervisory committee).
- All evaluation milestones must be conducted within the normal time frame of the program including the comprehensive exam, annual supervisory meetings, and the final thesis defense.
  - Exemption from departmental seminar series, whether as a course or as a milestone. Refer to Appendix E.
  - Must complete all program course requirements but 50% of the courses may be done at other universities under the OVGS as would normally be the case.
  - May transfer to the regular doctoral program so long as they remain full-time should they lose their position at the company or research institute. Funding and supervision should be handled consistent with the policies of Graduate Studies.

This option will apply to all departments within the School of Engineering and Applied Sciences.

### **PROPOSAL/MOTION**

THAT a new industrial option under the doctoral programs of the School of Engineering and Applied Sciences be approved and introduced in the 2016-2017 academic year.



## **Appendix A. Regular PhD Option Descriptions in the Graduate Calendar:**

### **Chemical Engineering PhD**

#### **Requirements**

The general Regulations for Degree Doctor of Philosophy appear earlier in the Calendar. The minimum course program for this degree is at least six half courses, at least four of which should be at the 700-level, beyond the baccalaureate degree or three half courses, at least two of which should be at the 700-level, beyond the M.A.Sc. degree. A candidate is also required to take the Ph.D. The student is required to defend the thesis at a Final Oral Examination.

#### **Seminar Participation**

The Department of Chemical Engineering arranges a series of seminars; graduate students are required to attend and participate in these seminars. Ph.D. students must present one seminar on their research work before they graduate.

### **Civil Engineering PhD**

#### **Requirements**

Candidates will be required to complete satisfactorily the equivalent of at least two full courses in addition to the course requirement for an M.A.Sc. Degree, of which at least one must be from within the Department of Civil Engineering at McMaster University. Additional course work may be presented if deemed necessary by the candidate's research supervisor. In addition to the above course requirements, all full-time Ph. D. candidates must attend and participate in the Department of Civil Engineering Graduate Student Seminar Day each year, for the first 12 terms (48 months) of study.

### **Computing and Software**

#### **Requirements for the Ph.D. Degrees in Computer Science and Software Engineering**

Students must successfully complete the following requirements:

- a. Equivalent of 4 one-term (half course) graduate courses in Computer Science, Software Engineering, or relevant areas of Engineering or Mathematics. At most two courses can be from outside the department, all must be at the 700-level. More than two courses outside the department requires approval of the department. Students may be required to take more courses as judged by the supervisory committee.
- b. Pass a two-part Comprehensive Examination. Part I tests breadth of knowledge and Part II is a defense of a thesis proposal.
- c. Prepare and successfully defend a thesis

### **Electrical and Computers**

#### **Requirements**

The general requirements for the degree Doctor of Philosophy appear earlier in the Calendar. The minimum number of graduate courses required is four half courses (or equivalent) beyond the Master's degree, or eight half courses (or equivalent) beyond the Bachelor's degree.

#### **General Requirements**

Candidates for the degrees of M.A.Sc. and Ph.D. must present a seminar on a topic approved by the Department at least once during the course of their programs. Grading will be restricted to *Pass/Fail*. The thesis or report submitted by the candidate must be defended orally at the conclusion of the study. All M.A.Sc. and Ph.D. graduate students are required to register [ECE 790 Graduate Poster Seminars in Electrical and Computer Engineering](#). M. Eng. students registering for [ECE 701](#), with the exception of those registered in the

combined B. Eng./M. Eng. Biomedical Engineering program, must register for [ECE 790](#) as well.

## **Engineering Physics**

### **Course Requirements**

The general Regulations for the Degree Doctor of Philosophy appear earlier in the Calendar. Students with a Master's degree are required to take three half courses, at least two of which must be at the 700- level. Students entering into the Ph.D. program directly from a Baccalaureate degree, or transferring into the Ph.D. program without being required to complete the Master's degree are required to take a total of six half courses, of which at least four must be at the 700-level.

## **Materials Science and Engineering**

### **Requirements**

A candidate for the Ph.D. degree in Materials Science or Materials Engineering will be required to complete not fewer than eight half courses beyond the bachelor's degree. This includes the course requirements listed for the M.A.Sc. or M.Sc. programs, plus two additional full courses at the 700-level. Students must complete the Graduate Seminar courses, [MATLS 701](#) or equivalent and [MATLS 702](#), as part of these course requirements.

Students entering the Ph.D. program with a Master's degree or promoted from the Master's program are required to complete not fewer than two full courses at the 700-level. These students must complete [MATLS 702 Graduate Seminar \(Ph.D.\)](#), as part of these course requirements.

Students are encouraged to select some of their courses from areas beyond the focus of their research, including courses offered by other departments. It is expected that the student may also be required to take courses in addition to the prescribed courses for graduate credit. These may be at either the undergraduate or graduate level.

## **Mechanical Engineering**

### **Requirements**

The minimum course program for this degree is at least six half courses, at least five of which should be at the 700-level, beyond the Bachelor's degree or two half courses at the 700-level, beyond the Master's degree. A candidate must complete a thesis which embodies the results of original research and mature scholarship. The general University requirements for the thesis and oral defense will apply.

Students holding a Bachelor's degree should enroll at the Master's level. Excellent students may be transferred to the Ph.D. program without completing their Master's degree. In addition, all full-time graduate students are required to successfully complete MECH ENG 758 "Graduate Seminars in Mechanical Engineering." For further details see the MECH ENG 758 course description.

## **Appendix B. Excerpt from UoT Grad Calendar**

### **13.1.1.3 Flexible-Time PhD Program Option**

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

In addition, applicants to the flexible-time PhD program option must demonstrate that they are "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.

An example of the program in Engineering is in their Mechanical And Industrial Engineering Department

<https://www.mie.utoronto.ca/graduate/phd/flextime.php>

## **Appendix C. Conditions of Research Conducted Off-Campus**

The following list was taken from the Eng.Sc.D. Degree requirements of the School of Engineering and Applied Sciences at Columbia University (USA). That degree allows research to be conducted at companies but lowers their course requirements. While we are not proposing to mirror their degree, the stated list provides very important points to consider when allowing research to be carried out off-campus.

### **Location of Research**

- The research must be unclassified.
- The dissertation must represent the student's own efforts.
- The employer must have full cognizance that the student is using company facilities and possibly
- company time to carry out doctoral research.
- The employer must have no objections to the publication of results.
- Supervisory committee members must be free to visit the location where the research is being
- conducted whenever they wish to do so.
- The student must be prepared to consult with his/her thesis adviser on the campus as often as two
- half-days per week, if the adviser so requires.
- At the time the research program is submitted for approval, the student must obtain a letter from a
- responsive member of his/her firm, addressed to the chair of the doctoral committee, stating that the company will abide by the conditions set forth in this section.

## **Appendix E. Memorandum of Understanding**

**[ To be attached separately ]**

## **Appendix E. Seminar courses per department**

All departments have requirements of attendance at seminars but only a few have courses in the calendar.

### **ECE 790 / Graduate Poster Seminars in Electrical and Computer Engineering.**

6 unit(s)

(This is a zero-credit course)

Research poster seminar series presented by graduate students in electrical and computer engineering. All full time graduate students are required to register for this course as outlined in “General Requirements.” Grading will be restricted to pass/fail (P/F).

Exemption – students in the M. Eng. Biomedical Engineering program due to course conflict.

### **MATLS 702 / Graduate Seminar (Ph.D.)**

3 unit(s)

Each student is required to prepare and present major seminars, based upon extensive research work and literature surveys, in areas related to their current research. A grade will be assessed based on overall performance in the course.

### **ME 758 / Graduate Seminars in Mechanical Engineering**

3 unit(s)

Seminar series presented by graduate students and guest speakers. All full time graduate students are required to register for this “zero credit” course in the fall and winter semesters. Course grades are either Pass or Fail (P/F). To pass the course the student must attend at least 90% of the seminars in each term. Full time Master’s students are required to present one seminar in the series before graduation, and doctoral students must present two seminars before graduation.

## **Memorandum of Understanding on Doctoral Degree Requirements**

*Between*

***[Enter Candidate's Name Here]***

*And*

***[Enter Supervisor's Name Here]***

*And*

***[Enter Candidate's Company Name Here]***

**Concerning** the degree completion requirements of a doctoral candidate under the Industrial PhD option within the Faculty of Engineering, **McMaster University**. This memorandum is not intended to be legally binding but rather, serves to reinforce how each party listed above can assist the candidate in completing their program in a timely manner.

**[Supervisor]**, and **[Company]** through signing this document acknowledge their support of **[candidate]** to complete his/her doctoral degree requirements in a timely manner by the provision of necessary resources that address the listed article points in this memorandum of understanding.

**These requirements are as follows:**

### ***Article 1***

The candidate under the Industrial PhD option must remain enrolled as a full-time student in their degree program for the first four years, as well as agrees to engage the company as an employee and will be available for employment under the terms initially provided. In turn, the candidate under this option may conduct research towards their thesis requirement at their place of employment.

### ***Article 2***

The candidate is enrolled in a doctoral program within a department in the Faculty of Engineering at McMaster University and is required to fulfill the normal course load of a full-time student in accordance to the requirements as listed in the Graduate Calendar for the corresponding year to which they started. Normally, there are two to four courses required, depending upon the department after their Masters and in most cases, will require the Candidate to come to the campus during normal work hours. These requirements include the additional two online courses, SGS 101/Academic Integrity and SGS 201/Accessibility for Ontarians with Disabilities Act which must

be completed within the first term of the first year of the program and are required of any new graduate student to McMaster. Under the Industrial PhD Option the candidate will be exempt from any seminar requirement corresponding the program.

### *Article 3*

The Candidate and Supervisor will engage in a review of program progress on a regular basis which may include email correspondences but may not be limited to only email. The regularity of meetings will be determined by the Candidate and Supervisor but should happen at least once a month unless under extenuating circumstances. The frequency of meeting may vary over the course of the program.

### *Article 4*

The review of Candidate's progress must be assessed at least once per year by a supervisory committee; the committee will be constituted in the same manner as any other for doctoral candidate and the same obligations of reporting apply. The Candidate will be required to provide a report on their progress to the committee members, defend their progress orally at the meeting and must receive a satisfactory grade in order to remain in the program. These meeting may require the Candidate to come to campus though web conferencing options are encouraged if all parties agree.

### *Article 5*

The Candidate must undertake to complete their comprehensive exam normally within 18 months of starting the program and no longer than 24 months. The Candidate is required to come onto the campus in order to complete the exam. For each department, a comprehensive exam differs in its format but generally constitutes two parts, both which the Candidate must pass. The normal rules regarding the exam, as stated in the Graduate Calendar, apply.

### *Article 6*

The Company gives the Candidate authorization to use its facilities or those of its affiliates to conduct all or most of the research and agrees to make company time available to carry out these studies.

### *Article 7*

The thesis project of the Candidate should correspond to the interests of the Candidate, the Company, and Supervisor. The research work:

- A. Must be unhindered by proprietary content so that the thesis and publications from the work may be published on MacSphere for public viewing, after a possible temporary embargo period of up to one year;
- B. Must be based on a research methodology devised solely by the Candidate;
- C. Should represent the Candidate's own efforts to collect data;
- D. Will include a critical analysis of the data, conducted solely by the Candidate, though the Candidate should feel free to solicit the expertise of their Supervisor or members of their company to provide guidance so long as they are not conducting the work;
- E. Shall stand as a unique scientific contribution within the published literature;



*Article 8*

The Company will declare at the time of signing this Memorandum of Understanding whether any review of the thesis is required before submission, when finished, and will work with the University to provide an addendum to this agreement stating the agreed upon terms for the thesis review. The review period may not exceed 90 days. The Company further agrees to notify all parties of any request to change these terms.

*Article 9*

To facilitate an understanding of the scope of research intended by all parties, the Candidate agrees to provide a formal study plan at least two weeks before the signing of this agreement and that study plan once accepted, will be attached to this agreement.

*Article 10*

Differences arising out of the interpretation on the implementation of the Memorandum of Understanding shall be settled amicably by consultation or negotiation between the Parties.

*Article 11*

This Memorandum of Understanding will remain in force for Seven (7) years and will become effective upon the date of signature by duly authorized representatives of both parties. The terms of the MOU can be modified at any time by mutual agreement communicated in writing.

DONE in on ?????? <sup>th</sup> 2016, in two originals in the English language.

**For McMaster University**

---

**Candidate**  
[Company Name]  
[Department Name]

---

**Date**

---

**Professor**  
[Department Name]

---

**Date**

---

**Departmental Chair**  
[Departmental Name]

---

**Date**

---

**Associate Dean of Graduate Studies**  
*Faculty of Engineering*

---

**Date**

*For [Company]*

---

[Company representative]  
[Company Name]

---

**Date**

- **Electrical and Computer Engineering**
  - **New Courses:**
    - 6CL4 Control Systems Design
    - 6PM4 Electrical Power Systems
    - 6DN4 Advanced Internet Communications
    - 738 Cloud Communications
  - **Change to Unit Count and Course Number**
    - 6EK3 Microelectronics
- **Mechanical Engineering**
  - **New Courses**
    - 754 Management and Control of Electric Vehicle Batteries
    - 712 Bio-Inspired Engineering
- **School of Engineering Practice**
  - **Engineering Design**
    - **New Courses:**
      - 6AS3 Advanced System Components and Integration
      - 6AT3 Conceptual Design of Electric and Hybrid Electric Vehicles
      - 6BC3 Building Science
      - 6DM3 Data Mining
      - 6PD3 Power Distribution II
      - 6TB3 Biotechnology III/Advanced Biotechnology
      - 762 Prototyping Tools and Methods
      - 780 Advanced Robotics and Automation
      - 781 Contaminated Site Management
      - 782 Modern Power System Design
      - 783 Electromagnetics Sensors and Actuators
  - **Engineering and Public Policy**
    - **New Courses:**
      - 6X03 The Regeneration Imperative
      - 784 Government Policy and Business
  - **Engineering/Technology Entrepreneurship and Innovation**
    - **New Course:**
      - 6PM3 Project Management
  - **Engineering in Manufacturing Engineering**
    - **New Courses**
      - 6RM3 Robot Mechanics and Mechatronics
      - 710 System Analysis Simulation



## SCHOOL OF GRADUATE STUDIES

### RECOMMENDATION FOR CHANGE IN GRADUATE CURRICULUM - FOR CHANGE(S) INVOLVING DEGREE PROGRAM REQUIREMENTS / PROCEDURES / MILESTONES

**IMPORTANT: PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:**

1. This form must be completed for **ALL** changes involving degree program requirements/procedures. **All** sections of this form **must** be completed.
2. An electronic version of this form (must be in MS WORD **not** PDF) should be emailed to the Assistant Secretary, School of Graduate Studies (cbryce@mcmaster.ca).
3. A representative from the department is **required to attend** the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.

<b>DEPARTMENT</b>		W Booth School of Engineering Practice	
<b>NAME OF PROGRAM and PLAN</b>			
<b>DEGREE</b>	M.Eng		
<b>NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)</b>			
Is this change a result of an IQAP review? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
CREATION OF NEW MILESTONE <input type="checkbox"/>			
<b>CHANGE IN ADMISSION REQUIREMENTS</b>	<input type="checkbox"/>	<b>CHANGE IN COMPREHENSIVE EXAMINATION PROCEDURE</b>	<input type="checkbox"/>
<b>CHANGE IN THE DESCRIPTION OF A SECTION IN THE GRADUATE CALENDAR</b>	<input type="checkbox"/>	<b>EXPLAIN:</b>	
<b>OTHER CHANGES</b>	<input checked="" type="checkbox"/>	<b>EXPLAIN:</b> Update Program Descriptions in Graduate Calendar	

**DESCRIBE THE EXISTING REQUIREMENT/PROCEDURE:**

## **Engineering Design**

The General Motors of Canada Centre for Engineering Design (GMC-CED) within the Walter G. Booth School of Engineering Practice offers complete facilities to students seeking the Master of Engineering Design (M. Eng. Design) degree in the following fields of study:

Process and Production Systems

Product Design

Sustainable Infrastructure

## **Engineering Entrepreneurship and Innovation**

The Xerox Centre for Engineering Entrepreneurship & Innovation (XCEEi) within the Walter G. Booth School of Engineering Practice offers complete facilities to students seeking the Master of Engineering Entrepreneurship and Innovation (M.E.E.I.) degree.

## **Engineering and Public Policy**

The Arcelor Mittal Dofasco Centre of Engineering and Public Policy within the Walter G. Booth School of Engineering Practice offers complete facilities to students seeking the Master of Engineering and Public Policy (M.E.P.P.) degree.

## **Manufacturing Engineering**

The Walter G. Booth School of Engineering Practice offers complete facilities to students seeking the Master of Engineering in Manufacturing Engineering (M.E.M.E.) degree.

## **Technology Entrepreneurship and Innovation**

The Xerox Centre for Engineering Entrepreneurship and Innovation (XCEEi) within the Walter G. Booth School of Engineering Practice offers complete facilities to students seeking the Master of Technology Entrepreneurship and Innovation (M.T.E.I.) degree.

The Master of Technology Entrepreneurship and Innovation program is a fast paced program aimed at highly motivated students.

## **Programs**

### **Master**

[Engineering and Public Policy, M.E.P.P.](#)

[Engineering Design, M. Eng. Design](#)

[Engineering Entrepreneurship and Innovation, M.E.E.I.](#)

[Engineering in Manufacturing Engineering, M.E.M.E.](#)

[Technology Entrepreneurship and Innovation, M.T.E.I.](#)

### **Course Offerings**

[Engineering and Public Policy Courses](#)

[Engineering Design Courses](#)  
[Engineering Entrepreneurship and Innovation Courses](#)  
[Manufacturing Engineering Courses](#)  
[Technology Entrepreneurship and Innovation Courses](#)  
← Return to: [Faculty of Engineering](#)

**PROVIDE A DETAILED DESCRIPTION OF THE RECOMMENDED CHANGE (*Attach additional pages if space is not sufficient.*)**

Remove reference to the "Centres", these are no longer used or referenced within the School

**RATIONALE FOR THE RECOMMENDED CHANGE (How does the requirement fit into the department's program and/or tie to existing Program Learning Outcomes from the program's IQAP cyclical review?):**

The decision to stop using Centres in the School was made a few years ago, accordingly, mention of these Centres needs to be removed from the Graduate Calendar.

**PROVIDE IMPLEMENTATION DATE: (*Implementation date should be at the beginning of the academic year*)**

September 2016

**ARE THERE ANY OTHER DETAILS OF THE RECOMMENDED CHANGE THAT THE CURRICULUM AND POLICY COMMITTEE SHOULD BE AWARE OF? IF YES, EXPLAIN.**

**PROVIDE A DESCRIPTION OF THE RECOMMENDED CHANGE TO BE INCLUDED IN THE CALENDAR (please include a tracked changes version of the calendar section affected if applicable):**

Replace the existing program descriptions for the W Booth School of Engineering Practice. Currently, the program descriptions reference the former Centres which no longer exist.

[http://academiccalendars.romcmaster.ca/preview\\_entity.php?catoid=16&ent\\_oid=2565&returnto=2710](http://academiccalendars.romcmaster.ca/preview_entity.php?catoid=16&ent_oid=2565&returnto=2710)

## Engineering Design

The W Booth School of Engineering Practice Master of Engineering Design graduate degree program emphasizes the development of competencies in:

1. Leadership, collaboration, and management skills to lead diverse teams and deal with

- complex situations in the work environment
2. Design thinking and innovations methodologies
  3. Engineering disciplines leading to breakthrough design and operation of systems in
    - Sustainable Infrastructure (renewable energy systems, environmental systems, sustainable products and systems design, local economy)
    - Product Design and manufacturing of industrial and consumer products
    - Process and Production Systems in industries and discrete manufacturing (i.e. refining, chemicals, specialty chemicals, pharmaceuticals, automotive)

~~The General Motors of Canada Centre for Engineering Design (GMC-CED) within the Walter G. Booth School of Engineering Practice- The Engineering Design Program offers complete facilities to students seeking the Master of Engineering Design (M. Eng. Design) degree in the following fields of study:-~~

- ~~• Process and Production Systems~~
- ~~• Product Design~~
- ~~• Sustainable Infrastructure~~

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## Engineering Entrepreneurship and Innovation

The W Booth School of Engineering Practice **Engineering Entrepreneurship and Innovation** graduate degree program offers its students the experience, opportunity and resources necessary for aspiring entrepreneurs to lead change. This innovative program for engineers and technology-savvy students provides the essential knowledge and skills to facilitate a successful business startup.

~~The Xerox Centre for Engineering Entrepreneurship & Innovation (XCEEi) within the Walter G. Booth School of Engineering Practice offers complete facilities to students seeking the Master of Engineering Entrepreneurship and Innovation (M.E.E.I.) degree.~~

## Engineering and Public Policy

**The Master of Engineering and Public Policy (MEPP)** graduate degree program aims:

- to provide a high quality educational experience to graduate engineers and scientists in the areas of engineering, science and public policy;
- to foster applied research in the areas of engineering, science and public policy through the successful completion and dissemination of a research paper;
- to develop viable working linkages between engineering, science and fields of study within social sciences and the humanities (public policy, economics, society)
- to produce graduates who will provide inspired leadership in the engineering, science and public policy areas within the public, private and NGO sectors.

~~The Arcelor Mittal Dofasco Centre of Engineering and Public Policy within the Walter G. Booth School of Engineering Practice offers complete facilities to students seeking the~~

~~Master of Engineering and Public Policy (M.E.P.P.) degree.~~

## **Manufacturing Engineering**

The Master of Engineering in Manufacturing Engineering (MEME) graduate degree program aims:

- To provide a high quality educational experience to graduate engineers in the constantly evolving area of manufacturing;
- To provide an opportunity for both industrial experience and intellectual flexibility while earning a master's degree;
- To give graduates a focused management experience with concepts including six-sigma production, lean production, just-in-time and more.

~~The Walter G. Booth School of Engineering Practice offers complete facilities to students seeking the Master of Engineering in Manufacturing Engineering (M.E.M.E.) degree.~~

## **Technology Entrepreneurship and Innovation**

The W Booth School of Engineering Practice **Technology Entrepreneurship and Innovation** graduate degree program offers its students the experience, opportunity and resources necessary for aspiring entrepreneurs to lead change. This innovative program for engineers and technology-savvy students provides the essential knowledge and skills to facilitate a successful business startup.

~~The Xerox Centre for Engineering Entrepreneurship and Innovation (XCEEI) within the Walter G. Booth School of Engineering Practice offers complete facilities to students seeking the Master of Technology Entrepreneurship and Innovation (M.T.E.I.) degree.~~

The Master of Technology Entrepreneurship and Innovation program is a fast-paced program aimed at highly motivated students.

## **Programs**

### **Master**

Engineering and Public Policy, M.E.P.P.

Engineering Design, M. Eng. Design

Engineering Entrepreneurship and Innovation, M.E.E.I.

Engineering in Manufacturing Engineering, M.E.M.E.

Technology Entrepreneurship and Innovation, M.T.E.I.

### **Course Offerings**

Engineering and Public Policy Courses

Engineering Design Courses

Engineering Entrepreneurship and Innovation Courses

Manufacturing Engineering Courses

Technology Entrepreneurship and Innovation Courses

← Return to: Faculty of Engineering



<b>CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:</b>
Name: Yvonne Maidment Email: <a href="mailto:maidmeny@mcmaster.ca">maidmeny@mcmaster.ca</a> Extension: 26403 Date submitted: January 25, 2016

If you have any questions regarding this form, please contact the Assistant Secretary, School of Graduate Studies, [cbryce@mcmaster.ca](mailto:cbryce@mcmaster.ca)

SGS/2013



**RECOMMENDATION FOR CHANGE IN GRADUATE CURRICULUM - FOR CHANGE(S)  
INVOLVING DEGREE PROGRAM REQUIREMENTS / PROCEDURES / MILESTONES**

<b>IMPORTANT: PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:</b>			
<p>1. This form must be completed for <b><u>ALL</u></b> changes involving degree program requirements/procedures. <b><u>All</u></b> sections of this form <b><u>must</u></b> be completed.</p> <p>2. An electronic version of this form (must be in MS WORD <b><u>not</u></b> PDF) should be emailed to the Assistant Secretary, School of Graduate Studies (cbryce@mcmaster.ca).</p> <p>3. A representative from the department is <b><u>required to attend</u></b> the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.</p>			
<b>DEPARTMENT</b>		Walter G. Booth School of Engineering Practice	
<b>NAME OF PROGRAM and PLAN</b>		Engineering Design	
<b>DEGREE</b>	Master of Engineering Design		
<b>NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)</b>			
Is this change a result of an IQAP review? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
CREATION OF NEW MILESTONE <input type="checkbox"/>			
<b>CHANGE IN ADMISSION REQUIREMENTS</b>	<input type="checkbox"/>	<b>CHANGE IN COMPREHENSIVE EXAMINATION PROCEDURE</b>	<input type="checkbox"/>
		<b>CHANGE IN COURSE REQUIREMENTS</b>	<input checked="" type="checkbox"/> x
<b>CHANGE IN THE DESCRIPTION OF A SECTION IN THE GRADUATE CALENDAR</b>		<b>EXPLAIN:</b> Update admission requirements to meet current admission	
<b>OTHER CHANGES</b>	<b>EXPLAIN:</b>		

**DESCRIBE THE EXISTING REQUIREMENT/PROCEDURE:**

As found in the Graduate Calendar:

[http://academiccalendars.romcmaster.ca/preview\\_program.php?catoid=16&poid=10648&returnto=2710](http://academiccalendars.romcmaster.ca/preview_program.php?catoid=16&poid=10648&returnto=2710)

## **Admission**

In addition to the general requirements for entry into a graduate program in Engineering, students must hold a 4-year engineering undergraduate degree, with at least a B- average (equivalent to a McMaster 7.0 GPA out of 12) in the final year in all courses in the discipline, or relating to the discipline, in which the applicant proposes to do graduate work.

Strong letters of recommendation are also required. Each applicant will also be interviewed as part of the admission process. Professional work experience will be highly desirable.

Candidates may be enrolled on a full- or part-time basis. Full-time students will complete the degree in twelve consecutive months of study. Students are admitted for September or January. Part-time students will normally be expected to complete the program in two years.

Prospective applicants who did not attain the required standing in their undergraduate degree, but who have at least four (4) years of relevant work experience, should discuss their situation with the program director. If the experience is deemed sufficient, the director may then recommend an interview. Evidence of ability to do graduate work will still be required. (See Sections 2.1.1 Admission Requirements for Master's Degree and 2.1.5 Admission of Students with Related Work Experience or Course Work beyond the Bachelor's Degree in the Graduate Calendar.)

Students who take Leading Innovation and/or Entrepreneurial Opportunity Identification may be granted advanced standing for these required courses upon registration in SEP programs.

**PROVIDE A DETAILED DESCRIPTION OF THE RECOMMENDED CHANGE (*Attach additional pages if space is not sufficient.*)**

Change wording to reflect that applications from students from a STEM background are considered for admission.

**PROVIDE IMPLEMENTATION DATE: (*Implementation date should be at the beginning of the academic year*)**

Sept. 1, 2016

**ARE THERE ANY OTHER DETAILS OF THE RECOMMENDED CHANGE THAT THE CURRICULUM AND**

**POLICY COMMITTEE SHOULD BE AWARE OF? IF YES, EXPLAIN.**

**PROVIDE A DESCRIPTION OF THE RECOMMENDED CHANGE TO BE INCLUDED IN THE CALENDAR (please include a tracked changes version of the calendar section affected if applicable):**

## Admission

In addition to the general requirements for entry into a graduate program in Engineering, students must hold a 4-year engineering undergraduate degree or equivalent, with at least a B- average (equivalent to a McMaster 7.0 GPA out of 12) in the final year in all courses in the discipline, or relating to the discipline, in which the applicant proposes to do graduate work. Students with a degree in Science, Technology and Mathematics background will also be considered.

Strong letters of recommendation are also required. Each applicant will also be interviewed as part of the admission process. Professional work experience will be highly desirable.

Candidates may be enrolled on a full- or part-time basis. Full-time students will complete the degree in twelve consecutive months of study. Students are admitted for September or January. Part-time students will normally be expected to complete the program in two years.

Prospective applicants who did not attain the required standing in their undergraduate degree, but who have at least four (4) years of relevant work experience, should discuss their situation with the program director. If the experience is deemed sufficient, the director may then recommend an interview. Evidence of ability to do graduate work will still be required. (See Sections 2.1.1 Admission Requirements for Master's Degree and 2.1.5 Admission of Students with Related Work Experience or Course Work beyond the Bachelor's Degree in the Graduate Calendar.)

Students who take Leading Innovation and/or Entrepreneurial Opportunity Identification may be granted advanced standing for these required courses upon registration in SEP programs.

**CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:**

Name: Yvonne Maidment Email: maidmeny@mcmaster.ca Extension: 26403

Date submitted: Jan 25, 2016

If you have any questions regarding this form, please contact the Assistant Secretary, School of Graduate Studies,  
[cbryce@mcmaster.ca](mailto:cbryce@mcmaster.ca)

SGS/2013



## SCHOOL OF GRADUATE STUDIES

### RECOMMENDATION FOR CHANGE IN GRADUATE CURRICULUM - FOR CHANGE(S) INVOLVING DEGREE PROGRAM REQUIREMENTS / PROCEDURES / MILESTONES

**IMPORTANT: PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:**

1. This form must be completed for **ALL** changes involving degree program requirements/procedures. **All** sections of this form **must** be completed.
2. An electronic version of this form (must be in MS WORD **not** PDF) should be emailed to the Assistant Secretary, School of Graduate Studies (cbryce@mcmaster.ca).
3. A representative from the department is **required to attend** the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.

DEPARTMENT	Walter G. Booth School of Engineering Practice		
NAME OF PROGRAM and PLAN	Engineering Design		
DEGREE	Master of Engineering Design		
NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)			
Is this change a result of an IQAP review? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
CREATION OF NEW MILESTONE <input type="checkbox"/>			
CHANGE IN ADMISSION REQUIREMENTS	<input type="checkbox"/>	CHANGE IN COMPREHENSIVE EXAMINATION PROCEDURE	CHANGE IN COURSE REQUIREMENTS <input checked="" type="checkbox"/>
CHANGE IN THE DESCRIPTION OF A SECTION IN THE GRADUATE CALENDAR	EXPLAIN: Proposed changes place more emphasis on hands-on prototyping in the program.		
OTHER CHANGES	EXPLAIN: Introducing a new (elective) course SEP 7XX (Prototyping tools and methods) which is described separately. This will enhance prototyping capabilities of the students.  Making SEP 760 Design Thinking a mandatory course for all MED students. This will enhance design thinking capabilities for all MED students.  Make SEP763 Selected Topics in Design a mandatory course for students in the Product Design		

	stream. This is a course where students will research various aspects of their M.Eng. project and carry out design calculation, prototyping, and other activities required for in-depth work on their project.
<p><b>DESCRIBE THE <u>EXISTING</u> REQUIREMENT/PROCEDURE:</b></p> <p>Mandatory course is SEP 773 Leadership for Innovation – this requirement remains. Remaining courses are selected depending on the stream. Strongly recommended selections are:</p> <p>Product Design stream: SEP 760 Design Thinking; SEP 761 Human-Centred Design</p> <p>Sustainable Community infrastructure stream: SEP 748 Sustainable Community Infrastructure</p> <p>Process/Production stream: SEP 752 Process Modelling and Optimization</p>	

<p><b>PROVIDE A DETAILED DESCRIPTION OF THE RECOMMENDED CHANGE (<i>Attach additional pages if space is not sufficient.</i>)</b></p> <p><b>Process and Production Systems &amp; Sustainable Community Infrastructure:</b></p> <p>The recommended change includes adding SEP 760 (Design Thinking) as a mandatory requirement for all MED students.</p> <p>Adding SEP 763 (Selected Topics in Design) as a mandatory course for all students in the <u>Product Design</u> stream only.</p>	
<p><b>PROVIDE IMPLEMENTATION DATE: (<i>Implementation date should be at the beginning of the academic year</i>)</b></p> <p>Sept. 1, 2016</p>	
<p><b>ARE THERE ANY OTHER DETAILS OF THE RECOMMENDED CHANGE THAT THE CURRICULUM AND POLICY COMMITTEE SHOULD BE AWARE OF? IF YES, EXPLAIN.</b></p>	
<p><b>PROVIDE A DESCRIPTION OF THE RECOMMENDED CHANGE TO BE INCLUDED IN THE CALENDAR (please include a tracked changes version of the calendar section affected if applicable):</b></p> <p><b>Process and Production Systems</b></p> <p>Master of Engineering Design program in the field of Process and Production Systems provides advanced competencies for engineers and supervisors typically working in:</p> <p>Process Design</p>	

Advanced Process Control  
Plant Operations  
Process Industry Oriented R&D  
Control Systems and Software

The following course requirements need to be fulfilled by the candidate:

### **Leadership and Management**

~~Required Courses~~ Candidates are required to take the following:

SEP 760 / Design Thinking

SEP 771 / W Booth School of Engineering Practice Practitioner's Forum (Full-students only)

SEP 772 / Innovation Studio

SEP 773 / Leadership for Innovation

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### **Interdisciplinary Engineering**

~~It is recommended that the candidates take the equivalent of one half course selected from the following courses:~~

~~SEP 730 / Reliability and Risk Management~~

~~SEP 733 / Project Management~~

~~SEP 760 / Design Thinking~~

### **Core Technical CoursesElectives**

~~. Candidates are required to select take two three~~ half courses which should be selected from graduate courses offered by departments within the Faculty of Engineering. Candidates are required to have their elective course selection approved by the program lead.

### **Process Design, Process Control, or Plant Operations**

Recommended courses for candidates focusing on *Process Design, Process Control, or Plant Operations* include:

SEP 751 / Process Design and Control for Operability

SEP 752 / Process Modeling and Optimization

SEP 6C03 / Statistics for Engineers

SEP 754 / Process Design and Integration for Minimal Environmental Impact

CHEM ENG 752 / Optimization of Chemical Processes

CHEM ENG 765 / Multivariate Statistical Methods for Process Analysis and Monitoring

### **Control Systems Engineering**

Recommended courses ~~(two or more half courses)~~

for students with a background or interest in *Control Systems Engineering* are:

CAS \*6CD3 / Distributed Computer Systems

CAS\*6EB3 / Database Management System Design

CAS 704 / Embedded, Real-Time Software Systems

CAS 703 / Software Design

CHEM ENG 6E03 / Digital Computer Process Control

ECE\*726/ Local Area Networks in Manufacturing Environment

ECE 732 / Non-linear Control Systems



ECE 771 / Algorithms for Parameter and State Estimation

ECE 772 / Neural Networks and Learning Machines

### **~~Elective Technical Courses~~**

~~Candidates are required to take two half courses which should be selected from graduate courses offered by departments within the Faculty of Engineering. Candidates are required to have their elective course selection approved by the Director of the program.~~

## **Product Design**

Innovation and creative system, solutions, or product design are emphasized through problem solving via interdisciplinary teams in a design studio environment, while learning about the use of materials in product design and design for manufacturing are led by the faculty who are also members of McMaster's advanced centres (including Centre for Automotive Materials, Manufacturing Research Institute, Institute for Polymer Production Technology and the Centre for Advanced Polymer Processing and Design). The interdisciplinary nature of the program enables its participants to work on a variety of designs, such as industrial machinery, consumer products, automotive, etc.

The following course requirements need to be fulfilled by the candidates:

### **Leadership and Management Mandatory Courses**

Candidates are required to take the following:

SEP 760 / Design Thinking

SEP 763 / Selected Topics in Design

SEP 771 / W Booth School of Engineering Practice Practitioner's Forum (full-time students only)

SEP 772 / Innovation Studio

SEP 773 / Leadership for Innovation

### **Core Technical Courses- Electives**

~~Candidates are required to take two design half courses:~~

~~SEP 760 / Design Thinking~~

~~SEP 761 / Human-Centred Design~~

### **Elective Technical Courses**

Candidates are required to take ~~three~~ two half courses which should be selected from graduate courses offered by departments within the Faculty of Engineering. Candidates are required to have their elective course selection approved by the ~~Director of the program~~ lead.

## **Sustainable Community Infrastructure**

Candidates in this field of study cover various aspects of the design of sustainable communities, including:

Public realm spaces (parks, sidewalks, recreation facilities)

Storm water management

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Housing and energy efficient buildings  
Development of local business  
Sustainable transportation systems  
Sustainable energy generation

The following course requirements need to be fulfilled by the candidates:

### **Leadership and Management Mandatory Courses**

Candidates are required to take:

SEP 760 / Design Thinking

SEP 771 / W Booth School of Engineering Practice Practitioner's Forum (full-time students only)

SEP 772 / Innovation Studio

SEP 773 / Leadership for Innovation

### **Interdisciplinary Engineering**

~~Recommended courses include:~~

~~SEP 730 / Reliability and Risk Management~~

~~SEP 733 / Project Management~~

~~SEP 760 / Design Thinking~~

### **Core Technical Courses Electives**

Candidates are required to take ~~four half technical~~ **three elective** courses, which should be selected from graduate courses offered by departments within the Faculty of Engineering. Suggested courses in sustainable energy systems and manufacturing are:

SEP 6103 / Sustainable Manufacturing Processes

SEP 705 / Green Engineering, Sustainability and Public Policy

SEP 746 / Design of Sustainable Community Infrastructure

SEP 747 / Energy Efficient Buildings

SEP 748 / Development of Sustainable Communities

### **Electives**

Candidates are required to have their elective course selection approved by the ~~Director of the~~ program lead.

#### **CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:**

Name: V. Mahalec	Email: mahalec@mcmaster.ca	Extension: 26386	Date submitted: Jan 12, 2016
Name: R.V. Fleisig	Email: robert@mcmaster.ca	Extension: 27408	Date submitted: Jan. 12, 2016

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If you have any questions regarding this form, please contact the Assistant Secretary, School of Graduate Studies,  
cbryce@mcmaster.ca

SGS/2013

**RECOMMENDATION FOR CHANGE IN GRADUATE CURRICULUM - FOR CHANGE(S)  
INVOLVING DEGREE PROGRAM REQUIREMENTS / PROCEDURES / MILESTONES****IMPORTANT: PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:**

1. This form must be completed for **ALL** changes involving degree program requirements/procedures. **All** sections of this form **must** be completed.
2. An electronic version of this form (must be in MS WORD **not** PDF) should be emailed to the Assistant Secretary, School of Graduate Studies (cbryce@mcmaster.ca).
3. A representative from the department is **required to attend** the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.

<b>DEPARTMENT</b>	Walter G. Booth School of Engineering Practice		
<b>NAME OF PROGRAM and PLAN</b>	Master of Engineering and Public Policy		
<b>DEGREE</b>	M.Eng		
<b>NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)</b>			
Is this change a result of an IQAP review? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
CREATION OF NEW MILESTONE <input type="checkbox"/>			
<b>CHANGE IN ADMISSION REQUIREMENTS</b>	<input type="checkbox"/>	<b>CHANGE IN COMPREHENSIVE EXAMINATION PROCEDURE</b>	<input type="checkbox"/>
<b>CHANGE IN THE DESCRIPTION OF A SECTION IN THE GRADUATE CALENDAR</b>	<input type="checkbox"/>	<b>EXPLAIN:</b>	
<b>OTHER CHANGES</b>	<input checked="" type="checkbox"/>	<b>EXPLAIN:</b> Change Program Requirements	

**DESCRIBE THE EXISTING REQUIREMENT/PROCEDURE:**

**Program Length:** Students in the Master of Engineering and Public Policy Program are required to take 8 courses to complete the program.

**Admission Requirements:** Students are required to have an Engineering or Science Degree

**PROVIDE A DETAILED DESCRIPTION OF THE RECOMMENDED CHANGE (*Attach additional pages if space is not sufficient.*)**

**Program Length:** The number of required courses for the program is being reduced from 8 to 7. In particular, SEP 703 Applied Microeconomics and Environmental Economics is being removed as a required course.

**Admission Requirements:** Updating the Graduate Calendar to include Technology and Mathematics backgrounds as eligible applicants

**RATIONALE FOR THE RECOMMENDED CHANGE (How does the requirement fit into the department's program and/or tie to existing Program Learning Outcomes from the program's IQAP cyclical review?):**

**Program Length:** The primary rationale for reducing from 8 to 7 courses is to bring the student load closer to other Booth School programs. Students in MEPP are frequently participating in project teams with students from other programs, thus a reduced course load will better enable to participate effectively in those project teams. Such projects begin with the Innovation Studio in the fall term and project work ramps up during the winter term and then, of course, is the primary activity in the summer term. This is in contrast to the previous approach in which, largely because of the course load, students didn't really get into project work until the summer.

**Admission Requirements:** The W Booth School encourages applications from all students with a STEM background, as such, the Graduate Calendar is being updated to reflect this.

**PROVIDE IMPLEMENTATION DATE: (*Implementation date should be at the beginning of the academic year*)**

September 2016

**ARE THERE ANY OTHER DETAILS OF THE RECOMMENDED CHANGE THAT THE CURRICULUM AND POLICY COMMITTEE SHOULD BE AWARE OF? IF YES, EXPLAIN.**

**PROVIDE A DESCRIPTION OF THE RECOMMENDED CHANGE TO BE INCLUDED IN THE CALENDAR (please include a tracked changes version of the calendar section affected if applicable):**

**Program Length:**

## Required Courses

~~Five~~ Four half-courses:

SEP 701 / Theory and Practice of Policy Analysis: Frameworks and Models

SEP 702 / Systems Engineering and Public Policy

~~SEP 703 / Applied Microeconomics and Environmental Economics~~

SEP 709 / Emerging Issues, Technology and Public Policy

~~SEP 773 / Leadership for Innovation~~

SEP 771 / W Booth School of Engineering Practice Practitioner's Forum (Full-time students only)

SEP 772 / Innovation Studio

~~SEP 773 / Leadership for Innovation~~

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## Focus Elective Courses

Three half-courses are required for electives. Students may select from the following options:

SEP 6103 / Sustainable Manufacturing Processes

SEP 705 / Green Engineering, Sustainability and Public Policy

SEP 706 / Energy and Public Policy

SEP 707 / Communication Technology and Public Policy

SEP 708 / Special Topics in Engineering and Public Policy

SEP 710 / International Governance and Environmental Sustainability

SEP 711 / Regeneration of the Natural and Built Environment

POL SCI 784 / Quantitative Political and Policy Analysis

POL SCI 785 / Public Sector Management

POL SCI 786 / Organizational Theory and the Public Sector

POL SCI 790 / The Politics of Economic Policy in Market Economies

POL SCI 792 / Public Choice

**Admission Requirements:**

## Admission

In addition to the general requirements for entry into a graduate program in Engineering, students must hold a 4-year engineering, ~~or~~ science, technology or mathematics undergraduate degree, with at least a B- average (equivalent to a McMaster 7.0 GPA out of 12) in the final year in all courses in the discipline, or relating to the discipline, in which the applicant proposes to do graduate work. Each applicant will also be interviewed as part of the admission process. Professional work experience is desirable but not essential.

Candidates may be enrolled on a full- or part-time basis. Students are admitted for

September or January.

Prospective applicants who did not attain the required standing in their undergraduate degree, but who have at least four (4) years of relevant work experience, should discuss their situation with the program director. If the experience is deemed sufficient, the director will recommend an interview. Evidence of ability to do graduate work will be required. (See Sections [2.1.1 Admission Requirements](#) for Master's Degree and [2.1.3 Admission of Students with Related Work Experience or Course Work Beyond the Bachelor's Degree](#) in the Graduate Calendar.)

**CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:**

Name: Yvonne Maidment Email: [maidmeny@mcmaster.ca](mailto:maidmeny@mcmaster.ca) Extension: 26403 Date submitted: January 25, 2016

If you have any questions regarding this form, please contact the Assistant Secretary, School of Graduate Studies, [cbryce@mcmaster.ca](mailto:cbryce@mcmaster.ca)

SGS/2013

**RECOMMENDATION FOR CHANGE IN GRADUATE CURRICULUM - FOR CHANGE(S)  
INVOLVING DEGREE PROGRAM REQUIREMENTS / PROCEDURES / MILESTONES**

<b>IMPORTANT: PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:</b>				
1. This form must be completed for <b><u>ALL</u></b> changes involving degree program requirements/procedures. <b><u>All</u></b> sections of this form <b><u>must</u></b> be completed.  2. An electronic version of this form (must be in MS WORD <b><u>not</u></b> PDF) should be emailed to the Assistant Secretary, School of Graduate Studies (cbryce@mcmaster.ca).  3. A representative from the department is <b><u>required to attend</u></b> the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.				
<b>DEPARTMENT</b>		Walter G. Booth School of Engineering Practice		
<b>NAME OF PROGRAM and PLAN</b>		Master of Engineering Entrepreneurship and Innovation		
<b>DEGREE</b>	M.Eng			
<b>NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)</b>				
Is this change a result of an IQAP review? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
CREATION OF NEW MILESTONE <input type="checkbox"/>				
<b>CHANGE IN ADMISSION REQUIREMENTS</b>		<input type="checkbox"/>	<b>CHANGE IN COMPREHENSIVE EXAMINATION PROCEDURE</b>	<input type="checkbox"/>
<b>CHANGE IN THE DESCRIPTION OF A SECTION IN THE GRADUATE CALENDAR</b>		<input type="checkbox"/>	<b>EXPLAIN:</b>	
<b>OTHER CHANGES</b>	<input checked="" type="checkbox"/>	<b>EXPLAIN:</b> Update Program Descriptions in Graduate Calendar		



**DESCRIBE THE EXISTING REQUIREMENT/PROCEDURE:**

The Graduate Calendar currently does not specify admission of STEM background nor does it mention the length of the program.

**PROVIDE A DETAILED DESCRIPTION OF THE RECOMMENDED CHANGE (*Attach additional pages if space is not sufficient.*)**

Updating calendar to reflect current practice in the admission of students with STEM background and to reflect the length of the program

**RATIONALE FOR THE RECOMMENDED CHANGE (How does the requirement fit into the department's program and/or tie to existing Program Learning Outcomes from the program's IQAP cyclical review?):**

**PROVIDE IMPLEMENTATION DATE: (*Implementation date should be at the beginning of the academic year*)**

September 2016

**ARE THERE ANY OTHER DETAILS OF THE RECOMMENDED CHANGE THAT THE CURRICULUM AND POLICY COMMITTEE SHOULD BE AWARE OF? IF YES, EXPLAIN.**

**PROVIDE A DESCRIPTION OF THE RECOMMENDED CHANGE TO BE INCLUDED IN THE CALENDAR (please include a tracked changes version of the calendar section affected if applicable):**

Update wording in calendar re: admission requirements and length of program. Curriculum forms submitted in 2015 reduced the course load from 5 to 4 courses, as such, the calendar description for program length should accurately reflect this change.

Current wording with track changes as found in the Graduate Calendar at  
[http://academiccalendars.romcmaster.ca/preview\\_program.php?catoid=16&poid=10649&returnto=2710](http://academiccalendars.romcmaster.ca/preview_program.php?catoid=16&poid=10649&returnto=2710)

Applications for admission will be made directly through the Walter G. Booth School of Engineering Practice. In addition to the general requirements for entry into a graduate program in Engineering, candidates applying to the Master of Engineering Entrepreneurship and Innovation program must hold an Honours Bachelor's degree in engineering or closely related discipline (i.e. science, technology, math), with at least a B- average (equivalent to a McMaster 7.0 GPA out of 12) in the final year in all courses.

Strong letters of recommendation are also required. The delivery of the program relies heavily on the synergy created between members of student teams, and successful operation of the program requires that each cohort have an appropriate blend of skills and experience. Therefore, each applicant will be interviewed. A strong performance in the interview is a critical requirement for admission.

~~The program will accept full- or part-time students. Candidates may be enrolled on a full- or part-time basis. The full program is expected to take 16 months full-time study or 28 months part-time. Students Candidates~~ are admitted for September only.

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spacing: At least 14.65 pt, Font  
Alignment: Baseline, Tab stops: Not at  
1.5" + 1.63"

**CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:**

Name: Yvonne Maidment Email: maidmeny@mcmaster.ca Extension: 26403 Date submitted: January 25, 2016

If you have any questions regarding this form, please contact the Assistant Secretary, School of Graduate Studies, cbryce@mcmaster.ca

SGS/2013



**RECOMMENDATION FOR CHANGE IN GRADUATE CURRICULUM - FOR CHANGE(S) INVOLVING DEGREE PROGRAM REQUIREMENTS / PROCEDURES / MILESTONES**

<b>IMPORTANT: PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:</b>			
<p>1. This form must be completed for <b><u>ALL</u></b> changes involving degree program requirements/procedures. <b><u>All</u></b> sections of this form <b><u>must</u></b> be completed.</p> <p>2. An electronic version of this form (must be in MS WORD <b><u>not</u></b> PDF) should be emailed to the Assistant Secretary, School of Graduate Studies (cbryce@mcmaster.ca).</p> <p>3. A representative from the department is <b><u>required to attend</u></b> the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.</p>			
<b>DEPARTMENT</b>		Walter G. Booth School of Engineering Practice	
<b>NAME OF PROGRAM and PLAN</b>		Master of Technology Entrepreneurship and Innovation	
<b>DEGREE</b>	M.Eng		
<b>NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)</b>			
Is this change a result of an IQAP review? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
CREATION OF NEW MILESTONE <input type="checkbox"/>			
<b>CHANGE IN ADMISSION REQUIREMENTS</b>	<input type="checkbox"/>	<b>CHANGE IN COMPREHENSIVE EXAMINATION PROCEDURE</b>	<input type="checkbox"/>
<b>CHANGE IN THE DESCRIPTION OF A SECTION IN THE GRADUATE CALENDAR</b>		<b>EXPLAIN:</b>	
<b>OTHER CHANGES</b>	<input checked="" type="checkbox"/>	<b>EXPLAIN:</b> Update Program Description in Graduate Calendar	

**DESCRIBE THE EXISTING REQUIREMENT/PROCEDURE:**

The Graduate Calendar currently lists the old program structure with respect to the length of the program.

**PROVIDE A DETAILED DESCRIPTION OF THE RECOMMENDED CHANGE (*Attach additional pages if space is not sufficient.*)**

Update length of program to the correct duration for full time and part time students

**RATIONALE FOR THE RECOMMENDED CHANGE (How does the requirement fit into the department's program and/or tie to existing Program Learning Outcomes from the program's IQAP cyclical review?):**

**PROVIDE IMPLEMENTATION DATE: (*Implementation date should be at the beginning of the academic year*)**

September 2016

**ARE THERE ANY OTHER DETAILS OF THE RECOMMENDED CHANGE THAT THE CURRICULUM AND POLICY COMMITTEE SHOULD BE AWARE OF? IF YES, EXPLAIN.**

**PROVIDE A DESCRIPTION OF THE RECOMMENDED CHANGE TO BE INCLUDED IN THE CALENDAR (please include a tracked changes version of the calendar section affected if applicable):**

Update wording in calendar re: length of program. Curriculum forms submitted in 2015 reduced the course load from 5 to 4 courses, as such, the calendar description for program length should accurately reflect this change.

Current wording with track changes as found in the Graduate Calendar at

[http://academiccalendars.romcmaster.ca/preview\\_program.php?catoid=16&poid=10717&returnto=2710](http://academiccalendars.romcmaster.ca/preview_program.php?catoid=16&poid=10717&returnto=2710)

The program will accept full- or part-time students. The full program is expected to take ~~up to 20~~ 16 months full-time study or 28 months part-time. ~~A compressed program of 12 months may be possible.~~ Candidates are admitted for September only.

**CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:**

Name: Yvonne Maidment Email: [maidmeny@mcmaster.ca](mailto:maidmeny@mcmaster.ca) Extension: 26403 Date submitted: January

25, 2016

If you have any questions regarding this form, please contact the Assistant Secretary, School of Graduate Studies,  
cbryce@mcmaster.ca

SGS/2013

To : Graduate Council

From : Christina Bryce  
Assistant Graduate Secretary

---

At its meeting on March 24th, the Faculty of Health Sciences Graduate Policy and Curriculum Committee approved the following graduate curriculum recommendations.

Please note that these recommendations were submitted to the April 27<sup>th</sup> Executive Committee of the Faculty of Health Sciences meeting.

**FOR INFORMATION OF GRADUATE COUNCIL:**

- **eHealth (also approved by the Faculties of Business and Engineering)**
  - **New Course**
    - 745 eHealth Innovations and Trends
- **Animal Care**
  - **Course Cancellations**
    - 700 Orientation
    - 701 Methodologies
    - 702 Completion of Ethical Research
- **Child Life Studies**
  - **New Courses**
    - 700 Child Life Residency I
    - 710 Child Life Residency II
    - 705 Grief, Loss, and Bereavement in Childhood and Adolescence
    - 706 Pediatric Psychosocial Assessment
    - 708 Child Life: Foundations of Play
    - 715 Child Life Clinical Internship 1
    - 716 Child Life Clinical Internship 2
- **Graduate Diploma in Clinical Epidemiology**
  - **Changes to Course Description and Prerequisites**
    - 771 Fundamentals of Health Research and Evaluation Methods (Online)
    - 772 Introduction to Research Methods for Randomized Controlled Trials (Online)
    - 773 Systematic Review Methods (Online)

- 774 Introduction to Biostatistics (Online)
- **Health Research Methodology**
  - **Change to Prerequisites**
    - 702 Introduction to Biostatistics
    - 740 Advanced Decision Analysis in Health Technology Assessment (HTA)
- **Health Science Education**
  - **Change to Prerequisites:** 709 Thesis
- **Public Health**
  - **New Course**
    - 708 Master of Public Health Seminar Series Year Two
- **Rehabilitation Science**
  - **Change in Course Title and Description**
    - 707 Research Methods in Rehabilitation Science
  - **Change in Course Description**
    - 706 Measurement in Rehabilitation

# Graduate Study at McMaster University

When McMaster moved to its current graduate organization, the aims of graduate work were described as "the highest development of the powers of reasoning, judgment, and evaluation in intellectual concerns; specialized training in professional skills; initiation into research or scholarly work and development of a capacity for its successful and independent pursuit; the fruitful pursuit of research and scholarly work". This description remains as valid today as it was then.

Research is central to graduate work, and McMaster's strong research orientation has a pronounced effect on the character of its graduate programs. The numerous research achievements of McMaster faculty members have been recognized by grants, prizes, medals, and fellowships in academic societies. Such distinctions attest to the qualifications and dedication of faculty members in developing and disseminating knowledge. The education that McMaster faculty provide is valuable not only for the graduate student's career but also for the student's development as a person.

## 1.1 Programs of Study

McMaster University offers graduate programs that lead to one of the following degrees [or diplomas](#):

[Graduate Diplomas in Advanced Neonatal Nursing, Critical Leadership, Clinical Epidemiology, Gender Studies and Feminist Research, Nuclear Engineering Primary Health Care Nurse Practitioner \(PHCNP\), Professional Accountancy, Water Without Borders](#)

Master of Arts in Anthropology, Classics, Communication and New Media, Cultural Studies and Critical Theory, Economics, Economic Policy, English, French, Gender Studies and Feminist Research, Geography, Globalization, Health and Aging, History, Philosophy, Political Science, Religious Studies, Sociology, and Work and Society;

Master of Biomedical Discovery and Commercialization ([First Offering September 2016](#))

Master of Business Administration

Master of Applied Science in Biomedical Engineering, Chemical Engineering, Civil Engineering, Computational Science and Engineering, Electrical and Computer Engineering, Engineering Physics, Materials Engineering, Mechanical Engineering, Software Engineering

Master of Communications Management

Master of Engineering in Chemical Engineering, Civil Engineering, Computational Science and Engineering, Computer Science, ADMI Design and Manufacturing, Electrical and Biomedical Engineering, Electrical and Computer Engineering, Engineering Physics, Manufacturing Engineering, Mechatronics, Nuclear Engineering (UNENE), Software Engineering; Software Engineering and Virtual Systems Design

Master of Engineering in Manufacturing Engineering

Master of Engineering Design

Master of Engineering Entrepreneurship and Innovation

Master of Engineering and Public Policy

Master of Finance

Master of Health Management

Master of Public Health



Master of Science in Biochemistry, Biology, Chemical Biology, Chemistry, [Child Life Studies and Pediatric Psychosocial Care](#), Cognitive Science of Language, Computational Science and Engineering, Computer Science, Earth and Environmental Sciences, eHealth, Geography, Global Health, Health and Radiation Physics, Health Research Methodology, Health Science Education, Kinesiology, Materials Science, Mathematics, Medical Sciences, Neuroscience, Nursing, Occupational Therapy, Physics and Astronomy, Physiotherapy, Psychology, Radiation Sciences (Radiation Biology), Radiation Sciences (Medical Physics), Rehabilitation Science, and Statistics

Master of Social Work

Master of Technology Entrepreneurship and Innovation

MD/Ph.D. in Medicine and Biochemistry, Medical and Biomedical Engineering, Medicine and Health Research Methodology, Medicine and Medical Sciences, Medicine and Neuroscience.

Doctor of Philosophy in Anthropology, Biochemistry, Biology, Biomedical Engineering, Business Administration (Accounting; Finance; [Health Management](#); [Information Systems](#); Management of Organizational Behaviour and Human Resources; [Information Systems](#); Management Science; Marketing), Chemical Biology, Chemical Engineering, Chemistry, Civil Engineering, Classics, Cognitive Science of Language, Computational Science and Engineering, Computer Science, Earth and Environmental Sciences, Economics, Electrical and Computer Engineering, Engineering Physics, English, French, Geography, Health Policy, Health Research Methodology, [Health Studies](#), History, Kinesiology, Materials Engineering, Materials Science, Mathematics, Mechanical Engineering, Medical Sciences, Neuroscience, Nursing, Philosophy, Physics and Astronomy, Political Science, Psychology, Radiation Sciences (Radiation Biology), Radiation Sciences (Medical Physics), Rehabilitation Science, Religious Studies, [Social Gerontology](#), Social Work, Sociology, and Software Engineering.

## 1.2 Responsibilities to Graduate Students

The principal responsibilities that McMaster University has for the academic endeavours of its graduate students are shared by the School of Graduate Studies, the Faculty, the Department, the Supervisory Committee, and the Faculty Advisor. The following summarizes the responsibilities of each of these bodies.

### 1.2.1 The School of Graduate Studies

The name "School of Graduate Studies" refers to the Associate Vice-President & Dean and Associate Deans of Graduate Studies, the Graduate Council, and the registrarial duties associated with graduate administration.

The Associate Vice-President & Dean of Graduate Studies provides leadership in maintaining and improving the standards of graduate scholarship in the University. The responsibilities include: being the School's voice in graduate matters concerning research and its funding, scholarships and assistantships, the development of graduate programs and policy statements affecting graduate work; being the designated chair of Ph.D. dissertation oral examinations; approving the nomination of external examiners for Ph.D. theses and receiving the examiners' reports. The Associate Deans of Graduate Studies routinely act as the Dean's delegates. They recommend revision or development of regulations or policies affecting graduate work, refer matters of policy and curriculum to the Graduate Curriculum and Policy Committees, and deal with student appeals. In addition to acting on behalf of the Graduate Admissions and Study Committees as described below, the responsibilities of the Associate Deans include the awarding of McMaster Graduate Scholarships by acting on recommendations received from departments offering graduate work.

The Associate Graduate Registrar and Secretary of the School administers the academic affairs of students enrolled in the School of Graduate Studies. This responsibility includes: registering graduate students; assessing tuition fees; maintaining records and files for applicants and new or in-course students and arranging Ph.D. oral examinations.

The Executive Director, Strategic Planning & Administration administers the financial affairs of the School of Graduate Studies. This responsibility includes: managing all graduate scholarships, administering the graduate payroll, and allocating scholarship funds for graduate programs.

## 1.2.2 The Faculty

For each Faculty there is a Graduate Admissions and Study Committee, which is chaired by an Associate Dean of the School of Graduate Studies. This committee, or the Associate Dean on its behalf, is responsible for matters concerning both incoming and in-course graduate students. More specifically, these responsibilities include:

- determining the admissibility of applicants;
- receiving reports on the progress of students and making decisions thereon, including recommendations to require a student to withdraw;
- ensuring that program requirements have been met prior to the awarding of degrees; approving off-campus courses and leaves of absence; and
- deciding on applications from students for special consideration with respect to academic regulations.

In all of these matters, the Committee or the Associate Dean acts on recommendations made by departments.

## 1.2.3 The Department (or Graduate Program)

Typically, many of the duties of the Department in regard to graduate students are carried out by the Department Chair and the Graduate Advisor (in some programs these are referred to as Graduate Coordinators or Area Coordinators) for the Department. For some programs (e.g. interdisciplinary graduate programs), these duties are carried out by the Program Director, Co-Director or Associate Director and for some Health Science programs, the Assistant Dean. For purposes of graduate studies policies stated in sections 1 through 6 of the Graduate Calendar, all reference to Department Chair shall mean, in the graduate programs of the Faculty of Health Sciences, [the Program Coordinators](#), Program Director, [Co-Director](#), [Associate Director](#) or appropriate Assistant Dean. The departmental duties include making recommendations to the Graduate Admissions and Study Committee of the Faculty as noted above. The Department is responsible for matters such as:

- ensuring that every student has, at all times, a faculty advisor or a properly constituted supervisory committee;
- reviewing annually each student's academic progress and reporting thereon;
- conducting comprehensive examinations and language examinations, when these are required;
- preparing and distributing guidelines and departmental regulations for supervisors and students;
- ensuring that each student is properly trained in all safety practices, guidelines, and policies for the use of any resources required in carrying out their work, where appropriate.

In performing those duties that relate to individual students, the Department relies on advice from the Supervisory Committee or the faculty advisor.

In those cases in which a Supervisory Committee or faculty advisor determines that a student's progress is unsatisfactory, and recommends that the student be required to withdraw, the Department is expected to verify the reasons for the recommendation. If the recommendation is confirmed, the Department will forward the recommendation to the Associate Dean of Graduate Studies, who will receive it and act on behalf of the Faculty Admissions and Study Committee.

If the Department is not convinced that the recommendation is appropriate, the Department may attempt to mediate between the supervisor and student, or may attempt to find an alternate Supervisory Committee or faculty advisor. If that is not possible because all members with expertise in the student's topic are already on the Supervisory Committee, then the Department may find it best to encourage the student to transfer elsewhere. If the student is very close to completion, the Department may advise the student to continue in the program despite the lack of Supervisory Committee support.

## 1.2.4 The Supervisory Committee

The Supervisory Committee, or the faculty advisor when no such committee is required, provides advice to the Department as noted above. Additional responsibilities include, where applicable:

- planning and approving the student's program of courses and research;
- approving thesis proposals;
- deciding, within departmental regulations, on the timing of the comprehensive examination and, language and other examinations;
- maintaining knowledge of the student's research activities and progress;
- giving advice on research;
- providing the student with regular appraisals of progress or lack of it;
- initiating appropriate action if the student's progress is unsatisfactory, including any recommendation that the student withdraw;
- deciding when the student is to write the thesis and giving advice during this process;
- acting as internal examiners for the thesis.

## 1.2.5 The Faculty Advisor

When a supervisory committee is not required, a faculty advisor will be assigned by the Department. Like the supervisory committee, the advisor will provide advice to the Department as noted in Section 1.2.3 above. His/her responsibilities will include: planning and approving the student's program of courses and research; deciding within departmental regulations, on the timing of the comprehensive examination, and language and other examinations; maintaining knowledge of the student's research activities and progress; giving advice on research; providing the student with regular appraisals of progress or lack of it (i.e., the student and student advisor have a mutual obligation to meet on a regular basis); initiating appropriate action if the student's progress is unsatisfactory, including any recommendation that the student withdraw.

## 1.2.6 Guidelines for Graduate Course Instructors

For most faculty members and graduate students alike, the graduate classroom offers a unique site of intellectual development, exploration, and exchange. The following guidelines are intended to highlight best practices to help instructors plan and run successful graduate courses, and to optimize the learning experience for graduate students. These guidelines supplement the official *Policy on Graduate Course Outlines*, to which all graduate courses must adhere.

In fields that include diverse knowledge bases or skill sets, the instructor may wish to meet with prospective students before the course starts, particularly with students who are from outside the home program or department. Such a meeting might include a discussion of the overall objectives and content of the course, an explanation of the methods of assessment, and a description of the expertise and skill level expected of the student.

The graduate course instructor may decide to recruit one or more faculty members or field experts to give special lectures during the course. Such an invitation should be made well in advance of the lecture date. Invited instructors usually are not expected to evaluate the students. However, there may be rare cases in which an invited instructor contributes some aspect of course evaluation. In that event, the official course instructor still bears ultimate responsibility for overall evaluation and course outcome. Accordingly, best practice would be for the invited instructor to receive information, preferably in writing, about evaluation criteria and expectations that are consistent with the course outline. Students also should be informed of the mechanism and mode of evaluation.

To receive credit for a course, each student is responsible for confirming in the Mosaic Student Center that his/her enrollment status is appropriate for that course. Students are responsible for ensuring that they have formally enrolled for the course through their department or graduate program. Best practice suggests that the instructor should remind students of their responsibilities at the first meeting of the course. If the instructor becomes aware that a student is not listed on the class list/grade roster, or that the class list/grade roster includes the name of a student who has not been attending the class, the instructor should inform the department/graduate program.

As noted in the *Policy on Graduate Course Outlines*, the course instructor is responsible for providing each student with evaluations of the student's academic performance at various stages during the course, and, whenever possible, a list of due dates. It is best practice in graduate courses for each student to receive at least one written evaluation prior to the 'drop' date so that students can have the chance to withdraw from the course without academic penalty. Such an evaluation could take any of a number of forms (e.g., evaluations of a seminar presentation, a written assignment, or a collaborative work).

At the graduate level, students normally are expected to actively participate in courses (i.e., contribute to discussion, be encouraged to ask questions), and instructors often award marks for participation. ~~Participation marks typically amount to a relatively minor proportion (e.g., 5-20%) of the final grade.~~ Some students, particularly those whose first language is not English, may be reluctant to participate in a discussion in class. Best practice suggests that these students should be recognized early and, whenever possible, tactfully drawn into the discussion by the instructor. The ultimate aim of any graduate course is not only to convey information to and exchange information with students, but also to equip students with the confidence and ability to exchange information with others, both in the spoken word and in writing.

Although instructors are required to provide written course outlines at the beginning of courses, the *Policy on Graduate Course Outlines* also provides instructors with the opportunity to alter a course's content to reflect shifting research interests as long as the students are informed of such changes promptly and *in writing*. Even in the case of changing content, best practice is for instructors to adhere to the original course outline in terms of the amount of work expected from the students, the schedule of assignments, due dates, and the evaluation scheme.

Best practice suggests that instructors should calculate and provide final grades to the School of Graduate Studies for *all students* by the date stipulated in the Graduate Calendar. Final marks also should be provided to the students in a timely manner. Although there may be rare instances in which the instructor may need to report grades before all work is complete for a student, instructors should be aware that a grade of "incomplete" will be converted to an "F" and recorded on the student's transcript.

## 1.3 Responsibilities of Graduate Students to the University

Just as the University has responsibilities to graduate students, they have responsibilities to the University.

The student's responsibilities include, but are not limited to:

- enroll annually until graduation, withdrawal, or withdrawal in good standing due to time limit;
- paying fees as required;
- complying with the regulations of the School of Graduate Studies as set out in this Calendar.

Where applicable, students are responsible for complying with such conditions as may be laid out in an accepted letter of offer. Students are also responsible for complying with the regulations governing graduate students at McMaster University with respect to full- and part-time status (see sections 2.5.2 and 2.5.3) and, in particular, for informing the School of Graduate Studies of any change in employment status. Students are further responsible for informing the School of Graduate Studies within two weeks, which acts as the official keeper of student records, of any change in personal information such as address, name, telephone number, etc. Students are also responsible for reporting through the department any change in student status, course registration, or withdrawal.

### Research-Based Programs

With regard to research and study, students are responsible for maintaining contact and meeting regularly with the faculty advisor, thesis/project supervisor or supervisory committee, for observing departmental guidelines, and for meeting the deadlines of the department and the School of Graduate Studies. If there is a problem with supervision, it is the student's responsibility to contact the Department Chair or Graduate Advisor. The provisions for changing a supervisor are outlined in Section 2.7.

Students who undertake to write a master's or doctoral thesis assume responsibility both for creating drafts of the thesis and for responding to direction from the Supervisory Committee. The student shall have the responsibility to write and ultimately to

defend the thesis, and the Supervisory Committee has the responsibility to offer guidance in the course of the endeavour, and to recommend or not recommend the completed thesis for defence.

In order to receive a degree, the student must fulfill all departmental or program requirements and all University regulations, including those of the School of Graduate Studies. Students who have outstanding financial accounts at the end of the academic year will not receive their academic results, diplomas, or transcripts.

Since enrollment permits access to libraries and certain other academic facilities (including off-campus facilities), it also implies a commitment on the part of each graduate student to use such facilities in accordance with applicable rules, including all safety practices, guidelines and policies. Inappropriate behaviour that is deemed to be in violation of such practices and/or policies may lead to denial of access to the facility. If such a denial of access to facilities means that a student can no longer fulfill his/her academic obligations, the student will be required to withdraw involuntarily from his/her academic program. (see also Section 6.2)

Full-time students are obliged to be on campus, except for vacation periods or authorized off-campus status, for all three terms of the university year. Vacation entitlement is discussed in Section 2.5.6. Any absence of one week or longer from campus, which is not part of the student's vacation entitlement requires the supervisor's approval in writing. If the absence exceeds two weeks, the approval of the department chair is also required. In accordance with government regulations (see Section 2.5.2) students who will be absent from campus for more than four weeks in any one term require not only permission from the Department but also that of the appropriate Associate Dean of Graduate Studies and must submit a petition for special consideration. Note that this permission is needed even for field work or study elsewhere in the world, in order to allow the University to comply with the regulation requiring that a written explanation for such absences be lodged in the Graduate School office. Students may arrange, through the Department and the Associate Dean of Graduate Studies, to be "full-time off-campus" for periods of up to a year. In cases of unauthorized absence the student will be deemed to have withdrawn voluntarily from graduate study and will have to petition for readmission. No guarantee of readmission or of renewal of financial arrangements can be made.

In order to receive a degree, the student must fulfill all departmental or program requirements and all University regulations, including those of the School of Graduate Studies. Students who have outstanding financial accounts at the end of the academic year will not receive their academic results, diplomas, or transcripts.

## General Regulations of the Graduate School

Please note: if there is any discrepancy between a department or program handbook and the School of Graduate Studies Calendar, then the School of Graduate Studies Calendar shall prevail.

It is the student's responsibility to:

- Maintain current contact information with the University, including address, phone numbers, and emergency contact information.
- Use the University provided e-mail address or maintain a valid forwarding e-mail address.
- Regularly check the official University communications channels. Official University communications are considered received if sent by postal mail, by fax, or by e-mail to the student's designated primary e-mail account via their @mcmaster.ca alias.
- Accept that forwarded e-mails may be lost and that e-mail is considered received if sent via the student's @mcmaster.ca alias.

### Collection of Personal Information

Under the authority of the *McMaster University Act, 1976*, and by applying to McMaster or by enrolling in a program at the University, students expressly acknowledge and agree that the collection, retention, use and disclosure of relevant personal information is necessary for McMaster University to:

- [establish a record of the student's performance in programs and courses;](#)
- [to assist the University in the academic and financial administration of its affairs;](#)
- [to provide the basis for awards and government funding; and](#)
- [to establish the student's status as a member of relevant student governmental organization.](#)

[Similarly, and in compliance with McMaster University's access to information and protection of privacy policies and Canadian and Ontario privacy laws, the University provides personal information to:](#)

- [the Canadian and Ontario government for the purposes of reporting purposes; and](#)
- [to appropriate student government organizations for the purposes of allowing such organizations to communicate with its membership and providing student government-related services consistent with the enrolment by a student at the University.](#)

[By applying and/or enrolling at McMaster University the student expressly consents to this collection, retention, use and disclosure of such personal information in this manner. Questions regarding the collection or use of personal information should be directed to the University Secretary, Gilmour Hall, Room 210, McMaster University.](#)

## 2.1 Admission Requirements

McMaster University seeks candidates for graduate study who show high scholarly promise. Admission to a graduate program is based on a judgement by the University that the applicant can successfully complete the graduate degree program. The University's minimum requirements are identified in this section. Degrees and grades from foreign universities are evaluated for their equivalency to McMaster's. Departments or programs may establish additional requirements, such as scores on the Graduate Record Examination (GRE). Applicants should read the admission statement for the program or department, as well as the section here. Admission is competitive: meeting the minimum requirements does not guarantee admission. Final decisions on matters of admission rest with the Graduate Admissions and Studies Committee for each Faculty. The admission decision is not subject to appeal.

### 2.1.1 Admission Requirements for Master's Degree

~~The University requires, as the majority of graduate programs at McMaster University major indicator of ability to complete a Master's program successfully, the holding of an Honours bachelor's degree with at least require~~ a B+ average (equivalent to a McMaster 8.5 GPA out of 12) in the final year in all courses in the discipline, or relating to the discipline, in which the applicant proposes to do graduate work. In a Master's program in the Faculty of Engineering the requirement is at least a B- average (equivalent to a McMaster 7.0 GPA). Strong letters of recommendation are also required. [Some programs may have different admission requirements, please consult the program section of the calendar for details.](#)

In recognition of the changes taking place in the structure of university education as a consequence of the Bologna Accord, three-year, first-cycle degrees that meet the criteria of the "Framework for Qualifications of the European Higher Education Area" will be accepted in place of a four-year Honours degree. ~~The equivalent of at least a B+ average (B- in Engineering) will still be required.~~ [Standard admission requirements will still apply.](#) A Diploma Supplement should accompany the official transcript [item (a) under Section 2.2].

Prospective applicants who lack some background in the discipline they wish to enter should consult the Undergraduate Calendar with regard to Continuing Student status. A continuing student is a university graduate who is not currently enrolled in a degree program, but who wishes to take one or more undergraduate classes.

Prospective applicants who did not attain the required standing in their undergraduate degree, but who have ~~several-five~~ years of work experience that is relevant to the program they wish to undertake, ~~should discuss their situation with the department of~~

~~interest~~ may be admitted to a Masters program as mature students provided they are recommended by their program. Submission of a complete resume is required to determine eligibility as a mature student. Such recommendations must be approved by the Graduate Associate Dean of the Faculty in question and Evidence of ability to do graduate work will still be required.

## 2.1.2 Admission Requirements for Ph.D. Degree

Applicants may be admitted to a regular Ph.D. program at one of three stages in their academic work: (1) after completion of a Master's program; (2) Directly from a Master's program at McMaster without completing the Master's degree; (3) in exceptional cases, directly from a Bachelor's program. ~~First, entry after completion of a Master's program. Second, admission to Ph.D. studies from a Master's program at McMaster without completing the Master's degree.~~ Students still enrolled in a Master's with thesis program beyond 22 months must complete the degree requirements including the thesis prior to admission to the Ph.D. program. ~~And third, in exceptional cases, admission may be directly from a bachelor's degree.~~

1. For applicants who hold a Master's degree, the primary requirements are distinction in their previous graduate work (equivalent to at least a McMaster B+), and strong letters of reference.
2. Students enrolled in a Master's program at McMaster University may be transferred to the Ph.D. program prior to completion of the Master's degree. Not sooner than two terms and no later than 22 months after initial registration in the Master's program here, students may request to be reclassified as Ph.D. students. After proper review, the department will recommend one of the following:
  - a. admission to Ph.D. studies following completion of the requirements for the Master's degree;
  - b. admission to Ph.D. studies without completion of a Master's program;
  - c. admission to Ph.D. studies but with concurrent completion of all requirements for a Master's degree within two months from the date of reclassification;
  - d. refusal of admission to Ph.D. studies.

For students in (b), the recommendation for admission to Ph.D. must identify which if any courses taken as a Master's student can be credited toward the requirements for the Doctoral program.

A student in (b) may re-register as a candidate for the Master's degree, provided that work to date has met the standards for the Master's program.

Students in (c) who do not complete the requirements for the Master's degree within the two months will lose their status as a Ph.D. candidate and be returned to Master's status.

3. In certain programs, applicants with a first degree only, may be admitted directly to Ph.D. studies. Such students must show sufficient promise, including at least an A average. Within one calendar year the progress of students admitted to Ph.D. studies directly from a Bachelor's degree will be reviewed by their supervisory committee and the program. The program then will recommend one of the following:
  - a. proceed with Ph.D. studies;
  - b. not proceed with Ph.D. studies but re-register as a Master's candidate;
  - c. withdraw from the University.

A student admitted to a Ph.D. program who re-registers as a candidate for a Master's degree must meet all of the requirements for the Master's degree in order for it to be awarded.

## 2.1.3 Transfer to Ph.D.

Transfers to a Ph.D. program take effect at the start of the next term, or are retroactive to September 1st for students whose request to transfer is received by the School of Graduate Studies by the end of the second week of October. Students are encouraged to transfer before the fall term.

## 2.1.3-4 Admission Requirements for Part-Time Ph.D. Degree

Admission to a part-time Ph.D. program is possible only for an individual holding a Master's degree whose circumstances preclude uninterrupted full-time doctoral studies. Because of the divergent nature of academic disciplines, part-time doctoral work is not feasible in some areas. Accordingly, no Department or Program is obligated to offer part-time doctoral work. As part of their applications prospective part-time students are required to provide a plan of study, including a clear account of when and where the thesis research is to be conducted. If facilities at the place of employment are to be used for the research, the signed agreement of the employer, recognizing the conditions surrounding graduate work, is also required. In addition, departments may have other requirements for admission to a part-time doctoral program. A part-time doctoral student must be geographically available on a regular basis, and must be able to participate regularly in departmental seminars and colloquia.

## **2.1.4-5 Admission of Students to a Cotutelle Ph.D. Degree**

A cotutelle is a single Ph.D. awarded by two post-secondary institutions, typically from different countries. A cotutelle degree is a unique way to promote and structure research collaborations, and allows students access to a broader range of research supervision than would be available at a single institution.

Students interested in a cotutelle Ph.D. degree must have finalized arrangements completed within the first 12 months of their Ph.D. study. Partner university arrangements may vary and students must investigate what is required to fulfill that institution's cotutelle requirements. For information on how to apply please view the Cotutelle Policy on the McMaster Senate Secretariat's website: <http://www.mcmaster.ca/policy/index.html>

## **2.1.5-6 Admission of Students with Related Work Experience or Course Work Beyond the Bachelor's Degree**

As noted in Section 2.1 of the Graduate Calendar, "Admission to a graduate program is based on a judgement by the University that the applicant can successfully complete the graduate degree program". Some potential applicants may not satisfy our admission requirement for a 4-year honours degree with a B+ average in the final year. However, work experience and/or completed course work beyond the Bachelor's degree, may have some bearing on the applicant's ability to complete a graduate program. The admissions process will recognize these accomplishments as follows.

Admission to graduate studies for a student with related work experience and/or course work beyond the Bachelor's degree will be based on the following criteria:

1. References from reliable sources, which specifically identify the applicant's aptitude for research and graduate education.
2. University 4-year undergraduate degree or equivalent, completed more than 4 years ago, together with additional course work taken since that time.
3. Significant record of workplace experience, the relevance of which will be assessed by the graduate program of choice.

## **2.1.6-7 Admission Requirements for Graduate Diploma Programs**

~~See Section 12 for descriptions of McMaster's approved diplomas.~~ The admission requirements for a graduate diploma are the same as are identified in Section 2.1.1 for admission to a Master's program.

Graduate Diploma students with at least a B+ average in their diploma course work may be eligible to transfer to a Master's degree in a related program, subject to the recommendation of the department or program to the relevant Faculty Graduate Admissions and Study Committee. If the diploma has not been completed, transfer credit may be given toward the degree requirements for all graduate courses completed successfully. Approval of the department is required for any such credit to be



applied toward a degree; it is not automatic. Departmental or program approval is normally based on an assessment of the amount of additional coursework that will be required for the degree.

If a student wishes to enter a related Master's program after the diploma has been completed, credit may be granted towards the subsequent degree program for those courses completed successfully, with a limit of one full course or half of the course requirements for the degree, whichever is less.

## **2.1.7-8 Admission Requirements for Post-Degree Students**

A Post-degree Student is one who has not been admitted to a graduate degree or diploma program but who holds a university degree and has been given permission to take a specific graduate course. Permission to take a course as a post-degree student requires the approval of the course instructor, the Department Chair, and the School of Graduate Studies. An application is required for each course.

Although acceptance as a post-degree student carries no implications with respect to acceptance for a degree program in the School of Graduate Studies, the level of academic achievement expected for admission under this category is the same as that required of students admitted to a Master's program (Section 2.1.1). Courses taken as a post-degree student may be eligible for credit toward a Master's degree in a related program, to a maximum of one-half of the degree's course requirement, subject to the recommendation of the department or program to the relevant Faculty Graduate Admissions and Study Committee.

A student who has completed a relevant undergraduate degree and is not admissible under current standards, but who is currently in (or has had) full-time employment in the intended area of study may be admitted as a post-degree student. In such cases, any courses taken as a post-degree student will not be available for credit in a subsequent graduate program, because they will have been necessary to demonstrate admissibility.

The deadline for registration is the same as for graduate degree programs (see Sessional Dates, Registration ).

(Note: A Graduate Diploma is distinct from a baccalaureate, undergraduate diploma, Master's or Ph.D. degree, or diplomas and certificates awarded by the Centre for Continuing Education at McMaster University).

## **2.1.8-9 Non-Credit Participants in Graduate Courses**

Graduate courses are not normally open to "auditors" who attend a course without the usual qualifications and without seeking academic credit. Under some circumstances, however, people who are not registered graduate students and who do not meet the requirements for admission as Post-degree (see Section 2.1.47) may attend a graduate course. This requires the written permission of the course instructor, the Department Chair, and the School of Graduate Studies. ~~Upon completion of the course, and subject to confirmation from the instructor that his/her expectations regarding the student's participation were met (i.e. that the student attended at least 80% of the instruction), a transcript notation "Audit" will be recorded. Audited courses may not be taken later for credit. No other grade will be assigned. Enquiries should be directed to the instructor or the Chair of the Department offering the course.~~

A fee is charged for each course taken as a non-credit participant (by persons who are not registered graduate students). See Section 5.1, Fees for Graduate Students, for the fee schedule.

## **2.1.9-10 Visiting Students**

**Visiting Students** are individuals who are currently registered in a graduate degree program in another university, and who have made arrangements through both their home university and a graduate program at McMaster to spend some time at McMaster as part of their degree program at the home university. While they are visiting students, they will not be enrolled in a degree program at McMaster. They are not part of any official exchange agreement including Ontario Visiting Graduate Student (OVGS) arrangement, although there may be an agreement between the McMaster program and their home institution. [For more](#)

[information on Ontario Visiting Graduate Student arrangements please consult section 6.10.](#) McMaster currently allows out-of-province and international students to visit in one of three ways: to take course work in a specific program; to conduct research in a specific lab; or to participate in an internship with a specific program or faculty member. In any case, students will be enrolled as full time students for a maximum of one year. Acceptance is on the recommendation of the department or program at McMaster. ~~Details about these options are available in Section 11 of the Graduate Calendar.~~ [For every term that the student is here in residence they must register in SGS 302.](#)

The student is expected to pay the incidental fees (see Section 5.1, Fees for Graduate Students) and the appropriate Canadian or international equivalent per course fee for the time that they are registered here. It ~~may also be~~ [is](#) necessary for them to enrol in the UHIP program to ensure adequate health insurance coverage during their stay.

## ~~2.1.10~~ [11](#) Exchange Students

**Exchange students** are individuals who much like visiting students, are enrolled in a graduate degree program in another university and are paying fees to that university. The difference between a visiting student and an exchange student is that the exchange student participates in a formal exchange program between McMaster University and their home institution. A complete list of exchange agreements that McMaster participate in can be found on the Office of International Students Affairs webpage (<http://oisa.mcmaster.ca>). [For every term that the student is here in residence the must register in SGS 702.](#)

Students participating in a formal exchange program are not assessed incidentals, or course fees, and are entitled to take a full course load (assuming they are registered for a full course load at their home institution). It ~~may be~~ [is](#) necessary for them to enrol in the UHIP program to ensure adequate health insurance coverage during their stay.

## ~~2.1.11~~ [12](#) English Language Requirements

English is the language of instruction and evaluation at McMaster, except in the M.A. and Ph.D. programs in French. Hence it is essential that all students (except in the French program) be able to communicate effectively in English.

Applicants whose native language is not English will be required to furnish evidence of their proficiency in the use of the English language. Such applicants are required to supply this evidence as part of their application. Applicants may be exempted from this requirement if they have completed a university degree at which English is the language of instruction.

The most common evidence is a score on the International English Language Testing System (IELTS) or the Test of English as a Foreign Language (TOEFL). Equivalent scores on other recognized tests may also be considered.

Students taking the IELTS are required to achieve a minimum score of 6.5 with a minimum score of 5.5 in each category.

TOEFL requirements may vary across programs.

- In most Faculties a minimum of 92 IBT (internet-based test) is required.
- In Business, Ph.D. and MBA programs require a minimum score of 100 with a minimum of 22 in the reading component, 22 in the listening component, 26 in the speaking component and 24 in the writing component on the IBT. The Master of Finance Program Requires a minimum score of 92.
- In Engineering, some programs require a minimum score of 80. Please check with the program to see specific requirements

Students who have completed an Academic ESL program through Canadian academic institutions may petition to have this considered in lieu of TOEFL.

## 2.2 Application for Admission

Enquiries about graduate work should be made directly to the department of interest. Our online application system is located at

<http://graduate.mcmaster.ca/graduate-students/future-students/how-to-apply.html>

Applications may be submitted at any time but applicants should refer to the department or program to which they are applying for department specific deadlines. However, most University scholarships and awards are adjudicated in late March or early April, so students applying later than March cannot be considered for these awards.

Applications from outside Canada should be completed at least five months before the desired date of entry in order to allow for any delays and for obtaining the necessary visa.

#### Application Fee

Applications must be accompanied by the required \$100 application fee. This fee is non-refundable and must be paid in Canadian dollars by means of a credit card payment or electronic transfer, or a cheque drawn on a Canadian bank made payable to McMaster University. Cheques drawn on Canadian banks should also include a \$15 processing fee for a total of \$115.

#### Required Documents

The following items are required before your online application will be considered complete.

- a. One official transcript of academic work completed to date, sent directly from the issuing institution. If the final transcript does not show that a completed degree has been conferred, an official copy of your diploma is also required.
- b. Two confidential letters of recommendation from instructors most familiar with your academic work. Please note that McMaster University uses the Electronic Referencing System. By entering the email address of your referee through the online application, the system will automatically send an eReference request on your behalf.
- c. see Section 2.1.9 - *English Language Requirements*
- d. Statement of interest in pursuing graduate studies.

A graduate of a university outside Canada may also be required to submit a description of undergraduate and graduate courses taken in the field of specialization and in similar fields.

#### Collection of Personal Information

Under the authority of the *McMaster University Act, 1976*, and by applying to McMaster or by enrolling in a program at the University, students expressly acknowledge and agree that the collection, retention, use and disclosure of relevant personal information is necessary for McMaster University to:

- establish a record of the student's performance in programs and courses;
- to assist the University in the academic and financial administration of its affairs;
- to provide the basis for awards and government funding; and
- to establish the student's status as a member of relevant student governmental organization.

Similarly, and in compliance with McMaster University's access to information and protection of privacy policies and Canadian and Ontario privacy laws, the University provides personal information to:

- the Canadian and Ontario government for the purposes of reporting purposes; and
- to appropriate student government organizations for the purposes of allowing such organizations to communicate with its membership and providing student government related services consistent with the enrolment by a student at the University.

By applying and/or enrolling at McMaster University the student expressly consents to this collection, retention, use and disclosure of such personal information in this manner. Questions regarding the collection or use of personal information should be directed to the University Secretary, Gilmour Hall, Room 210, McMaster University.

## 2.3 Transfer Credit and Determination of Course Equivalency

Application for transfer credit is normally done through the admissions process or as a petition for [special consideration before taking the course for](#) in course students and in both cases requires an Associate Dean's approval. Credits from other institutions must have been received in the last 5 years with a minimum grade of B-. In general, no credits used towards a previous degree or used as a basis of admission will be approved as credit toward a McMaster graduate degree. Normally, a maximum of 50% of the course degree requirements only will be approved for transfer credit. Approved transfer credit appears as a course with a grade notation of T on the student's transcript.

Credits from other institutions can be used to substitute a specific McMaster University course requirement; however, the student may be required to take [alternate additional](#) courses. Students wishing to apply for advance credit or course requirement equivalency should [normally inquire when they apply or accept and offer of admission. Requests should be submitted fill-out the Petition for Special Consideration form and submit it to their](#) program office for consideration.

## 2.4 Acceptance

Initial assessment of completed applications is the responsibility of departments. If that assessment is favourable, the department will recommend to the School of Graduate Studies Office of a favourable decision, or by the department of a negative decision. Applicants may be accepted conditionally before completing their present degree programs. Such conditions must be cleared at the time of registration.

Official letters of admission are sent only by the School of Graduate Studies, and are valid only for the program and term stated in the admission letter. Successful applicants are required to respond in writing to the offer of admission within the interval identified in the offer letter. Some programs require a deposit fee when accepting the offer of admission. The value of the deposit fee will be deducted from the student's tuition fees. If circumstances develop making it impossible for a student to begin graduate work in the specified term, the department and the School reserve the right to revoke the offer of admission, and any financial aid offered.

The graduate program and the University reserve the right to revoke an offer of admission if a final transcript does not meet admission requirements or if it contains an annotation about an academic integrity or code of conduct matter.

## 2.5 Enrollment

### 2.5.1 ~~Procedures~~ Continuity of Registration

~~All graduate students, in both regular and part-time programs, are~~ [All graduate students, in both the regular and part-time programs,](#) are required to enroll and pay fees annually in September until they graduate or withdraw. If they fail to do so they do not retain the status of graduate student and must apply for re-admission if they wish at a later date to continue their studies. If the department approves, a student may be allowed to begin graduate work in the winter or summer term (January or May), in which case they will first register at the start of that term, but in any following years will enroll in September.

It is the joint responsibility of the student and program to determine the appropriate program [and status](#) of study. [This will be clearly outlined in the student's offer of admission.](#)

### 2.5.2 ~~Provincial~~ Definition of Full- and Part-time Status

[Under the regulations of the Government of Ontario;](#)

#### [Full-Time Status](#)

A full-time graduate student must:

- [a. have been admitted to a graduate program as a full-time student](#)
- [a.b. be pursuing his or her studies as a full-time occupation;](#)
- [b.c. identify himself or herself as a full-time graduate student;](#)
- [c.d. be designated by the university as a full-time graduate student;](#)
- [d.e. be geographically available and visit the campus regularly. Without forfeiting full-time status, a graduate student, while still under supervision, may be absent from the university \(e.g. visiting libraries, doing field work, attending a graduate course at another institution, etc.\) provided that, if any such period of absence exceeds four weeks in any one term, written evidence shall be available in the Graduate Studies Office to the effect that the absence has the approval of the department or program Chair and Graduate Associate Dean.](#)
- [e.f. be considered to be a full-time graduate student by his/her supervisor or equivalent \(designated by the university\).](#)

[All active graduate students other than full-time graduate students as defined above are part-time graduate students.](#)

## 2.5.3 McMaster University's Regulations for Full- and Part-time Status

In accordance with the above provincial regulations, McMaster requires students to register annually, and to confirm their status as a full-time graduate student. Only full-time graduate students are eligible for scholarship support. [Full-time students who are participating in paid employment not directly related to their studies should work no more than an average of ten hours per week.](#) University-related employment ~~should~~[should also](#) be limited to an average of ten hours per week for full-time students, and full-time students are expected to limit time spent on employment both inside and outside the University.-

Exceptions to this rule are possible with the approval of the School of Graduate Studies. A full-time student seeking an exception must provide a study plan that has been approved by the departmental graduate studies committee or its equivalent, along with a written statement from the student's supervisor. Ph.D. students who seek an exemption from the rule must arrange for a supervisory committee meeting, with a report of that meeting submitted to the Graduate School, every four months during the time they are employed beyond ten hours per week. No exceptions totalling 505 hours or more in a single academic year will be approved.

[The University considers full-time students to be those that have their studies as their priority. Full-time employment may be compatible with full-time registration if the employment is in an area closely linked to the student's academic work. All full-time students must be available to conduct research \(as appropriate\), participate in courses and the other activities required by their program.](#)

All active graduate students other than full-time graduate students as defined above are part-time graduate students.

## 2.5.4 Employment Regulations

In the McMaster context, there are three terms in the School of Graduate Studies for purposes of interpreting the rule in Section 2.5.3 limiting employment with the University to ten hours per week on average: Fall (September through December); Winter (January through April); and Summer (May through August). These are deemed to have 17, 17, and 18 weeks respectively. The ten-hour limit includes work as a Teaching Assistant at McMaster.

If the student is to be employed at the University other than as a TA (or Research Assistant in lieu of a TA), the School of Graduate Studies should be informed in writing of the nature of the employment, and the approval of the supervisor and the chair of the department is required. The approval of the School of Graduate Studies is required if the student is to be hired for University teaching.

## **2.5.5 Enrolment - International Students on Study Permits**

Students without valid Study Permits will not be allowed to enrol. All international students admitted to graduate studies degree programs must have a valid Study Permit issued by Citizenship and Immigration Canada (CIC). A copy of the Study Permit must be submitted to the Graduate studies Office (GSO) upon arrival at the University.

If a Study Permit expires prior to program completion, students must apply to CIC for renewal and submit a copy of the renewed Study Permit to the GSO (check the 'valid until' date on the Study Permit). Make sure you apply at least 30 days before your current permit expires. If your Study Permit expires and you have made an application to renew it, but have not had a decision yet, you can continue studying until you receive a decision. Proof of application for renewal must be submitted to the GSO to permit continuing enrolment.

For information on status change to permanent resident status during the course of your study, please see section 5.1.4

## **2.5.6 Full Time on Campus**

On admission to a full time program, the assumption is that you will full-time on-campus. This is known as being "in residence". If a student wants to spend a period of time away from the university in order to complete their research, they must apply to be full time off campus.

Students admitted to a degree program on a part-time basis are responsible for maintaining close contact with faculty members and students in their field of study.

## **2.5.7 Leaves of Absence**

### **General Regulations**

Leaves of absence are normally granted on a term-by-term basis. Whenever possible the leave should start and end at the beginning of a term (i.e., January 1, May 1, or September 1). During the period of a Leave the student cannot expect to be given supervision or be entitled to use the University's academic facilities. During a Leave of Absence, no tuition will be charged, nor will the student be eligible for any scholarship support. Students on a leave of absence have to pay applicable supplemental fees and will be able to use the services associated with those fees. The length of time for completing the degree, and for scholarship support eligibility (see qualifier below), will be extended by the duration of the Leave on the resumption of studies. If a leave begins or ends in the middle of a term, term count will be determined upon return in consultation with the Associate Dean.

Leaves of absence affecting Teaching Assistantship duties are covered by the Collective Agreement with Local 3906 (Unit 1) of the Canadian Union of Public Employees.

Students should be aware that in the event of Leaves of Absence, continuation of the same research project and/or supervisor cannot be guaranteed. Students applying for a leave of absence for personal reasons must normally have completed at least one year of full time graduate studies. Students who have not completed a minimum of 16 weeks of graduate studies at McMaster

will not be eligible for parenting leave scholarship funding as noted below. For additional information related to parental and maternity leaves, please refer to the next section.

### Reasons for Leaves of Absence

A leave of absence for up to one year is permitted for reasons of illness, provided that the request is supported by adequate medical documentation. Students who have successfully completed at least one full year in a graduate program may apply for a leave of absence once for up to one year for other personal circumstances, provided that the student's supervisor and the department support the request. Alternatively, the student may request withdrawal (Withdrawal at the Request of the Student). Should the student opt to withdraw, he/she may be eligible for reinstatement upon reapplication.

A leave of absence to obtain externally paid relevant work experience may be granted for one term for a Master's student and for two terms for a Ph.D. student. No two Leaves taken to obtain relevant work experience may be consecutive.

A leave of absence will not be granted to pursue another program of study.

[Under certain circumstances the AVP and Dean of Graduate Studies may allow for a special leave of absence. In this case, application should be made directly to the AVP and Dean of Graduate Studies.](#)

Note: Students who hold fellowships, scholarships or grants from NSERC, SSHRC, CIHR, or OGS should be aware that these agencies have policies governing the interruption and continuation of awards that may differ from the University's policy on leaves of absence. Students holding such awards and who intend to keep them are responsible for ensuring that any leave of absence taken does not conflict with the granting agency's regulations. The appropriate agency should be contacted for details.

## **Parenting Leave Policy**

### **Intent**

The Parenting Leave Policy (the "Policy") is intended to assist parents in successfully combining their graduate studies and family responsibilities with minimum financial and/or academic impact. The University will provide the following arrangement for parents requiring parenting leave from their studies. The Policy applies only to full time graduate students as defined by the School of Graduate Studies.

### **Definitions**

**"McMaster Graduate Scholarship Funds"**- The sum total of departmental and graduate scholarships as well as research account support committed to the student. It does not include funding from external sources; funding from employment such as Teaching Assistantships or Research Assistantships, or; most scholarships held in trust.

**"Parent"**- Includes the birth mother of a child; a person with whom a child is placed for adoption; and a person who is in a relationship of some permanence with a parent of a child and who intend to treat the child as his or her own.

**"Parenting Leave"**- An unpaid leave of absence from studies of up to 52 weeks' duration for a birth mother of a child or up to 37 weeks' for the parent of child who is not the birth mother.

### **Leave of Absence from Studies**

#### **Eligibility**

A leave of absence for up to 52 weeks is permitted for Parenting Leave. A student electing not to take the maximum amount of time available for parenting leave will not have the option of taking any unused portion at a later date.

#### **Parameters**

A Parenting leave for the birth mother may consist of two parts - a pregnancy leave and parental leave. The pregnancy leave must begin, at the earliest, up to 17 weeks before the anticipated due date or on the date the child comes into the care and control of the parent for the first time and lasts for 17 weeks. The parental leave must begin right after the pregnancy leave and lasts for up to 35 weeks. Alternatively, the birthing mother may only take the parental leave. In this case the leave can be a maximum of 37

weeks in length and must begin at latest within 52 weeks after the birth of the child or the date on which the child comes into the care and control of the parent for the first time.

The Parenting leave for a non-birth mother can be a maximum of 37 weeks in length and must begin at latest within 52 weeks after the birth of the child or the date on which the child comes into the care and control of the parent for the first time.

It is understood that when a student takes a Parenting leave, the duration of the leave will not be counted as time towards the time limits in which the student is required to complete or make progress in his or her graduate studies program.

In order that the student's supervisor and/or program can make suitable arrangements to cover ongoing responsibilities during the student's absence, students are expected to provide as much notice as possible of the intention to take a Parenting Leave under this Policy.

A student is normally expected to give at least four weeks' notice of the date on which he/she intends to take his/her leave(s) and at least four weeks' notice of the date on which he/she intends to return from leave, should this date be different from the date agreed upon at the time the leave was granted.

A Parenting Leave or a portion thereof *may* be taken simultaneously with a Pregnancy and/or Parental leave from employment, in accordance with the Employment Standards Act, should the student also be an employee of McMaster University.

If both parents of a child are McMaster Graduate Students, only one parent is eligible to access Parenting Leave under this Policy at any one time. This Policy does not preclude the other parent from applying for a leave of absence under another policy or program and the approval or denial of that leave application will be determined on the basis of the parameters of that leave policy or program.

### **Combination with Other Leaves**

If a student is also an employee, it is incumbent upon the student to review their terms and conditions of employment and/or Collective Agreement (if any) and apply for the appropriate leave of absence from employment there under.

### **Financial Support from the School of Graduate Studies for Parenting Leave**

#### **Eligibility**

Students who have not completed a minimum of 16 weeks of graduate studies at McMaster will not be eligible for Financial Support under This Policy. They will remain eligible for a leave of absence from studies, in accordance with the above.

#### **Parameters**

A student in receipt of McMaster Graduate Scholarship Funds who has a child (or children) by birth or adoption may receive the financial support available under the Policy for a minimum period of 4 months and a maximum period of 8 months.

A student electing not to take the maximum amount of time available will not have the option of taking any unused leave at a later date.

A student in receipt of McMaster Graduate Scholarship Funds who takes a Parenting Leave under the Policy will be entitled to continue to receive graduate scholarship funds at the normal monthly rate, to a maximum of \$750 per month and to a maximum total of \$3,000, provided that a "Leave of Absence Information Form" has been submitted to and approved by the School of Graduate Studies.

The formula used to determine the "normal monthly rate" when a student is not currently in receipt of scholarship funds is the total of their McMaster Graduate Scholarship Funds averaged over the previous or current academic year depending on the start date of the parenting leave.

### **Combination with Other Forms of Financial Support**

To maximize flexibility, the financial support available under the Policy can be combined with stipends from sources, excluding those from the Tri-Agencies (noted below) and can be spread over a period of between 4 and 8 months at the discretion of the



student. However, in no case will funding for Parenting Leave from the School of Graduate Studies exceed a total of \$3000 (and \$750.00/month).

If the parent of the child for whom the Parenting Leave is being taken is eligible to receive parental support from CIHR, NSERC, SSHRC or another agency that provides parental support for the leave at any time during the Parenting leave, the parent is not eligible for financial support under McMaster's Parenting Leave Policy.

When two McMaster graduate students are the parents of a child, only one of those students will be entitled to claim the financial support under the Policy.

Financial support during Parenting Leave for students who are also employees of the University, provided as part of their terms and conditions of employment, are distinct and separate from the financial support available under this Policy. Other financial benefits, except as specifically excluded herein, can be taken concurrently with the financial support provided under this Policy provided that the individual meets the eligibility requirements for those plans for the duration for which they are accessing financial support under those plans.

The financial support provided under this Policy is not considered an approved Supplemental Unemployment Benefit Plan for the purposes of receiving Employment Insurance. Therefore, students wishing to access financial support under this Policy in addition to Employment Insurance ("EI") benefits should be aware that Human Resources and Skills Development Canada ("HRSDC") may consider financial support under this Policy to be earnings and could therefore require repayment of some of all EI benefits received. It is incumbent upon the student accessing financial support under this Policy to contact HRSDC if they have questions in this regard.

For questions on the administration of the Policy, contact the School of Graduate Studies.

## **2.5.6-8 Vacations**

Full-time graduate students are expected to be on campus for all three terms of the university year, as specified in Section 1.3. In addition to statutory holidays (see Sessional Dates-) and the weeklong closing of the University from late December until early January, normal vacation entitlement is two weeks of vacation during the year, to be scheduled by mutual agreement with the research supervisor and the employment supervisor. An exception to this allotment requires approval from the supervisor, or in their absence, a member of the supervisory committee.

## **2.5.7-9 Appeals and Petitions for Special Consideration**

The University wishes to assist students with legitimate difficulties. It also has the responsibility to ensure that degree, program and course requirements are met in a manner that is equitable to all students. Students may submit, in a prompt and timely manner, a *Petition for Special Consideration* to the office of the Associate Dean of the School of Graduate Studies in those instances where a student acknowledges that the rules and regulations of the University have been applied fairly, but is requesting that an exception be made because of special circumstances (compelling medical, personal, or family reasons). The appropriate form ~~may be found~~ [is available](#) on the School of Graduate Studies website. The student's supervisor and Associate Chair are normally required to provide their independent assessments of the student's statement in the petition. Supporting documentation will be required but will not ensure approval of the petition. The authority to grant petitions lies with the School of Graduate Studies and is discretionary. It is imperative that students make every effort to meet the originally-scheduled course requirements and it is a student's responsibility to write examinations as scheduled.

In accordance with the Student Appeal Procedures, decisions made on Petitions for Special Consideration cannot be appealed to the Senate Board for Student appeals. Where any student feels there may have been discrimination on grounds in a protected social area as outlined in the Ontario Human Rights Code, they may initiate a complaint with the Office of Human Rights & Equity Services in Room 212 of the McMaster University Student Centre. In Health Sciences, Graduate Students ~~should~~ [also should also](#) consult the Advisor on Professionalism in Clinically-Based Education.

## 2.6 Graduate Curriculum

### 2.6.1 Averaging of Letter Grades

Grades in graduate courses are reported as letter grades. However, instructors may record grades for individual components of the course either as letter or numerical grades. The averaging of letter grades assigned to individual components of a course must be done by using the McMaster 12-point scale, as follows: A+ = 12, A = 11, A- = 10, B+ = 9, B = 8, B- = 7, C+ = 6, C = 5, C- = 4, D+ = 3, D = 2, D- = 1, F = 0. Further, all .5 marks should be rounded up. The passing grades for courses at the graduate level are A+, A, A-, B+, B, and B-. Graduate students enrolled in undergraduate courses will be subject to the same set of passing grades as courses at the graduate level.

Graduate Student Grading Scale:

Grade	Points	Pass/Fail
A+	12	P+
A	11	P
A-	10	F
B+	9	
B	8	
B-	7	
F	0	

Note: Grades in graduate courses are reported as letter grades. Averaging of letter grades must be done using the McMaster 12-point scale.

Note: McMaster University's Policy on Graduate Course Outlines is available at:

<http://www.mcmaster.ca/policy/faculty/Conduct/GraduateCourseOutlines.pdf>

### 2.6.2 Course Levels and Types

Courses available for graduate credit are numbered either at the 700- or 600-level (e.g. 771 or 6D06). Courses are restricted in enrolment to graduate students, with the exception of those undergraduate students registered in approved, accelerated M.Eng. programs and with written permission of their department (or program) chair, director, or designate. (Departments may have restrictions on the number of 600-level courses allowed for graduate credit). Graduate students taking 600-level courses are regularly required to do extra course work beyond that required of undergraduates in the corresponding 400-level course. Each department offers only a selection of its courses in any given year.

All Graduate courses have a unit value, with the standard being 3 units for a one term course, 6 units for a two term course and 1.5 units for a course lasting for half a term.

In all cases, the expectation is that the course will meet at least three hours per week (on average). For 600-level courses, the first character represents the level of the course (combined graduate-undergraduate), the second character is a letter identifying the specific course within a department, the third character is a letter identifying the area of study within a program or simply a zero, and the fourth character indicates the number of units of course credit. Generally, 3-unit and 4-unit courses are one-term courses; 6-unit courses are full-year courses.

## 2.6.3 Requirement Designations

Where a student wishes to designate a particular course towards a program other than their primary academic program a special request is required. The requirement designation form is available on the School of Graduate Studies website.

Courses can be designated as being in one of the five categories:

### **Masters** (Count towards the Master's degree requirements)

This category identifies the courses that are to count towards the Master's degree requirements (including any additional graduate requirements or undergraduate courses specified by the supervisory committee or Department Chair). The passing grades for a [Masters](#) course are A+, A, A-, B+, B, and B-.

### **Doctoral** (Count towards the Doctoral degree requirements)

This category identifies the courses that are to count towards the Doctoral degree requirements (including any additional graduate requirements or undergraduate courses specified by the supervisory committee or Department Chair). The passing grades for a [Doctoral](#) course are A+, A, A-, B+, B, and B-.

### **Extra Courses** (Extra Course)

This category identifies courses that the student is taking with the approval of the supervisor but that are not necessary to the student's current degree program. If a failing grade (i.e. less than B-) is received in a course taken as Extra, the courses (and grade) will not appear on the student's transcript unless because of academic dishonesty. Students may petition to change the designation of an EC course to an M or D course prior to the deadline to drop a course provided that this change is supported by the supervisor and program. Changes of designation after the drop date will not be approved. Courses designated as [Extra Course](#) may subsequently be counted towards graduate degree requirements and the course designation changed to [Masters](#) or [Doctoral](#), if approved by the Faculty Admissions and Study Committee or the Associate Dean acting on its behalf. The passing grades for an [Extra Course](#) are A+, A, A-, B+, B, and B-.

Courses that are required by the supervisory committee or the Department Chair as additional requirements in excess of the stated minimum for the program must be designated as [Masters](#) or [Doctoral](#).

### **Diploma Course**

This category identifies courses that are to count towards the requirements for a diploma. The passing grades for a [DIP-Diploma](#) course are A+, A, A-, B+, B, and B-.

### **Certificate Course**

This category identifies courses that the student is taking as individual courses not counting towards the requirements for a diploma. The passing grades for a [CER-Certificate](#) course are A+, A, A-, B+, B, and B-.

McMaster students enrolled in a program wishing to take a course at another institution need to apply online in the Student Centre (see section 6.10 - Inter-University Cooperation - Ontario Visiting Graduate [Student](#)→[Student](#)).

## 2.6.4 Failing Grades and Incomplete Grades

All instances of failures are reviewed by the appropriate Faculty Committee on Graduate Admissions and Study or the Associate Dean acting on its behalf. The Faculty Committee on Graduate Admissions and Study or the Associate Dean acting on its behalf

requests a departmental recommendation regarding the student, and this recommendation is given considerable weight. In the absence of a departmental recommendation to allow the student to continue, the student will be required to withdraw. Those allowed to remain in the program must either repeat or replace the failed course. A failing grade in a Certificate, Diploma, Masters or Doctoral course remains on the transcript. Students who fail a second course will not normally be allowed to continue in the program.

Under exceptional circumstances a course instructor may approve an extension for the student for the completion of work in a course and assign an Incomplete grade (INC). Normally this extension is in the range of a few weeks. A student who receives this permission must complete the work as soon as possible, and in any case early enough to allow the instructor to report the grade to the School of Graduate Studies by the date specified in the Sessional Dates near the beginning of this Calendar. If the INC grade is not cleared by the deadline, a failing grade will automatically be recorded.

## 2.6.5 Required Course and Training for All Graduate Students

All graduate students, including part-time students, must complete and pass the course *SGS 101 Academic Research Integrity and Ethics* ~~within~~ within the first ~~twelve months~~ term after their admission to graduate studies at McMaster. The purpose of this course is to ensure that the standards and expectations of academic integrity and research ethics are communicated early and are understood by incoming students. All students are required to take and pass SGS 101. Students may not graduate or register in a subsequent academic year-term without having successfully completed this course. ~~The course description for SGS 101 may be found in Section 11.~~

All graduate students are required to complete appropriate training required to complete their research and studies (health and safety training, ethics training, biosafety training, etc.), as determined by their home Department or Program. All graduate students also are required to complete and pass *SGS 201 Accessibility for Ontarians with Disabilities Act (AODA)*, which can be completed on-line [www.mcmaster.ca/accessiblity]. Having an understanding of how we can identify and reduce attitudinal, structural, information, technological, and systemic barriers to persons with disabilities is core to McMaster University's commitment to supporting an inclusive community in which all persons are treated with dignity and equality, and completion of AODA training is critical as McMaster's graduates move forward in their varied, chosen professions.

Students may not graduate or register for subsequent years-terms in their program until they have completed their required training.

## 2.6.6. Audited Courses

Graduate Students may request to audit Graduate courses only. This requires a completed form, signed by the instructor and student's supervisor. Upon completion of the course, and subject to confirmation from the instructor that their expectations regarding the student's participation were met (i.e. that the student attended at least 80% of the class), a grade of "AUD" will be recorded on the transcript. No other grade will be assigned.

Audited courses have no academic credit and an audited course may not be retaken for credit.

## 2.6.7. Repeated Courses

Graduate students may not repeat courses for credit. The only exceptions are: when remediating a failing grade (see 2.6.4) and reading/special topics courses (only where each topic taken by the student is distinct from others previously taken).

## **2.6.68. Milestones**

In addition to course work, most graduate programs have a series of non-course academic requirements that are designated as part of the curriculum, examples - seminars, workshops and comprehensives. These requirements are tracked via a series of milestones and progress can be viewed on the student center, and once complete will appear on the student's transcript. Please refer to individual program descriptions for further details of non-coursework requirements. These milestones are considered formal components of your academic progress.

## **2.6.9. Placeholder Courses**

To complete registration at least one course needs to be added for **each** term. If the student is not taking an academic course in a term, there are two different placeholder courses.

- SGS 700 – for students who are in programs that are costed on a per term basis
- SGS 711 – for students who are in programs that are costed on a per course basis

If a student does not add a course in each term – the student will not have completed their enrollment. This will have impacts on all aspects of student life including scholarships, fee assessment and ordering transcripts

## **2.7 Supervision**

It is the responsibility of the department/program to ensure that every graduate student has, at all times, a faculty advisor or a properly constituted supervisory committee. The department/program should ensure that the members of a supervisory committee are sufficiently competent and experienced to serve at the required level. In identifying a supervisory committee, the department/program should consider the following, among other things: the balance of the committee by rank and experience; publications and other demonstrations of competence in scholarship or research on the part of the supervisor. Supervisory committees for Ph.D. candidates shall be reviewed annually by the department/program.

While the supervisor and student have a mutual obligation to meet on a regular basis, the department/program shall ensure there is a formal regular meeting of each Ph.D. supervisory committee at least once within the academic year (September-August), and possibly more often, to discuss the student's progress. Each Ph.D. supervisory committee must report annually on the student's progress and the department/program chair must forward such reports to the School of Graduate Studies. The report formally documents the supervisory committee's assessment of the progress of the student's program.

The department/program should prepare a set of guidelines for supervisors and students. The guidelines should deal with the selection and functioning of supervisory committees and should cover the joint responsibilities of faculty members and graduate students. The guidelines may be attached to or incorporated in department/program handbooks which give regulations supplementary to those in the Calendar. Items relevant to graduate supervision should be approved by the appropriate Faculty Committee on Graduate Admissions and Study. A copy of the guidelines shall be given to each faculty member and each graduate student.

It is possible to change supervisors or the membership of a supervisory committee, although this is not the norm. If the direction of the research changes, membership can be changed by mutual consent of the parties involved. Supervisors and/or supervisory committee members may not resign without the department's/program's approval. A change in supervisor is at the discretion of the department/program, not the student or supervisor.

If a student feels that she/he is receiving unsatisfactory supervision, he/she should consult the Department/Program Chair or Graduate Advisor. If this avenue is not sufficient, the student is encouraged to speak with the appropriate Associate Dean of Graduate Studies about the problem (see Section 4.5 - Supervision).

Graduate students and supervisors are encouraged to familiarize themselves with the McMaster University Graduate work Supervision Guidelines for Faculty and Students, which follow below and to list of policies, policies on accommodations available on the School of Graduate Studies website at <http://graduate.mcmaster.ca/current-students/policies.html>.

## 2.7.1 Graduate Work Supervision Guidelines for Faculty and Students

### Preamble

The relationship between the graduate student and supervisor/advisor is unique and provides a remarkable opportunity to guide and mentor the student engaged in advanced academic learning. What is considered 'good' supervision will vary from discipline to discipline, and it naturally evolves as the student advances through a graduate program. This document provides suggestions to initiate, promote, and sustain successful student-supervisor/advisor relationships.

### Guidelines for the Graduate Student

1. Commitment to scholarly activity is a pre-requisite for graduate success.
2. To support mentorship and guidance, the student must engage in effective, timely and on- going communication with the supervisor/advisor regarding the status of their project.
3. The student should discuss expectations with the supervisor/advisor to ensure that there is a mutual understanding of research goals and related activities, coursework, timelines and deadlines.
4. The student must manage their time, meet deadlines, and prepare for regularly scheduled meetings (e.g., with the supervisor/advisor and supervisory committee). Students should recognize that graduate program academic expectations will not be modified if they choose to engage in other activities, such as working outside of his/her graduate studies, studying for professional program entrance exams or applying for jobs or postdoctoral fellowships. Student- supervisor meetings for thesis work typically occur at least monthly, although meeting regularity will vary amongst disciplines and at various stages. Students are encouraged to discuss concerns about the type and amount of supervision needed for their work with their supervisor. Students are expected to inform the academic head of the graduate program if they are concerned about inadequate or inappropriate supervision.
5. The student is expected to develop effective communication and collaborative skills and to demonstrate respect for others. The student should carefully and earnestly consider advice, suggestions, comments and criticisms received from the graduate supervisor/advisor. The student should expect timely, but not immediate, responses (regarding meetings, feedback on written work, etc.) from the supervisor/advisor and supervisory committee.
6. The student is obliged to act ethically in conducting graduate work. This includes, but is not limited to, following McMaster University policies on the ethical conduct of research and academic integrity. The student is required to document and honestly report research data, to conscientiously cite information and data sources, and to seek guidance on any data exclusions. He/she must acknowledge contributions of the supervisor/advisor, committee members and others, in accordance with the norms of their academic discipline.
7. It is the student's responsibility to carry out all work safely and in accordance with standard operating procedures. Potentially dangerous tasks should not be done while impaired and should not be done until properly trained. It is the student's duty to learn about safe practices, ask questions, and seek appropriate help and guidance on safety matters.
8. It is the student's responsibility to be aware of all the requirements, regulations, and guidelines outlined in the Graduate Calendar as well as all University policies pertaining to graduate work.  
See [http://graduate.mcmaster.ca/images/files/graduate/forms/Graduate Work Supervision Guidelines.pdf](http://graduate.mcmaster.ca/images/files/graduate/forms/Graduate%20Work%20Supervision%20Guidelines.pdf) (see Appendix).

### Guidelines for Supervisors and Advisors of Graduate Students

1. The supervisor/advisor must be aware of the inherent power imbalance in the relationship with students, behave professionally, and communicate appropriately. He/she must provide a safe, healthy environment that fosters productive scholarly work, curiosity, and freedom of expression. The environment must be free from harassment, discrimination, and intimidation.

2. The supervisor/advisor is expected to have sufficient time and resources (as appropriate for the field) to support the student's work effectively. It is the supervisor's responsibility to ensure that students have appropriate safety training, and that they carry out all work safely, and in accordance with standard operating procedures, once properly trained.
3. The supervisor/advisor should help the student develop a realistic thesis/research plan with reasonable plans, that balance exploration with achievable, manageable and focused goals, and allow completion of scholarly work "in time."
4. The supervisory committee must approve thesis project plans, including those that are part of a larger collaborative project led by others (e.g. research team members or collaborators).
5. The supervisor/advisor may encourage the student to undertake some research that is not formally part of their scholarly paper project or thesis project, provided that it will not negatively impact the student's academic progress. If appropriate, the additional work can be supported by a research assistant stipend.
6. The supervisor/advisor should be aware that a student might experience changes in motivation and productivity. The supervisor/advisor should be prepared to adapt his/her mentorship approach to promote success in a range of different situations.
7. The supervisor/advisor is expected to be aware of accommodation policies, procedures and support services, and to support students with disabilities in designing and organizing accommodations. They are expected to be respectful of graduate students who are dealing with stressful situations and personal difficulties. When appropriate, the supervisor/advisor should direct the student to campus resources and other supports. The supervisor/advisor is responsible for promoting a culture of respect and collaboration and encouraging timely conflict resolution when disputes arise, which may require consultation with the supervisory committee or others (e.g. head of the graduate program).
8. The supervisor must regularly communicate and have face-to-face meetings with the student to provide feedback on the student's progress, strengths, weaknesses, gaps in knowledge, and how well the student is addressing deficiencies. Written summaries of feedback should be prepared when there are significant deficiencies. When a student is struggling with meeting graduate program/thesis work expectations, a supervisory committee meeting should be scheduled early to assess progress and plans, and to provide a clear statement of requirements to meet expectations.
9. The supervisor/advisor and supervisory committee are required to provide students with timely, but not instantaneous, feedback. As an example, corrections to a thesis chapter, major research project, or a manuscript optimally should occur within a few weeks. Faculty should be aware that they must respond to a draft of the thesis within the timelines outlined in the graduate calendar.
10. Supervisors/advisors who undertake a research leave or other leaves must communicate to their graduate students, and graduate student applicants, the plans to provide supervision during the leave. Supervisors/advisors who will be away from campus for extended periods of time must name an alternate faculty member, with graduate supervisory privileges, who will have day-to-day responsibility and signing-authority for students.
11. The supervisor/advisor is expected to encourage increasing independence as the student progresses through graduate work. Although the supervisor/advisor is not expected to be a copy editor for the student's written work, he/she should review and provide feedback on materials that the student produces prior to external review or defence.
12. Students' contributions to research must be acknowledged in accordance with the University policies and the norms of the academic discipline.
13. When feasible and appropriate, supervisors/advisors are expected to encourage students to submit their graduate work for presentation at conferences and workshops, and for publication.
14. The supervisor/advisor should recognize that there are multiple career paths available to different students, and should be respectful of the student's choice of career path, providing advice, where appropriate, on the best way for the student to reach his/her career goals. The supervisor also should be aware of professional development opportunities for the student offered through the Department/Program, Faculty, or University, and should encourage the student to take advantage of such opportunities.
15. It is the supervisor/advisor's responsibility to be aware of all the requirements, regulations, and guidelines outlined in the Graduate Calendar and University policies. See [http://graduate.mcmaster.ca/images/files/graduate/forms/Graduate Work Supervision Guidelines.pdf](http://graduate.mcmaster.ca/images/files/graduate/forms/Graduate%20Work%20Supervision%20Guidelines.pdf) (see Appendix).

## 2.8 Theses

### 2.8.1 General

The thesis will be a coherent work prepared as an electronic document (an e-thesis) that provides a complete and systematic account of the research accomplished by the writer. A printed paper version is no longer acceptable for thesis defense or for storage in the university library after a successful defense. A Doctoral student may prepare and defend either a standard e-thesis (see 'GUIDE FOR THE PREPARATION OF MASTER'S AND DOCTORAL THESES') or a "sandwich" e-thesis at oral examination (also known as the 'thesis defense'). Normally, a Master's student may submit only a standard e-thesis (see 'Thesis Guide' section 5.2). Each department or program offering graduate work is wholly responsible for setting up oral examinations for Master's candidates (see 'Thesis Guide' Sections 6.1 and 6.2). The School of Graduate Studies is wholly responsible for arranging all Ph.D. oral examinations (see 'Thesis Guide' Sections 6.3, 6.4, and Appendix 1).

All candidates for Master's or Doctoral degrees who have successfully completed their oral examinations and who have made all required revisions to the satisfaction of their supervisor must upload an electronic version of their final e-thesis to 'MacSphere' (see section 2.8.3 below). The e-thesis must be presented in a format acceptable to the School of Graduate Studies. Please note that changes to an e-thesis will not be accepted after it has been uploaded to MacSphere and that the document uploaded should be the version approved by ~~your~~ the supervisory committee after the defence. Having filed the e-thesis to MacSphere, the student may choose to purchase printed and bound copies for their personal use or for presentation. Details of selected companies who are organized to print and bind the thesis are listed on the School of Graduate Studies website (<http://www.mcmaster.ca/graduate>). The cost of printing and binding will be borne by the student.

No research for the Master's or Ph.D. degrees at McMaster may be secret or classified. All e-theses will be available to readers through MacSphere.

Individual Departments or graduate programs may issue special instructions concerning the expected forms of graphs, tables, maps, diagrams, and sound and video files which may be included within the e-thesis. Accepted forms of bibliographical reference in the particular discipline and other matters of format should be discussed with the thesis supervisor. Students may also refer to the instructions set forth in Kate L. Turabian's A Manual for Writers of Term Papers, Theses, and Dissertations (7th ed., 2007). In those instances where an examiner requests a printed copy of the thesis, it is the student's responsibility to produce a print version well before the oral examination. Doctoral students and their supervisors should keep in mind that theses of extraordinary length are to be discouraged. The preparation of a lengthy Ph.D. thesis almost certainly extends the time that the student takes to complete his or her degree. As a general rule, doctoral students are urged to limit their theses to no greater length than three hundred (300) pages of text (Master's thesis to less than 200 pages). In cases where students and their supervisors believe that responsible scholarly treatment of the thesis topic requires substantially greater length than that specified above, a written approval from the appropriate Associate Dean of Graduate Studies must be obtained before the external examiner is contacted.

## 2.8.2 Response Times for Theses

Supervisory committees should respond to the draft of a Ph.D. thesis within 2 months. Providing comments on individual chapters will take proportionately less time. Very long theses or chapters may take more time. There are busy periods within the academic year when the time taken to provide comments might be a bit longer than this norm. However, in no case should the response time exceed 3 months.

For Master's theses the corresponding times are 1 month and 2 months. Master's students are entitled to defend within 2 months of providing the final draft of the thesis to the department/program.

## 2.8.3 Publication of Electronic Theses at McMaster University

Every successfully-defended thesis for a Master's or a Ph.D. degree shall be published substantially as it was approved at the thesis defense, including any changes mandated by the defense committee, through the University Library's MacSphere and the Library and Archives of Canada. To this end, as a final requirement of the degree, each student must sign a license enabling such digital publication, and must upload the thesis to MacSphere in electronic form. Note that the student may request postponement



of digital publication for up to one year at the time of uploading the thesis to MacSphere, and all such requests will be automatically granted. E-publication delays normally would be requested for the shortest amount of time required to facilitate publication with external organizations, to protect any right to immediate commercial gain, or to permit a patent application to be completed. Students wishing extensions of their initial postponement must apply directly to the Associate Vice-President & Dean of Graduate Studies, at least 4 weeks before the termination of the initial e-publication postponement, with a full description of why an additional delay is requested and what steps have been taken to address the issues that required the initial delay. The Associate Vice-President & Dean of Graduate Studies will determine whether further publication postponement is warranted, and, in no case will a publication delay of more than 2 years be permitted.

## Regulations for Master's Degrees

Master of Applied Science, Master of Arts, [Master of Biomedical Discovery and Commercialization](#), Master of Communications Management, Master of Engineering, Master of Engineering in Manufacturing Engineering, Master of Engineering Design, Master of Engineering Entrepreneurship and Innovation, Master of Engineering and Public Policy, Master of Finance, Master of Health Management, Master of Public Health, Master of Science, Master of Social Work, Master of Technology Entrepreneurship and Innovation. Regulations for the M.B.A. program may be found in the M.B.A. Calendar, available from the DeGroote School of Business.

### 3.1 General

Three types of Master's programs are available, although not all departments offer each type. The first is the thesis program, consisting of both course work and a research thesis. The second type entails a project rather than a thesis, as well as course work. Finally, some programs offer a course work-only curriculum. The decision on the choice of curriculum for Masters students can either be determined at the time of application or after the student is admitted, please consult the departmental listings to see which options are available in a specific discipline.

If a department offers more than one of these types, the ability for a student to switch between them is not automatic, but is sometimes permitted. Approval of the supervisor and department chair (or graduate chair/advisor) is required. In many departments, there will be consequences for the level of financial support to the student. As well, there are likely to be consequences for the expected time to completion. Both financial support and expected time to completion should be clarified prior to approval of the change. If such a change is approved, notification should be sent to the School of Graduate Studies by the department or program, along with any change to the payroll authorization. Graduate Studies approval is not required.

The regular Master's programs are designed for those students who can devote their full time to graduate studies. (See Section 2.5.2 for the definitions of a full-time student.) Some departments also offer part-time programs. Consult the departmental listing in this Calendar to see whether or not a part-time program is available in a particular department.

Prior to the 2001-2002 academic year, all Master's degrees awarded within the Faculty of Engineering were designated as Master of Engineering (M. Eng.) degrees. On April 11, 2001, the University Senate approved the use of the Master of Applied Science (M.A.Sc.) designation for thesis-based degrees in the Faculty of Engineering. Non-thesis Master's degrees in the Faculty of Engineering retain the M. Eng. designation.

### 3.2 Program Requirements

A Master's program involving a thesis will normally be somewhat more specialized and will involve fewer courses than is the case in a Master's program without a thesis. A course Master's program is constructed by departments to contain a sufficient number of courses to make possible a diversified experience, for the student.

The student who is presenting a thesis as part of a program is required to complete, with at least B- standing, at least one full graduate course (or equivalent). Certain programs regularly prescribe additional graduate courses. In accordance with OCGS requirements, no more than one-third of the departmental minimum course requirements may be at the 600-level. The student may be required or permitted by the department to take courses in addition to those prescribed for graduate credit. In consultation with the programs concerned, one or more graduate courses in a related subject may be taken outside of the program.

Students will be required to meet any additional requirements of the program, including special seminars or colloquia. Such requirements are subject to approval by the appropriate Graduate Curriculum and Policy Committee.

## 3.3 Thesis

A candidate must present a thesis which embodies the results of original research and mature scholarship. In the case of sandwich theses, mature scholarship specifically includes substantial and significant contributions to the composition of text in papers with multiple authors. The student must be authorised by a majority of the supervisory committee before producing the final version of the thesis for oral defense. Normally the thesis will be distributed to committee members and examiners in an electronic format (see Section 2.8 - Theses).

A thesis may be submitted at any time. The final date for submitting a thesis to the department for Fall or Spring Convocation is found in the Sessional Dates Section. The thesis will be examined by a committee of not fewer than three members (including the supervisor and an examiner external to the supervisory committee) who will be appointed by the department/program chair; the thesis will be defended by the candidate in an oral examination before this committee. The Associate Vice-President & Dean of Graduate Studies may appoint members to these committees. The time of the defense will be set by the department/program chair; normally this will be about two weeks after the completed thesis (as an electronic file; see section 2.8) has been submitted to the department for examination.

After a discussion of the examination, the Chair will ask for a vote on each of the two questions, the acceptance or rejection of the written document and the success or failure of the defense. If the examiners approve both the written thesis and the defense, the Chair will ask the examiners to complete the Examination Report by initialling appropriately. The student will be invited back to the examination room for congratulations by the committee. In the event the written thesis is approved conditionally, the Chair of the examination committee is responsible for ensuring that (1) the candidate is advised of the conditions in writing, (2) the candidate receives and understands the 'Final Thesis Submission form' to be used by the Supervisor to confirm that the conditions have been met, and (3) the supervisor is also aware of the form. The Chair will complete and sign the Examination Report and return it to the School of Graduate Studies.

However, if there are two or more negative or abstaining votes on either question, with at least one of these votes being from a member of the supervisory committee, the candidate will be deemed to have failed the defense, and a reconvened oral defense must be held at a later date. The candidate should be told as clearly as possible by the Chair and the examining committee what he/she must do to improve the written thesis and/or the defense of it. The reconvened defense is the candidate's final opportunity to complete the degree. Membership on the reconvened examining committee should be the same as that for the original defense, except that one or two substitutions are permitted in order to expedite scheduling of the reconvened defense. If the written thesis, or the defense of it, fails a second time, that decision is final, and is not open to appeal.

After a successful examination and all requested changes have been made, the student will upload the final e-thesis to MacSphere (see section 2.8). Students must submit their final thesis within four weeks of a successful defence when only minor changes are required of the student by the examining committee. When major revisions are required by the examining committee, the student will have one term (4 months) to complete those changes. The student may wish to have printed copies of the final thesis suitably bound for personal use or for presentation. The student will be responsible for the cost and distribution of any bound copies.

Tuition fees continue to be assessed until all degree requirements are met, including the successful submission of the final approved thesis to MacSphere.

Please note: when a thesis is submitted and published to MacSphere students must be aware that their name will appear as author of the document. In exceptional circumstances a pen name may be used subject to written approval of the AVP and Dean of Graduate Studies.

## 3.4 Project

In departments where there is the option of submitting a project, the department regulations must be observed. If the project is to be submitted to the University Library, the rules governing Master's theses must be followed.

## 3.5 Supervision

The general regulations regarding supervision, described earlier (Section 2.7, "Supervision"), apply to Master's students. If the student is registered in a thesis degree program, the thesis supervisor will have been identified by mutual consent, based on the nature of the thesis research. If the student is registering in a degree program without a thesis, a faculty advisor will be assigned. In either case, the advisor may be changed with the approval of the Department, as described in Section 2.7.

## 3.6 Program Duration

The amount of work in a regular (full-time) Master's program for a student with good preparation varies across the campus, but generally, programs involving a thesis are designed to take longer than those without a thesis. Programs with a thesis typically take sixteen to twenty months. Twelve-month non-thesis programs occur in Anthropology, Classics, Cultural Studies and Critical Theory, Economics, Economic Policy, English, Finance, French, Global Health, History, Physics, Political Science, and Sociology.

For students in a regular program, the permissible time for completion of a Master's degree program is limited to three years from their initial registration in the program. For those students admitted to a part-time Master's program, and who complete all degree requirements while registered part-time, the permissible time is limited to five years from their initial registration. Please note, students who choose to move from part-time to full-time or from full-time to part-time will be governed by the time to completion and fees associated with the degree to which they were admitted. For more information please see Section 5.1 - Fees for Graduate Students.

Each student's progress is reviewed annually by the department and on a more frequent basis by the supervisor. A student whose work is unsatisfactory may at any time be required to withdraw from the University. In those cases in which a student does not manage to complete the degree before the end of the time limit specified above, the University has no further obligation to provide supervision. Upon consultation with the department and on its recommendation, the student will be shown as having been "withdrawn in good standing due to time limit".

In the case of a student in a thesis program, if a completed thesis is submitted, and is acceptable to the department, the student can be readmitted in order to defend the thesis. However, thesis program students who have been withdrawn in good standing should be aware that they may be required to complete additional course work before being permitted to proceed to a defense of the thesis. In all cases, the department must first declare that the submitted thesis is ready for defense before the student will be readmitted. Students can only be readmitted to defend at the beginning of the academic term.

A student enrolled in a course work or project program may also be readmitted if this is deemed acceptable by the student's department. However, course work and project program students who have been withdrawn in good standing should be aware that they may be required to retake courses in which the content is judged by their department to have changed significantly since first completion and/or may be required to take additional courses that are necessary to fulfill current program requirements.

At the time of readmission to defend, the student will be required to pay a fee (equivalent to one term's tuition at the current part-time level 5 rate - see section 5.1) to compensate for the costs of the defense and subsequent processing of the thesis.

# Regulations for the Doctor of Philosophy Degree

## 4.1 General

The regular doctoral programs at McMaster have been designed for students who can devote full time to their studies. Academically, full-time Ph.D. study is the best and most efficient way to undertake the degree. However, some departments at McMaster University will consider individual applicants holding a Master's degree whose circumstances preclude uninterrupted full-time graduate work to undertake Ph.D. studies. Because of the divergent nature of academic disciplines, part-time Ph.D. work is not feasible in some areas.

Accordingly, no Department or Program is obligated to offer part-time Ph.D. work. Consult the department listings for information as to whether a part-time program is available in any particular department, or correspond with the department directly.

## 4.2 Program Requirements

McMaster University does not have a minimum course requirement for the Ph.D. Instead, it is left to each graduate program to establish its own minimum requirement, subject to the approval of the appropriate Graduate Curriculum and Policy Committee, and Graduate Council. In accordance with OCGS requirements, no more than one-third of the program's minimum course requirements may be at the 600-level.

Students should consult that section of the Calendar applicable to the graduate program in which they are interested.

The supervisory committee may also require a student to take courses in addition to the minimum prescribed by the program's regulations. These additional courses must be relevant to the student's program. They may be taken in another program and may be at either the undergraduate or the graduate level. The student who is required to take undergraduate courses may register for a maximum of 12 units of such work.

Students will be required to meet any additional requirements of the program, including special seminars or colloquia. Such requirements are subject to approval by the appropriate Committee on Graduate Curriculum and Policy.

## 4.3 Examinations

All Ph.D. candidates at McMaster are expected to acquire, during the course of their studies, a comprehensive knowledge of the discipline or sub-discipline to which their field of research belongs. The Comprehensive Examination is designed to test students for this breadth of knowledge and the ability to integrate ideas. The form of the exam and its administration are the responsibility of the department in which the student is registered, not of the student's supervisory committee.

The outcome will be reported to the School of Graduate Studies as "pass with distinction", "pass", or "fail."

If the Comprehensive Examination consists of multiple components, a second failure of the same single component will constitute a second failure of the Comprehensive Examination.

If the result of the Comprehensive Examination is "fail", the student must be given a second opportunity to take the examination, or those portions on which the failure occurred. This second opportunity is given in place of any 're-read' of a comprehensive exam, which is explicitly excluded from the Student Appeal Procedures, and in recognition of the fact that the failure may occur on the oral part of the examination. If a student chooses to withdraw from the program prior to that second opportunity, the result

"fail" will remain on the student's record. A second failure will result in the student being withdrawn at the end of the month in which the decision is rendered.

Normally, for full-time students, the comprehensive examination will be completed between the 12th and 20th month after the student began doctoral-level work at McMaster University, with an upper limit of 24 months. Individual exceptions require the approval of the appropriate Faculty Committee on Graduate Admissions and Study. Programs which offer part-time Ph.D. programs must require such students to complete the Comprehensive Examination by the end of the 36<sup>th</sup> month.

Departments may hold transfer, qualifying, or entrance exams at the start of a student's doctoral program, but those exams are distinct from the comprehensive exam.

There is no University-wide foreign language requirement for Ph.D. students. Many departments, however, do have such a requirement (see departmental regulations).

All departmental examination rules and practices ([course examinations exempted](#)) are subject to approval by the Faculty Committee on Graduate Curriculum and Policy, which may refer questions to Graduate Council.

## 4.4 Thesis

A candidate must present a thesis which embodies the results of original research and mature scholarship. In the case of sandwich theses, mature scholarship specifically includes substantial and significant contributions to the composition of text in papers with multiple authors. The student must be authorised by a majority of the supervisory committee before producing the final version of the thesis for oral defense. Normally the thesis will be distributed to committee members and examiners in an electronic format (see Section 2.8 - Theses).

When a majority of the supervisory committee have approved the final version of the thesis, it may be submitted to the School of Graduate Studies for examination. The oral defense will not be arranged by the Thesis Coordinator until a majority of the supervisory committee has submitted a report approving the thesis for defense and an agreed date of defense has been received.

### Selection of the Examining Committee

Selection of an external examiner is the responsibility of the Associate Vice-President & Dean of Graduate Studies. To aid in that selection, the supervisory committee is required to provide, through the Chair of the Department (or equivalent), the names and contact information for three potential examiners, at least one month prior to the submission of the thesis. The nominees must not have primary appointments at McMaster University, and they must be at arm's length\* from all members of the supervisory committee and the student. To maintain this distance, all communication with a potential or selected external examiner that is related to the examination and defense of the student must originate only from the School of Graduate Studies. The external examiner will provide a written report to the Associate Vice-President & Dean of Graduate Studies judging whether the written thesis is satisfactory for defense or not. The external examiner will provide this assessment regardless of their ability to be present at the defense.

The examining body will consist of the following members: the student's supervisor, at least two members of the supervisory committee and an external examiner. The examining committee must not exceed five voting members. If there are more than four members on the ~~students~~ student's supervisory committee, the additional members are welcome to attend the defence and ask questions in the time allotted for audience members. If the external examiner cannot attend the oral defense, either in person or through tele- or video-conferencing, one additional representative of the faculty at large will be selected as an attending external examiner. In this case, the original (non-attending) external examiner will remain a member of the examining committee, but their contribution to evaluation of the candidate will be restricted to the written thesis. In unusual situations where the supervisor is not available to participate in the defense for an extended period, the program Chair may designate a different faculty member to serve on the examining committee in place of the supervisor.

The definition of 'arm's length' is as follows: The nominees should not have been a research supervisor or student of the supervisor or the student within the last 6 years; should not have collaborated with the supervisor or the student within the past 6 years, or have made plans to collaborate with these individuals in the immediate future. There also should be no other potential

conflicts of interest (e.g., personal or financial). External examiners should not have been employed by or affiliated with the student's or supervisors' Department within the past 6 years, nor expect to become employed in the Department in the immediate future.

#### Scheduling and Conducting the Oral Examination (Oral Defense)

Dates scheduled for doctoral defences assume that the external reviewer will conclude that the written thesis is acceptable and ready for oral examination. When the external reviewer concludes otherwise, the defence date can no longer be held on the date as planned and the situation reviewed in accordance with the process around a negative external report as outlined below. Any travel and/or employment arrangements made by the candidate based on the original defence date are entirely at their own risk.

If the external examiner approves the thesis for oral examination, an oral defense will be convened by the Associate Vice-President & Dean of Graduate Studies, chaired by herself or her delegate and conducted by all members of the examining committee. Quorum for the examination will be the Chair of the examining committee and the supervisory committee plus one additional examiner. The oral defence will be open to members of the university community and the public who wish to attend as observers, unless the student requests a closed defence. The Ph.D. defence presents the culmination of a number of years of scholarly work which are publicly funded. It is important, therefore, that in all but exceptional circumstances the student presents the result of this effort to the public. The examination proper will be conducted only by the members of the examining committee. When they have completed their questions, the Chair may permit a few minutes of questioning by visitors. Normally the student will attempt to answer visitors' questions, but these are not to be considered part of the examination for the degree. Observers will withdraw prior to the committee's deliberations on the student's performance at the defense. Normally, examination of the candidate will not take more than two hours. In no case should it take more than three.

If the external examiner does not approve the thesis for an oral defense, the appropriate Associate Dean will convene a meeting with the student's supervisory committee to discuss the external examiner's report. The supervisory committee and student will make every effort to address the concerns of the examiner. A memo addressing the external examiner's concerns as outlined in the report is to be submitted to SGS along with the revised thesis. SGS will then request that the external examiner re-evaluate the revised document to determine if it is suitable to go to defense. ~~and the revised thesis may be re-assessed again by the external examiner.~~ In rare cases, a new external examiner may be appointed by the Associate Vice-President and Dean of Graduate Studies.

After a discussion of the examination, the Chair will ask for a vote on each of the two questions, the acceptance or rejection of the **written document** and the success or failure of the **defense**. If the examiners approve both the written thesis and the defense, the Chair will ask the examiners to complete the Examination Report by initialling appropriately. The student will be invited back to the examination room for congratulations by the committee. In the event the written thesis is approved conditionally, the Chair of the examination committee is responsible for ensuring that (1) the candidate is advised of the conditions in writing, (2) the candidate receives and understands the 'Final Thesis Submission form' to be used by the Supervisor to confirm that the conditions have been met, and (3) the supervisor is also aware of the form. The Chair will complete and sign the Examination Report and return it to the School of Graduate Studies.

However, if there are two or more negative or abstaining votes on either question, with at least one of these votes being from a member of the supervisory committee, the candidate will be deemed to have failed the defense, and a reconvened oral defense must be held at a later date. The candidate should be told as clearly as possible by the Chair and the examining committee what he/she must do to improve the written thesis and/or the defense of it. The reconvened defense is the candidate's final opportunity to complete the degree. Membership on the reconvened examining committee should be the same as that for the original defense, except that one or two substitutions are permitted in order to expedite scheduling of the reconvened defense. If the written thesis, or the defense of it, fails a second time, that decision is final, and is not open to appeal.

After a successful defense, the candidate must correct any errors detected by the readers to the satisfaction of the Supervisor and then submit an electronic copy to the School of Graduate Studies via MacSphere (see Section 2.8.3 - Publication of Electronic Theses at McMaster University). The fee for archiving the thesis is paid by the student. Students must submit their final thesis within four weeks of a successful defence when only minor changes are required of the student by the examining committee. When major revisions are required by the examining committee, the student will have one term (4 months) to complete those changes.

Tuition fees continue to be assessed until all degree requirements are met, including the successful submission of the final approved thesis to MacSphere.

Please note: when a thesis is submitted and published to MacSphere students must be aware that their name will appear as author of the document. In exceptional circumstances a pen name may be used subject to written approval of the AVP and Dean of Graduate Studies.

## 4.5 Supervision

The general regulations in regard to supervision, described earlier (Section 2.7), apply to doctoral students.

Students will be expected to confer with the Chair of the Department/Program and others in choosing a supervisor for their entire doctoral program, including the proposed research. As soon as possible, and in any case not later than six months following their arrival, a supervisory committee will be appointed by the department/program, on the recommendation of the students and their possible supervisors. The supervisory committee will consist of at least three members. Two, including the supervisor, must be from within the department/program. A third member, whose scholarly interests include the area of the student's main interest, may be from outside the department/program. One member may be appointed from outside the University with the permission of the Associate Vice-President & Dean of Graduate Studies. If the need arises, the membership of a supervisory committee will be subject to change by the same procedures involved in its appointment (see Section 2.7 - Supervision). Supervisory committee members, including supervisors, may not resign without the department's/program's approval. The duties of the Ph.D. supervisory committee will be as follows:

- to assist in planning and to approve the student's program of courses and research;
- to approve the thesis proposal;
- to decide, within departmental regulations, on the timing of the comprehensive examination and, where applicable, of the language and other examinations;
- to maintain knowledge of the student's research activities and progress;
- to give advice on research, usually through the student's supervisor;
- to provide the student with regular appraisals or progress or lack of it;
- to perform such other duties as may be required by the department;
- to report on the above matters annually, in writing, on the approved form to the department, which in turn will report to the Faculty Graduate Committee on Admissions and Study;
- to initiate appropriate action if the student's progress is unsatisfactory, including any recommendation that the student withdraw, for approval by the department and the Faculty Committee on Graduate Admissions and Study;
- to decide when the student is to write the thesis and give advice during this process;
- to act as internal examiners for the student's thesis;
- to act as members of the examination committee for the final oral defense when so appointed.

The supervisory duties of the department/program will be as follows: to provide all Ph.D. students in its doctoral program with copies of the complete departmental regulations of the program (such regulations are subject to approval by the Faculty Committee on Graduate Curriculum and Policy); to approve the membership and work of the supervisory committee; and, when necessary, to make changes in the membership; to report this membership to the Faculty Committee on Graduate Admissions and Study; at least once a year to review each student's course grades and research progress, as reported by the supervisory committee; to conduct comprehensive examinations; to conduct or arrange for language examinations when these are required; to attest to the Faculty Committee on Graduate Admissions and Study that all departmental and University requirements for the degree have been satisfied; to name any departmental representatives to the examination committee for the final oral defense of the thesis; to replace any members of the supervisory committee, including the supervisor when on leave of absence or, if necessary, when on research leave.

Part-time students must have their course grades and research progress reviewed at least once a year by the supervisory committee.

## 4.6 Program Duration

The minimum time in which to complete a Ph.D. program at McMaster is three calendar years beyond the bachelor's level or two calendar years beyond the master's level. However, the minimum time may be reduced by up to one year for graduate work beyond the Master's level taken in a university or research institution approved by the Faculty Committee on Graduate Admissions and Study.

Completion of the Ph.D. degree is normally limited to six years from initial registration in a regular doctoral program at McMaster. The time for completion of the Ph.D. program for those admitted to a part-time program is normally limited to eight years from initial registration at McMaster as a Ph.D. student.

Each student's progress is reviewed annually by the department and on a more frequent basis by the supervisory committee. A student whose work is unsatisfactory may at any time be required to withdraw from the University.

In those cases in which a student does not manage to complete the degree requirements before the end of the time limit specified above, the University has no further obligation to provide supervision. Upon consultation with the department and on its recommendation, the student will be shown as having been "withdrawn in good standing due to time limit".

If a completed thesis is submitted, and is acceptable to the department, the student can be readmitted in order to defend the thesis. Students who have been withdrawn in good standing should be aware that they may be required to complete additional course work before being permitted to proceed to a defense of the thesis. In all cases, the department must first declare that the submitted thesis is ready for defense before the student will be readmitted. Students can only be readmitted to defend at the beginning of the academic term.

At the time of readmission to defend, the student will be required to pay a fee (equivalent to one term's tuition at the current part-time level 5 rate - see section 5.1) to compensate for the costs of the defense and subsequent processing of the thesis.

## Financial Matters

### 5.1 Fees for Graduate Students

(The Board of Governors reserves the right to amend fees after the printing of this statement.) These regulations apply to tuition and ~~student~~ Mandatory Supplemental fees. They cover the various charges which would be incurred for reasons of late payment or late registration. The 2015-2016 fees schedule is in effect for a period of September 1, ~~2015-2016~~ to August 31, ~~2016-2017~~ and applies to all graduate students whether registered in regular or part-time degree programs. Please consult the Accounts and Cashiers website ([http://www.mcmaster.ca/bms/student/SAC\\_fees\\_grad.html](http://www.mcmaster.ca/bms/student/SAC_fees_grad.html)) for the official graduate fees.

#### Notes:

Students promoted to a Doctoral program from a Master's program will be considered as new admissions for the purpose of time limits for completion of the degree requirements, eligibility for financial assistance, and fee assessment.

Some international students may be eligible to pay Canadian fees depending on various immigration policies, and the Ministry Funding Manual. International students in Term 7 or greater of a Master's program or Term 13 or greater of a Ph.D. program will pay Canadian tuition fees.

Program Fees assessed on a term by term basis



Most students will pay regular [tuition](#) fees and these fees are assessed on a term by term basis. Part-time fees apply only to those students originally offered admission to a part-time program. If students change status from full time to part time, they will still be required to pay regular fees. The part-time fees will allow registration in up to 3 half courses per academic year, in programs where fees are costed on a term by term basis. Students registering in more than 3 half courses will be assessed full-time fees. In situations where a student in a part-time program completes the degree or withdraws from the university, fees for the academic session will be assessed by the number of terms or number of half courses (whichever is the greater). Term count is adjusted if student changes status from part to full time at a ratio of 2:1.

If a full time student wishes to change their status from full time to part time, they will still continue to pay full time tuition fees for the entire program. The most common occurrence of this situation would be when a student gains full time employment, changes in status to part time will be effective at the start of term.. Their mandatory supplementary fees however would be reduced to the part time rate at the start of the next academic year.

#### Program Fees assessed on a course basis

Students enrolled in programs with course costed tuition in professional programs such as UNENE, ADML, Health Management, Rehabilitation Science (on line), and Communications Management will be assessed [tuition](#) fees for each course that they take. The limit of 3 half courses per year does not affect their status.

Ph.D. students who have been registered as full-time for longer than the normal period of funding eligibility (as defined in Section 5.2.1) will be assessed discounted [tuition](#) fees.

A fee is charged for each course taken on the basis of Section 2.1.7 by persons who are not registered graduate students. The [tuition](#) fee for certain courses may be higher.

#### Leave of Absence

Students on leave of absence do not pay tuition fees for any complete months that they are on leave, but do pay mandatory supplemental fees. Students who are on leave for a complete academic year do not pay mandatory supplemental fees.

#### Readmission

Students who have "withdrawn in good standing due to time limit" do not pay fees until readmission. Readmission will only take place at the start of a term for students being readmitted to program. Students readmitted to defend will be readmitted at the point that they are ready to defend. See Section 5.1.4 (Readmission Tuition Charges).

#### Mid-Year Admissions

Students admitted in January or May, will have a slightly different schedule of fees for tuition and Mandatory Supplemental Fees.

Enquiries about fees should be referred to Student Accounts and Cashiers (<http://www.mcmaster.ca/bms/student/>) 905-525-9140 ext. 24478.

## 5.1.1 Payment of Fees

In order to register a student must ~~either~~:

pay ~~by cash or cheque,~~ full tuition and all additional fees for the full year. Details for payment methods and due dates can be found on the Students Accounts and Cashiers websites

([http://mcmaster.ca/bms/student/SAC\\_payment\\_methods.html](http://mcmaster.ca/bms/student/SAC_payment_methods.html))

~~or~~

have made arrangements with Students Accounts & Cashiers

In all cases, scholarships awarded to a student will be applied towards tuition and all other mandatory supplemental fees on a student's account. ~~For those who hold a teaching assistantship (or a research assistant in lieu) the sum of financial support, less~~

~~appropriate employment taxes and deductions but including scholarship, must exceed the amount of tuition and all other mandatory supplemental fees to be eligible for payroll deduction from the teaching assistantship (or research assistant in lieu).~~

## 5.1.2 Non-payment of Fees or Charges

Students with outstanding accounts at the end of the academic year will:

- a. not receive academic results; and
- b. not be permitted to register for the next academic year until the account is settled.

## 5.1.3 Discounted Fees - Ph.D. Students

Full-time Ph.D. students (Canadian and international), who have reached term 13 or greater of their Ph.D. studies, will be charged tuition at a discounted fee rate. The discounted tuition rate is normally equal to 1/2 of the Canadian tuition rate.

## 5.1.4 Change in Residency

Changes in residency that occur when a student becomes either a permanent resident or Canadian citizen will have an impact on fees. These changes can only be accepted at the start of term and cannot be applied retroactively.

## ~~5.1.4~~5 Readmission Tuition Charges

Students who do not register and pay tuition [fees](#) for any academic session are deemed to have withdrawn. These students and those who have been withdrawn in good standing due to time limit are required to apply for readmission. Master's or Ph.D. students withdrawn in good standing who are being readmitted to defend their thesis pay fees at the "Readmission to Defend" rate and are not eligible for a refund.

Students who withdrew voluntarily or did not register for an academic session and wish to apply for readmission [to their academic program](#) are readmitted at the registration status they were at the time of withdrawal and charged the current calendar rate of tuition and supplemental fees accordingly. Readmissions in this category are not eligible for the part-time rate unless the student was registered in a part-time program at the time of withdrawal.

## ~~5.1.5~~6 Refund of Tuition Fees

A student, who completes the degree requirements, withdraws from the program, or takes a leave of absence prior to the end of the academic year will be entitled to a refund, based on the method of payment per section 5.1.1. The refund is based on the schedule set out by Student Accounts and Cashiering (<http://www.mcmaster.ca/bms/student/>)~~f~~. (Note: a refund does not apply to students who are readmitted [to defend](#).) Mandatory supplemental fees are not refundable.

## 5.2 Financial Assistance

### 5.2.1 Financial Support for Full-time Students

The University normally provides ~~four different~~ types of financial support to full-time students: employment income, graduate/department or research scholarships, [tuition bursaries](#), ~~internal McMaster~~ scholarships and [awards](#), bursaries ([financial](#)

[need](#)), and external awards tenable at the university. A student's letter of offer or award letter from the University will include all details of financial support. Students with questions regarding financial support should contact their department or graduate program directly for assistance.

The University provides graduate scholarship awards to most regular graduate students in Ph.D. programs and in many Master's programs. These students must be full-time as defined in section 2.5.2. Such scholarships are awarded annually. For students who are successful in winning [an internal scholarship or external award](#) ~~a major award~~ (e.g. OGS, SSHRC, NSERC, CIHR), any [change in](#) Graduate and/or Research scholarships is at the discretion of your program for the duration of the award and the student will be provided with correspondence from the program reflecting the change in their financial support relative to the offer letter. ~~A Support for a~~ Ph.D. student is normally eligible for [his/her the](#) first four years. Students in Master's programs are usually supported for their first three to six terms depending on the department. Subsequent support is at the department or graduate program's discretion, unless the offer of admission guarantees otherwise.

Teaching Assistantships (TA) (or Research Assistantship-in-lieu under the collective agreement between Canadian Union of Public Employees, Local 3906, Unit 1 and McMaster University) and contract employment income are offered to many graduate students registered in full-time programs. TA duties vary according to department but will normally consist of performance in connection with undergraduate teaching, such as leading tutorials, demonstrating labs, and marking assignments. The award of a TA may vary but should not exceed 10 hours per week, plus three hours of training per term. TA funding is contingent on fulfillment of the employment obligations and maintaining satisfactory work performance, as stated in the letter of offer or employment contract. No exceptions ~~totalling more than~~ 505 hours or more in a single academic year will be approved. Employment is paid as earned over the period in which the work is performed. ~~Note that employee number and student number are different.~~

[The Faculties or departments may provide tuition bursary funds to assist with tuition and fees. These funds will be applied towards tuition and all other mandatory supplemental fees on a student's account.](#)

## 5.2.2 Financial Payments to Graduate Students

International students must provide a clear demonstration of their means of financial support in order to obtain a student visa. ~~The Faculties may provide tuition bursary funds to visa students to assist with tuition fees. These funds will be applied towards tuition and all other mandatory supplemental fees on a student's account.~~

~~For students receiving sufficient scholarship support, after tuition and all other mandatory supplemental fees have been paid, payments will normally be made on the fourth Thursday of each month. The direct deposit method of payment is mandatory.~~

The University is required by law to deduct Canada Pension Plan and Employment Insurance premiums on all employment income [and any appropriate union dues and deductions](#). Income Tax will be assessed on employment income only. Your net earnings will be deposited bi-weekly, ~~one week in arrears~~, directly into a Canadian Bank account of ~~your~~ choice. A statement of your earnings ~~will be sent to your campus address~~ [is available online after](#) each pay. The direct deposit method of payment is mandatory.

[Enquiries about employment should be referred to Human Resource Services \(<http://www.workingatmcmaster.ca/>\) 905-525-9140 ext. 22247.](#)

[Scholarships \(excluding Research\) and bursaries awarded to a student will be applied towards all charges on a student's account. A credit balance owing to the student will be issued as a "refund" once per term into a Canadian Bank account of choice. The direct deposit method of payment is mandatory and may take 3-5 business days to process.](#)

~~Teaching Assistantships (TA) (or Research Assistantship-in-lieu under the collective agreement between Canadian Union of Public Employees, Local 3906, Unit 1 and McMaster University) and contract employment income are offered to many graduate students registered in full-time programs. TA funding is contingent on fulfillment of the employment obligations and maintaining satisfactory work performance, as stated in the letter of offer or employment contract. TA duties vary according to department but will normally consist of performance in connection with undergraduate teaching, such as leading tutorials, demonstrating~~

~~labs, and marking assignments. The offer of a TA may vary but should not exceed 10 hours per week, plus three hours of training per term. No exceptions for the number of hours of work totaling 505 hours or more in a single academic year will be approved.~~

If the student withdraws or graduates from the program part way through an academic year, the student is not entitled to any further portion of the award. Note that monies owing to McMaster, such as ~~taxes or~~ award repayments ~~to an external agency~~, will be deducted from the student's financial support as necessary, or show as an outstanding balance on their student account. Please see section 5.1.2.

## **Additional University Regulations Affecting Graduate Students**

### **6.1 Academic and Research Integrity**

The following brief statements are excerpted in part from the McMaster University Academic Integrity and Research Integrity Policies. For guidance on how to proceed in the case of suspected academic dishonesty or research misconduct, please consult the Office of Academic Integrity and the complete policies at

<http://www.mcmaster.ca/policy/faculty/Research/Research%20Integrity%20Policy.pdf>. The Associate Deans of Graduate Studies are available for confidential consultations on matters related to academic and research integrity.

### **Academic Work**

Academic work includes any academic paper, term test, proficiency test, essay, thesis, research report, evaluation, project, assignment or examination, whether oral, in writing, in other media or otherwise and/or registration and participation in any course, program, seminar, workshop, conference or symposium offered by the University.

For graduate students, comprehensive/qualifying exams, any research work, and thesis work (a thesis proposal, or thesis draft, or draft of one or more chapters) also constitute academic work and must adhere to standards of academic integrity.

### **Academic Dishonesty**

#### **Definition**

Academic dishonesty is to knowingly act or fail to act in a way that results or could result in unearned academic credit or advantage.

Wherever in this policy an offence is described as depending on "knowingly," the offence is deemed to have been committed if the person ought reasonably to have known.

Students are responsible for being aware of and demonstrating behaviour that is honest and ethical in their academic work. Such behaviour includes:

- a. following the expectations articulated by instructors for referencing sources of information and for group work;

- b. asking for clarification of expectations as necessary;
- c. identifying testing situations that may allow copying;
- d. preventing their work from being used by others, e.g., protecting access to computer files; and
- e. adhering to the principles of academic integrity when conducting and reporting research.

Students are responsible for their behaviour and may face penalties under the Academic Integrity or Research Integrity policies if they commit academic dishonesty or research misconduct.

Graduate students, having been deemed admissible to higher studies, are expected to be competent in the acknowledgement of other people's work, whether that work is in print or electronic media.

Graduate students are expected to understand the demands of ethical conduct of research and reporting research results and behave ethically and responsibly in conducting and reporting research. All graduate students are responsible for familiarizing themselves with the definition of research misconduct in the University's policy, namely, "a researcher must be honest in proposing, seeking support for, conducting, and reporting research; a researcher must respect the rights of others in these activities."

## 6.2 Code of Conduct

McMaster University is a community dedicated to furthering learning, intellectual inquiry, and personal and professional development. Membership in the community implies acceptance of the principle of mutual respect for the rights, responsibilities, dignity and well-being of others and a readiness to support an environment conducive to the intellectual and personal growth of all who study, work and live within it.

The *Code of Conduct* outlines the limits of conduct considered to be consonant with the goals and the well-being of the University community, and defines the procedures to be followed when students fail to meet the accepted standards.

Copies of the *Code of Conduct* may be obtained from the website at [http://studentconduct.mcmaster.ca/student\\_code\\_of\\_conduct.html](http://studentconduct.mcmaster.ca/student_code_of_conduct.html).

For Health Sciences graduate students, a supplementary guideline, Professional Behaviour Code of Conduct for Learners, applies to learners in health care professions and research. This guideline outlines the professional behaviours in all academic and clinical settings that must be understood and followed.

Copies of the Professional Behaviour Code may be obtained from the website.

## 6.3 Appeal Procedures

The University has a responsibility to provide fair and equitable procedures for the lodging and hearing of student complaints arising out of University regulations, policies and actions that affect students directly. The procedures described in the [Student Appeal Procedures](#) are intended to provide a mechanism to fairly address alleged injustices.

Students who wish to raise questions or who have a concern are strongly encouraged to communicate informally with their instructors, the Chair of his/her Supervisory Committee (or the Department Graduate Advisor where no committee exists), the Department Chair and/or the Associate Dean of Graduate Studies, the University Ombuds, or the appropriate administrative officer *before* seeking a review under the formal procedures. Experience has shown that many complaints can be resolved satisfactorily through informal communication. Students are requested to speak with the University Secretary regarding a complaint before submitting an application.

Students should seek remedies for their grievances as promptly as possible and must do so within the time limitations set out in the Student Appeal Procedures.

A Master's or Ph.D. thesis, and a Ph.D. comprehensive exam are specifically excluded from the re-read procedures identified in the Student Appeal Procedures. If a student does poorly in any of these examinations, the original examining committee is required to allow the student a second opportunity at the examination after at least a week. If the student fails on that second attempt, no additional examinations are permitted.

The Student Appeal Procedures may be found at:

<http://www.mcmaster.ca/policy/Students-AcademicStudies/StudentAppeal.pdf>

## 6.4 Ownership of Student Work

In Canada, the author is the immediate owner of the copyright in an original work, except when the author is employed to create such material. 'Copyright' is an exclusive property right to publish, produce, reproduce, translate, broadcast, adapt or perform a work, as defined in the Copyright Act (R.S.C. 1985, c. C-42, as amended). For work done by a graduate student, McMaster has the following policies related to the interpretation of copyright and other aspects of intellectual property rights. These policies distinguish in general between items done solely by the student and those undertaken as part of a joint research effort.

In the former case, the intellectual property is primarily the student's, but the University reserves certain rights as detailed in the remainder of this section. In the latter case, the intellectual property rights involve the student, the research supervisor, (and possibly other individuals as well), the University, and on occasion the financial sponsor of the research. If the work is anticipated to have commercial possibilities, it is recommended that the parties involved agree in writing beforehand on the sharing of any financial returns. The Associate Deans of Graduate Studies are available for confidential consultations on matters of ownership of student work involving faculty and/or other individuals.

### 6.4.1 Examinations, Reports and Papers Done as Part of Course Requirements

When work that is eligible for copyright is submitted to meet a requirement of a course, the University acknowledges the student's ownership of the copyright, but places the following conditions on the submission of the work to meet course requirements.

- a. The original physical document becomes the property of the University. This applies particularly to examination answer scripts, and may also be applied to term papers and other course work.
- b. Except for examination scripts, the University receives a royalty-free, non-exclusive licence to make copies of the work for academic purposes within the University, and to circulate the work as part of the University library collection.

### 6.4.2 Theses and Master's Project Reports

As with other papers, the University recognizes that the student holds copyright to the finished thesis. Copies of the thesis shall have on them in a prominent place on the title page the international copyright notice.

The student is required to sign a licence to the University library (and for Ph.D. students an additional licence to the National Library). (See Section 2.8.3 above.) These licences grant the two libraries permission to reproduce the thesis and to circulate it, but do not affect ownership of the copyright.)

However, the University also recognizes that the ideas in the thesis will often arise from interaction with others. In some cases, this interaction will have been solely with the thesis supervisor; in other cases, a larger research team will have been involved. For this reason, it is understood that the copyright refers only to the written document of the thesis. The ideas, or commercial exploitation of the work may or may not be the exclusive property of the student. For the student who has worked closely with a supervisor, or as part of a research group, the rights to publish, [the ownership of original and secondary research records](#), patent,

or commercially exploit the results of the research are shared with the supervisor and/or the research group, and with the University. In those cases in which the work has been supported in part by research grants or contracts, there may be other conditions affecting any patent or commercial exploitation. (The student should be made aware of any such conditions before work begins.)

## 6.4.3 Computer Programs

Computer programs written as part of employment duties, as for example by a teaching assistant, are the property of the employer, as specified in the Copyright Act. Computer programs written as part of course work, a project or a thesis may also have value as a potentially marketable intellectual property. The University recognizes that such software may arise in two different ways, and accordingly has two policies. In setting forth these policies, it is understood that in those cases in which software development draws upon other software owned or licensed by the University, the terms and conditions of the licence or purchase must be followed.

- a. Where a student develops such software at the direct request of a supervisor, and under supervision, it is assumed that there is joint ownership of the intellectual property rights. In such cases, it is recommended that the individuals involved co-author a working paper documenting the software, rather than including it as an appendix to a thesis or report. Prior agreement between the student and supervisor that this is to be the case would be helpful, but is not mandatory.
- b. Where a student develops such software on his/her own, as for example for an independent project in a course, copyright remains with the student. As a condition of using University computing facilities, the student is required to grant the University a royalty-free licence to use the software. This includes the right of the University to distribute copies of the software to McMaster faculty, staff, and students for the University's administration education and research activities. This licence does not include the right to use the software for commercial purposes or to distribute the software to non-McMaster people.

## 6.4.4 Research Data

As with computer software, the University recognizes that research is conducted and data are acquired in two different fashions. When the data are acquired as part of a joint or collaborative effort, such as one relying on the equipment within a laboratory, they are not solely the property of the student, although some of the data may ultimately appear in tables or appendices in a completed thesis. As a general rule, such data are the joint property of the student and the research supervisor, either of whom has the right to make them available to other individuals as well. Both student and supervisor are responsible for insuring that proper acknowledgement of the contributions of the student, supervisor, and other members of the research team is made when the data are released in any form. Students are responsible for ensuring that there is adequate documentation of their research work and findings and that their records meet granting agency, program and supervisor expectations. While original research records are normally the property of the faculty supervisor overseeing the work, students are expected to generate and properly secure adequate, original documentation, in addition to keeping personal copies, in order to ensure the integrity of their records.

When the data are acquired through the student's individual effort, and without the use of University laboratories or funding, then they are usually the property of the student making that effort. However, exceptions may occur when the student collects data using research instruments, including interview schedules and questionnaires, developed wholly or in part by the research supervisor or by some other person or agency. In such instances the right to ownership and/or use of the data may be shared among the parties involved. Given the range of possible alternatives it is not possible to set absolute guidelines in advance covering all such situations. Consequently, it is recommended that students and supervisors make clear agreements in advance concerning the ownership and use of data collected in this fashion. Ownership of data may also be affected by the terms of a research contract that has supported the work.

## 6.4.5 Equipment

If University resources have been applied to the construction or design of equipment, it is not the property of the student, but of the University. Equipment constructed or designed as part of course or thesis work is the property of the student if the work, materials, and workroom space have been provided by the student or other non-University source. Ownership of newly constructed equipment may also be specified in a research contract that has supported the work.

## 6.5 McMaster University Policy for Academic Accommodation of Students with Disabilities

McMaster University is committed to ensuring that each student is afforded an academic environment that is dedicated to the advancement of learning and is based on the principles of equitable access and individual dignity. To this end, the University has a Centre for Student Development and is continuously making improvements to its facilities to maximize access for all students. The School of Graduate Studies, along with the relevant academic department(s) and the Centre for Student Development, encourages academically qualified students to investigate the full range of possibilities at McMaster.

As with all applicants, those with disabilities are expected to select graduate programs that are appropriate for their skills and abilities. Materials provided to applicants by departments should describe specific program requirements, including the nature of research and/or course work, to ensure that the applicant is aware of the expectations for successful completion of the program. Students with pre-existing disabilities, as well as students who become disabled after their admission to graduate studies, may require special support services and accommodations in order to complete their programs successfully. The University will take reasonable steps to provide such services and accommodations that do not compromise the quality and integrity of the student's academic program. Self-identification is voluntary and confidential, and access to information must be approved by the applicant. To facilitate accommodation, however, McMaster University urges applicants to declare any disabilities, as well as to provide details concerning accommodations provided by their previous educational institutions, at the time of application. Such declaration is encouraged particularly in cases where it is felt that the disability may have affected past academic performance, and/or where accommodation may be required in order for the student to complete his/her graduate program. Applicants who have been identified and who are offered admission will need to consult with their Department/Program Chair and the Centre for Student Development as early as possible, and preferably prior to enrolment, to identify and implement an appropriate accommodation plan. At all times, concern for maintaining the dignity of the individuals involved will be paramount. Failure to disclose a disability at the time of admission, however, may delay or otherwise compromise the accommodation process.

Special services and accommodations are provided on an individual basis, are disability specific, and are consistent with the academic objectives of the course and program. McMaster University's *Policy for Academic Accommodation of Students with Disabilities* outlines the steps that must be taken in order to arrange for such services and accommodations (see Sections 31-34 inclusive). The full policy is available from the Centre for Student Development.

## 6.6 Student/Faculty Non-Disclosure Agreements

The School of Graduate Studies encourages the cooperation of faculty with the private sector. Often cooperation will permit the involvement of graduate students. When this happens, it is not unusual for a company to protect its interests by asking the faculty member and the student to sign a confidential Non-disclosure Agreement. Such agreements, even those signed only by the faculty member but referring to student involvement, can restrict conditions for a number of matters important to students, such as their wish to publish research results, the thesis defense, and the deposit of the thesis with libraries. In many cases, the restrictions are reasonable and do not clash with academic principles that require the presentation of research findings for peer assessment.

In those instances where a Non-disclosure Agreement has been signed, a supervisor must notify the Associate Vice-President & Dean of Graduate Studies in writing of the Agreement, giving a brief description of its contents and assessing the impact on the thesis defense or dissemination of the thesis.

Students are advised to discuss any non-disclosure waivers or comparable agreements with the department chair, graduate advisor, or the School of Graduate Studies, before signing.



It has been common practice, in cases where a corporation wishes to protect its interests in a discovery, to delay placing copies of a thesis in libraries for up to twelve months after the oral defense, but not for longer periods.

It has not been common practice in these same cases to limit attendance at oral defenses to only examination committee members; nor has it been common practice to have examination committee members agree to non-disclosure agreements. The pertinent guiding principle is that oral defenses are public events.

Students in doubt about how these norms of academic activity apply to their circumstances should approach the Associate Vice-President & Dean of Graduate Studies.

## **6.7 Conflict of Interest Guidelines, School of Graduate Studies**

### **6.7.1 General**

There shall be no prohibition on the grounds of family relationship against the admission of persons as full- or part-time graduate students or against the eligibility for financial awards of such persons. Faculty members normally shall not take part in any proceedings at any level which affect the graduate standing of a spouse or other relative (including admission, financial assistance, promotion, courses of instruction, supervisory, thesis and examining committees). It is understood that the merits of each individual shall be the overriding consideration in all such cases.

### **6.7.2 Conflict of Interest in the Evaluation of Graduate Students**

All faculty members responsible for the evaluation of graduate students have a general responsibility to the University to ensure that they are not in a position of conflict of interest (or the appearance of a conflict of interest) in their obligations to the University with regard to the nature of their relationships with graduate students. Specifically, a faculty member may not be involved in the evaluation of a graduate student if the faculty member has a close family relationship with the student (including spouse, parent, child, sibling, niece/nephew or spouses of the foregoing), if the faculty member is, or has been engaged to be married to the student, or if the faculty member has (or has had) an intimate personal relationship with the student. Evaluation includes grading course work or examinations (including the defense of a thesis) and supervision, whether as the principal supervisor or as a member of a supervisory committee.

A faculty member should question the propriety of evaluating a graduate student if there exists a distant family relationship with the student, or if the faculty member and the student maintain or have had a business relationship or any other relationship which should reasonably give cause for concern.

Questionable cases should be referred to the Associate Vice-President & Dean of Graduate Studies for a decision.

## **6.8 Student Academic Records**

Student academic records are the property of the University. The University has developed procedures designed to protect the confidentiality of student records. A student may have access to her or his file, but documents received from a third party in confidence will not be disclosed.

Transcripts are issued only with the consent of the student.

## 6.9 McMaster University Workplace and Environmental Health and Safety Policy

McMaster University is committed to provide and maintain healthy and safe working and learning environments for all employees, students, volunteers and visitors. This is achieved by observing best practices which meet or exceed the standards to comply with legislative requirements as contained in the Ontario Occupational Health and Safety Act, Environmental Protection Act, Nuclear Safety and Control Act and other statutes, their regulations, and the policy and procedures established by the University. To support this commitment both McMaster University and its employees are responsible jointly to implement and maintain an Internal Responsibility System directed at promoting health and safety, preventing incidents involving occupational injuries and illnesses or adverse effects upon the natural environment.

The University is responsible for the provision of information, training, equipment and resources to support the Internal Responsibility System and ensure compliance with all relevant statutes, this policy and internal health and safety programs. Managers and Supervisors are accountable for the safety of workers within their area, for compliance with statutory and University requirements, and are required to support Joint Health and Safety Committees. Employees are required to work in compliance with statutory and University requirements, and to report unsafe conditions to their supervisors.

Contractors and subcontractors undertaking to perform work for McMaster University must, as part of their contract, comply with all relevant workplace and environmental health and safety statutes and to meet or exceed the University's Workplace and Environmental Health and Safety Program requirements.

In addition to the above stated managerial responsibilities, Deans, Directors, Chairs, Research Supervisors and other Managers are also accountable for the safety of students, volunteers and visitors who work and/or study within their area of jurisdiction. Students are required by University policy to comply with all University health, safety and environmental programs.

### Implementation:

The authority and responsibility for the administration of procedures and programs to provide for the implementation of this policy is assigned to the Office of the Vice President, Administration.

The Risk Management Support Group is responsible for facilitating the development, implementation and auditing of the Health and Safety Programs effective under this policy. This is achieved through the implementation of a risk management system that is directed at supporting the Internal Responsibility System through the application of best practices for the management of occupational, environmental, public health and safety related risks.

The Office of the Vice President, Administration will provide reports to the University Board of Governors concerning the status and effectiveness of the Workplace and Environmental Health and Safety System and any notices of violation issued to the University regarding breaches of workplace health and safety or environmental protection statutes.

## 6.10 Inter-University Cooperation - Ontario Visiting Graduate Student

It is possible for a graduate student registered at McMaster University to take a graduate course at another Ontario university for credit toward the McMaster degree. To do so, the student must [review the 'Information Booklet'](#), -complete the form for an Ontario Visiting Graduate Student ([available online using the Student Centre](#)) ([both available on the Council of Ontario Universities website: <http://cou.on.ca/key-issues/education/graduate-education/ontario-visiting-grad-students/>](#)) and describe the course to be taken, the term in which it will be taken, and the reasons for taking the course. Approval of the student's Department Chair and Supervisor are required before the form is submitted for approval to the School of Graduate Studies, which will send it

to the host university. The course selected must be required for the student's program, must be a graduate level course, and must not be available at McMaster University. Auditing of courses or registration for "extra" courses is not permitted.

## General Information

### Counselling Services

Human Rights and Equity Services - <http://www.mcmaster.ca/hres>

International Student Services - Tel. 905-525-9140 ext.24700; [iss@mcmaster.ca](mailto:iss@mcmaster.ca) ext.

Ombuds Office - <http://www.mcmaster.ca/ombuds>

Ownership of Student Work/Office of Academic Integrity - <http://mcmaster.ca/academicintegrity/index.html>

Student Accessibility Services - <http://sas.mcmaster.ca/>

Student Financial Aid and Scholarships - <http://sfas.mcmaster.ca>

Student Success Centre - <http://studentsuccess.mcmaster.ca/>

### Health Services

Environmental and Occupational Health Support Services - Tel . 905-525-9140 Ext. 24352

Ontario Health Insurance Card - Tel . 905-521-7825 (Service Ontario)

Student Wellness Centre - <http://wellness.mcmaster.ca>

University Health Insurance Plan - Tel . 905-525-9140 Ext. 24748; [iss@mcmaster.ca](mailto:iss@mcmaster.ca)

Workplace Safety and Insurance Board Coverage for Graduate Students (Working at McMaster) - <http://www.workingatmcmaster.ca>

### Housing and Conference Services and Hospital Services

Conference and Event Services - <http://conference.mcmaster.ca>

Hospitality Services - <http://hospitality.mcmaster.ca>

McMaster Community Homes Corporation - Tel . 905-578-3833; E-mail: [receptionist@communityhomes.ca](mailto:receptionist@communityhomes.ca)

Off-Campus Housing - <http://macoffcampus.ca> (Off-Campus Resource Centre)

On-Campus Housing - <http://housing.mcmaster.ca> (Housing and Conference Services)

### Student Associations

Graduate Students Association (GSA) - <http://www.mcmaster.ca/gsa>

McMaster University Alumni Association - <http://www.mcmaster.ca/ua/alumni>

### Other University Services/Facilities

Athletics and Recreation - <http://www.marauders.ca>

Bookstore and Post Office - <http://www.bookstore.mcmaster.ca> (Titles Bookstore)

Day Care Facilities at McMaster

- McMaster Children's Centre Incorporated - <http://www.mcmaster.ca/mcmcc>
- McMaster Students' Union Child Care Centre - Tel. 905-526-1544 E-mail: [dthomson@msu.mcmaster.ca](mailto:dthomson@msu.mcmaster.ca)

Parking Services - <http://parking.mcmaster.ca>

Security Services - <http://security.mcmaster.ca>

University Chaplain Centre - <http://www.mcmaster.ca/chaplain>

### Special Resource Services/Facilities

Centre for Continuing Education - <http://www.mcmastercce.com>

Centre for Leadership in Learning - <http://cll.mcmaster.ca>

McMaster Media Production Services - <http://www.media.mcmaster.ca>

McMaster Museum of Art - <http://www.mcmaster.ca/museum>

Office of International Affairs - <http://www.mcmaster.ca/oia>

Office of Sustainability - <http://www.mcmaster.ca/sustainability/index.html>

University Library - <http://library.mcmaster.ca>

University Technology Services (UTS) - <http://www.mcmaster.ca/uts>

# Graduate Scholarships, Bursaries and Other Awards

(<http://graduate.mcmaster.ca/graduate-scholarships>)

## 8.1 Overview

The following information is intended to provide details about the various forms of scholarship support available at McMaster. Students with questions regarding financial support should contact their department or graduate program (hereafter referred to as the department) directly for assistance.

All efforts have been made to ensure the accuracy of information of awards on the School of Graduate Studies website. However, it is ultimately the responsibility of fellowship and award applicants themselves to verify program deadlines and/or requirements with external agencies. The School of Graduate Studies cannot be held responsible for any error or omissions, but would appreciate being informed of these, for correction or addition in the next edition.

### 8.1.1 General Regulations

Graduate students at McMaster University are expected to apply annually for external funding opportunities that may be available to them and as directed by the department.

Scholarships (including fellowships, prizes, medals and awards) and bursaries may be cancelled without notice if the conditions under which they are granted are violated. To hold an award at McMaster University, students must:

- Have been unconditionally admitted into the eligible graduate degree program for which funding was granted;
- Be registered full-time and progressing satisfactorily in the eligible graduate degree program; part-time students are normally not eligible to receive scholarship support;
- Accept the terms and conditions of the award;
- Comply with all academic regulations of McMaster University and the requirements of the scholarship and/or award;
- Not hold or accept full-time employment while holding the award; and
- Agree to have McMaster University administer the award in accordance with its policies and procedures.

In accordance with the *Freedom of Information and Protection of Privacy Act* and McMaster University's Statement on the collection of Personal Information and the Protection of Privacy, where notice is given, the University is permitted to publish an individual's name, Faculty, program and award information. McMaster University publishes the names of recipients of most scholarships and awards, in the University's convocation program and other award publications.

### 8.1.2 Value and Duration of Award

The value and duration of scholarships and awards are detailed in the terms of letter of offer or award letter. Should a successful applicant receive an internal scholarship or external award subsequent to the letter of offer, McMaster's normal practice is to adjust the contributions to the applicant's offer in such a way that the applicant benefits from the additional award, but not to the extent that it simply adds the value of the award to the original offer. The fractional financial benefit of an internal scholarship or external award varies by program but is consistent within a given program.

Any approved change in degree, program, registration, supervisor or research area must be reported to the School of Graduate Studies and may result in a change to the value and/or duration of the award. The value of some external awards must be refunded if conditions of the awards are not met.

## 8.2 Graduate Scholarships

Upon admission to McMaster, graduate students are automatically considered for funding by the various departments. Offers that include funding will state the amount and duration of funding, conditions for renewal (if any), terms of continued funding, and other relevant details. Continued funding for graduate students from the University or from individual programs will be based on satisfactory progress of the student in his/her program as determined by academic criteria or as specified in an offer of funding. If the student has been awarded a Graduate or Departmental Scholarship, he/she should be aware that the funds for this scholarship might come from funds awarded by the School of Graduate Studies and/or from the department. The student may also receive a Research Scholarship provided by funds from the supervisor. If the student has been awarded an Entrance Scholarship, he/she should realize that it is for the first term of study only and is not renewable.

### 8.2.1 Internal Scholarships and Bursaries

Internal scholarships (including fellowships, prizes, medals and awards) and bursaries (hereafter referred to as awards) support students registered in a specific program or Faculty through the generous contributions of our benefactors and donors, and initiatives from the School of Graduate Studies. Selection is based on academic merit, research excellence and potential or financial need. Adjudication for internal awards normally occurs at the department level. Departments forward their recommendations to the School of Graduate Studies for final approval. It is critical that students consult with their departments regarding eligibility, application procedures and deadlines as each department will have its own process for internal review. Deadlines for the various internal awards vary and are explained in more detail on the School of Graduate Studies website, which are listed alphabetically by their complete official names.

The University reserves the right not to grant an award in the absence of a suitable candidate, or to limit the number of awards where too few suitable candidates exist. Where the terms of such awards become impossible to fulfill, the University may amend the terms of an award to carry out the nearest possible intent of the donor, while still ensuring that the benefit of such award continues. The University also reserves the right to withdraw and/or to suspend granting of an award, or to adjust the stated value and/or number of awards in years in which insufficient income is available due to fluctuations in investment markets.

Additional bursaries or financial assistance may be available through the Office of Student Financial Aid & Scholarships (Gilmour Hall, Room 120).

### 8.2.2 External Awards Tenable at the University

External awards tenable at the University are given by federal and provincial government agencies and other private organizations that rely on McMaster University to recommend candidates, facilitate payments, and ensure compliance of terms and conditions of the award. Examples of these agencies include the Canadian Institute of Health Research (CIHR), the Natural Sciences and Engineering Research Council (NSERC), the Social Sciences and Humanities Research Council (SSHRC), and the Ontario Graduate Scholarships (OGS). Applicants must be invited by their department to submit an application to these competitions and verify eligibility requirements with the external agencies.

Awards from external agencies are sometimes renewable. The application process for the majority of these awards is usually held one year in advance of receipt of the award (for example, competitions are held in October for awards starting in May, September or January of subsequent year). Applications and eligibility requirements are usually indicated on respective government agency web sites by late August. Deadlines vary by agency but normally occur in the Fall of each academic year.

As the recipient of a CIHR, NSERC, SSHRC, OGS or similar award, the student may be required to complete additional acceptance/refusal forms, and provide copies to the department. If the student changes his/her status, or is granted a leave of absence, the student may be required to notify the external agency as outlined in the guidelines (or terms and conditions) of the award. It may also be the case that the external award is subject to restrictions that require altered terms of the original letter of offer, or forfeit the award.

## 8.3 Funding Application Deadlines

Students interested in applying for scholarships and awards should contact their home departments for specific details on the application process and department internal deadlines. Dates and information from external agencies may be updated periodically and without notice. Changes to internal due dates within departments or programs, and the School of Graduate Studies, will be updated accordingly.

## Governing Bodies

### 9.1 Senate

The University Senate consists of approximately 65 members, including the Chancellor, the President (Chair), the Vice-Presidents, the Associate Vice President & Dean of Graduate Studies, the Faculty Deans, three members from the Board of Governors, four members from the Alumni Association, and 32 faculty members. In addition, there are 12 student members, one graduate and one undergraduate from each of the six Faculties. The students are elected by and from the students in their respective Faculties.

The Senate has ultimate responsibility for determining academic policy, which includes new academic programs, changes in curriculum, standards for admission to the University, matters arising in connection with the award of scholarships and prizes, examination policy, academic regulations, procedures for student appeals, criteria and procedures for granting tenure and promotion to faculty members, the codes of conduct for students and so on. Website: <http://www.mcmaster.ca/univsec>

### 9.2 Graduate Council

The Graduate Council is a deliberative, administrative, and executive body responsible directly to Senate but otherwise autonomous. Its membership consists of the Chancellor, the President and Vice-Chancellor, the Provost and Vice-President (Academic), the Associate Vice President & Dean of Graduate Studies (Chair), the Associate Deans of Graduate Studies, the Faculty Deans, the University Librarian, the University Registrar, the Secretary of Senate, the Vice-President (Research and International Affairs), the Assistant Dean (Graduate Student Life and Research Training), the Executive Director (Strategic Planning & Administration), the Associate Graduate Registrar and Secretary of the School of Graduate Studies, eighteen faculty members (three from each faculty), and twelve graduate students (two from each faculty).

The responsibilities of the Graduate Council have been specified in some detail by Senate and are outlined in the By-laws of the Senate of McMaster University and the Senate Resolutions. The more significant ones may be summarized by noting that it regulates matters concerning graduate work of common concern to the entire University, acts upon recommendations concerning graduate work from each Faculty upon matters of particular concern to that Faculty, reports to Senate on graduate matters, recommends candidates for graduate degrees, stipulates conditions for the awarding of graduate scholarships, and stipulates the departments eligible to offer graduate work.

#### 9.2.1 Executive Committee of Graduate Council

The Executive Committee of Graduate Council is composed of the Associate Vice President & Dean of Graduate Studies (who acts as Chair), the Associate Deans of Graduate Studies as Deputy Chairs, the President and Vice-Chancellor, the Provost and Vice-President (Academic), one faculty member from each Faculty, and the Associate Graduate Registrar and Secretary of Graduate Studies.

The Executive acts as nominating committee, academic policy committee, and on any other matters put before it by Graduate Council or the Associate Vice-President & Dean. This body acts on behalf of Council in instances where there is some urgency (e.g., during the summer months when there are no regularly scheduled meetings).

## **9.2.2 Scholarships Committee of Graduate Council**

The Scholarships Committee of Graduate Council is composed of the Associate Deans of Graduate Studies (who act as co-chairs) and faculty members (representing all six faculties). This committee is responsible for acting upon all recommendations and applications for internal endowed fellowships and scholarships, and external scholarships.

## **9.3 Standing Committees**

### **9.3.1 Faculty Graduate Curriculum and Policy Committees**

Each of the six Faculties has a Committee on Graduate Curriculum and Policy which is responsible for dealing with matters of policy and curriculum affecting the Faculty, including new developments, course changes, changes in degree requirements, and new programs and fields of study arising from departmental proposals. The Faculty then acts upon the recommendations of this committee.

### **9.3.2 Faculty Graduate Admissions and Study Committees**

For each Faculty, there is also a Committee on Graduate Admissions and Study responsible for determining admissibility of any applicant on the recommendation of the department, approving each student's course program, reviewing annually the progress of each student, making necessary decisions thereon, recommending awarding of degrees, deciding upon applications from students for special consideration, and acts on the final decisions from a hearings committee for student appeals and cases of alleged academic dishonesty and research misconduct. Normally, the Associate Dean of Graduate Studies for the Faculty handles the matters on behalf of the committee. The Secretary of all Committees, to whom business items may be addressed, is the Associate Graduate Registrar and Secretary of Graduate Studies.



# PhD SUPERVISORY COMMITTEE MEETING REPORT to the School of Graduate Studies

Student ID# \_\_\_\_\_ First Name \_\_\_\_\_ Family Name \_\_\_\_\_

## Program

Date student began PhD studies at McMaster: \_\_\_\_\_ Date format: YYYY-MM-DD  
Date of last Supervisory Meeting: \_\_\_\_\_ Date of This Meeting: \_\_\_\_\_

Every Ph.D. student must have a Ph.D, Supervisory Committee meeting at least once every academic year (between September 1<sup>st</sup> and the following August 31<sup>st</sup>). This report must be received by the School of Graduate Studies within two weeks of the end of the academic year.

### COMPREHENSIVE REQUIREMENT

The School of Graduate Studies Calendar states that the Comprehensive Examination for full-time students will normally have taken place between 12 and 20 months from commencement of PhD studies with an upper limit of 24 months.

Date Of Completion		Expected date of completion		
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### RESEARCH ETHICS APPROVALS ([http://www.mcmaster.ca/ors/ethics/faculty\\_intro.htm](http://www.mcmaster.ca/ors/ethics/faculty_intro.htm))

Does research involve human participants, their records or tissues?	YES <input type="checkbox"/>	NO <input type="checkbox"/>
If yes, has approval been obtained from the research ethics board?	YES <input type="checkbox"/>	NO <input type="checkbox"/>
Does research involve animals or their tissues?	YES <input type="checkbox"/>	NO <input type="checkbox"/>
If yes, has approval been obtained from the research ethics board?	YES <input type="checkbox"/>	NO <input type="checkbox"/>

### FIELD TRIPS (<http://www.workingatmcmaster.ca/link.php?link=eohss%3Aeohss-events-electives>)

Does research involve international travel, which poses an identifiable additional risk under the university's risk management policy?	YES <input type="checkbox"/>	NO <input type="checkbox"/>
If yes, has student completed risk management forms and obtained approval?	YES <input type="checkbox"/>	NO <input type="checkbox"/>



Student ID# \_\_\_\_\_ First Name \_\_\_\_\_ Family Name \_\_\_\_\_

**Supervisor's report** (This section must not be filled out by the student.)

**Part A: Progress**

Progress made in accomplishing goals set out in last report (or toward meeting degree requirements since beginning the program if this is the first report):

(i.e., courses completed, comprehensive examination preparation/writing/oral defense, thesis proposal, research, chapters written/revised, conference presentations, publications).

**Part B Goals**

Specific goals for the next interval of \_\_\_\_\_ months (attach an additional page if necessary):

Anticipated date for the completion of degree requirements:

Date:

**Part C Areas for improvement and additional direction:**

### Committee's Report

Evaluation of overall progress at this stage in the degree development during the interval since beginning Ph.D. studies (if this is the first Committee meeting) or since the last Ph.D. Supervisory Committee meeting:

#### RATING

##### [E] Excellent

The student has exceeded expectations in terms of academic and/or research progress. This rating may reflect exceptional initiatives taken by the student to address unexpected challenges in their course of study. This rating is only given to a student with no significant weakness in any area, and who is clearly on track to complete within four years.

##### [G] Good

The student is meeting and achieving all expectations in terms of academic and/or research progress. There are no areas of concern with respect to meeting goals and milestones for research and academic progress. This rating is to be used for students who show promise for completing the degree in a timely manner.

##### [S] Satisfactory

The student is meeting and achieving most expectations in terms of academic and/or research progress. There is some concern around the pace and/or the meeting of goals and milestones for research and academic progress. The committee has some concerns with the student's skills growth and subject area expertise. This rating is to be used when the committee identifies areas for improvement and where some expectations at this stage of degree development are not being met. Details about concerns should be provided in Part C.

##### [M] Marginal\*

The student is meeting and achieving some expectations in terms of academic and/or research progress. There is significant concern around the pace and/or the meeting of goals and milestones for research and academic progress. The committee has significant concerns with the student's skill growth and subject area expertise. This rating is to be used when the committee identifies several areas for improvement and where significant expectations at this stage of degree development are not being met. Areas for improvement should be provided in Part C.

##### [U] Unsatisfactory\*

There is an unreasonably low rate of academic and/or research progress. The committee has serious concerns about the pace and/or the meeting of goals and milestones for research and academic progress, and whether these goals can be achieved in a reasonable period of time. Areas of serious concern should be provided in Part C. In cases where this category is used, the program should determine whether the student should be required to withdraw or be allowed to continue in the program until their next committee meeting.

	Print Name	Email address (McMaster if available)	Rating	Signature
Supervisor	_____	_____	_____	_____
2 <sup>nd</sup> Member	_____	_____	_____	_____
3 <sup>rd</sup> Member	_____	_____	_____	_____
4 <sup>th</sup> Member	_____	_____	_____	_____

\*Where progress is deemed marginal or unsatisfactory, attach a detailed explanation of what must be accomplished over the next 6 months in order to remedy the situation.

This completed report has been seen by me.

Student's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Department Chair's  
Signature \_\_\_\_\_ Date: \_\_\_\_\_

The student may append additional comments. A student who thinks that s/he is receiving unsatisfactory supervision is urged to follow the recommended grievance procedure for the Department or Program and/or to contact the Department Graduate Advisor, Department/Program Chair, or the Associate Dean of Graduate Studies.

The student's single page report on his/her progress **must** be appended to this page.

Student ID# \_\_\_\_\_ First Name \_\_\_\_\_ Family Name \_\_\_\_\_

**TO BE COMPLETED BY THE STUDENT and SUBMITTED FOR THE COMMITTEE MEETING**

Details of progress made since the last report (or toward meeting degree requirements since beginning the program if this is the first report), i.e., courses completed, comprehensive examination preparation/writing/oral defense, thesis proposal, research, chapters written/revised, conference presentations, publications:

Student signature: \_\_\_\_\_ Date: \_\_\_\_\_

Supervisory Committee Members: Initial below to affirm that you have read the student's report on this page.

Supervisor: \_\_\_\_\_ Committee Member: \_\_\_\_\_ Committee Member: \_\_\_\_\_ Committee Member: \_\_\_\_\_

## TERMS OF REFERENCE

### Farncombe Family Student Scholarship Fund

A gift from the Farncombe Family has been directed to the Faculty of Health Sciences at McMaster University to provide a fund in support for the Farncombe Family Student Scholarship Fund.

The Fund will be used to support the next generation of researchers in the field of digestive health research at the Farncombe Family Digestive Health Research Institute. Specifically, it will support those who wish to pursue research careers in digestive diseases and microbiome-related areas

To be awarded by the Faculty of Health Sciences to full-time graduate students or postdoctoral fellows at McMaster who, in the judgement of a selection committee from the Institute chaired by the Director, demonstrate academic achievement and are working in the area of digestive diseases and/or microbiome-related areas at the Farncombe Institute or with a Farncombe scientist. Nominations will be sought by the Director of the Farncombe Institute.

It is expected that the supervisor will seek contributing funds from their respective Department or the Faculty of Health Sciences' Graduate Studies office. Funding will be provided for a maximum of two years for MSc students and a maximum of five years for PhD students. Ongoing funding will be dependent on satisfactory progress as reflected in the student's supervisory committee reports.

In the case of postdoctoral fellows, the scholarship is designed to support research fellows holding a PhD or MD degree and wishing to pursue a career in preclinical GI research. The award will provide funding for a maximum of three years. Priority will be given to applicants who are new to the Institute. Funds may be used in certain situations to support existing PDFs, particularly those toward the end of their projects.

Costs to support the administration of this scholarship program are allowable on this fund, within reasonable limits, at the discretion of the Director of the Farncombe Family Digestive Health Research Institute.

