



ENGINEERING
Materials Science
& Engineering

Graduate Student Handbook

Department of Materials Science and Engineering

2023/2024

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Welcome to Materials Science and Engineering

The Graduate Student Handbook, 2023/2024 outlines the policies and procedures followed by the Department of Materials Science and Engineering. All graduate students are responsible to familiarize themselves with the policies, regulations and procedures within the [SGS calendar 2023-2024](#), specifically the “General Regulation of the School of Graduate Studies” section.

Contacts

DEPARTMENT LEADERSHIP

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ENGINEERING SUPPORT SERVICES (The Hub)

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

Extension 27291 | JHE 216A | thehub@mcmaster.ca

Disclaimer

In the event of a discrepancy between the information provided in the department’s Graduate Student Handbook, 2023/2024 and the School of Graduate Studies Calendar, 2023/2024, the latter prevails.

McMaster Vaccination Policy

As of May 1, 2022, McMaster paused its [Vaccination Policy](#) but will continue to follow emerging guidance from University experts and Public Health officials.

Should pandemic circumstances shift, the University will review the situation, which may result in the reinstatement of a mask mandate and/or the resumption of a vaccination policy. Resumption of a vaccination policy will require that access to campus be limited to those fully vaccinated against COVID-19, unless a human rights exemption is obtained.

Students will be notified directly upon resumption of a vaccination policy. Students will be expected to adhere to any academic regulations, which are developed in compliance with Public Health guidance and the University's health and safety policies, including any vaccination policy that is in effect. Any applicable deadline(s) for compliance will be clearly communicated.

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.

General Information

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.

Condition Clearing

Conditions must be cleared by the date indicated on your offer letter. This does not restrict your current enrollment. Failure to clear conditions by the deadline will 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.

Desk Assignment and Graduate Student Office Policy

Desks are assigned to all full-time, in-time graduate students. While we do our best to provide overtime students with a desk, this is not always possible, and we may ask you to vacate or relocate should you exceed your term count.

Graduate student offices are also shared offices. The department tries to keep similar research/supervisor groups together. At times discussions can be louder than anticipated. Please be mindful of others working nearby, and if possible, have lengthy and group conversations outside the office. Meeting spaces can be booked through The Hub engdoc@mcmaster.ca and the Grad Lounge is also available in JHE 328A.

Grad offices are **not** maintained by McMaster custodial staff therefore, students are responsible for the cleanliness of their desk space and encouraged to work together to keep the office clean. To avoid pests, household appliances (refrigerators, microwaves, kettles etc.) and kitchenware (cups, mugs, utensils) should be kept clean and clear of food. Food should not be left in grad offices. Please dispose of waste or recycling in the proper bins located in the hallways or leave bags outside the office to be picked up by custodial staff at a later time. The Grad Lounge (JHE 328A) is open weekly from 12 p.m. to 2:00 p.m. as a space for lunch breaks.

Building Access and Keys

Grad office keys and desk keys will be assigned upon arrival. Lab keys will be assigned by your supervisor. There is a \$20 key deposit required for each physical key (excluding desk keys). Keys and access cards are issued with a deposit as a charge to your student account. The money will be credited to your account once keys or cards are returned. For safety

and security do not lend your keys or allow anyone else into your office after hours. External building keys are not permitted. Lost or stolen keys must be reported to Security Services, The Hub, and the grad admin.

Scent Awareness

Persons entering McMaster University buildings are encouraged to use unscented products wherever possible. **Please minimize the use of, and exposure to, scented products in your office.** Scented products more commonly used include:

- Personal hygiene products (e.g., hairsprays, deodorants, colognes, after-shaves, fragrances, perfumes, lotions);
- Industrial and household chemicals and cleaners;
- Air fresheners (e.g., deodorizers, potpourri, oils and candles); and
- Various household products

Mail Services

Mail Services processes all incoming mail from Canada Post and delivers to each department. Grad mailboxes are located in JHE 355. Please check your mailbox frequently for mail. All items must have the following information:

First Name Last Name
McMaster University
Materials Science and Engineering
1280 Main Street West, JHE 357
Hamilton, ON L8S 4L7

Incoming courier packages will first arrive at Mail Services and then be delivered to the department office (JHE 357). It is best to address all packages to the department office (JHE 357). Once a delivery is received, admin staff will send an email. The department is not responsible for lost or stolen packages.

Fed-Ex

Students can use FedEx to send items for research purposes. A completed FedEx form is required. You need a chartfield number from your supervisor that will be charged for the expense. The form is available in the resource folder on the department website: <https://www.eng.mcmaster.ca/materials/resources#forms>

Photocopying and Paper

Each graduate student office is equipped with a printer. Paper is stored in the department office (JHE 357). When taking paper, fill in the form stating your name, supervisor and how many packages you are taking. Your supervisor is billed at the end of the month. There is no need to ask for permission. There is also a photocopier/scanner in JHE 355 for larger jobs. Photocopying or scanning for research-related purposes also requires an account number from your supervisor that is charged for the expense.

MSE Graduate Student Representatives

Each year, a group of graduate students (domestic and international) are elected to serve as liaisons between the graduate student body and the department faculty and staff. These representatives participate in the monthly department meetings and are responsible to provide a voice for graduate student body and collect and disseminate relevant information back to graduate student body.

Peer Mentor Program

The department is excited to offer all incoming students an opportunity to be matched with a senior graduate student. The objective is for the mentor to provide informal local information and advice on getting started to the mentee. This may include communication pre-arrival, guidance upon arrival and throughout the first few months as new students settle into the McMaster and Hamilton community. Please contact the Grad Admin for more information.

Social Insurance Number (SIN)

It is essential that the School of Graduate Studies and Human Resources have your Canadian Social Insurance Number (SIN) on your record (for income tax receipt purposes). You will be asked to provide your Canadian SIN on the direct

deposit forms and tax forms. Your Canadian SIN is a nine-digit number that you need to work in Canada or to have access to government programs and benefits. You can obtain a SIN upon arrival at the airport or any one of the following locations:

Hamilton Mountain Service Canada Centre
1565 Upper James St.
Hamilton, ON
905-572-2211

Red Hill Creek Centre
2255 Barton St. East
Hamilton, ON
905-572-2211

International students need a Canadian SIN to work in Canada. If you hold a Teaching Assistantship (TA), then you will need to take the following documents with you when you apply:

- Your employment contract/offer letter
- Your passport and study permit
- Completed SIN application form

****Your new Canadian SIN card will have the same expiry date as your study permit.
Remember to renew both documents at the same time****

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 the School of Graduate Studies upon arrival at the university. International graduate students without valid study permits will not be allowed to enroll.

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

Verification Letter Request

Letter requests for the following can be obtained by completing a Letter Request Form through the School of Graduate Studies webpage under the **Forms and Policies** tab:

- Enrollment Letter
- Study Permit / Extension of Study Permit
- Approval to Graduate / Work Permit Application
- Degree Conferred

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:

<https://studentsuccess.mcmaster.ca/international-students/immigration-advising/>

Health Insurance Information

All registered students are required to have approved hospital and medical insurance. Medical costs in Canada are very expensive; therefore, having health insurance covered is essential. Ontario residents and permanent residents must have Ontario Health Insurance Plan (OHIP) coverage. International, visiting and exchange students must have individual coverage under the University Health Insurance Plan (UHIP) and coverage for any dependents. The Graduate Student Association (GSA) also provides Studentcare Health Plan. Please refer to the "Graduate Students Association" section further in this handbook.

Permanent Residents (OHIP)

Health coverage for Canadian and Permanent residents is covered by OHIP. You must apply in person at a ServiceOntario Centre. Please visit www.ontario.ca for information and to find the closest ServiceOntario Centre.

International Students (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 dependents (spouse and children).

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.

Enrollment 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 for further information on how to register your dependents for UHIP. **Dependents must enroll in UHIP within 30 days of arrival in Canada.** More information is available on the university's international student services (ISS) website: <https://studentsuccess.mcmaster.ca/international-students/health-insurance/>

Dental Plan

All full-time graduate students who are receiving a Teaching Assistantship (TA), or a Research Assistantship (RA) in lieu of a TA of 130 hours or greater, will have dental plan premiums deducted each month for the full academic year (September 1 to August 31). Provisions for opting out of the dental plan, or for obtaining family coverage, are covered in a separate document that describes the Canadian Union of Public Employees (CUPE) Local 3906 dental plan. Dental claim forms and opt out forms are available in PDF-format on the [CUPE Local 3906 website](#)

The Graduate Student Association (GSA) also provides Studentcare Dental Plan. Please refer to the "Graduate Students Association" section further in this handbook for more information.

Leaves of Absence, Parenting Leave, Full-Time Off Campus, Vacation Time, Co-op

Graduate students are required to be continuously registered to support the timely completion of their degree. On admission to a full-time program, the assumption is that a student will be full-time on-campus. Failure to be on campus on a full-time basis may result in automatic withdrawal of the program.

Leaves of Absence (LOA)

Students may apply for a leave of absence in one of four categories:

1. Medical or disability leave
2. Parenting leave
3. Compassionate or personal leave
4. No course available leave

Full Time Off Campus (FTOC)

Graduate students who will be off campus for more than two weeks for purposes related to research must apply to be full-time off campus and complete the required form. Forms can be found on the [School of Graduate Studies](#) website, Current Students, Forms and Policies.

Vacation

Graduate students are expected to be on campus for all three terms of the university year. Normal vacation entitlement is two weeks, to be scheduled by mutual acceptance with the supervisor. An exception to this allotment requires approval from the supervisor.

Co-op

The Co-op Program for Graduate students is an optional program for full-time domestic and international Masters and Ph.D. students in good academic standing that allows students to gain engineering work experience prior to graduation. Students are required to complete a minimum of 8-months of work experience for Masters students, and 12-months of work experience for Ph.D. students prior to graduation. It is administered by the Career Development & Relationship Manager - Graduate Studies. <https://www.eng.mcmaster.ca/co-op-career/co-op-program#FAQs>

More information is available in the School of Graduate Studies Calendar 2023/2024 under the [General Regulations](#) tab.

Payroll Information

Research Scholarships

McMaster scholarship payments and refunds are paid via e-transfer. You will receive an e-transfer to your McMaster email. Research scholarships are paid in lump sum installments at the beginning of each term (September, January & May). All other scholarships are also disbursed to the student in lump sum installments via direct deposit at the beginning of each term. Further information about student accounts, timing of payments and payment schedule for the 2023/2024 academic year is available on the School of Graduate Studies website [Scholarship/Payments Schedule](#) page.

Teaching Assistantships (TAs)

If you are to receive a TA, as indicated in your offer letter, you will be paid bi-weekly by direct deposit, based on when you are scheduled to work. TA payments are typically held in the Fall Term (Term 1) from September to December 2023 and/or the Winter Term (Term 2) from January to April 2024. All first time TAs will be required to attend a mandatory training session. More information is available on the [Human Resources website](#)

Teaching Assistant Training

First Time Teaching Assistants (TA)

All first time TA's 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).

You need to register for this training on **Mosaic**, through the Regulatory Training Tile on the homepage, and then 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.*

Returning Teaching Assistants for 2023/2024 academic year (tentative)

Returning Engineering TAs for the 2023/2024 academic year will be required to take the two-hours **online Anti-Oppression training** module through MacPherson and will receive two hours of pay accordingly. While additional training is encouraged, it will not be compensated.

All TAs are required to take 3 paid hours of Health and Safety training as related to the course assigned.

CUPE 3906 Collective Agreement

Your TA position is unionized by CUPE Local 3906 bargaining unit 1, and subject to the terms of the Unit 1 Collective Agreement (the "CA"). Under this agreement, the Employer will:

- (i) Make copies of the revised collective agreement available within one month of the printing of this agreement in all Human Resources Services offices and academic units; and
- (ii) Provide direct access, via an email link, one month after the start of each semester, to a copy of this collective agreement to each newly hired employee, at no cost to the employee upon commencement of his/her initial assignment, unless a printed copy is requested by the employee.

The [Collective Agreement](#) is available on your local CUPE website.

Scholarships and Awards

The Faculty of Engineering has a policy ensuring that the gross pay minus tuition of any newly hired full-time, non-overtime Ph.D. students is a minimum of \$21,000. There is no such policy for newly hired, non-overtime M.A.Sc. students.

There are three types of additional funding available to graduate students:

1. External major scholarship and awards that have an associated application process.

2. Internal (department) scholarships and awards that have an associated nomination process.
3. University travel awards (limited number) that have an associated application process.

The department strongly encourages graduate students to apply for all eligible internal, external, Government, Indigenous, and travel scholarships, awards and bursaries. Some of the available awards are provided in Table 1 below. Application procedures vary. Applicants are responsible to check government award pages, as well as the agency websites, for complete details on eligibility, how to apply, and competition deadlines. Please visit the [Scholarships](#) page for a full list of scholarships and awards. Additional awards are available from [McMaster's Engineering Graduate Society \(EGS\)](#) and [Graduate Student Association \(GSA\)](#).

Table 1: External/Internal Scholarships and Awards

EXTERNAL SCHOLARSHIPS AND AWARDS		
Award Name	Description	Value
Canada Graduate Scholarships – Michael Smith Foreign Study Supplements	This CIHR, NSERC and SSHRC CGS-MSFSS supports high-calibre Canadian graduate students in building global linkages and international networks through the pursuit of exceptional research experiences abroad. By accessing international scientific research and training, CGS-MSFSS recipients will contribute to strengthening the potential for collaboration between Canadian universities and affiliated research institutions and universities, or other research institutions outside of Canada.	\$6,000 max
Ontario Graduate Scholarship (OGS) and The Queen Elizabeth II Graduate Scholarship in Science and Technology (QEII-GSST)	The Ontario Graduate Scholarship (OGS) and The Queen Elizabeth II Graduate Scholarship in Science and Technology (QEII-GSST) programs provide funding to full-time students at the Master's and Doctoral levels. They are merit-based scholarships for students with an A- or above average.	Varies
Ontario Graduate Fellowship (OGF)	Ontario Graduate Fellowships (OGF) provide funding to full-time students in graduate studies at the masters and doctoral level. It's a merit-based scholarship for students with an A- or above.	\$12,000
Ontario Graduate Scholarship for Indigenous Graduate Students	Two OGS-I scholarships are awarded to Indigenous graduate students at McMaster University who face significant financial hardship, with particular priority given to women with family responsibilities. This criteria has been established in consultation with the Indigenous Education Council (IEC) and is adjudicated by a committee chaired through the Indigenous Studies Program.	\$15,000
Ontario Graduate Scholarship International	The Ontario Graduate Scholarship for International Students is by nomination only. Applicants to this award must contact their department for application instructions.	Varies
NSERC – CGS-M	The CGS-M Awards Program supports students in all research disciplines and is administered jointly by Canada's three federal granting agencies: the Canadian Institutes for Health Research (CIHR), the Natural Sciences and Engineering Research Council of Canada (NSERC), and the Social Sciences and Humanities Research Council of Canada (SSHRC). The selection process and post-award administration are carried out at the university level, under the guidance of the three agencies.	\$17,500
NSERC Doctoral Scholarship	The Alexander Graham Bell Canada Graduate Scholarships – Doctoral Program (CGS D) and the NSERC Postgraduate Scholarships – Doctoral (PGS D) program provide financial support	\$35,000 (CGS D) \$21,000 (PGS D)

	<p>to high-calibre scholars who are engaged in an eligible doctoral program. This support allows these scholars to fully concentrate on their studies and seek out the best research mentors in their chosen fields.</p> <p>Both programs are administered through a single application.</p>	
Vanier	The Vanier CGS program aims to attract and retain world-class doctoral students by supporting students who demonstrate both leadership skills and a high standard of scholarly achievement in graduate studies in the social sciences and humanities, natural sciences and/or engineering and health.	\$50,000
INTERNAL SCHOLARSHIPS AND AWARDS*		
MIRA and Labarge Scholarship in Aging Research	The MIRA and Labarge Scholarship program offers awards at the master's and Ph.D. level in two distinct streams. The Labarge Mobility Scholarship supports applicants whose research on aging includes a focus on mobility. The MIRA Scholarship in Aging Research supports interdisciplinary aging research in one of MIRA's identified areas of focus.	\$15,000 (MAsc) \$18,000 (Ph.D.)
MURA Academic Scholarship	Established in 2020 the McMaster University Retirees Association (MURA). To be awarded by the School of Graduate Studies to a graduate student researching technological advances related to seniors, and who demonstrates academic excellence.	Varies
The Angela Manolescu Memorial Scholarship	Established in 2020 by family in loving memory of Angela Manolescu '77, the first female Ph.D. in Metallurgy at McMaster University. To be awarded by the School of Graduate Studies, on the recommendation of the Department of Materials Science and Engineering, to Ph.D. student(s) in Materials Science & Engineering who demonstrate academic excellence.	Varies
The Barkleys of Avonmore Scholarship	The Barkley's of Avonmore Scholarship was established in 1977 through the generosity of Fred Barkley to assist a student from a developing country to pursue advanced studies at McMaster University. Each year the Dean of Graduate Studies will identify a worthy graduate student from one of the developing countries to receive the award.	Varies
The Dr. Colin Webber Graduate Scholarship	Established in 2013 to honour the memory of Dr. Colin Webber, McMaster University Professor, Physicist, Radiation Safety Expert, Teacher, Mentor, and Leader in the field of bone research. To be awarded by the School of Graduate Studies to master's or doctoral students. Preference will be given to students who demonstrate interest in bone research.	\$1,600
The H.G. Hilton Master's Scholarship	The H.G. Hilton Master's Scholarships were established by the income from a bequest in the estate of Hugh G. Hilton, at one time Chief Executive Officer of Stelco and member of the McMaster Board of Governors support a Master's scholarship. The scholarship is tenable for one year, and is awarded annually to incoming Canadian citizens, permanent residents or, international students from departments which offer full-time Master's graduate studies. Priority will be given to students intending research in Canadian industry or industrial problems. Other things being equal, preference will be given to deserving children of employees or former employees of Stelco Ltd.	\$3,000

The David Alan Reid Kay Memorial Prize	The David Alan Reid Kay Memorial Prize was established in memory of David Alan Reid Kay, Professor in the Department of Materials Science and Engineering from 1969 to 1997 to perpetuate the spirit of service to the university and materials community, as well as research excellence for which he was so well known. The prize will be awarded annually to a graduate student registered in Materials Science and Engineering based on the criteria above by the School of Graduate Studies on the recommendation of the Chair of the Department of Materials Science and Engineering.	\$400
The Dante Cosma Graduate Memorial Scholarship	The Dante Cosma Graduate Memorial Scholarship was established in 1997 by family, friends and colleagues of Dr. Dante Cosma, in recognition of his years of service in the Faculty of Engineering at McMaster University, and to his support of engineering students in their pursuit of higher education. To be awarded to a graduate student in the Faculty of Engineering by the School of Graduate Studies on the recommendation of the Dean of Engineering. Preference will be given to a student studying metallurgy.	\$1,000
The Dr. W. Smeltzer Scholarship	The Dr. Walter Smeltzer Memorial Scholarship was established in 2000 by Mrs. Grace Smeltzer in memory of her husband, Dr. Walter William Smeltzer, researcher and professor in Materials Science at McMaster University from 1959 to 1992. The scholarship is to be awarded to a student in the Department of Materials Science and Engineering (MSE) who is deemed to have submitted the most outstanding graduate thesis over the previous two-year period. Ph.D. theses will be recognized in even-numbered years, and Master's theses recognized in odd-numbered years. The School of Graduate Studies will award the scholarship on the recommendation of the Department of Materials Science and Engineering.	\$1,250
OTHER		
Engineering Graduate Society (EGS) Travel Awards	The EGS Travel Awards are graciously sponsored by the Faculty of Engineering at McMaster University. For the 2022-2023 academic year, \$25,000 CAD has been allocated for McMaster Engineering Graduate Students. Awards are valued up to \$1,200 CAD; this is dependent on the number and quality of the applications*.	Varies
Graduate Student Association (GSA)	The GSA awards a number of travel awards (up to \$500) every semester for travel to conferences to present, or to undertake research relevant to their field of study. GSA Travel Awards are funded from the proceeds of the GSA Development Fund, which is sustained by contributions from Graduate Students and the University. Award recipients will be asked to voluntarily contribute a 250-word statement of how this award and travel contributed to their graduate experience, whichh may be posted on the Graduate Studies and GSA websites and other media sources.	Varies
Wilson Leadership Scholarship Award	The Wilson Leader Scholarship Award for graduate students is different. Valued at up to \$25,000, it's a leadership development and career launcher program that builds on your studies. It involves about 15 hours/month over 6 months – less than a TA or Raship. And it includes experiential learning opportunities. The award program is open to incoming and current McMaster graduate students at all levels whose research and interests relate	Varies

	to democracy, the economy, education, healthcare, the impacts of technology, or public policy in a Canadian context.	
* Values may change without notice.		

Policy on Major Graduate Scholarships/Awards

For the purposes of this policy, a “major graduate scholarship” includes any external scholarship valued at \$10,000 or greater. In no case can the total support per year provided to you as a major scholarship holder be less than the Faculty of Engineering minimum stipend or the value listed in your admission letter. New graduate students who bring with them a major scholarship, the total support per year provided to the graduate student cannot be less than the Faculty of Engineering minimum stipend.

If you are currently enrolled in an engineering-hosted program and receiving a major external scholarship/award administered by the university, the total stipend currently being provided to you by the department cannot be reduced by more than \$2,500 per term for each term in which you hold the major scholarship/award (i.e., maximum stipend adjustment of \$7,500 per year). Table 2 below summarizes the reductions associated with major scholarships/awards, as levied by the department.

Table 2: Department Reductions to Major External Scholarships/Awards

Award	Value	Duration	Net Minimum Increase to Student Funding Package
OFS	\$12,000	1 Year	\$4,500
OGS	\$15,000	1 Year	\$7,500
NSERC CGS-Master’s	\$17,500	1 Year	\$10,000
NSERC CGS-Doctoral	\$35,000	2 or 3 Years	\$27,500
NSERC PGS-Doctoral	\$21,000	2 or 3 Years	\$13,500
Vanier	\$50,000	3 years	\$42,500

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’s experience. Some of the services available include Health and Dental, HSR Bus Pass, and Empower Me. The GSA also hosts several 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 <http://www.studentcare.ca/>

Please remember that you need to pay the Studentcare plan fees to your student account. As mentioned above, once you 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: <https://gsa.mcmaster.ca/services/health-and-dental/>

International Student Services (ISS)

International Student Services (ISS) is a division of the Student Success Centre that provides additional services and programs for international undergraduate, graduate, visiting and exchange students. International students are a valued part of our community. We encourage you to explore these services, as well as our other services through the Student Success Centre. If you're unsure where to get support for your specific concerns, check out our [success coaching services](#).

Student Wellness Centre

The Student Wellness Centre is the place on campus to address your wellness needs. They provide a range of counselling options, medical services and wellness programs so that you can get the most out of your McMaster experience, academically and personally! If graduate students have questions about any of the support programs available, they are free to email wellness@mcmaster.ca and the response time is normally within 24 hours. More information is available on the website: <https://wellness.mcmaster.ca/>

Counselling

At some point just about everyone finds they have major concerns on their mind that may interfere with their success, happiness, and satisfaction at university. Often, students mention that a helpful way of dealing with problematic situations and feelings is to start by talking them through with an experienced counsellor.

Medical Care

Our medical team of doctors and nurses provide a range of health services to support your emotional, physical, and personal wellbeing while studying at McMaster.

Health Promotion

Our health promotion team provides health and wellness prevention and awareness programs to connect you with information, resources and services in the McMaster and Hamilton community.

Mental Health – Empower Me Program

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.

Though Empower Me, counselors are completely qualified to support students in crisis. What's great about Empower Me is that you don't need to be in crisis in order to take advantage of their services. You could speak to a life coach about subjects like personal performance, well-being and growth, career, relationships, and finances.

****It is not recommended that students email about a crisis.**

In a crisis you can call one of the following:**

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

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

EmpowerMe – 1-844-741-6389, 24/7

This is a 24/7 accessible counselling services to empower you to thrive, crisis support, mental health and well-being services.

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:

<https://wellness.mcmaster.ca/crisis-support/>

Student Accessibility Services (SAS)

Student Accessibility Services (SAS) provides academic accommodation assistance and related supports to students with disabilities at McMaster. Student Accessibility Services is available to assist students transitioning from high school, other post-secondary institutions, undergraduate, graduate continuing education students.

Note to all students seeking academic accommodations: Please be advised that the process for activating academic accommodations is different for undergraduate, graduate, and continuing education students. As you begin your studies in any of these areas, you must contact Student Accessibility Services to implement or update your student status and to activate accommodations. Accommodations do not automatically follow you as you move from one category to another (e.g. undergraduate to graduate). For any questions related to this statement, please contact SAS. More information is available of SAS's website: <https://sas.mcmaster.ca/>

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 & Professional Development at McMaster Engineering.

More information is available on the Engineering Graduate Society website: <https://egs.mcmaster.ca/>

Health and Safety Training Program

McMaster's occupational health and safety training program is designed to provide mandatory and site-specific safety training for all employees, graduate students, volunteers and visitors working in the university. More information regarding training programs, McMaster's Risk Management system and resources can be found on the Human Resource website: https://hr.mcmaster.ca/employees/health_safety_well-being/#tab-content-our-safety

Mandatory Health and Safety Requirements

The following Risk Management Manual (RMM) are mandatory readings and should be discussed with your supervisor.

- [**Training Matrix \(APPENDIX A\)**](#)

The mandatory safety training matrix is reproduced in Appendix A. Additional safety courses such as, machine guarding, gas cylinder and hydrogen fluoride (HF) are required if the hazard is present. Please discuss the need for additional safety training courses with your supervisor.

- **[RMM Number 300 - HEALTH AND SAFETY TRAINING PROGRAM](#)**

You are encouraged to make an appointment with your supervisor to specifically discuss the roles, responsibilities, procedural guidelines, record keeping and mandatory safety training matrix.

How to Complete Health and Safety Training

Talk to your supervisor about which additional safety courses you should take. Health and safety training can be completed online through **Mosaic** under “Regulatory Training”. Once you have registered for training your health and safety course is available in Avenue to Learn within one business day. Once you have successfully completed your training in Avenue to Learn you can view your training record in Mosaic one business day after completion.

- **[RMM Number 324 – JOB HAZARD ANALYSIS PROGRAM](#)**

Prior to commencing work (research-related or TA-related), a job hazard analysis (JHA) of your main activities must be completed and reviewed with your supervisor (research) or instructor (TA) to identify hazards and determine health and safety training requirements. Each main activity involved with the job requires a hazardous analysis, where common hazards and associated controls, are identified. The goal is always to eliminate the hazard, however, if a hazard cannot be eliminated, then it needs to be minimized before the work is performed. Hazards can be minimized by implementing controls such as personal protective equipment, written procedures or training.

How to Complete Job Hazard Analysis

The JHA involves the review of existing forms (online), and newly created forms (offline) when required. To document that this analysis has been performed, a summary sheet listing all of the online JHA forms analyzed, complete with a hard copy of all newly created JHA forms, needs to be signed by both you the researcher/TA and your supervisor/instructor. You should retain a copy along with your supervisor/instructor. Existing JHA forms, along with detailed instructions of how to create a JHA form are available on the Human Resources website:

<https://hr.mcmaster.ca/app/uploads/2019/01/Creating-a-JHA.pdf>

- **[RMM Number 304 – WORKING ALONE PROGRAM](#)**

If your work (research or TA-related) involves working alone or after-hours, please review RMM 304 and create an approved Working Alone Policy with your supervisor. The plan must include procedures for obtaining assistance in the event of an emergency.

- Students should also review the [RMM website](#) and meet with their supervisor to discuss what other policies are mandatory reading, including, e.g., RMM 600 Biosafety, RMM 700 Radiation Safety, and RMM 403 Animals in the Workplace.

McMaster University Laboratory Manual 2019

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:

https://hr.mcmaster.ca/employees/health_safety_well-being/our-safety/lab-safety/

Reporting of a Safety Incident

Any incident, whether it did or could have, resulted in injury must be reported to the department immediately. Please advise your supervisor/instructor as soon as possible and complete the online Injury/Incident Report. This form is available on the Human Resources website:

https://hr.mcmaster.ca/employees/health_safety_well-being/our-safety/

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. More information can be found in [RMM 1201 Fire Safety Plan](#)

Security Services

Developing a safe and secure environment in this academic institution is the responsibility of the entire community. The primary responsibility for the protection of persons and property within the McMaster community is assigned to the [Security Services Department](#).

Security

Please be security conscious. Do not leave personal valuables in your office or desk. Keep all books, notes, etc. locked in your locker. Do not share your keys or invite others to the graduate student offices or other department facilities. So that no rooms are left unattended, the last person leaving an office should lock the door. Do not give your copier code to anyone. Do not reveal your computer password to anyone. If you suspect that it is compromised, change it immediately.

Emergency

The McMaster Security office is located in E. T. Clarke 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 by them for 60 days. ****IN CASE OF EMERGENCY DIAL 88***

Safety App

McMaster’s SafetyApp is the official safety app of McMaster University. It is the only app that integrates with McMaster’s safety and security systems. McMaster University has worked to develop a unique app that provides students, faculty, and staff with added safety on the McMaster campus. The app will send you important safety alerts, including campus closures and emergency instructions and provide instant access to campus safety resources. A “Friend Walk” option allows someone to watch your travel route home, which enhances the existing [Student Walk Home Attendant Team](#)

Learn more about the [Safety App](#) and how to download it to your devices.

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.

Graduate Course Requirements

The requirements listed apply to the 2023/2024 academic year (September 2023, January 2024 or May 2024 admission). For in-course graduate students, please refer to the graduate course requirements stated in the School of Graduate Studies Academic Calendar and the department’s Graduate Student Handbook issued for the academic year of your

admission. For example, if you started in September 2020, January 2021 or May 2021, refer to the Academic Calendar and MSE Handbook for 2020/2021. In the event of a discrepancy between the information provided in the Graduate Student Handbook and the School of Graduate Studies Calendar, the latter prevails.

M.A.Sc. Degree (Materials Science and Engineering)

Graduate students are required to successfully complete at least 12 units of course work, which must include the mandatory seminar half course (3 units) MATLS 701. Courses at the 700-level are offered as either a half course (3 units) or a quarter course (1.5 units). Only one 600-level course is allowed for graduate course work credit. Courses offered at the 600-level are offered as half courses (3 units). Only one non-technical half course (3 units) is permitted with written approval from the supervisor.

The passing grades for a graduate level course are A+, A, A-, B+, B, and B-.

Ph.D. Degree (Materials Science and Engineering)

Graduate students entering the Ph.D. program are required to successfully complete at least 12 units (4 half-courses) of course work, which includes the mandatory seminar course MATLS 702 (3 units) and 6 units of technical courses at the 700 level. Courses at the 700 level are offered as either a half course (3 units) or a quarter course (1.5 units). Only one 600-level course is permitted for graduate credit. Courses offered at the 600-level are offered as half courses (3 units). Only one non-technical half course (3 units) is permitted for graduate credit with written approval from the supervisor. Graduate students who have successfully transferred to the Ph.D. program from the Master's program in the Department are allowed to count the course work that they completed as a M.A.Sc. student towards their course requirements for the Ph.D. program.

The passing grades for graduate level course are A+, A, A-, B+, B, and B-.

Department Course Offerings 2023/2024

Table 4 lists the graduate course that will be offered by the Department during the 2023/2024 academic year. Overview descriptions and outlines for these courses are available on the Department website:

<https://www.eng.mcmaster.ca/materials/programs/course-listing#graduate>

Table 4: Department Course Offerings for the 2023/2024 Academic Year

Fall Term (Term 1)		
Course	Units	Name
MATLS 6G03	3	Character of Nanomaterials
MATLS 6MS4	4	Materials Selection in Design and Manufacturing Materials
MATLS 6NN3	3	Computational Modelling in Materials Engineering at the Nano-scale
MATLS 6T03	3	Properties and Processing of Composites
MATLS 701	3	Grad Seminar (M.A.Sc.)
MATLS 702	3	Grad Seminar (Ph.D.)
MATLS 724	3	Materials Characterization by Electron/Ion Microscopy
MATLS 734	1.5	X-Ray Theory

Winter Term (Term 2)		
Course	Units	Name
MATLS 6FF3	3	Synthesis, Applications and Environmental Impact of Nanomaterials

MATLS 6I03	3	Sustainable Manufacturing Processes
MATLS 6P03	3	Properties of Polymeric Materials
MATLS 701	3	Grad Seminar (M.A.Sc.)
MATLS 702	3	Grad Seminar (Ph.D.)
MATLS 715	3	Solidification Processing
MATLS 725	3	Transmission Electron Microscopy
MATLS 751	3	Mechanical Properties of Materials

Courses Outside the Department

Graduate students are normally required to complete their course degree requirements by taking courses from within their program (Department of Materials Science and Engineering). As a minimum, at least 50% of courses taken must be listed or cross-listed by the Department's (Materials Science and Engineering) program in order to be counted towards your degree; these courses have the MATL prefix in the Graduate Calendar. Graduate students are encouraged to consult with their supervisor to select some of their courses from areas beyond the focus of their research, including courses offered outside of the department. For courses to be taken for credit outside of the department, but within the Faculties of Engineering, Science and Health Science, written approval from the supervisor is required (to be submitted to the Graduate Administrative Assistant for record keeping purposes). For any other courses to be taken for credit require approval from the Associate Dean – Graduate Studies (Engineering).

The passing grades for all graduate courses outside of the Department are A+, A, A-, B+, B, and B-.

Extra Course(s)

This category identifies courses that a graduate student takes (with the approval of the supervisor) that are not necessary to meet the course requirements for the degree program. In order to designate a course as 'extra', graduate students need to submit a [Request for In-Program Course Adjustments](#) during the normal add period of enrollment in a particular term. The form is submitted to the program office and once approved will have the designation added to the enrollment record for that course only. 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 graduate student's transcript unless of academic dishonesty. Graduate students may petition to change the designation of an Extra Course to a M.A.Sc. or Ph.D. course prior to the deadline to drop a course provided that this change is supported by the supervisor and program and approved by the Associate Dean – Graduate Studies (Engineering). Changes of designation after the drop date will not be approved. 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 a M.A.Sc. or Ph.D. course.

The passing grades for an Extra Course are A+, A, A-, B+, B, and B-.

Failing a Course or Milestone

The minimum passing grade in a graduate course is a B-. Failure in either a course or a milestone is reviewed by the appropriate Faculty Committee on Graduate Admissions and Study or the Associate Dean. 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 or milestone, per the decision of the Faculty Committee on Graduate Admissions and Study. A failing grade in a Certificate, Diploma, Master's or Doctoral course remains on the transcript. Students who fail a second course or milestone will not normally be allowed to continue in the program.

SGS 700 Research/Writing (Full-Time)

Mosaic requires graduate students to be enrolled in a course in all three terms, even if you plan on finishing before the year ends. Students must have one course in each term. If you do not have any courses in a term you must enroll in the placeholder course SGS 700. Failure to enroll a course in each term may result in payment delays or prevent the student from moving onto the next academic year. This does not apply to graduate students who are on a leave of absence.

Once graduate students enroll in the SGS 700 course for a given term, they cannot add another course to that term. To make a change, students must first drop the SGS 700 course before the system will allow them to add anything else.

Graduate student fees in the department are assessed on a per-term basis.

Mandatory Course Requirements

MSE Graduate Seminar Course (MATLS 701/702) – Attendance is Mandatory

The Department holds a regular meeting, which incorporates the Graduate Seminar, featuring oral presentations by registered graduate students (MATLS 701 or MATLS 702) and by visitors and fulltime researchers.

Each student is required to prepare and present a major seminar, based upon extensive research work and literature surveys, on any topic of current research interest in Materials Science and Engineering. A pass/fail grade will be assessed based on overall performance in the course.

MATLS 701 (M.A.Sc.)

- One (1) seminar required, usually in Year 2 of program
- Enroll in Mosaic
- Watch for communication from the Graduate Administrative Assistant

MATLS 702 (Ph.D.)

- Two (2) seminars required, usually in Year 2 and Year 4 of program
- Registration with the Graduate Administrative Assistant is required for first (1st) seminar (do not enroll in Mosaic)
- Enroll in Mosaic for second (2nd) seminar
- Watch for communication from the Graduate Administrative Assistant

NOTE: There is a permission placed on the course to prevent students from registering for this course more than once.

Career Planning Milestone Training & Report (CARP)

Graduate students are required to complete a career planning exercise within the first three terms (12 months) of full time study. Graduate students will participate in a planning session with a career specialist within the Faculty and subsequently produce a report before completion of the first three terms (12 months) of full time study. The report must be submitted to the Graduate Administrative Assistant for approval by the Associate Chair (Graduate). Courses are only offered in Fall (Term 1) and Winter (Term 2) of the academic year.

SGS Mandatory Courses: SGS 101 / SGS 201

Graduate students are required to complete the following two (2) on-line courses available within Avenue to Learn (A2L) McMaster's web-based course management system:

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

Anyone who has not completed either of the following courses by the deadline provided by SGS will be automatically assigned an F grade. Each course takes approximately one hour to complete and consists of watching an online presentation followed by a test.

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 (SGS) at sgsrec@mcmaster.ca

Notes

- Passing grade for SGS 101 is 14/20 and students have three (3) attempts.
- Passing grade for SGS 201 is 6/6 and currently there is no limit to the number of attempts.
- Graduate students who have taken SGS 101 and 201 for a previous graduate degree do not need to take the course again.
- Graduate students, who have taken an AODA equivalent course, either previously at McMaster (e.g. undergraduate welcome week representative) or at another institution, may be exempt from taken SGS 201. They should contact aoda@mcmaster.ca to confirm that the course in question is an OADA equivalent course. Once confirmation is provided, it needs to be forwarded to sgsrec@mcmaster.ca.

M.A.Sc. Degree Requirements (Excluding Course Work)

Annual Supervisory Committee Meeting (SCM)

M.A.Sc. students are assigned a supervisory committee that consists of their supervisor plus one other faculty member (typically from the Department). Members external to the University need to be nominated by your supervisor and approved by the Associate Dean – Graduate Studies (Engineering). M.A.Sc.

Overview

The objective of the meeting is to assess progress towards meeting degree requirements and set goals to complete all degree requirements.

Format

The meetings typically consists of a 15-20 minute presentation given by the student with an emphasis on the research progress made. The presentation is followed by an informal question period and then a goal setting discussion. The meeting is concluded by the submission of a Masters Supervisory Committee report, which requires input from the student and the supervisor and approvals of both committee members.

How to Initiate and Submit the Supervisory Committee Meeting

- Students must submit to the Graduate Administrative Assistant, prior to the meeting deadline and/or by the end of Term 4, the names of the supervisory committee members (supervisor + 1).
- Students are expected to arrange the meeting with their supervisory committee members.
- Students are to complete the Masters Supervisory Committee Meeting Report prior to the meeting.
- The meeting is concluded by the submission the Masters Supervisory Committee Meeting to the Graduate Administrative Assistant. The final report is then submit to the School of Graduate Studies.

[Download and complete the form here.](#)

Timeline

Students completing a 24-month program including Part-Time students are expected to have a meeting within the first 12-months of their program (see Table 5 for deadline dates). Accelerated M.A.Sc. students are expected to submit a supervisory report within 6-8 months of starting the program. Students on an approved Leave of Absence is extended by the duration of the leave beyond the nominal deadline.

Table 5: M.A.Sc. Supervisory Committee Meeting Deadline (2023/2024)

<i>Program Start Date:</i>	<i>SCM Deadline:</i>
Prior to September 1, 2023	November 30, 2023
September 1, 2023	November 30, 2024

January 1, 2024	November 30, 2024
May 1, 2024	November 30, 2024

M.A.Sc. Defence

Your first step regarding any questions with respect to writing your thesis is to consult the [School of Graduate Studies' Guide for the Preparation of Master's and Doctoral Theses](#). All graduate theses must conform to the style and form requirements as detailed in the Guide.

Overview

The defence covers material presented in the written thesis and the background material to the submitted thesis.

Format

This is an oral public exam administered by the Department and open to all interested persons.

The exam consists of a short (20 minutes maximum) oral presentation that is followed by a question period where the student is asked to defend the contents and background to the written thesis. The question period (typical no more than 100 minutes) involves two rounds of questions with the majority of time being spent in the first round. Each of the three examiners will be allotted equal time to ask questions. Upon conclusion of the exam, the student is asked to leave the exam so that an assessment of the defence can take place. After a discussion of the examination, the chair will ask for a vote on the success or failure of the defence. If the examiners approve the defence, the chair will ask the examiners to complete the Examination Report by initialing appropriately. The student will be invited back to the exam for congratulations by the committee. If minor revisions are required to the thesis, the chair of the examination committee is responsible for ensuring that (1) the student is advised of the revisions, (2) the student receives and understands the 'Final Thesis Submission Sheet' to be used by the supervisor to confirm that the revisions have been made, and (3) the supervisor is also aware of the form. The chair will complete and sign the Examination Report and return it to the Graduate Administrative Assistant, whom will return it to the School of Graduate Studies upon receipt of the Final Thesis Submission Sheet and McMaster University Licence.

However, if there are two or more negative votes, the student will be deemed to have failed the defence, and a reconvened oral defence must be held at a later date. The student should be told as clearly as possible by the chair and the examining committee what must be done to improve the defence. The reconvened defence is the student's final opportunity to complete the degree. Membership on the reconvened examining committee is typically the same as that for the original defence. If the defence fails a second time, that decision is final, and not open to appeal.

Examination Committee

The examination committee is comprised of three faculty members (Supervisory committee member + 1). The third member will act as both examiner and chair of the defence.

Initiating the Defence

- Inform the Graduate Administrative Assistant by email a minimum of 6-weeks from the anticipated defence date including:
 - The title or working title of the defence
 - Supervisory Committee Members
 - Approximate date of the defence
 - Suggested Examiner/Chair as approved by the Supervisor
- Confirm all degree requirements (course and milestones) have been met by checking Student Summary in Mosaic. If a degree requirement or grade is missing, contact the Graduate Administrative Assistant.

Organizing the Defence

The Graduate Administrative Assistant will coordinate the defence including submitting all required forms to the Chair. A copy of the report must be submitted to the examination (pdf or printed) a minimum of 2-weeks prior to the confirmed defence date.

After the Defence

After a successful defence, the student must correct any errors identified in the written report identified by the examination committee to the satisfaction of the supervisor. Once approved by the supervisor, the student must submit an electronic copy to the School of Graduate Studies via MacSphere. Students are normally expected to submit their final thesis within four weeks of a successful defence.

Clear to Graduate

The Graduate Administrative Assistant will receive all required forms from the supervisor and/or Chair and submit to the School of Graduate Studies. The forms are then processed, and the student is clear to graduate. Please note the administrative process to clear to graduate may take up to 4-weeks. The final defence date is the date which the thesis was uploaded to MacSphere. Students requiring a verification letter (clear to graduate, degree completion) for work or Post Graduate Work permit, should be planned in advance. Last minute requests for verification letter are not guaranteed. See information about [verification letters](#).

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

More information is available on the School of Graduate Studies website: <https://gs.mcmaster.ca/current-students/completing-your-degree/masters-thesis/>

IMPORTANT: It is the student's responsibility to ensure they have met all course requirements and milestones prior to initiating the defence.

Transfer Exam from Master's to Ph.D.

M.A.Sc. students wishing to be transferred to the Ph.D. program prior to the completion of the M.A.Sc. degree must submit and successfully defend a written transfer report embodying a statement of progress and achievement in the research to date and a proposal for the Ph.D. research.

Timeline

Typically, a transfer examination is completed by the **end of the fifth term (20 months)** after initial admission in the M.A.Sc. program: to help ensure the graduate student does not go overtime while attempting to transfer. Approval to transfer from the M.A.Sc. program to the Ph.D. program will be determined through a closed (non-public) oral examination in defence of the submitted written Transfer Report. ([see section 2.1.4 of the General Regulations of the Graduate School](#))

Examination Committee

The exam committee is comprised of four faculty members, including the three members of the supervisory committee plus one additional faculty members (typically from the Department) as suggested by the supervisor and approved by the Associate Chair – Graduate. The fourth member will double as examiner and chair.

Format

The transfer exam consists of two parts: a report and an oral examination. The transfer report should take the form of a literature review plus some preliminary results and analysis followed by a detailed research proposal (objectives, methodology and anticipated significance). The literature review should not simply catalogue the papers in the field. Rather it should offer some insight into the state of the field (i.e. what are the main advances achieved, what are the main shortcomings, what is good or bad about the approaches taken by previous workers). This should lead into a discussion of what approach you intend to take in your own research. What will you want to do different from previous research, and what advances in the state-of-the-art do you hope to achieve? Some discussion of the techniques you expect to use will be important. You will be expected to demonstrate that you have thought about how best to approach your problem, and what the associated limitations may be. The report need not, and indeed should not, be a

lengthy document. It should indicate that you have a good grasp of the background to the project being undertaken, have demonstrated a potential to perform research, and have thought carefully about the research being proposed.

The oral exam covers material presented in the written transfer report and the background material to the proposed research. The purpose of this exam is to determine whether the student has a good chance of successfully completing a Ph.D. It also serves the valuable function of providing a good appraisal of the problem chosen for research.

The exam itself consists of a short (20 minutes maximum) oral presentation that is followed by a question period where the student is asked to defend the transfer report contents and background to the proposed research. The question period (typical no more than 120 minutes) involves two rounds of questions with the majority of time being spent in the first round. Each of the four examiners will be allotted equal time to ask questions. Upon conclusion of the exam, the student is asked to leave the exam so that an assessment of the defence can take place. After a discussion of the examination, the chair will ask for a vote on the success or failure of the transfer. If the examiners approve the transfer, the chair will ask the examiners to complete the transfer examination report by initialling appropriately. The student will be invited back to the examination room for congratulations by the committee.

However, if there are three or more negative votes, the student will be deemed to have failed the transfer exam and a reconvened oral exam must be held at a later date. The student should be told as clearly as possible by the chair what must be done to improve the transfer report. The reconvened oral exam is the student's final opportunity to complete the transfer. Membership on the reconvened examining committee should be the same as that for the original exam. If the exam fails a second time, that decision is final, and is not open to appeal. The student is then expected to complete the M.A.Sc. degree by submitting a written thesis and defending it in an oral defence exam.

In the case of a tie vote, the result is in favor of the student.

Initiating a Transfer Examination

The oral exam is administered by the Department. Inform the Graduate Administrative Assistant by email a minimum of 6-weeks from the anticipated transfer date including:

- The title or working title of the transfer report
- Supervisory Committee Members
- Approximate date of the transfer exam
- Suggested Examiner as approved by the Supervisor
- Suggested Chair as approved by the Supervisor

A copy of the transfer report (PDF or printed) must be sent to the members of the examination committee at least two weeks in advance of the scheduled examination.

Organizing the Transfer Exam

The Graduate Administrative Assistant will coordinate the transfer exam including submitting all required forms to the Chair. A notice of the transfer exam date will be delivered by email.

After the Transfer Exam

Upon successful completion of the transfer exam, the Graduate Administrative Assistant will submit the required forms to the School of Graduate Studies. All transfers are effective at the start of term. Courses taken as a M.A.Sc. will count towards your Ph.D. program. A second career planning exercise is required.

Ph.D. Degree Requirements (Excluding Course Work)

Annual Supervisory Committee Meeting (SCM)

Ph.D. students are assigned a supervisory committee. 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 scholar 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 and Dean of Graduate Studies. In this instance, please contact the Graduate Administrative Assistant for more information.

Overview

The objective of the meetings is to assess progress towards meeting degree requirements and to set goals to complete all remaining degree requirements.

Format

Students are expected to arrange the meeting with their supervisory committee members. The meetings typically consist of a 15-20 minute presentation given by the student that updates the supervisory committee on the progress made towards completing all degree requirements with an emphasis on the research progress made. The presentation is followed by an informal question period and then a goal-setting discussion. The meeting is concluded by the submission of an online (Mosaic) report, which requires input from the student and the supervisor and approvals of all three.

How to Initiate and Submit the Supervisory Committee Meeting

- Students must submit to the Graduate Administrative Assistant, prior to the meeting deadline and/or by the end of Term 4, the names of the supervisory committee members (supervisor + 2).
- Students are expected to arrange the meeting with their supervisory committee members.
- Email the Graduate Administrative Assistant to initiate the online Supervisory Committee Report
- Complete and submit the online report.

Timeline

Ph.D. students are required to meet with their supervisory committee on an annual basis (a minimum of four times over the typical length of the Ph.D. program). See Table 6 for deadline dates.

Table 6: Ph.D. Supervisory Committee Meeting Deadline (2023/2024)

<i>Program Start Date:</i>	<i>SCM Deadline:</i>
Prior to September 1, 2023	November 30, 2023
September 1, 2023	November 30, 2024
January 1, 2024	November 30, 2024
May 1, 2024	November 30, 2024

Research Proposal Exam

Overview

The proposal exam consists of two parts: a report and an oral examination. The proposal report should take the form of a literature review plus some preliminary results and analysis followed by a detailed research proposal (objectives, methodology and anticipated significance). The literature review should not simply catalogue the papers in the field. Rather it should offer some insight into the state of the field (i.e. what are the main advances achieved, what are the main shortcomings, what is good or bad about the approaches taken by previous workers). This should lead into a discussion of what approach you intend to take in your own research. What will you want to do different from previous research, and what advances in the state-of-the-art do you hope to achieve? Some discussion of the techniques you expect to use will be important. You will be expected to demonstrate that you have thought about how best to approach your problem, and what the associated limitations may be. The report need not, and indeed should not, be a lengthy document. It should indicate that you have a good grasp of the background to the project being undertaken, have demonstrated a potential to perform research, and have thought carefully about the research being proposed. For students transferring into the Ph.D. program from the M.A.Sc. program, this requirement is replaced by the Transfer Exam.

Timeline

Students in the Ph.D. program must submit a written Research Proposal for their research program and complete (pass) the associated oral exam within **12-20 months, with a final deadline of 24 months** in the program.

Examination Committee

The exam committee is comprised of four faculty members, the three members of the supervisory committee plus one additional faculty members (typically from the Department) as suggested by the supervisor and approved the by Associate Chair – Graduate. The fourth member will double as examiner and chair of the exam.

How to initiate the Proposal Exam

The oral exam is administered by the Department. Inform the Graduate Administrative Assistant by email a minimum of 6-weeks from the anticipated exam date including the following:

- The title or working title of the proposal report
- Supervisory Committee Members
- Approximate date of the proposal exam
- Suggested Examiner/Chair as approved by the Supervisor

Organizing the Proposal Exam

The Graduate Administrative Assistant will coordinate the proposal exam including submitting all required forms to the Chair. A notice of the confirmed exam date will be delivered by email.

Format

The oral exam covers material presented in the written proposal report and the background material to the proposed research. The purpose of this exam is to determine whether the student has a good chance of successfully completing a Ph.D. It also serves the valuable function of providing a sound appraisal of the problem chosen for research. Each of the examiners will give a critical review and examine the student on the content contained in or related to the Research Proposal during the oral exam.

The exam itself consists of a short (20 minutes maximum) oral presentation that summarizes the contents of the proposal report. The presentation is followed by a question period where the student is asked to defend the proposal and background to the proposed research. The question period (typically no more than 120 minutes) involves two rounds of questions with the majority of time being spent in the first round.

Each of the four examiners will be allotted equal time to ask questions. Upon conclusion of the exam, the student is asked to leave the exam so that an assessment of the exam can take place. After a discussion of the examination, the chair will ask for a vote on the success (pass) or failure of the exam. The student is then invited back into the exam for the verdict and feedback. If the verdict is fail (three or more votes to fail), then the exam will be reconvened at a later date (typically within four weeks). The reason(s) why the student failed will be clearly communicated by the chair so that students can focus on these shortcomings for the reconvened exam. The reconvened oral exam is the student's final opportunity to complete the proposal exam. If the student fails the reconvened exam, that decision is final, and is not open to appeal. The student is then invited back into the exam for the verdict and feedback.

In the case of a tie vote, the result is in favour of the student.

After the Proposal Exam

Upon successful completion of the proposal exam, the Graduate Administrative Assistant will submit the required forms to the School of Graduate Studies to be updated on the Student's Summary in Mosaic.

Comprehensive Examination Overview

Students in the Ph.D. program are also required to successfully complete (pass) the Comprehensive Examination. This oral exam tests the student's knowledge of three topics related to the research at an advanced level. Students are expected to show the greatest depth of knowledge in their field of research, but also are expected to demonstrate knowledge of fields related to their areas of specialization.

Timeline

Students in the Ph.D. program must complete (pass) the comprehensive exam within the **first six terms (24 months)** of entry into the Ph.D. program.

Examination Committee

The exam committee will consist of the Supervisory Committee, augmented by one other member suggested by the supervisor, and approved by the Associate Chair – Graduate. The fourth member will act as chair of the exam.

How to initiate the Comprehensive Exam

The oral exam is administered by the Department. Inform the Graduate Administrative Assistant by email a minimum of 6-weeks from the anticipated exam date including the following:

- The three topics as decided by the supervisory committee within 6-weeks of the anticipated exam date.
- Supervisory Committee Members
- Suggested Examiner/Chair as approved by the Supervisor
- Approximate date of the proposal exam

Organizing the Comprehensive Exam

The Graduate Administrative Assistant will coordinate the comprehensive exam including submitting all required forms to the Chair. A notice of the confirmed exam date will be delivered by email.

Format

The Comprehensive exam is meant to test the depth and breadth of your fundamental understanding in various areas of materials science and engineering. Three topics, on which the exam is to be based, are set by the supervisory committee and provided to the student no later than 3-weeks prior to the exam date.

The exam is an in-depth oral exam typically lasting two hours, consisting of two parts. It starts with a short oral presentation of the student's research objectives, methodology, major results, and discussion of their significance. The presentation is followed by a question period that is the exam, consisting of questions on the presentation delivered and more broadly, the three topics selected. Students are probed about their breadth and depth of knowledge pertaining to these research topic areas. The question period involves two rounds of questions with the majority of time being spent in the first round. Each of the examiners will be allotted equal time to ask questions. Upon conclusion of the exam, the student is asked to leave the exam so that an assessment of the exam can take place. After a discussion of the exam, the chair will ask for a vote on the success (pass) or failure of the exam. The student is then invited back into the exam for the verdict and feedback. If the verdict is fail (three or more votes to fail), then the exam will be reconvened at a later date (typically within four weeks). The reason(s) why the student failed will be clearly communicated by the chair so that students can focus on these shortcomings for the reconvened exam. The reconvened oral exam is the student's final opportunity to complete the comprehensive exam. If the student fails the reconvened exam, that decision is final, and is not open to appeal.

In the case of a tie vote, the result is in favour of the student.

Combining the Proposal and Comprehensive Exams

At the discretion of your supervisor and supervisory committee, the Proposal and Comprehensive Exam may be held concurrently by **24 months** into your Ph.D., at the latest. In this case, all requirements for both exams, as outlined above

must be met and although the exams will be held back-to-back in one meeting, you will be evaluated separately. In this case, you still have 3 requirements: a written report, a presentation, and an oral exam.

First, you prepare your Proposal Report, as outlined above. Second, your presentation should capture the requirements of both exams as outlined above, including a short (20-25 minutes maximum) oral presentation that summarizes the contents of the proposal report (the requirement for the Proposal Exam), including research objectives, methodology, major results to date and discussion of their significance (the requirement for the Comprehensive Exam).

The presentation is followed by a question period where the student is asked to defend the proposal and background to the proposed research. Concurrently, (or subsequently, at the preference of the presiding examination Chair) the student will be questioned on the 3 topics selected for the Comprehensive portion of the oral exam. Typically, the question period will not exceed 180 min for both portions combined.

The exams will be evaluated separately although taking place on the same day.

Ph.D. Defence

Your first step regarding any questions with respect to writing your thesis is to consult the [School of Graduate Studies' Guide for the Preparation of Master's and Doctoral Theses](#). All graduate theses must conform to the style and form requirements as detailed in the Guide. This is an oral exam administered by the Department. This is a public examination open to all interested persons.

Format

This is an oral exam administered by the School of Graduate Studies. Please contact gthesis@mcmaster for any questions pertaining to the Ph.D. defence process. After a short oral presentation, the student will be asked to defend the contents and background to the written thesis. This is a PUBLIC examination open to all interested persons.

Examination Committee

The examining committee includes members of the supervisory committee, members of the university from outside the department, and an external examiner from outside the university. Either your supervisor or the School of Graduate Studies will determine the additional members (external examiner and chair).

Initiating the Defence

- The deadline to initiate your defence varies each term and can be found on the School of Graduate Studies website [Dates and Deadlines](#) page.
- You can initiate your defence at any time but keep in mind if they are outside the deadline to initiate date, you may not meet convocation deadlines.
- Once you initiate your defence, your supervisor will have the choice to select the standard defence stream or the accelerated defence stream. The difference is mainly administrative and does not impact when you initiate your defence.
- Confirm all degree requirements (course and milestones) have been met by checking Student Summary in Mosaic. If a degree requirement or grade is missing, contact the Graduate Administrative Assistant.

Organizing the Defence

The School of Graduate Studies together with your supervisor will coordinate the defence including submitting all required forms to the Chair.

After the Defence

After a successful defence, the student must correct any errors identified in the written report identified by the examination committee to the satisfaction of the supervisor. Once approved by the supervisor, the student must submit an electronic copy of the final thesis to the School of Graduate Studies via MacSphere. Students are normally expected to submit their final thesis within four weeks of a successful defence.

Clear to Graduate

The Graduate Administrative Assistant will receive all required forms from the supervisor and/or Chair and submit to the School of Graduate Studies. The forms are then processed, and the student is clear to graduate. Please note the administrative process to clear to graduate may take up to 4-weeks. The final defence date is the date which the thesis was uploaded to MacSphere. Students requiring a verification letter (clear to graduate, degree completion) for work or Post Graduate Work permit, should plan in advance. Last minute requests for verification letters are not guaranteed. See information about [verification letters](#).

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

More information is available on the School of Graduate Studies website: More information can be found here <https://gs.mcmaster.ca/current-students/completing-your-degree/doctoral-degree/>

IMPORTANT: It is the student's responsibility to ensure they have met all course requirements and milestones prior to initiating the defence.

iThenticate – Plagiarism Checking Software

Students will need to scan their theses for originality using iThenticate effective October 1, 2023 and afterwards. Their supervisor will be required to sign off on the originality report. Documents with high overlap in content with other bodies of work does not necessarily mean that plagiarism has occurred, for example in the case of a sandwich thesis, which is why it is important that the supervisor sees the report and reviews it with the student. Students are expected to change their theses accordingly and re-scan if necessary. The software will be freely available to students. Training documents and more information will be available on the SGS website and distributed once available.

Sandwich Thesis

If some of the research undertaken expressly for the degree has previously been published or prepared 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: <https://gs.mcmaster.ca/current-students/completing-your-degree/>

****All questions about Ph.D. defence should be sent via email to the Thesis Coordinator at gthesis@mcmaster.ca****

M.A.Sc. Degree Requirements Summary & Checklist

M.A.Sc. Degree Course Work

- 12 units of course work: 9 units in addition to the mandatory MATLS 701 (3 units)
- 700 level courses are either a half (3 units) or quarter course (1.5 units)
- 600 level courses are offered as half courses (3 units) – only 1 permitted
- 50% of courses must be from offered by, or cross-listed with, the department (MATLS)
- Select course work after consultation and permission of your supervisor

Accelerated M.A.Sc. Degree Option Course Work

- One 600 level course (3 units) in final year of undergraduate degree (counts towards undergraduate AND graduate degree)

- 6 units of course work (must all be at the 700 level) in addition to the mandatory MATLS 701 (3 units)
- 50% of courses must be offered by, or cross-listed with, the department (MATLS)

Other Degree Milestones

- TA Training Session (first time TA students only) – September 2023 or January 2024**
 - Mandatory – students are paid for TA training once
- SGS 101 /SGS 201**
 - Complete by the deadline set by the School of Graduate Studies
 - Courses are administered by the School of Graduate Studies
- MATLS 701 Seminar Course**
 - Mandatory attendance for all students
 - Must complete one seminar presentation during degree program (usually in Year 2)
- Career Planning Milestone Training & Report (CARP)**
 - Attend mandatory workshop in September 2023 or January 2024
 - May students must attend September 2023 training
 - Submit report to the Graduate Administrative Assistant by end of Year 1
- Supervisory Committee Meeting and Report**
 - Supervisor plus one additional member
 - Incoming 2023/2024 students must complete first meeting by November 30, 2024
- Transfer Exam (Only if Transferring to Ph.D.)**
 - Transferring to the Ph.D. program prior to completing a M.A.Sc. degree
 - Transfer report submitted and defended end of term 5 (20 months) of program
- Thesis Defence**
 - Complete by end of sixth term (24 months)
 - Exam administered by the department
 - Examining committee consists of the two supervisory committee members plus one other member approved by the department

Ph.D. Degree Requirements Summary & Checklist

Course Work

- 12 units of course work: 9 units of course work in addition to mandatory MATLS 702 (3 units)
- 700 level courses are either a half (3 units) or quarter course (1.5 units)
- 600 level courses are offered as half courses (3 units) – only 1 permitted
- 50% of courses must be offered by, or cross-listed with, the department (MATLS)
- Select course work after consultation and permission of your supervisor

Other Degree Milestones

- TA Training Session (first time TA students only) – September 2023 or January 2024**
 - Mandatory – students are paid for TA training once
- SGS 101 /SGS 201**
 - Complete by the deadline set by the School of Graduate Studies
 - Courses are administered by the School of Graduate Studies

- **MATLS 702 Seminar Course**
 - Mandatory attendance for all students
 - Must complete 2 seminar presentations during degree program

- **Career Planning Milestone Training & Report (CARP)**
 - Attend mandatory workshop in September 2023 or January 2024
 - May students must attend September 2023 training
 - Submit report to the Graduate Administrative Assistant by end of Year 1

- **Supervisory Committee Meeting and Report – Annual Requirement**
 - Supervisor plus two additional members
 - Incoming 2023/2024 students must complete first meeting by November 30, 2024

- **Research Proposal Exam**
 - Submit and defend written research proposal within 12-24 months (three-six terms) of degree program
 - Examining committee consists of the three supervisory committee members plus one other member approved by the department

- **Comprehensive Exam**
 - Completed within the 24 months (end of term 6) of admission
 - Examining committee consists of the three supervisory committee members plus one member approved by the department

- **Thesis Defence**
 - Completed by end of 48 months (end of term 12) of admission
 - Exam administered by School of Graduate Studies

2023/2024 Graduate Handbook Sign-off Sheet

I have read the MSE Graduate Handbook and reviewed the document with my supervisor. I understand that in the event of a discrepancy between the information provided in this handbook and the School of Graduate Studies Calendar, the latter prevails.

- I have read the 2023/2024 Graduate Handbook in its entirety.
- I have completed the mandatory Risk Management Manual Health and Safety readings:
 - [RMM Number 300](#) – Health and Safety Training Program
 - [RMM Number 324 – Job Hazard Analysis](#)
 - [RMM Number 304 – Working Alone Program](#)
 - [McMaster University Laboratory Manual 2019](#)
- I have met with my Supervisor prior to the start of term and discussed necessary Health and Safety training. Including reviewing all other applicable [RMMs](#), for example, RMM 600 Biosafety, RMM 700 Radiation Safety, and RMM 403 Animals in the Workplace.
- All students are responsible for respecting the rights of others, contributing to an environment that is free of Discrimination, Harassment, and Sexual Violence, and for conducting themselves in a manner that contributes positively to the University and the University Community. By enrolling at the University students agree to abide by the Rights, Responsibilities, and Expectations in [McMaster's Code of Student Rights and Responsibilities](#).

Student Name


Date

Supervisor

Date

Please return signed and completed form via email to Grad Admin.

APPENDIX A – Training Matrix

McMaster University Training Matrix - Teaching/Research Assistants					
 McMaster University	Training Frequency (may be more frequent as per OH&S guidelines)	Teaching Assistant or Research Assistant - Category 1: Strictly Marking and office work, classroom presence	Teaching Assistant or Research Assistant - Category 2: Marking, office work, classroom presence, other duties, lab work with chemicals	Teaching Assistant or Research Assistant - Category 3: Marking, office work, classroom presence, other duties, lab work including chemical use and machine/equipment operation	Teaching Assistant or Research Assistant - Category 4: Marking, office work, classroom presence, machine/equipment use with no chemicals
Asbestos Awareness	5 yr	X	X	X	X
Chemical Handling & Spills	3 yr		X	X	
COVID-19 Awareness	Once	X	X	X	X
Ergonomics	5 yr	X	X	X	X
Fire Safety	3 yr	X	X	X	X
Gas Cylinder	Once		⊗	⊗	⊗
Health & Safety Orientation	Once	X	X	X	X
Hydrogen Fluoride	3 yr		⊗	⊗	
Machine Guarding Awareness	3 yr			⊗	X
Slips, Trips & Falls	5 yr	X	X	X	X
Violence & Harassment Prevention in the Workplace	3 yr	X	X	X	X
WHMIS 2015 ~	5 yr	X	X	X	X
Other Specific Training	Various	⊗	⊗	⊗	⊗

Legend

X Mandatory

* Mandatory if currently working on campus or before your return to campus for work purposes.

⊗ Required if working with the hazard or supervising staff who work with the hazard

~ As New products, equipment and technology take place training is required

All training to be completed as soon as practicable upon hire and prior to working with hazard.

Supervisors may request at their discretion the worker to complete refresher training of the current health and safety courses offered by the University on a more frequent basis as is deemed necessary, ie. conditions change, new information or hazards are introduced.

Supervisors please note RMM #300 (Safety Training & Orientation) all undergraduate students (and placement students) shall have safety orientation training prior to commencing labs

APPENDIX B – Guide to Ph.D. Exam Deadlines and Committee Composition

Admission date	Comprehensive 1		Proposal		Comprehensive 2		Comprehensive	
Before January 2021	Deadline	4-8 months	Deadline	12 – 16 months	Deadline	24 months	×	
	Examination Committee	3 appointed by the department	Examination Committee (5 in total)	SCM Examiner Chair	Examination Committee (4 in total)	SCM Chair		
January 2021 to September 2022	×		Deadline	12 – 24 months	×		Deadline	24 months
			Examination Committee (5 in total)	SCM Examiner Chair			Examination Committee (5 in total)	SCM Examiner Chair
After September 2022	×		Deadline	12 – 24 months	×		Deadline	24 months
			Examination Committee (4 in total)	SCM Examiner/Chair			Examination Committee (4 in total)	SCM Examiner/Chair