

McMaster
University



Department of Mechanical Engineering

Accelerated M.A.Sc. Program

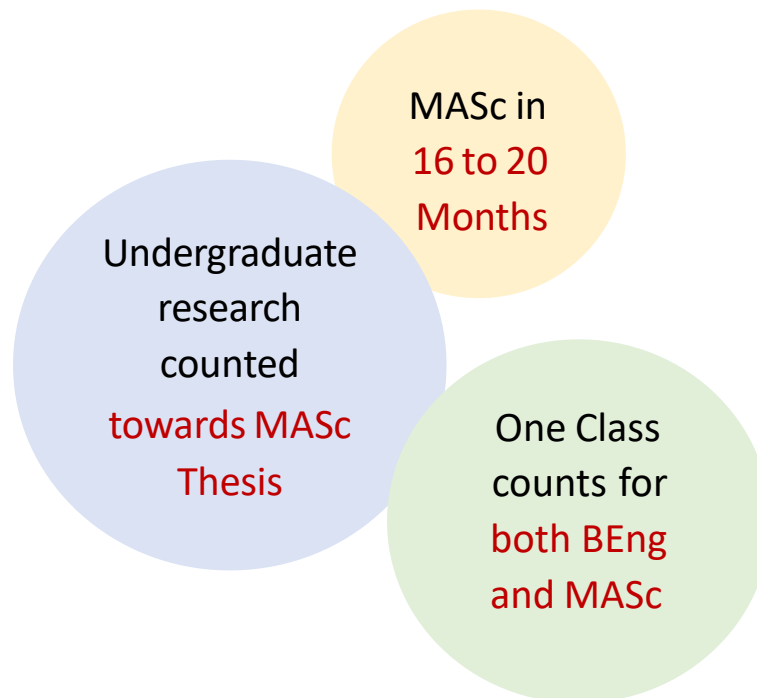
Updated: August 2024

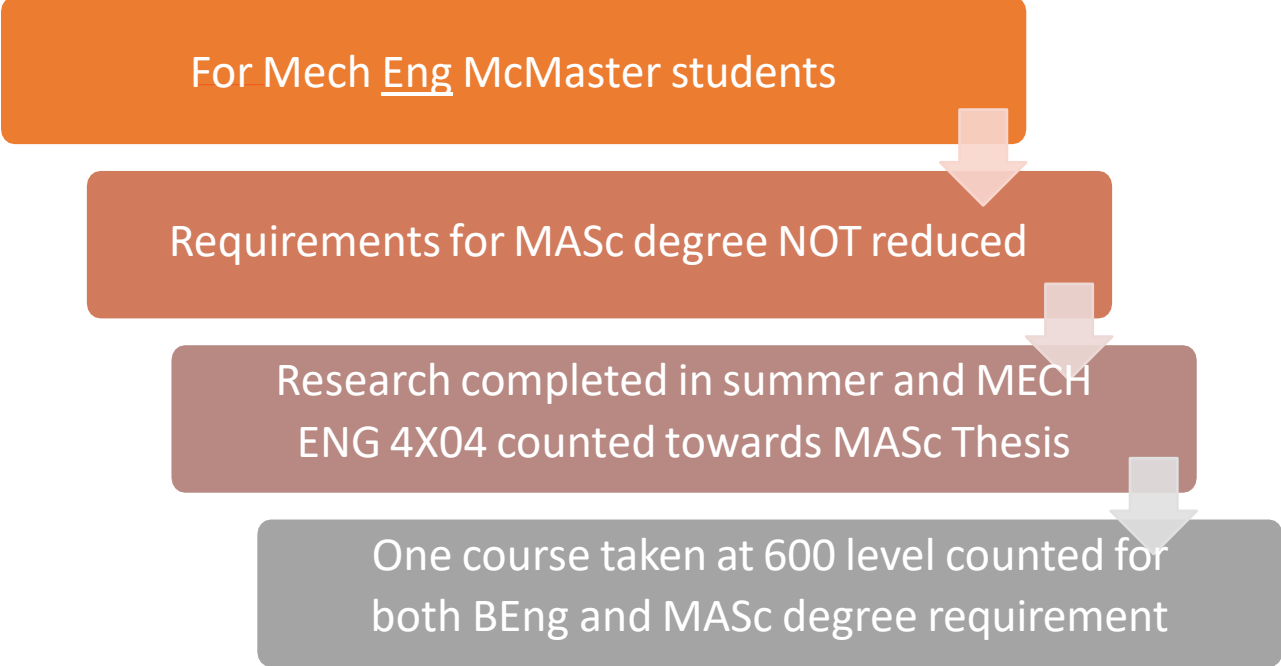


Innovation in Education • Excellence in Research • Quality of Student Life

ACCELERATED M.A.Sc. OPTION

An Accelerated M.A.Sc. Option is now available to students currently enrolled at McMaster as undergraduate students in the Mechanical Engineering Department, whereby the M.A.Sc. degree may be completed in 16-20 months of full-time study. In exceptional circumstances, students from other Engineering departments in McMaster may apply for entry into the accelerated option by contacting the Mechanical Engineering Department's Associate Chair (Graduate). Application for entry into the Accelerated Option through the Associate Chair (Graduate) occurs in the penultimate year of undergraduate studies. Applicants must have maintained a minimum CGPA of 9.5 for their undergraduate course work with a sessional average of 9.5 at the time they are applying for the option. The Accelerated Option requires students to complete at least one term of their research project with a supervisor from the department prior to completion of their undergraduate degree. A one-term 600-level course is required under the Accelerated Option in the final undergraduate year for graduate credit provided it is listed within the department. For students enrolled in the Accelerated Option, research conducted in MECHENG 4X04 may count towards the Accelerated Option and therefore towards partial fulfillment of the graduate M.A.Sc. thesis work. Entry into the M.A.Sc. program under the Accelerated Option must occur less than one year after completing one's undergraduate degree and must meet the same requirements for admission as other candidates.





Key Notes

- Eligibility:
 - Minimum cumulative average of 9.5
 - Minimum sessional average of 9.5 in last year of studies
- Have a Faculty Supervisor willing to supervise summer research with intent of also supervising subsequent MASC Research
- Apply for the Accelerated Option through the Associate Chair (Graduate)
- Associate Chair and Supervisor to review academic performance for admission to Accelerated Option
- Register for Accelerated Option in penultimate year of BEng; Student encouraged to apply for NSERC USRA

Timeline

TIMELINE	MILESTONE
Year 3 of B.Eng	Seek Faculty Supervisor for M.A.Sc. Thesis. Preferably apply for NSERC USRA.
Summer at end of Year 3 of B.Eng	Perform research with Faculty Supervisor. Apply to Accelerated M.A.Sc. option through department.
Year 4 of B.Eng	Take ONE 600 level course. Inform course instructor that 400 level course be used for U/G credit. Take ME 4X04 course and continue M.A.Sc. research. Apply to SGS for admission to M.A.Sc. program.
Year 1 of M.A.Sc.	Continue M.A.Sc. research in summer/fall/winter. Petition SGS for credit of completed 600 level course. Complete THREE additional 700 level courses. Complete Supervisory Committee Meeting (within first 8 months)
Summer following Year 1 of M.A.Sc.	Complete and defend M.A.Sc. Thesis.

Program Requirements

The minimum course requirement is four half-courses (50% of which must have the MECHENG course code); three of the four courses must be at the 700 level. A half-course is classified as 3 units. Courses delivered by departments in the School of Engineering and Applied Sciences (listed [here](#)) do not require a petition to count toward degree requirements; however, they cannot replace a MECHENG course.

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

Students are required to present a thesis that embodies the results of original work that the candidate has completed and demonstrates competence in Mechanical Engineering. Only the standard format thesis, as described in the document ["Completing your Masters degree – Thesis"](#) (available from the School of Graduate Studies website), will be accepted for examination. An oral defence of the thesis is required.

Degree Requirement Checklist

Incoming graduate students will be given a [Degree Requirement Checklist](#) at the beginning of their academic career. The completion of this checklist is mandatory and should be completed throughout the duration of your studies.

Student Responsibility

1. Keep the checklist up-to-date as you complete your studies.
2. Bring the checklist with you to your [Supervisory Committee Meeting](#) to discuss your progress.

Supervisor Responsibility

1. Discuss the checklist with the student at the Supervisory Committee Meeting to ensure the student is on track.
2. Once all academic requirements are fulfilled, sign the checklist. **The completed signed checklist must be submitted to the graduate administrator before initiating the defence.**

Additional Requirements

- ME 758 “Graduate Seminars in Mechanical Engineering.”: Mandatory annual registration in Mosaic for Term 1 and Term 2 of every academic session. Please visit [Avenue to Learn](#) for more details. MASc students are required to make one 7-minute presentation with a 3-minute Q&A period.
- SGS 101 and SGS 201 (online courses): Mandatory registration in Mosaic at the start of a student’s program only. Must pass and abide by these online SGS courses.
- Job Hazard Analysis (JHA) form: Must complete a job hazard analysis (JHA) form with your supervisor and read and follow the appropriate Standard Operating Procedures (SOPs). **Note**: In the context of safety, all graduate students are considered “workers”.
- Core Health and Safety courses: Must successfully complete *and abide by* the following core health and safety courses:
 - SAFE training (*replacing Slips, Trips and Falls, Asbestos Awareness, Fire Safety, Ergonomics*)
 - Health and Safety Orientation
 - Violence and Harassment Prevention
 - WHMIS 2015

Supervision

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

Supervisory Committee Meeting

The supervisor shall meet with the student within the first 8 months of Year 1 of the start of the M.A.Sc. for a formal review of progress. The student will complete the M.A.Sc. supervisory committee report form and submit to the supervisor at least one week in advance of the meeting. The supervisor will complete the form and submit it to the Department graduate program administrator at the end of the progress review meeting.

Student Responsibility

1. Set up the meeting with supervisor within 8 months of starting M.A.Sc.
2. Complete the student sections of the M.A.Sc. supervisory committee report form. (Details of progress towards meeting degree requirements since beginning of program).
3. Submit the form with a critical literature review of your research area to your supervisor at least one week before the meeting.

Supervisor Responsibility

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



Mechanical Engineering Accelerated MASc Application Form

PART A: Application (To be completed in the penultimate year of the Undergraduate program)			
First Name:		Last Name:	
Student Number:		Expected graduation month/year:	
Student Email:			
Cumulative GPA (must be ≥ 9.5)		Sessional GPA (must be ≥ 9.5)	
**Attach transcripts to this application			
Student Signature:		Date:	
Supervisor agrees to supervise applicant for a period of 4 months. No financial commitment is required or implied with this commitment.			
Supervisor Name: (print)			
Supervisor Signature:		Date:	
Sign if student has been admitted to Accelerated Master's Program			
Associate Chair (Graduate) Approval:		Date:	
PART B: To be completed at the end of Undergraduate program			
Part A and B of the course credit form have been completed and attached	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
Supervisor of Research:		** # of Months Under Supervision	
**Note – 4X04 will count as 1 month per term. A maximum of 8 months can be credited and a minimum of 4 months is required			
Supervisor Signature:		Date:	
The student named above meets the requirements for admission to the Accelerated Master's Program. The course request form must be completed once the student has begun their MASc. program. The MASc. program must begin within one year of graduation from the Undergraduate Program.			
Associate Chair (Graduate) Approval:		Date:	

Return completed form to the Graduate Program Administrator



Accelerated MASc – 600 Level Course Credit Application Form

PART A: To be Completed by the Undergraduate Student Prior to Taking the 600 level Course			
First Name:		Last Name:	
Student Number:		Course Name/Number:	
Student Email:			
Permission Granted to Attend 600 level Course			
Course Instructor:		Date:	
Instructor Signature:		Term:	
**Student: Enroll in the 400 level version of the course on MOSAIC and return this form to the Graduate Administrator once Part A has been completed			
PART B: To be Completed on Completion of Course			
Did the Student Pass the 600 level Course?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
Instructor Signature:		Date:	
**Student: Return the form to the graduate assistant once part B has been completed. Once you have graduated from the undergraduate program and have begun your MASc program, you must petition to have this course counted as a 600 level course. This document will be a part of that petition.			
PART C: To be Completed during MASc program when petitioning for 600 level credit			
**Student: Attach your "Petition for Special Consideration" (form found on SGS website) with Parts A and B completed, to this form before giving it to the Associate Chair, Graduate for completion.			
Petition for Special Consideration Form Attached	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
Requested 600 level Course Number:			
I certify that _____ (student) has fulfilled the requirements of the Accelerated Master's program and should receive credit for the above course.			
Associate Chair (Graduate): _____ Date: _____			
Signature: _____			
**Associate Chair, Graduate: Complete Part C of the Petition for Special Consideration and submit both forms to the Associate Dean, Graduate Studies.			

Return completed form to the Graduate Program Administrator

CONTACT US

Dr. Andrew Gadsden (Associate Chair, Graduate Studies)

- Email: gadsden@mcmaster.ca

Mrs. Diane Siv-Parr (Graduate Program Administrator)

- Email: mechgrad@mcmaster.ca