



## School of Biomedical Engineering

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# Graduate Program Handbook 2025/2026

Updated: October 2025



*Innovation in Education • Excellence in Research • Quality of Student Life*

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# WELCOME NOTE (2025/2026)

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## ***Welcome to the Biomedical Engineering Graduate Program!***

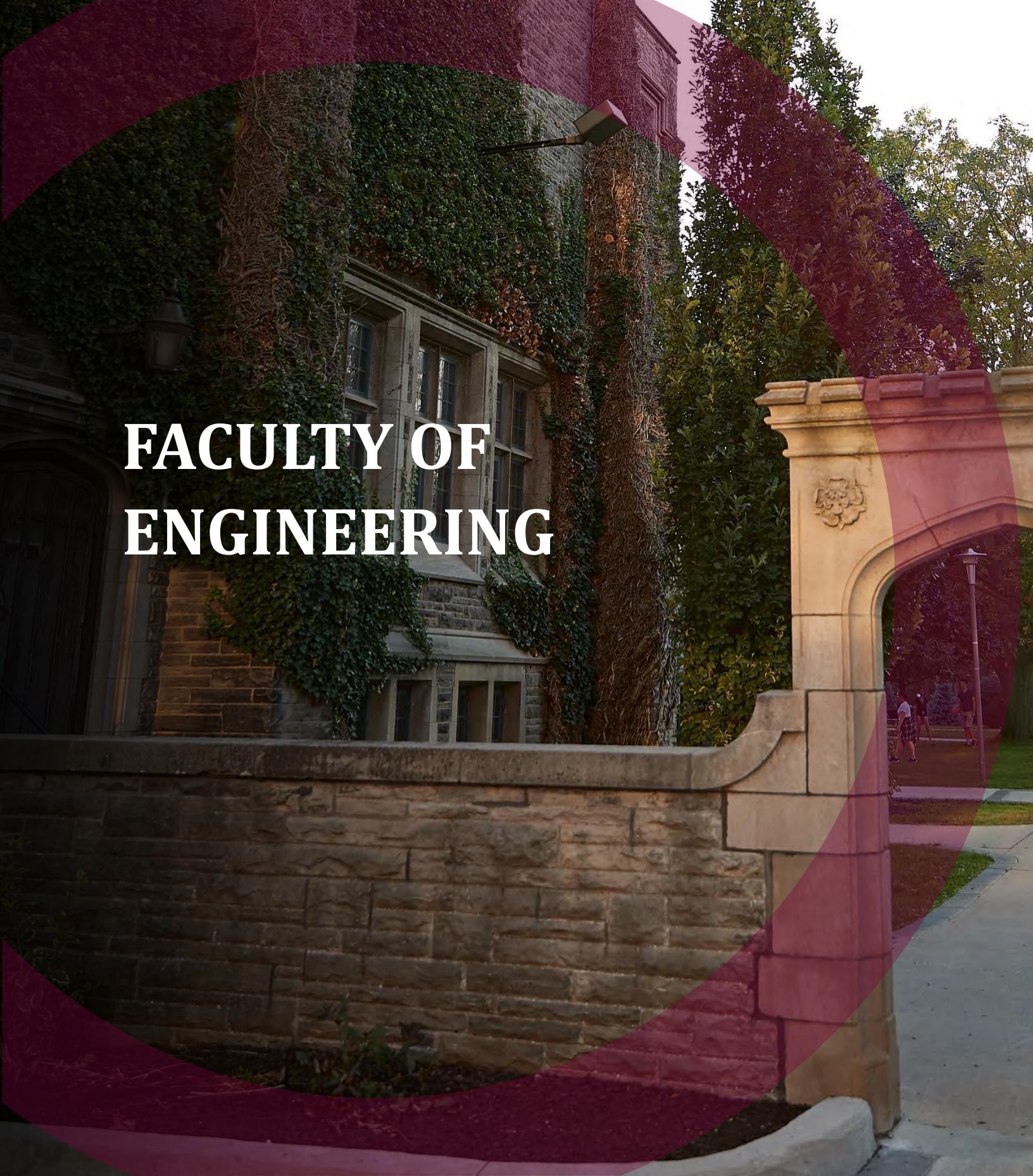
*We are pleased to welcome you to our community of researchers, innovators, and problem-solvers. This handbook outlines key program requirements, timelines, and resources to support your success. We encourage you to engage with your peers, supervisors, and the wider McMaster community, and to take full advantage of our collaborative, interdisciplinary environment.*

*Please note that this handbook is comprised of two sections: the first contains general information which graduate students in all Faculty of Engineering departments will find useful; the second includes information specific to the School of Biomedical Engineering.*

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### **Disclaimer:**

In the event of a discrepancy between the information provided in this handbook and The School of Graduate Studies Calendar, the latter prevails.



# FACULTY OF ENGINEERING

# IMPORTANT UNIVERSITY POLICIES AND REGULATIONS

## Quick Links

Students are expected to familiarize themselves with and abide by the regulations, policies and procedures below.

- [The School of Graduate Studies Graduate Calendar \(2025-2026\)](#)
- [General Regulations on Supervision](#)
- [Dates and Deadlines](#)
- [Policies, Procedures and Guidelines](#)
- [Accommodations, Appeals and Petitions](#)
- [Student Appeal Procedures](#)
- [Student Code of Conduct](#)
- [Copyright Policy \(MILO\)](#)
- [Discrimination, Harassment and Sexual Harassment Prevention and Response Policy](#)
- [Research Integrity Policy](#)
- [Thesis Completion and Defence](#)
- [Collective Agreement for TA/RA in lieu of TA](#)

## Conduct Expectations

As a McMaster graduate student, you have the right to experience, and the responsibility to demonstrate, respectful and dignified interactions within all our living, learning and working communities. These expectations are described in the [Code of Student Rights and Responsibilities](#) (the “Code”). All students share the responsibility of maintaining a positive environment for the academic and personal growth of all McMaster community members, **whether in person or online**.

It is essential that students be mindful of their interactions online, as the Code remains in effect in virtual learning environments. The Code applies to any interactions that adversely affect, disrupt, or interfere with reasonable participation in University activities. Student disruptions or behaviours that interfere with university functions on online platforms (e.g. use of Avenue 2 Learn,

WebEx or Zoom for delivery), will be taken very seriously and will be investigated. Outcomes may include restriction or removal of the involved students' access to these platforms.

### **Responsibilities of Graduate Students to the University (Section 1.3 Of The Graduate Calendar)**

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:

1. Maintaining current contact information with the University, including address, phone numbers, and emergency contact information.
2. Using the University provided e-mail address or maintaining a valid forwarding e-mail address.
3. Regularly checking 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.
4. 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.
5. 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.
6. 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 and a decision on readmission is not subject to appeal.
7. Reviewing and complying with the University's [Code of Student Rights and Responsibilities](#)
8. Registering annually until graduation, withdrawal, or withdrawal in good standing due to time limit.
9. Paying fees as required.
10. If there is a problem with supervision, it is the student's responsibility to contact the Associate Chair (Graduate) with their concerns.

### **Extreme Circumstances**

The University reserves the right to change the [dates and deadlines](#) for any or all courses in extreme circumstances (e.g., severe weather, labour disruptions, etc.). Changes will be communicated through regular McMaster communication channels, such as McMaster Daily News, A2L and/or McMaster email.

# IMPORTANT UNIVERSITY AND FACULTY SERVICES

## Academic Accommodation for Religious, Indigenous or Spiritual Observances (RISO)

Students requiring academic accommodation based on religious, indigenous or spiritual observances should follow the procedures set out in the [RISO policy](#). Students should submit their request to their Graduate Administrative Assistant **normally within 10 working days** of the beginning of term in which they anticipate a need for accommodation, or to the Registrar's Office prior to their examinations. Students should also contact their instructors as soon as possible to make alternative arrangements for classes, assignments, and tests.

## Academic Accommodations of Students with Disabilities

Students with disabilities who require academic accommodation must contact [Student Accessibility Services \(SAS\)](#) at 905-525-9140 ext. 28652 or [sas@mcmaster.ca](mailto:sas@mcmaster.ca) to make arrangements with a Program Coordinator. For further information, consult McMaster University's [Academic Accommodation of Students with Disabilities](#) policy.

**Note:** Approved accommodations of previous undergraduate students at McMaster **do not** automatically apply during graduate studies. Students needing accommodations should return to SAS soon after commencement of their graduate program to implement or update your student status and to activate accommodations.

## Engineering Support Services (The Hub)

Services include managing keys and access cards, meeting rooms, and more.

JHE 216A

Ext. 27291

[thehub@mcmaster.ca](mailto:thehub@mcmaster.ca)

## Equity and Inclusion

The [Equity and Inclusion Office \(EIO\)](#) is a central resource where expertise is proactively drawn upon by administrators, faculty, staff, and students: to advance unit-specific and institutional equity, diversity, inclusion, and accessibility goals; to enact inclusive excellence principles; and to establish respectful living, learning, and working environments that are free from harassment and discrimination, and sexual violence including through timely and procedurally fair investigative and alternative dispute resolution processes.

## **Human Rights and Dispute Resolution (HRDR) Program**

HRDRP is one of four intake offices listed in McMaster's Policy on Discrimination and Harassment: Prevention and Response and the Sexual Violence Policy. It is responsible for facilitating the resolution of concerns and complaints and for investigating formal complaints related to issues of discrimination, harassment, and sexual violence support.

## **Education, Outreach and Support**

The Education, Outreach and Support (EOS) engages students, staff and faculty members through education including workshops and special events. The ESP team works closely with on and off campus partners to advance equity and accessibility and to challenge rape culture on campus. EOS also provides support to the President's Advisory Committee on Building an Inclusive Community (PACBIC), the Anti-Violence Network and the McMaster Accessibility Council.

## **International Student Services (ISS)**

At McMaster, international students have access to accredited experts on staff who offer extra guidance on academics, health, wellness, immigration, finances, housing, cultural and social matters.

More information can be found on the [International Student Services \(ISS\) website](#).

## **Mental Health**

### **Resources on Campus**

No issues are too big or small. Request support for depression, anxiety, grief, relationship problems, adjusting to life in a new country, addictions, mild substance abuse, educational conflict, disordered eating, and more.

There are many on-campus resources students can reach out to:

- [Student Wellness Centre: Mental Health Resources](#)
- [TalkSpot: A Mental Health Service Exclusively for Mac Eng Students](#)

**It is not recommended that students email about a crisis. In a crisis you can call one of the following:**

### **Good2Talk**

This is a free, confidential helpline providing professional counselling and information and referrals for mental health, addiction and well-being to post-secondary students in Ontario. Available 24/7/365.

Call 1-866-925-5454 or dial 211 and ask to be connected to Good2Talk.

### **Empower Me**

This is an accessible counselling service which includes crisis support, as well as mental health services. You can also speak to a life coach about things like personal performance, well-being and growth, career, relationships, and finances. Available 24/7/365.

Call 1-844-741-6389.

### Crisis Support

If you have immediate safety concerns for yourself or others, call campus security at 905-522-4135 if you are on campus or call 911 if you are off campus. More information is available on [Student Wellness Centre website](#).

### School of Graduate Studies (SGS)

The School of Graduate Studies website provides robust pages of information and resources including academic services, awards and funding, news, and events. Select the Accepted My Offer tab to help you get started at McMaster and the Current Students tab for important information and resources to help you on your graduate journey.

The School of Graduate Studies offices are located in Gilmour Hall, Room 212, or can be reached by phone at ext. 23679

Additional SGS resources can be found here:

- [SGS Main Page](#)
- [Graduate Studies Forms and Policies for Graduate Students](#)

### Security

#### Emergency

In case of emergency, dial 88 from any campus phone. The McMaster Security office is located in the E. T. Clarke Centre, room 201, and can be contacted at ext. 24281. This office is responsible for overall security on campus. In addition, they operate a Lost and Found service (ext. 23366). Any lost items will be held for 30 days.

#### Emergency First Response Team (EFRT)

In cases of serious injury or accidents, McMaster University's Emergency First Response Team (EFRT) can provide advanced emergency first aid. The EFRT team is staffed by trained, certified student volunteers. The team responds to incidents across campus. To access EFRT assistance, dial 88 and Security Services will dispatch EFRT to your location.

#### Escort Service (SWHAT)

During the months of September through April, students operate an escort service, "Students Walk Home Attendant Team" (SWHAT). After dark, if you call (905)525-9140 ext. 27500, you can arrange to be escorted to your car or residence by a male and a female student. During the months, May to August, the Campus Security will look after escorting you to your car or residence. The extension remains the same x27500.

#### McMaster Safety App

Download the McMaster Safety App for safety alerts, such as campus closures and emergency instructions. The app is available for free download on the Apple and Android app store. For more information, click [here](#).

### **McMaster Security Office**

McMaster Security Officers act under the authority of the Ontario Police Act to enforce federal and provincial regulations. They are here to protect, not to harass you. Students who violate these statutes and bylaws are subject to arrest, prosecution and/or disciplinary action under McMaster's Student Code of Conduct. The Security Office can be reached at ext. 24281.

### **University Technology Services (UTS)**

UTS is McMaster's central IT department, providing IT services and support to students, faculty, and staff. Services include help with emails, passwords, Office 365, and more.

[University Technology Services](#) can be reached on ext. 24357, or via live chat or by submitting a service ticket [here](#).

# HEALTH AND SAFETY

## Core Health and Safety Courses

All students must successfully complete *and abide by* the following core health and safety courses:

- SAFE training (*replacing Slips, Trips and Falls, Asbestos Awareness, Fire Safety, Ergonomics*)
- Health and Safety Orientation
- Violence and Harassment Prevention
- WHMIS 2015

## Job Hazard Analysis (JHA) Forms

All students must complete a Job Hazard Analysis with your supervisor and read and follow the appropriate Standard Operating Procedures (SOPs).

**Note:** In the context of safety, all graduate students are considered “workers”.

## McMaster University Laboratory Manual

This manual is intended to provide basic rules for safe work practices in a laboratory. The procedures may be supplemented with Standard Operating Procedures (SOP) where applicable and with information on roles, responsibilities and specific procedures outlined in the university's Risk Management Manual (RMM). This is mandatory reading for all employees, graduate students and volunteers working in laboratories. This manual applies to all campus labs. The manual is available on the human resources website.

## Eye Safety Regulations

All people entering an active laboratory must wear eye protection. The specific type of protection will be determined by the actual hazards present. Graduate students should discuss this with their Faculty Supervisor.

## Fire Safety Procedure

In the case of fire, or the sounding of an alarm, “Get Out and Stay Out”. Evacuate the building by the closest exit. You should be at least 50 feet away from the building and not return until the “All Clear” is given by the Fire Warden. Please become familiar with the closest fire exit to your lab, office and classrooms.

## Chemical Waste Disposal

- Hazardous chemical waste will be picked up from your laboratory every Tuesday
- You must wait for the waste management company to arrive at your laboratory for the pickup.

- By Friday 9:00 AM prior to the pick-up on Tuesday, you are required to provide EOHSS with a copy of the chemical waste disposal record by e-mail at [waste@mcmaster.ca](mailto:waste@mcmaster.ca).
- All waste must be identified and properly labeled. Unlabeled waste will not be accepted.
- Do not pour hazardous chemicals down the drains, including any organic solvent or acids/bases that have not been fully neutralized.
- Sharps, broken glass and pipette tips are disposed of as hazardous or biohazardous waste.
- Do not throw hazardous chemical waste into the garbage bins.

Full guidelines are available [here](#).

### IT Security

With an increase in online work, there is an increase in cyber threats. Email phishing and malware attacks are on the rise. [Click here](#) to learn more about email phishing, anti-virus software and tips for creating a strong password. Consider taking the UTS Phishing Course on Avenue to Learn.

### Reporting of a Safety Incident

Any incident, which could have resulted in injury, must be reported to the Department immediately, through your Faculty Supervisor. The University is required, by law, to report such incidents to the Workplace Safety and Insurance Board (WSIB).

The online [Injury/Incident Report](#) is available on the [Human Resources website](#), under “Quick Links”.

## OTHER ACADEMIC POLICIES

### Copyright and Recording

Students are advised that lectures, demonstrations, performances, and any other course material provided by an instructor include copyright protected works. The Copyright Act and copyright law protect every original literary, dramatic, musical and artistic work, **including lectures** by university instructors.

The recording of lectures, tutorials, or other methods of instruction may occur during a course. Recording may be done by either the instructor for the purpose of authorized distribution, or by a student for the purpose of personal study. Students should be aware that their voice and/or image may be recorded by others during the class. Please speak with the instructor if this is a concern for you.

### Generative Artificial Intelligence (AI)

#### **Guidelines for the Use of Generative AI in Teaching and Learning**

Please refer to the [MacPherson Institute Guidelines](#) regarding the use of generative AI (e.g. OpenAI's ChatGPT) in teaching and learning. These guidelines were developed by the Task Force on Generative AI in Teaching and Learning and will continue to be updated as the Task Force explores additional topics and as technology rapidly changes.

#### **Provisional Guidelines for the Use of Generative AI in Research**

While generative AI offers promising new avenues for enhancing pedagogical approaches and advancing research, we approach its integration with thought and consideration. As we explore its applications, we continue to prioritize the informed engagement of our community. We invite our students, faculty, alumni, and partners to join us in this exploration, ensuring that our approach to AI remains rooted in our collective values and the broader interests of our community.

The guidelines can be reviewed [here](#). All graduate students are expected to engage in discussions with their supervisors around GenAI and confirm if or how GenAI may be used in their research or milestones. It is the student's responsibility to seek clarification from the Associate Chair (Graduate).

### Intellectual Property and Student Ownership

More than roughly 80% of the research carried out in the Faculty of Engineering is done with industry. The university signs intellectual property and ownership agreements with a company and hence the terms of these agreements apply to all members of McMaster, not just the project supervisor. Students are encouraged to talk to their supervisors about the terms covering their research project to understand how their contributions will be weighted in the intellectual property generated and whether any review of theses and papers is required by the industrial sponsor before public disclosure. Student should review the IP Policy [here](#).

### **Plagiarism-Checking Software (iThenticate)**

Effective December 1, 2023 the university requires all Master's and Doctoral theses to be reviewed by iThenticate, a plagiarism-checking software, before being seen by an external reviewer (Doctoral) or the finished copy submitted (Master's). This requirement can be found in the University's [Research Plagiarism Checking Policy](#), which can be found on the Secretariat website. This requirement is not meant to catch plagiarism but rather to prevent it. By helping students detect sections of text requiring revision before the document is released to the public, the use of this tool can avoid otherwise serious allegations.

Student and supervisor will work together to revise any sections of the thesis that may be overlapping with previously published content that the student does not have permission to copy; sandwich theses are expected to have a substantial amount of already published content, but in this case the student should have sought, and been granted, permission to use it in their document. The student's supervisor is responsible for confirming the thesis is ready to submit.

# GRADUATE PROGRAM REGULATIONS – ENROLLMENT

## Matters With Regard to Enrollment ([Section 2.5 Of The Graduate Calendar](#))

### **1. Full-Time Student**

A full-time student is one who is studying on a full-time basis; treating studies like a full-time job; attending to coursework and research in a professional manner; being in consultation with and available to their supervisor at regular intervals (daily and/or weekly by mutual agreement) to monitor progress.

### **2. Part-Time Student**

A part-time student is one who usually has a full-time job outside the university, but wants to work towards his or her graduate degree on a part-time basis. A part-time student is limited to 3 graduate courses (9 units) per academic session (Sept 1 – Aug 31) and will usually take more time to complete the degree [M.A.Sc. program: up to 15 terms from the original date of registration if student began as “part-time”; Ph.D. program: up to 24 terms from the original date of registration if student began as “part-time”]. Part-time students are not eligible for financial support from the department; nor teaching assistantships; nor scholarship equivalent.

### **3. Status Changes (FT to PT; PT to FT; Withdrawal; Re-admission to Defend; Program Transfers, Leaves of Absence and Parenting Leave; Full-time Off-Campus)**

Students who wish to change their status (full-time to part-time; part-time to full-time; transferring from M.A.Sc. to Ph.D.; withdrawal from the program; going on [leave of absence, studying full-time off-campus](#)), and former students who wish to be readmitted to the program, are expected to complete paperwork within a timeframe that permits their change to be effective on the first day of the next term (September 1st, January 1st or May 1st). Paperwork should be submitted to SGS at least one month in advance of an expected transition. Please see the Graduate Administrative Assistant well in advance to ensure that all paperwork is completed in a timely manner.

## Engineering Co-op Program

The Engineering Co-Op Program for graduate students is an optional program for full-time domestic and international M.A.Sc., M.Eng., and Ph.D. students in good academic standing, that allows students to gain engineering work experience prior to graduation. Students have the option to complete 4 to 12 months of co-op experience. It is administered by the Career Development and Relationship Manager - Graduate Studies.

### **Centre for Career Growth and Experience Contact Information**

Gerald Hatch Experiential Centre, Room JHE H301, ext. 22571

Email: [gradcoop@mcmaster.ca](mailto:gradcoop@mcmaster.ca)

More information is available on the [Co-op for Graduate Students website](#).

## Student Responsibilities

Students who are interested in the Co-op Program must follow the following steps:

### 1. *Enrol in the Co-Op Program*

SCHOOL OF ENGINEERING AND APPLIED SCIENCES (SEAS) STUDENTS:

- a. Complete the [Graduate Supervisor Permission Form](#). The student's academic supervisor must indicate on the form which academic term(s) the student is approved to work.
- b. Submit the signed graduate supervisor permission form to [gradcoop@mcmaster.ca](mailto:gradcoop@mcmaster.ca).
- c. Enrol in ENGINEER 701 – C01 Work Term Preparation (Lecture) course via Mosaic.
- d. Complete the ENGINEER 701 co-op registration process (link available [online](#)).
- e. Complete the ENGINEER 701 – C01 Work Term Preparation (Lecture) course.

SCHOOL OF ENGINEERING PRACTICE AND TECHNOLOGY (SEPT) STUDENTS:

- a. Enrol in ENGINEER 701 – C01 Work Term Preparation (Lecture) course via Mosaic.
- b. Complete the ENGINEER 701 co-op registration process (link available [online](#)).
- c. Complete the ENGINEER 701 – C01 Work Term Preparation (Lecture) course.

### 2. *Engage in Job Search*

Students will engage in co-op job search 4-6 months in advance of the term that has been approved for work. Students can work a maximum of 12 months. If they do not secure a job during their approved work term(s), they may submit an amended permission form to access jobs posted for future work terms

### 3. *Register Your Co-Op and Drop Courses*

- a. [Register the co-op](#) by completing and submitting the co-op confirmation form, and if applicable, the RMM-801 form (for co-ops taking place outside Canada) to [thecentre@mcmaster.ca](mailto:thecentre@mcmaster.ca).
- b. Contact their Graduate Administrative Assistant (after receiving confirmation from the Centre that co-op is approved) to specify the course(s) they want to drop from their MOSAIC record while on work term.

# FINANCIAL MATTERS

## Quick Links

- [Payroll Information](#)
- [Payment Schedules](#)
- [Pay Statement Guide](#)
- [Tuition Fees](#)
- [Refunds](#)
- [Scholarships Database](#)
- [Graduate Students Association \(GSA\) Health and Dental Insurance Plan](#)
- [University Health Insurance Plan \(UHIP\) for International Students](#)
- [OSAP/Government Aid](#)
- [Social Insurance Number \(SIN\)](#)

## Cost of Living and Tuition Fees

Topics, such as cost of living and tuition fees, can be found on [The School of Graduate Studies' website under "Cost of Living"](#) or on [The Registrar's website under "Graduate Fees": Tuition and Supplementary Fees.](#)

## Grad Pay

Most full-time graduate students admitted to the thesis-based M.A.Sc. and Ph.D. programs in McMaster Engineering will receive financial support in the form of a teaching assistantship and a departmental scholarship. The minimum level of support varies from year to year.

Research scholarships and departmental scholarships are paid as one lump sum two or three weeks into the start of a new term; TA income is paid biweekly during the term(s) in which you are a TA.

**In order to receive research scholarships and TA income**, you will need to ensure that you are properly set up on the Student Centre module (under Graduate Studies' Banking webpage, click "If you are receiving a Research Scholarship, TA, and/or RA in Lieu of TA" to see instructions on how to [enrol in direct deposit](#))

In addition to the above, **to receive TA income**, ensure that you are properly set up on the Human Resources module (students must [submit their payroll information](#) via the online Employee Self-Service portal in Mosaic).

**If you do not see the Enrol in Direct Deposit (Student) tile on your Mosaic Homepage,** please log into University Technology Services' (UTS) [Client Services Portal](#) (again, using your MacID and password) and select:

1. "General Requests"; then
2. "Report a Problem".
3. Detail your issue in the blank field, then click "Create". Please monitor the portal for confirmation that the tile has been added to your Mosaic Homepage. Detail your issue in the blank field, then click "Create". Please monitor the portal for confirmation that the tile has been added to your Mosaic Homepage.

**\*IMPORTANT:** If you complete any of the previous steps improperly and/or are not fully enrolled in the Fall 2025, Winter 2026 and Spring/Summer 2026 terms by August 1, 2025, your payments will be delayed until a correction is made.

### Pregnancy/Parental Leaves

To address a gap in funding provided to MSc students during pregnancy and parental leave, the Faculty of Engineering invites eligible applicants to apply for support.

**Eligibility:** A parental leave fund of up to \$4,000 will be provided to eligible MSc students in the Faculty of Engineering who take an approved parental leave for one term or more, provided that:

1. The student is currently enrolled in a full-time MSc program in the Faculty of Engineering and is in receipt of McMaster Graduate Scholarship Funds;
2. The student has been enrolled in their current MSc program for a minimum of one term;
3. The applicant is in good standing at the time that this leave of absence is requested;
4. This leave of absence has been approved by the Department's Associate Chair (Graduate);
5. The student is ineligible for funding from either CUPE or NSERC/CIHR (whether that be directly through a graduate scholarship, or via a supervisor's grant);
6. The student has applied for funding from all other sources for which they are eligible;
7. The application below is completed and submitted to the Graduate Studies Administrator four weeks before the leave;
8. The student provides a medical note for their pregnancy or that of their partner from a licenced Canadian healthcare provider (i.e., the physician, midwife or nurse practitioner that is providing pregnancy care) or an adoption certificate issued from the Canadian government;
9. The student is the primary caregiver for the duration of the Parenting Leave

*Important:*

- This funding may be accessed by a student one time only

- Students receiving Tri-Agency scholarships are ineligible for this funding as they are eligible for Tri-Agency Paid Parenting Leave supplements
- Students who continue to receive research funding from their supervisor are ineligible for this funding
- Fund recipients who return to their program prior to the approved leave of absence end date may be required to return a portion of the funding
- Students who do not return to their studies after their leave must repay the amount received in full
- Multiple births on the same occasion (e.g., twins) do not increase funding duration or value
- If the student wishes to take a leave of less than one term, then the amount for which they are eligible is pro-rated to \$1,000/month
- The application should be initiated by the student, who will be responsible for obtaining the approval of their supervisor and Associate Chair (Graduate), before submitting it to the Graduate Studies Administrator at [salehl5@mcmaster.ca](mailto:salehl5@mcmaster.ca) for approval by the Associate Dean Graduate Studies

**Note:** PhD students should refer to the equivalent supports provided by the School of Graduate Studies [Parenting Grant](#).

### **Scholarships, Fellowships, Bursaries and Other Awards**

Graduate students are encouraged to apply for any scholarships for which they are eligible. A list of scholarships available can be found on the [Graduate Studies Scholarships page](#) and the [Engineering Funding & Awards page](#).

Keep an eye on your email; many of these opportunities will be advertised through that medium. Awards such as NSERC Canada Research Graduate Scholarships are announced in the Fall term, as well as most donor-funded awards. Ontario Graduate Scholarship (OGS) applications are announced in the Winter term. Department-specific awards are often announced between the Winter and Spring terms.

If a graduate student holds a major award (such as NSERC, CGS-M, CGS-D, PGS-D, OGS, QEII GSST, Vanier, etc.), the total stipend provided by the program may be reduced by up to \$2,500 per term for each term in which the student holds the award. Any scholarship greater than \$10,000 is considered a major scholarship.

### **Teaching Assistantships**

#### **First Time Teaching Assistants (TA)**

All first time TAs at McMaster are required to complete five hours of paid mandatory TA training which will include instruction on topics in pedagogy and anti-oppression. This mandatory training is a one-time requirement separate from, and in addition to, other training that you may be expected to complete as part of your employment (which may include general orientations,

institution-wide mandatory health and safety training, and assignment-specific health and safety training required by your Employment Supervisor).

Self-registration for training courses is available through the Regulatory Training Tile on the [Mosaic](#) homepage. Once registered, carefully follow the directions under on the welcome page on [Avenue to Learn](#). More detailed instructions will be emailed to students before the beginning of each semester.

#### *Important notes:*

1. Training should be completed within two weeks of your assignment.
2. A short quiz follows each module on Avenue to Learn, and a score of 100% is required on each quiz. These quizzes can be taken repeatedly until the required score is reached. *These quizzes trigger the payment process - if the quizzes are not successfully completed (i.e. 100%), you risk not being paid for these five hours.*
3. This training is a one-time requirement for the first time that you TA at McMaster. You will not be paid for more than 5 hours of training, even if you TA for multiple faculties.

For more information, please refer to the links below:

1. [Mandatory TA/RA in Lieu Training \(Anti-Oppression and Pedagogy\)](#)
2. [MacPherson Institute New TA Programming](#)

#### **Returning Teaching Assistants**

If for any reason, a returning TA has not taken the five-hours of mandatory training (due to being away on a leave of absence or co-op placement), the TA will be required to complete this training and will be compensated accordingly.

#### **Resources and Useful Information for Teaching Assistants**

Before commencing your Teaching Assistantship duties, you must complete all TA training and complete the following forms in consultation with the course instructor and submit the completed forms to the Graduate Administrative Assistant.

1. [TA Hours of Work Form](#)
2. [TA Performance Expectations Form](#)

A useful guide is provided [here](#).

#### **Travel and Expense Claims**

If you require a reimbursement for travel or other expenses, you may submit Travel and Expense claims through the Mosaic system by logging in with your Mac ID. To get to the Travel and Expense module use the following path: *Mosaic Home > Employee Self Service > Travel and Expenses*

Please note that these claims will require a valid chartfield string and approval from your supervisor.

## University Health Insurance Plan (UHIP)

UHIP is a mandatory, comprehensive health insurance plan that provides health coverage for international and incoming exchange students. UHIP covers medically necessary doctors and hospital visits within Ontario for international students, incoming exchange students and dependants (spouse and children).

For more information, click [here](#).

### **Coverage**

Through UHIP, your necessary medical costs are covered for the entire academic year, from September 1 to August 31 with a few exceptions for incoming exchange students and other students with plans to study at McMaster for fewer than 12 months.

Your UHIP coverage begins on the tenth day of the month before your academic term start date or your scheduled arrival date in Canada, whichever is later. If you plan to arrive in Canada before your UHIP coverage begins, the department recommends that you purchase additional medical insurance. This way, you'll be covered if you need to access health care before your UHIP coverage starts.

### **Enrolment of UHIP**

If you're an international student, you're automatically enrolled in UHIP every year. However, it's your responsibility to ensure your coverage is correct. Check your account on your *Mosaic Student Center > Finances > Other Financial > View/Maintain UHIP*.

### **UHIP Card**

In late August/early September, your UHIP provider, Sun Life Financial, will send an email to your McMaster email account with your UHIP card attached. To make sure you receive your UHIP card, please make sure you've activated your McMaster email account.

When you receive your UHIP card, print a copy, and always carry it with you. This way, you'll have it easily accessible in case you need to seek medical care.

If you have dependents living in Ontario with you, please contact the university's international student services (ISS) at [uhip@mcmaster.ca](mailto:uhip@mcmaster.ca) for further information on how to register your dependents for UHIP. **Dependents must enrol in UHIP within 30 days of arrival in Canada.** More information is available on the [university's international student services \(ISS\) website](#).

# STUDENT LIFE

## Quick Links

- [Information for Incoming Graduate Students](#)
- [Housing and Student Life](#)
- [Graduate Student Orientation Hub](#)
- [Advice From Current Graduate Students](#)
- [Athletics and Recreation](#)

## McMaster Engineering Graduate Society (EGS)

The EGS is a student run organization dedicated to supporting engineering graduate students in any way possible, including hosting fun events, running professional development workshops, and providing travel bursaries. The EGS has three major mandates:

- To represent the interests of Engineering Graduate Students to the Faculty and other organizations, making sure your voice is heard.
- To help create an open and welcoming community of Engineering Graduate Students
- To advance Academic and Professional Development at McMaster Engineering.

More information is available on the [Engineering Graduate Society website](#).

## Graduate Students Association (GSA)

The Graduate Student Association (GSA) advocates for the needs of the collective, acts as a resource, and provides support and services that improve the graduate student experience. Some of the service available include Health and Dental, HSR Bus Pass, and Empower Me. The GSA also hosts a number of events, clubs and recreational activities throughout the year. Visit the Graduate Student Association page for more details.

## **Studentcare Health Plan/Dental Plan**

Initiated by your student association, the Studentcare Health Plan provides students with unique health benefits. The Plan was designed by students for students to provide many important services and cover expenses not covered by a basic health-care plan (i.e. OHIP), or the equivalent (e.g. UHIP for international students) such as prescription drugs, health practitioners, medical equipment, travel health coverage, and more. A comprehensive dental plan was added to cover those graduate students who were not covered by the CUPE 3906 plan (except for Divinity students).

Please note all GSA members are automatically enrolled in the Studentcare dental plan and are assessed the fees as part of their supplementary fees paid in September. Students who have a TA, or an RA in lieu, will be covered by the CUPE 3906 dental plan are automatically opted out of the Studentcare dental plan and will receive a reimbursement cheque.

Graduate students who are covered by an alternative health and/or dental plan can upload proof of coverage using the [Studentcare's secure website](#).

Please remember that you need to pay the Studentcare plan fees on your student account. As mentioned above, once you are opted out, you will receive your reimbursement cheque directly from Studentcare. More information, including opt out dates, is available on the [Graduate Student Association website](#).

# MISCELLANEOUS INFORMATION AND RESOURCES

## Quick Links

- [Campus Map](#)
- [Accessibility Floor Plans](#)
- [Parking and Transit Services](#)
- [OMBUDS Office](#)
- [Supervisory Relationships](#)

## Letter/Verification Requests

Please refer to the list below for instructions on requesting various letters and verifications:

- [Degree verification](#)
- [Enrolment verification](#)
- [Proof of graduation](#)
- [Study permit /Extension of study permit](#)
- [Transcript request](#)

## MacQuest

MacQuest provides on-campus searchable navigation, including indoor floor map visualization and other campus-related services. Users can use the app to navigate from class to class; it also lists last, next, and following bus arrival times near campus by bus stop and route number. It also allows users to look for nearby bathrooms, stairs and elevators.

The app is available for free download on the Apple and Android app store. For more information, click [here](#).

## Professional Development

### **Build Professional and Technical Skills**

Discover the Technical Communications for Graduate Students module on Avenue2Learn: The Art and Science of Persuasion, Audience Analysis, Writing for Publications, Proposing and Reporting a Project, Presentations and Visualizing Data, How to Give an Oral Presentation. All essential skills for success in today's competitive market.

After logging in, click on the 'Discover' link, and search for 'Technical Communications for Graduate Students' to find the course.

A screenshot of the Avenue to Learn dashboard. At the top, there is a navigation bar with links for Badges, Locker, Blog, Quick Eval, eSupport, Discover (which is circled in red), and ePortfolio. Below the navigation bar is a main content area with sections for Announcements and Work To Do.

### Thesis Writing and English Language Skills Development

If you are having difficulty with the English language and thesis writing, there are several on campus resources available to help you. The following are particularly useful:

McMaster Office for the Development of English Language Learners (MODEL). This is a FREE service designed to help students with the English language. They offer training, workshops and support to meet student needs of all academic backgrounds and English language proficiency. You can get more information at [MODEL | MELD Office](#).

The School of Graduate Studies also offers help with Thesis writing. Often, the Thesis writing can be the stumbling block for students to graduate on-time. Using their resources at the start of one's graduate study can significantly help with the writing process. Please check out their resources at [Graduate Writing – School of Graduate Studies](#).

The [Student Success Centre](#) also has resources to support student development and careers.

# FACULTY OF ENGINEERING REQUIREMENTS

## All Degrees

In order to receive a degree, students 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.

## **Upon Arrival**

Please refer to the arrival plan communicated by your Graduate Administrative Assistant prior to your arrival. Arrival processes will differ depending on term start. For helpful information on your journey to McMaster as an incoming student, please visit [McMaster Engineering Incoming Student Page](#). For information on your McMaster ID card, please visit [MacCard](#).

## **Condition Clearing**

Conditions must be cleared by the date indicated on your offer letter. This does not restrict your current enrolment. However, failure to clear conditions by the deadline may result in your offer being rescinded. Please follow the instructions as indicated by the Graduate Administrative Assistant and the School of Graduate Studies regarding condition clearing. More information can be found on the [Conditions of Admissions page](#).

## **Student Authorizations (International Students Only)**

International students admitted to graduate studies degree programs must have a valid study permit issued by Immigration, Refugees and Citizenship Canada (IRCC), provided that their program of study is longer than six months. A copy of the study permit must be submitted to their department upon arrival at the university. Incoming graduate students should email their Graduate Administrative Assistant a copy of their Port of Entry (POE) letter or Letter of Introduction (LOI) as soon as possible. Students will not be allowed to enrol without it.

Student permit extensions take some time to process, so please plan accordingly. Last-minute requests do not constitute urgency. Canadian Social Insurance Numbers (SIN), study permits and passports have expiry dates. The responsibility for maintaining up-to-date documentation lies with you – the graduate student.

**Note:** Department staff cannot provide information about Visa or immigration. Students should contact the Immigration and Mobility Advisor via the [university's international student services \(ISS\) website](#).

## **SGS 101 / SGS 201**

Graduate students are required to complete the following two (2) online courses:

- SGS 101 – Academic Research Integrity and Ethics
- SGS 201 – Accessibility for Ontarians with Disabilities Act – AODA Training

Students are required to take [these online courses in Mosaic](#) only once during their graduate career at McMaster University. All students must pass and abide by these online SGS courses. Each course takes approximately one hour to complete and consists of watching an online presentation followed by a test. Anyone who has not completed either of the following courses by the deadline provided by SGS will be automatically assigned an F grade.

Check your Mosaic Student Centre to ensure that you are registered in these courses. If they do not appear in your course schedule or in Avenue to Learn, please contact the School of Graduate Studies at [sgsrec@mcmaster.ca](mailto:sgsrec@mcmaster.ca).

### **SGS 700 / SGS 711**

Graduate students are required to enrol in the [placeholder course, SGS 700 or SGS 711](#), if they are not taking another course in that term (SGS 700 for programs charged per term; SGS 711 for programs charged per course). If you do not add a course in each term, you may have impacts on aspects of your student life, including scholarships, fee assessment and ordering transcripts.

### **Career Planning Reports**

Incoming graduate students to the Faculty of Engineering are required to complete a [career planning report](#) **within their first year of study**. Students must first book a career planning session with the faculty's career development specialist before submitting a career planning report. The report should not exceed 2 pages and must be submitted to their Graduate Administrative Assistant to be evaluated by the Associate Chair (Graduate).

**Note:** Industrial PhD students and students registered in the School of Engineering Practice and Technology are exempt from this requirement.

### **Additional Information**

#### ***Academic Advisement Reports***

Mosaic offers graduate students the Academic Advisement report tool as a method of tracking your progress towards graduation via completion of your curriculum requirements. A guide on how to use it can be found [here](#).

#### ***Failing a Course or Milestone***

The minimum passing grade in a graduate course is a B- (70-72%). Failure in either a course or a milestone is reviewed by the appropriate Faculty Committee on Graduate Admissions and Study or the Associate Dean Graduate Studies in the Faculty, and may result in withdrawal from the program. Those allowed to remain in the program must either repeat or replace the failed course or milestone, per the decision of the Faculty Committee on Graduate Admissions and Study. Further details can be found in [Section 2.6.11 of the Graduate Calendar](#).

#### ***Regulations for Degree Progression***

It is the student's responsibility to follow the academic calendar's degree progression in order to successfully obtain their degree. Further details can be found in [Section 3 of the Graduate Calendar](#).

## **Master of Applied Science (M.A.Sc.)**

Supervision of M.A.Sc. students is governed by the School of Graduate Studies regulations as outlined in [Section 3.1 of the Graduate Calendar](#).

### **M.A.Sc. Supervisory Committee Meeting**

The supervisor shall meet with the student between 9 months to 12 months of commencement of the program for a formal review of progress. The student will complete the M.A.Sc. supervisory committee report form and submit to the supervisor at least one week in advance of the meeting. The supervisor will complete the form and submit it to the Department Graduate Administrative Assistant at the end of the progress review meeting.

#### ***Student Responsibility***

1. Set up the meeting with supervisor within 12 months of starting.
2. Complete the student sections of the M.A.Sc. supervisory committee report form. (Details of progress towards meeting degree requirements since beginning of program).
3. Submit the form with a critical literature review of your research area to your supervisor at least one week before the meeting.

#### ***Supervisor Responsibility***

1. Complete Part A: Progress made towards meeting degree requirements.
2. Complete Part B: Specific goals for next number of months.
3. Complete Part C: Areas for improvement.
4. Provide an overall assessment.
5. Review the form with student, sign and submit to the Graduate Administrative Assistant.

### **M.A.Sc. Thesis Defence**

#### ***Examination Committee***

Each M.A.Sc. student must successfully defend their thesis in an oral examination before a committee proposed by the supervisor and approved by the Department Chair or their delegate. A member of the committee, other than the supervisor, will be appointed to chair the committee. The committee shall be composed of 3 (three) members, including the supervisor. In the case of co-supervision, the committee will consist of 4 (four) members including the supervisors.

#### ***Plagiarism Check***

Thesis candidates are required to use plagiarism-checking software, iThenticate, before submitting. Students must speak with their supervisor for directions on how to submit their thesis through the plagiarism-checking software. The supervisor must sign off on the originality report of the student's thesis after they scan their theses for originality using iThenticate.

#### ***Procedure***

The thesis defence starts with the candidate's presentation of the main elements of the thesis, including the relevance of their work, approach, samples of the most important findings, and

contributions. The presentation should not exceed 20 minutes. This is followed by one round of questions and another round of follow-up questions, as appropriate. The duration of the Master's defence (including the candidate's presentation) is expected to vary from 1½ to 1¾ hours, but it normally should not exceed 2 hrs. If the examining committee is not satisfied with the candidate's performance in the thesis defence, the candidate must retake the defence after completing any thesis revisions which may be recommended by the examining committee. The student must be informed in writing of the conditions they must meet to be able to succeed in the second and final defence.

Regulations/guidelines for thesis writing, submittal and defence can be found [here](#).

Please refer to the department section of the handbook for program specific details of procedure and timelines.

### **Transferring from M.A.Sc. to Ph.D. Without Completing M.A.Sc. Degree**

Students currently enrolled in the M.A.Sc. program may be transferred to the Ph.D. program before they complete their M.A.Sc. degree requirements. Regulations governing this scenario can be found in [Section 2.1.4 of the Graduate Calendar](#).

M.A.Sc. students transferring to Ph.D. will need to have:

1. completed a minimum of TWO terms of study in the M.A.Sc. program;
2. completed a minimum of TWO half courses at the 700 level with a minimum average of A- (McMaster 10/12);
3. completed their M.A.Sc. supervisory meeting and received a rating of EXCELLENT on their report;
4. garnered a strong letter of support from their supervisor.

If a student would like to transfer to Ph.D., their supervisor will have to inform the Graduate Administrative Assistant via email with their letter of support attached.

### **Transferring from M.A.Sc. to Ph.D. While Completing M.A.Sc. Degree**

If a student is granted permission to enter the Ph.D. program while concurrently completing the M.A.Sc. program, the School of Graduate Studies requires the student to complete all requirements for the M.A.Sc. program (including defence and submission of thesis for binding) within four (4) months of the date of entry into the Ph.D. program. Students who do not complete the requirements for the Master's degree within the four months will lose their status as a Ph.D. student and be returned to Master's status.

### **Accelerated M.A.Sc. Option**

Refer to the department section of the handbook for details if an accelerated M.A.Sc. option is available.

## **Doctor of Philosophy (Ph.D.)**

Supervision of Ph.D. students is governed by the School of Graduate Studies regulations as outlined in [Section 3.1 of the Graduate Calendar](#).

### **Ph.D. Supervisory Committee**

As soon as possible, and no later than nine (9) months after commencing doctoral studies, a supervisory committee for the student shall be approved by the Department Chair or their delegate, on the recommendation of the supervisor and in consultation with the student.

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 Vice-Provost & Dean of Graduate Studies.

### **Ph.D. Supervisory Committee Meeting**

The Ph.D. student's supervisory committee shall meet with the student a minimum of once a year before November 30th. **Committee meetings should be planned and scheduled with this deadline in mind.** Additional and/or subsequent meetings shall be held to monitor progress towards the comprehensive exam as well as the completion of the thesis, as needed. At each meeting, the student shall prepare a 5-to-10-page progress report to be given to the committee members at least one week in advance of the meeting. At each meeting, the student shall give a short 20 – 25 minutes presentation of their research progress, entertaining questions from committee members. Please make sure that you confirm details and expectations with your supervisor in advance.

### ***Supervisory Committee Report Deadlines***

The deadline for completion of the supervisory committee report for students who have been in the program for one semester or more is November 30, 2025 or within ONE year of starting the PhD program, whichever comes **FIRST**.

Student start date of January or May 2025: Deadline is November 30, 2025

Student start date of September 2025: Deadline is November 30, 2026

Student start date of January or May 2026: Deadline is November 30, 2026

For Biomedical Engineering internal meeting timelines, please refer to the program-specific deadlines.

### **Ph.D. Supervisory Committee Meeting Procedures**

Students must talk to the Graduate Administrative Assistant to initiate the report. Students will receive this message via email:

---

Dear Student Name,

All PhD students must meet at least once a year with their supervisor and committee. Our records indicate that you should have a meeting this year. Please work with your supervisor, and/or graduate office to arrange a meeting date and time. Once a date has been fixed, please click on the link below to initiate the report to be submitted by you to your committee and supervisor, prior to the meeting.

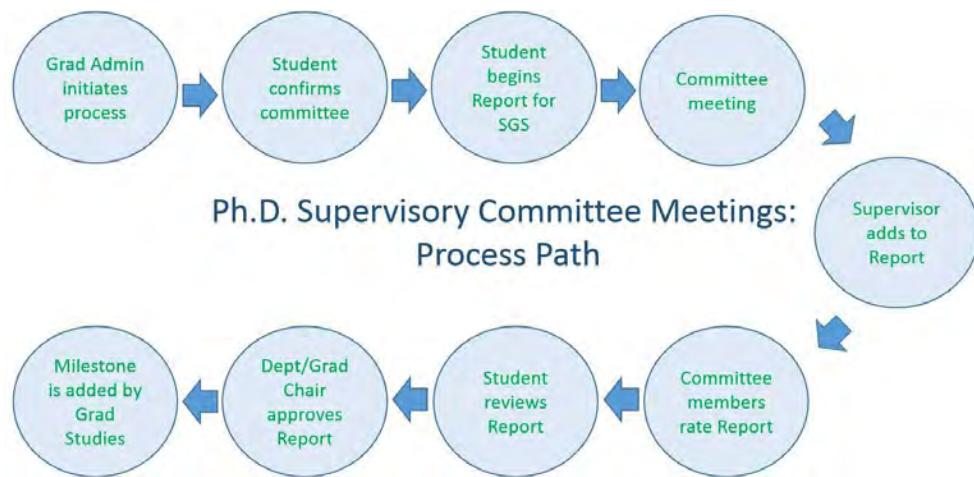
**[Link to student's report]**

Student Records  
School of Graduate Studies

---

Follow the instructions at the link in the email to complete your Annual Supervisory Committee Report. (Images from the online report appear on the next page.)

Please refer to the department section of the handbook for program specific details of procedure and timelines.



### Ph.D. Supervisory Committee Meeting Online Report

The link will bring the student to the following screen:

### Supervisory Committee Report

Please make sure all the information listed below is correct. If you find anything incorrect, please contact your department graduate secretary PRIOR to the submission of your supervisory committee report.

Family Name	First Name	Title	Email
Malte-ried	Maureen	Supervisor	malte@mcmaster.ca
Ashkar-danesh	Noori	Member	daneshn@mcmaster.ca
Hickey	Colleen	Member	hickey@mcmaster.ca

Continue

If the committee is correct, select Continue.

If the committee is incorrect, close the page and contact the Graduate Administrative Assistant.

### Student Begins Report

Once the student confirms their committee, they'll be shown a screen where they will begin to enter information about their new meeting.

They'll also be asked to report on their progress since their last report (or since they started their research if this is the first report).

The student will click Submit, and the primary supervisor will receive an email.

Supervisory Committee Report

Select a Date to view report or New Meeting to start a new report

Please enter the meeting date

The date you began this degree studies at McMaster

Please indicate if you are a continuing student

With some qualifications, the Calendar (Section 2.7.2) states that supervisors should respond to a student's PhD status within two months. Providing comments on individual chapters will take place proportionately less time.

Have you submitted draft research this year?  Yes  No

Details of progress made since the last report

### Supervisor Adds to Report

After the student clicks Submit, the primary supervisor will receive an email inviting them to see what their student submitted.

The supervisor will complete their portion of the report and select the members who will be signing off on the report. An email with a link will be sent to each selected member of the committee.

**Supervisory Committee Report**

Meeting Date: 2017-06-19

The Office of Graduate Studies Calendar states that the Comprehensive Examination for full-time students usually takes place between 12 and 18 months after admission to the program. The student has completed 24 months.

Is Comprehensive Examination complete?  Yes  No

Please justify an expected date of completion that exceeds 20 months in the comments section.

The Comprehensive Examination was completed on  YYYY-MM-DD

Progress made in accomplishing goals set out in first report toward meeting degree requirements since student began program. (This is the first report)

Progress:

Special goals for the next interval of  months:

Goals:

Anticipated date for the submission of degree requirements:  YYYY-MM-DD

Comments:

Please specify members who will rate student's report on the following scale (each member below)

Member	Name	Role	Comments	Grade
1	Chair	Chair	Reviewing	Excellent
2	Monitor	Monitor	Reviewing	Excellent
3	Reviewer	Reviewer	Reviewing	Excellent

### *Committee Rates the Report*

When the supervisor clicks the Submit button, each selected committee members will receive an email with a link inviting them to review the report.

The committee member can view the student's report and must click the tick box acknowledging they've read it.

The committee member will also rate the report from the drop down. The default is Excellent.

The system now sends the report back to the student to view.

**Supervisory Committee Report**

Meeting Date: 2017-06-21

By checking this box the committee member acknowledges having read the student's report

Rating:

Comments:

The information below is for your review only.

**Supervisor Report**

The Comprehensive Examination requirement was completed on  YYYY-MM-DD Grade

Please justify an expected date of completion that exceeds 20 months in the program in the comments section.

The Comprehensive Examination is expected to be completed by  YYYY-MM-DD

Progress made in accomplishing goals set out in first report toward meeting degree requirements since student began program. (This is the first report)

Progress:

Special goals for the next interval of  months:

Goals:

### *Student Reviews the Report*

The student receives a final email to view their supervisor's report, committee rating and if they are satisfied with the supervision.

When they select Submit, the report will be sent to the Department Chair/Associate Chair (Graduate) for approval.

Supervisory Committee Report

Meeting Date: 2017-06-21

By entering this box you acknowledge having read the completed report

Is the supervision satisfactory?  Yes  No

Comments:

The information below is for your review only.

**Supervisor Report**

The Comprehensive Examination requirement was completed on: 2019-06-01 Grade: B+ Status:

Please indicate the date of completion that student is 20 months in the program in the previous section.

The Comprehensive Examination is expected to be completed by: 2020-01-02.

Progress in date of completing given below in last report or in case meeting degree requirements since last report in program.

### Department Chair Approval

An email is sent to the Department Chair/Associate Chair (Graduate). They can see the report and choose to approve it.

The default is Yes.

Clicking Submit will complete the report.

### Ph.D. Comprehensive Exam

The purpose of the comprehensive examination is to test the breadth of knowledge and maturity of approach over a range of topics that are both within and peripheral to the student's discipline. The student's level of achievement in this examination will determine possible academic background deficiencies that the candidate may have. Successful completion of the comprehensive examination is a necessary requirement for the candidate to continue in the program.

Comprehensive Exams are private examinations, open only to the student and their comprehensive examination committee.

The student is expected to complete all requirements of the comprehensive examination **within 12 to 20 months of first registration in the Ph.D. program, with an upper limit of 24 months**. Part-time students must take the comprehensive examination by the end of their 36<sup>th</sup> month. Students who transferred from M.A.Sc. to Ph.D. without completion of M.A.Sc. are expected to complete their comprehensive exam 2 years from initial start date of their M.A.Sc. Special exceptions require the approval of the Department Chair or designate and the Graduate School. Normally, course requirements will be completed before the Comprehensive Exam, but this is not a requirement. Likewise, preliminary research results are not required, but the student is expected to present and defend a viable research proposal including anticipated new contributions to the existing scientific literature.

Please refer to the department section of the handbook for program specific details of procedure and timelines.

### *Examination Result*

- The candidate's achievement shall be judged as: Pass (P), Pass with Distinction (P+), or Fail (F).
- **The candidate must pass all parts to successfully complete the comprehensive exam.**
- The committee chair shall communicate the result of the examination to the Graduate Administrative Assistant.
- Should the candidate fail any part, they may request a re-examination. **The re-examination will follow the same format, and must be completed between one to six months after the student was notified that they had failed the original assessment.** The candidate will be allowed only one re-examination of each part.
- Once the candidate completes all parts of the examination, the Graduate Administrative Assistant will submit the official result to SGS so that the student's academic record will be updated.

### **Ph.D. Thesis Defence**

#### *Plagiarism Check*

Thesis candidates are required to use plagiarism-checking software, iThenticate, before submitting. Students must speak with their supervisor for directions on how to submit their thesis through the plagiarism-checking software.

The supervisor must sign off on the originality report of the student's thesis after they scan their theses for originality using iThenticate.

#### *Procedure*

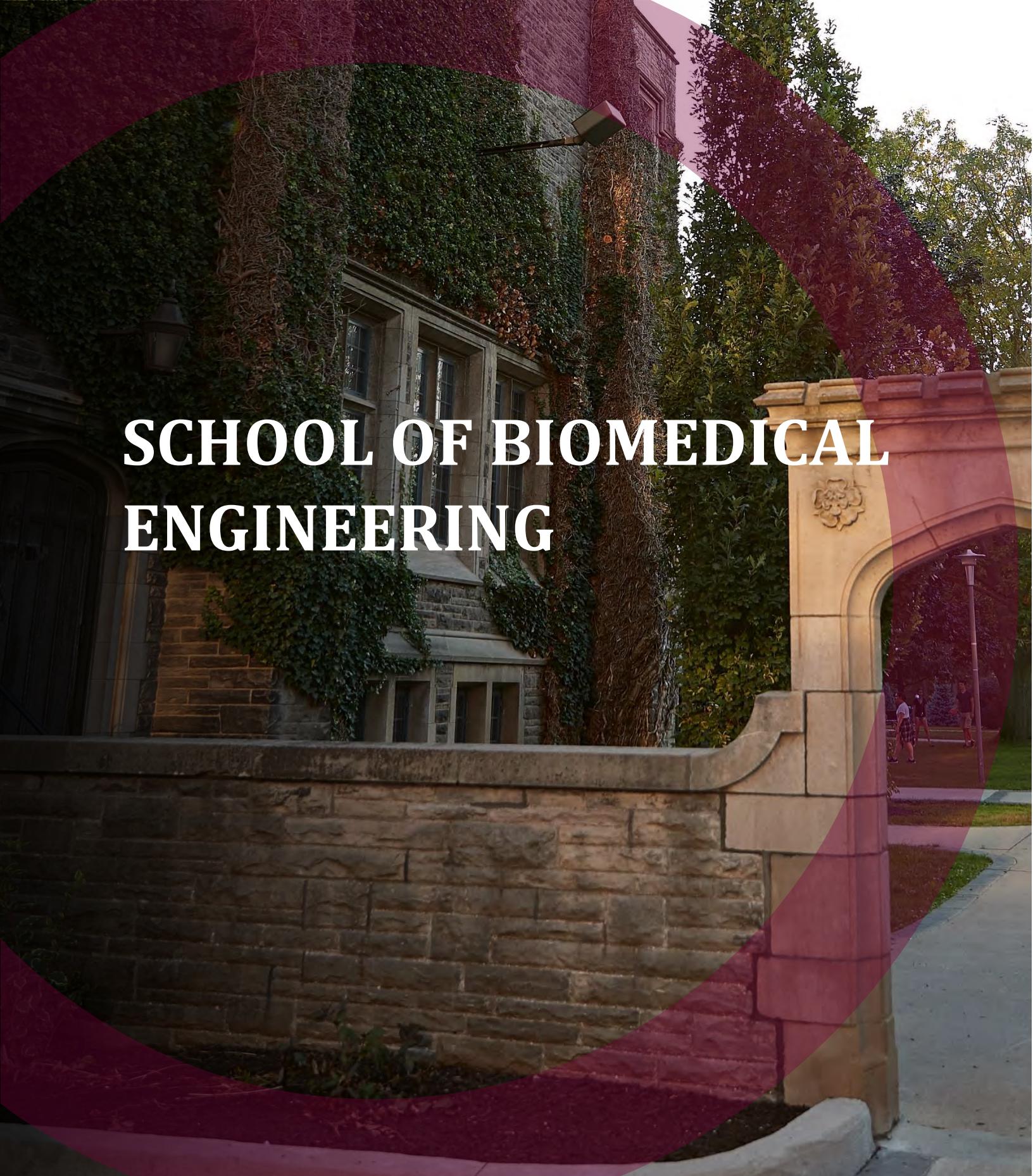
The thesis defence starts with the candidate's presentation of the main elements of the thesis, including the relevance of their work, approach, samples of the most important findings, and contributions. The presentation should not exceed 20 minutes. This is followed by one round of questions and another round of follow-up questions, as appropriate. The duration of the PhD defence (including the candidate's presentation) will not normally exceed three hours. If the examining committee is not satisfied with the candidate's performance in the thesis defence, the candidate must retake the defence after completing any thesis revisions which may be recommended by the examining committee. The student must be informed in writing of the conditions they must meet to be able to succeed in the second and final defence.

Regulations/guidelines for thesis writing, submittal and defence can be found [here](#).

Review the following:

- [Ph.D. Defence Flowchart](#)
- SGS Final Submission – Final Thesis Checklist ([PhD \(Doctoral\) > Step 3. Submit](#))

Please refer to the department section of the handbook for program specific details of procedure and timelines.



# SCHOOL OF BIOMEDICAL ENGINEERING

## DEPARTMENT CONTACTS

### Dr. Ravi Selvaganapathy (Co-Director, Faculty of Engineering)

- Email: [selvaga@mcmaster.ca](mailto:selvaga@mcmaster.ca)
- Point of contact for any issues that cannot be resolved by the Program Administrator.

### Dr. Alison Fox-Robichaud (Co-Director, Faculty of Health Sciences)

- Email: [afoxrob@mcmaster.ca](mailto:afoxrob@mcmaster.ca)
- Point of contact for any issues that cannot be resolved by the Program Administrator.

### Maya Sabados (Program Administrator)

- Email: [sabadom@mcmaster.ca](mailto:sabadom@mcmaster.ca)
- First point of contact for all financial matters and graduate program administrative matters.

### BMEGA (Graduate Representative)

- Brenda Truong, Email: [truonb3@mcmaster.ca](mailto:truonb3@mcmaster.ca)
- Arjun Raha, Email: [rahaa@mcmaster.ca](mailto:rahaa@mcmaster.ca)
- Point of contact for graduate student association related and networking.

## GETTING STARTED: KEY DEPARTMENT RESOURCES

### Building Access and Keys

Graduate students will receive card access to the ETB external entrance and ETB-303 graduate office space upon request.

If you would like access to the ETB-409 meeting room or the ETB-303 quiet study area, please contact the Program Administrator to have your access set up or to book the room.

### Graduate Student Offices/Desks

A limited number of desks are available in ETB-303 to in-time Biomedical Engineering graduate students. Desks may be assigned or shared on a hotelling basis depending on space availability. Please contact the Program Administrator to request access or inquire about desk availability.

### Meeting Rooms

The ETB-409 meeting room can be booked for research or supervisory meetings. To reserve this space, please contact the Program Administrator.

## ESSENTIAL REQUIREMENTS

As per [Section 1.3 of the Graduate Calendar](#), 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. Students must be geographically available and visit the campus regularly which normally means multiple times per week; written permission from the department/supervisor is required for studies to be off campus. In all such cases, Full Time Off Campus status must be formally submitted to SGS.

# MASTER OF APPLIED SCIENCE (M.A.Sc.)

## Program Requirements

An M.A.Sc. Candidate entering is required to complete at least three (3) one-term courses and present a thesis embodying an original contribution to biomedical engineering; students of different cohorts may have different requirements. The thesis must be defended in an oral examination. M.A.Sc. students must complete one of the biomedical core courses (BME \*701 Biomedical Engineering – Core I for students from a health/life sciences background or BME \*706 Biomedical Engineering – Core II for students from an Engineering background). At least two of the courses must be at the 700 level. For students from engineering backgrounds, 1 of the 2 courses must be from the health sciences offerings. For students from health/life sciences, 1 of the 2 courses must be from the Engineering offerings.

A twenty-four (24) month period with funding has been set for our research based M.A.Sc. program. The maximum time for completion of the degree is three (3) years from initial registration, 5 years for part-time students.

## Additional Requirements

The School of Biomedical Engineering runs an annual 2-day Biomedical Engineering Symposium (in April). Attendance of all registered Master's and Ph.D. students in the Biomedical Engineering program is mandatory. Students are also required to present one seminar on the research they have carried out while enrolled in the program. Students can present their seminar during one of the following events:

- The BME symposium (Spring)
- The Health Sciences Plenary (May)
- 'METRIC' conference if hosted by the Engineering Graduate Society, EGS, [egs@mcmaster.ca](mailto:egs@mcmaster.ca), [egs.mcmaster.ca](http://egs.mcmaster.ca)

## Supervision

Supervision of M.A.Sc. students is governed by the School of Graduate Studies regulations as outlined in [Section 3.1 of the Graduate Calendar](#).

## **Supervisory Committee Meeting**

Refer to "Supervisory Committee Meeting" under [Faculty of Engineering Requirements > Master Of Applied Science \(M.A.Sc.\)](#)

## M.A.Sc. Thesis Defence

Refer to "M.A.Sc. Thesis Defence" under [Faculty of Engineering Requirements > Master Of Applied Science \(M.A.Sc.\)](#)

## **M.A.Sc. Defence Procedures/Timelines**

The administration of the M.A.Sc. thesis defence is the responsibility of the School. The School recommends that the thesis follow the format described by Graduate Studies in their booklet “Guide for the Preparation of Theses” at <https://gs.mcmaster.ca/current-students/completing-your-degree/masters-thesis/>

The student is responsible for ensuring that the format satisfies the University requirements. The sequence of events is as follows:

1. The student's supervisor gives permission to prepare the thesis. The student is responsible for submitting the thesis either hard copy or electronic copy, reasonably free of grammatical, typographical and technical errors to the examiners and to the Chair of the defense. If the thesis is found to contain an excessive number of errors, it will be returned to the student and the oral examination postponed until a satisfactory thesis has been submitted.
2. The student's supervisor(s) and two other faculty members, one of whom may be from a department other than Biomedical Engineering, sit as an examining committee for the thesis. The Associate Vice-President & Dean of Graduate Studies may appoint members to these committees. The supervisor usually acts as Chair of the examination committee.
3. The committee will be approved by the Director. The Administrator will prepare the appropriate forms and provide them to the Chair of the examination committee.
4. Each student is responsible, together with their supervisor organize their Master's Defence.

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 of School of Graduate Studies Calendar). 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.

If some of the research undertaken expressly for the degree has previously been published or prepared for publication by the student as one or more journal articles, or parts of books, those items may be included within the thesis subject to the School of Graduate Studies' regulations and to obtaining permission from the supervisory committee. Please consult the “Guide for the Preparation Theses” for more detailed information on Sandwich Theses.

[Master's Guide to Write, Defend and Submit your Thesis](#)  
[Guide to Preparation of Master's and Doctoral Theses](#)

The student is required to submit the following forms to the program Administrator for processing. Both forms can be found at <https://gs.mcmaster.ca/current-students/forms-and-policies-for-graduate-students-staff-and-faculty/>

- Report of Examining Committee
- Final Thesis Submission Form
- License to McMaster University Form

## **Accelerated M.A.Sc. Option**

An Accelerated M.A.Sc. option is available to current McMaster University students enrolled in the Integrated Biomedical Engineering & Health Sciences (IBEHS) program. This option enables eligible students to complete the M.A.Sc. degree within 12 months of full-time study following completion of their undergraduate program.

### **Application Timing:**

Students normally apply for entry into the Accelerated M.A.Sc. option during the penultimate year of their undergraduate studies. Admission is contingent upon successful completion of all requirements listed below prior to the start of the graduate program.

### **Admissions Requirements:**

#### **Eligibility:**

This option is available only to students in McMaster's four- or five-year IBEHS Honours Bachelor's program.

#### **Academic Standing:**

- Minimum B+ (77–79%) average in the final two years of undergraduate study.
- Students must maintain satisfactory academic performance throughout their undergraduate program.

#### **Academic Prerequisites:**

Applicants must have successfully completed the following courses and requirements by the end of their fourth (final) year of undergraduate study:

- One of the following advanced credit courses:
- IBEHS 6F04 (Advanced Biomedical Instrumentation and Measurement) — taken concurrently with IBEHS 4F04, or
- IBEHS 6QZ3 (Advanced Modelling of Biological Systems) — taken concurrently with IBEHS 4QZ3.
- These graduate-level course components must be completed during the undergraduate degree and will be transferred for graduate credit upon admission to the M.A.Sc. program (with departmental approval).

#### **Research Requirement:**

Students must begin their M.A.Sc. research project during the summer term of their fourth undergraduate year under the supervision of a Biomedical Engineering faculty member. This research term forms part of the admission requirements and must demonstrate readiness for independent graduate-level research.

#### **Additional Requirements:**

Applicants must also satisfy the general admission requirements of the McMaster School of Graduate Studies, including submission of official transcripts and proof of completion of the undergraduate degree.

## **Program Requirements**

### **Coursework:**

#### **Students must complete three (3) one-term graduate courses, consisting of:**

1. The approved 600-level IBEHS course (transferred for advanced credit).
2. One Biomedical Engineering core course:
  - BME 701 — for students with a health/life sciences background, or
  - BME 706 — for students with an engineering background.
3. One additional 700-level elective course.

### **Seminar Requirement:**

Students must attend all seminars in the Biomedical Engineering Program seminar series and present one seminar on their research.

### **Thesis Requirement:**

Students must complete a thesis to be examined by a committee of no fewer than three members (supervisor(s) plus two additional faculty members, one of whom may be from outside the Biomedical Engineering program). The thesis must be defended in an oral examination typically held two weeks after submission of the completed document.

### **Supervisory Committee and Progress Monitoring**

Upon admission, students will form a supervisory committee consisting of at least three members, in accordance with the School of Graduate Studies policy.

To ensure consistent oversight and timely research progress, Accelerated M.A.Sc. students are required to meet with their supervisory committee at least once every three (3) months. These meetings allow for progress review, identification of challenges, and alignment of project milestones with the 12-month completion timeline.

# DOCTOR OF PHILOSOPHY (Ph.D.)

## Program Requirements

The minimum course requirement for this degree for the 2025/2026 incoming cohort is at least five (5) half courses beyond the baccalaureate degree or two (2) half courses beyond a McMaster M.A.Sc. degree in Biomedical Engineering; students of different cohorts may have different requirements.

- Five (5) half courses beyond the baccalaureate degree, or
- Two (2) half courses beyond a McMaster M.A.Sc. degree in Biomedical Engineering.
- Three (3) half courses beyond a M.A.Sc. degree outside of McMaster M.A.Sc in Biomedical Engineering.

At least 50% of all graduate-level courses counted toward the degree must be from Biomedical Engineering (BIOMED) offerings. All Ph.D. students must complete the required core course (BIOMED 701 or BIOMED 706 as appropriate to their background) unless it was completed during their Master's degree. If the core course has already been completed, an alternative course may be selected in consultation with the supervisor, while maintaining the 50% BIOMED course requirement.

A forty-eight (48) month period with funding has been set for our Ph.D. program. The maximum time for completion of the degree is six (6) years from initial registration, 8 years for part-time students.

## Additional Requirements

The School of Biomedical Engineering runs an annual 2-day Biomedical Engineering Symposium (in April). Attendance of all registered Master's and Ph.D. students in the Biomedical Engineering program is mandatory. Students are also required to present one seminar on the research they have carried out while enrolled in the program. Students can present their seminar during one of the following events:

- The BME symposium (Spring)
- The Health Sciences Plenary (May)
- 'METRIC' conference hosted by the Engineering Graduate Society, EGS, [egs@mcmaster.ca](mailto:egs@mcmaster.ca), [egs.mcmaster.ca](http://egs.mcmaster.ca)

## Supervision

Supervision of Ph.D. students is governed by the School of Graduate Studies regulations as outlined in [Section 3.1 of the Graduate Calendar](#).

## **Supervisory Committee Meeting**

Refer to “Supervisory Committee Meeting” under [Faculty of Engineering Requirements > Doctor of Philosophy \(Ph.D.\)](#).

## **Ph.D. Comprehensive Examination**

Refer to “Comprehensive Exam” under [Faculty of Engineering Requirements > Doctor of Philosophy \(Ph.D.\)](#).

The comprehensive examination is a requirement of the PhD program. This examination normally takes place between 12 and 20 months after the start of the program. In all cases, this must be completed within 24 months after their start date. The timing of this examination is the same for both full time and part time students. Each student is responsible, together with their supervisor, to select and organize their supervisory committee. This will be scheduled by the supervisory committee.

The format will resemble a committee meeting except it will be based on a written research proposal. The supervisory committee will meet to determine the written proposal topic and scope of the oral examination. The topic will be related to, but not the same as, the PhD research topic. The chosen topic is then submitted to the Director for approval. Additional candidate information is to be provided including start date in the program, number of committee meetings and progress to date.

Once the topic is assigned, the candidate will have **21 days** to complete and submit the written proposal. During this preparation period, the student is not required to perform laboratory or research duties, in order to allow focused preparation for the examination.

**Important:** The comprehensive examination must be scheduled separately from the PhD supervisory committee meeting. Supervisory committee meetings cannot be held during the 21-day preparation period.

An official letter is sent to the candidate outlining the proposal topic, examination procedures and guidelines. The oral examination will be one week after submission of the report.

### **Format of the Examination**

The comprehensive examination will consist of two components:

1. **Written Research Proposal:** A document of up to **10,000 words** (plus references), prepared within 21 days of receiving the topic. The proposal must include:
  - o Proposal objectives (short- and long-term)
  - o Relevant literature review
  - o Proposed methods and approach
  - o Milestones for specific objectives and tasks
  - o Anticipated significance of the work
2. **Oral Examination:** Conducted in two parts.
  - o **Part 1:** A brief oral presentation by the candidate (maximum 15 minutes), followed by questions directly related to the written proposal.

- **Part 2:** A broader discussion to assess the candidate's general comprehension of the research field and peripheral areas.

The oral examination will normally last **up to two (2) hours** and **shall not exceed this duration**.

### **Structure of Comprehensive Exam Committee**

The examination committee will consist of three members:

- One Examination Chair (who may be a member of the supervisory committee),
- One additional member of the supervisory committee, and
- One member external to the supervisory committee, whose expertise is relevant to the examination topic.

Suggestions for the external member are provided by the supervisory committee and approved by the supervisor. The supervisor attends the examination but is not part of the official examining panel and does not vote on the outcome. The supervisor's role is to observe and confirm the fairness of the examination process.

### **Exam Procedures and Evaluation**

- The Chair of the Examining Committee will convene a meeting at least five (5) weeks before the examination to determine the research topic and scope.
- Once the proposal is submitted, the oral examination will typically take place one week later.
- The results will be recorded as Pass (P), Pass with Distinction (P+), or Fail (F).
- The Chair will communicate the result to the Director, who will notify the student in writing.

A candidate who fails the comprehensive examination will be granted one opportunity to retake the portion(s) deemed unsatisfactory within six (6) months, with the same examining panel but a new topic. There is no opportunity for a third attempt.

### **Ph.D. Supervisory Committee**

As soon as possible, and no later than nine (9) months after commencing doctoral studies, a supervisory committee for the student shall be approved by the Department Chair or their delegate, on the recommendation of the supervisor and in consultation with the student.

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 Vice-Provost & Dean of Graduate Studies.

### **Ph.D. Supervisory Committee Meeting**

The Ph.D. student's supervisory committee shall meet with the student a minimum of once a year and submit their report before November 30th. Committee meetings should be planned and scheduled with this deadline in mind. Additional and/or subsequent meetings shall be held to monitor progress towards the comprehensive exam as well as the completion of the thesis, as needed.

## *Supervisory Committee Report Deadlines*

**Biomedical Engineering Program Internal Deadline:** To accommodate internal review, grading, and approvals, the School of Biomedical Engineering requires that all supervisory committee meetings be held no later than November 15th of each academic year. This earlier deadline ensures adequate time for processing and final submission to the School of Graduate Studies by their official November 30th deadline.

## **Ph.D. Thesis Defence**

Refer to “Ph.D. Thesis Defence” under [Faculty of Engineering Requirements > Doctor of Philosophy \(Ph.D.\)](#)

## **Ph.D. Defence Procedures/Timelines**

Here is the link to guide you through the preparation of your Doctoral theses:

### [Guide for Preparation of a Ph.D. Thesis:](#)

- [Ph.D. Guide to Write, Defend and Submit](#)
- [Ph.D. Defence Flowchart](#)

Students close to submitting their Ph.D. thesis (approximately 2 months) should complete the on-line Thesis Defence System (TDS).

This will begin thesis defence scheduling. Candidates will be asked for a thesis title and estimated date to submit the thesis. Under separate cover, the supervisor will be asked to submit the name of an external examiner which must be approved by the supervisory committee and School. A final date and time of the defence will be scheduled and approved by the student, supervisory committee and external examiner.

Doctoral students and their supervisors should note that theses of extraordinary length are to be discouraged. As a general rule, doctoral students are urged to limit theses to no greater length than three hundred (300) manuscript pages. In cases where students and their supervisor(s) believe that responsible scholarly treatment of the thesis topic requires substantially greater length than that specified above, they are expected to receive written approval from the Associate Dean of Graduate Studies before the thesis is submitted for the defence.

If some of the research undertaken expressly for the degree has previously been published or prepared for publication by the student as one or more journal articles, or parts of books, those items may be included within the thesis subject to the School of Graduate Studies’ regulations and to obtaining permission from the supervisory committee. Please consult the “Guide for the Preparation Theses” for more detailed information on Sandwich Theses.

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 of School of Graduate Studies Calendar - 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.

## Direct to Ph.D. Option

A **Direct Entry to Ph.D.** option is available to outstanding McMaster undergraduate students who wish to proceed directly from the **Integrated Biomedical Engineering and Health Sciences (IBEHS)** program into the doctoral program in Biomedical Engineering.

### Eligibility and Admission Requirements

- Applicants must have a **sessional average of at least 11.0 (A)** by the end of their **third year** and must maintain this standing until completion of the undergraduate degree.
- Interested students should contact the **Director of the School of Biomedical Engineering** during their third year to express their intention to apply for this option.
- This pathway is **only available to McMaster IBEHS students**. Applicants from other programs or institutions, including those who already hold an accelerated or standard Master's degree, are **not eligible**.

### Program Structure and Academic Prerequisites

- During the **summer term of the fourth year** (May–August), students are required to complete the **first term of their research project** under the supervision of their proposed Ph.D. supervisor.
- Students must complete one of the following IBEHS courses, including the 600-level advanced evaluation component, by the end of their final (fifth) undergraduate year:
  - **IBEHS 4F04 / 6F04:** Biomedical Instrumentation and Measurement, or
  - **IBEHS 4QZ3 / 6QZ3:** Modelling of Biological Systems.The program will petition the **School of Graduate Studies** for advanced credit for this course upon the student's entry into the doctoral program.

### Progression and Course Requirements

- Students officially begin the **Ph.D. program in May**, following completion of their fifth year and confirmation of graduation from the undergraduate program.
- Research activities continue through the summer term and follow the standard Biomedical Engineering Ph.D. progression schedule.
- Students in the Direct to Ph.D. option complete a total of **five graduate courses**, including:
  - One **Biomedical Engineering Core course** (either **BME 701 – Core I** or **BME 706 – Core II**, depending on disciplinary background).
  - One **600-level advanced IBEHS course** (approved for graduate credit).

- **Three additional 700-level courses**, selected in consultation with the student's supervisory committee.

### **Program Duration**

Students in the Direct to Ph.D. option typically complete their doctoral degree within **three years following the completion of their undergraduate program** (approximately **eight years total** including undergraduate study).

## GENERAL GRADUATE INFORMATION

### Department Club Name

Biomedical Engineering Graduate Association (BMEGA)

### Department Social Media

Connect with us!



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