

McMaster University
W Booth School of Engineering Practice and Technology
MASTER OF ENGINEERING ENTREPRENEURSHIP & INNOVATION

Graduate Student Course Selection
2022 - 2023

Date: _____

Student Name: _____

Program: _____

Student ID: _____

Supervisor: _____

Course Name	Course Number	Term	Add (A) or Drop (D)?
Academic Research Integrity and Ethics	SGS 101	1	A
Accessibility for Ontarians with Disabilities Act (AODA)	SGS 201	1	A
Entrepreneurial Opportunity Identification	SEP 793	1	A
Leadership for Innovation	SEP 773		A
Enterprise Opportunity Development	SEP 753	2	A
W Booth SEPT Practitioner's Forum Part I	SEP 771	1	A
W Booth SEPT Practitioner's Forum Part II	SEP 771	2	A
Business Launch and Development	SEP 755**	4	A
Total Sustainability Management	SEP 770	2	A
Emerging Innovation Project	SEP 794	3	A
Emerging Technologies for Engineering Enterprise Innovation	SEP 790	1	A

*SGS 700 must be added when the student is not enrolled in any courses for the term.

** Students cannot enroll in SEP 755 until the July 2023 for the Fall 2023 term.

Graduate students must register for courses online via Mosaic. **Students must consult with their Program Advisor regarding course selection.** It is the responsibility of the student to ensure that the courses meet the program requirements, and that their course selections are recorded correctly on Mosaic. Any addition or deletion of courses should be approved by the faculty member. Once an agreement is reached with the Program Advisor, **students must upload this document to [this link](#)** and department staff will gather the faculty member's signature.

I approve these course selections

Program Advisor

Date

MASTER OF ENGINEERING ENTREPRENEURSHIP AND INNOVATION

The Master of Engineering Entrepreneurship and Innovation program is a fast-paced program that will provide new and seasoned engineering professionals with the modern skills and insights needed to confidently bring technology innovation to market. Successful graduates receive the MEng degree. The program is intended for full time students and the nominal program duration is 16 months

Students in the MEEI program must complete 10 courses (30 units).

7 core courses (21 units)
2 technical electives (6 units)
1 cross-disciplinary elective (3 units)

Core courses:

*793 / Entrepreneurial Opportunity Identification (Term 1)
*753/ Enterprise Opportunity Development (Term 2)
*755/ Business Launch and Development (Term 4)
*770/ Total Sustainability Management (Term 2)
*773 / Leadership for Innovation (Any term)
*794 / Engineering Innovation Project (Term 3)
*790/ Emerging Technologies for Engineering Enterprise Innovation (Term 1)
771/ W Booth School of Engineering Practice and Technology Practitioner's Forum Part I – Term 1
771/ W Booth School of Engineering Practice and Technology Practitioner's Forum Part II – Term 2

Those students who have exceptional technical backgrounds may consult the Program Lead to request an exemption for SEP 790. If approved, the student will choose an additional technical or approved cross-disciplinary elective to replace SEP 790.

Additionally all full-time candidates are required to successfully complete:

SEP 771 / W Booth School of Engineering Practice and Technology Practitioner's Forum Part I – Term 1
SEP 771 / W Booth School of Engineering Practice and Technology Practitioner's Forum Part II – Term 2

Technical Electives:

All students in the Master of Engineering Entrepreneurship and Innovation program must complete 6 units of elective courses. Students may choose any course in the Faculty of Engineering as an elective. Students with an exceptional entrepreneurship project may obtain permission from the Program Lead to complete the following course towards 3 units of their elective requirements.

SEP 795 / Entrepreneurship Project (Term 4, if applicable)

Cross-Disciplinary Elective Course:

All students in the Master of Engineering Entrepreneurship and Innovation program are required to complete one half course (3 units) which should be selected from the following approved cross-disciplinary elective list.

SEP 701 / Theory and Practice of Policy Analysis: Frameworks and Models
SEP 709 / Emerging Issues, Technology and Public Policy
SEP 777 / Cyber-Physical Systems and Industry 4.0
SEP 729 / Manufacturing Systems
SEP 731 / Lean Six Sigma for Engineering
SEP 760 / Design Thinking

Innovation and Entrepreneurship Project

An essential element in the MEEI/MTEI program is an Innovation project (SEP 794). Building on key concepts and outcomes of the core course progression, students will work in groups to develop market-aligned and technologically innovative new venture concepts. The project can be derived from several important sources:

Inventions and intellectual property developed by McMaster researchers
Innovation initiatives from sponsoring organizations from the community
Original concepts or inventions from students.

The project will allow students to experience the full cycle modern engineering and technology innovation including:

Assessing and characterizing markets and technology spaces
Developing high and unique value propositions for promising technologies
Thorough market research, competitive research, and IP management
Proof of Concept and Minimum viable product definitions
Framing a promising new business with either entrepreneurial or intrapreneurial intent
Essential financial and operational models for new ventures

Through the program, student groups who exhibit exceptional potential, through either the SEP 794 / Engineering Innovation Project course or other course activities, may be approved to take the elective SEP 795 / Entrepreneurship Project course elective. This intensive course provides an immersive opportunity for the project team to convert their project concepts into viable ventures that will be ready for either incubation via McMaster's Forge organization or to enter global pitch competitions. Key activities of this process include:

Rigorous proof of concept in business concept and critical technical elements.
Detailed, credible operational, financial, and marketing plans suitable for a new venture launch.
Intensive pitch preparations for competitions and even investment discussions with external parties

2.6.5 Required Course for All Graduate Students

All graduate students must complete the course *SGS #101- Academic Research Integrity and Ethics* and *SGS 201#, AODA* within the first month after their admission to graduate studies at McMaster. A graduate student may not obtain a graduate degree at McMaster without having passed these courses. In the event that a student fails these courses, they must retake it at the earliest opportunity. The course description for *SGS 101# and SGS 201#* may be found in the School of Graduate Studies Calendar.