WBOOTH
PROFESSIONAL GRADUATE PROGRAMS
wbooth.mcmaster.ca
This is NOT your typical M.Eng. degree.
Advancing your career with an interdisciplinary professional Master’s degree from McMaster University’s W Booth School of Engineering Practice and Technology. Our innovative graduate programs will help you broaden your technical perspective while gaining project management and communication skills that will help you to become a leader in your field.

4 Master’s Degree programs available:
- Engineering Design
- Engineering and Public Policy
- Entrepreneurship and Innovation
- Manufacturing Engineering

Leadership Excellence Entrance Scholarship
- 20 awards, $6,000
- Awarded to top domestic students entering full-time studies in Entrepreneurship and Innovation, Engineering Design, or Engineering and Public Policy.

At the W Booth School, you will develop as an innovative leader and creative problem-solver, with a focus on creating sustainable solutions for a changing world.

92% of our alumni are employed in their field within 6 months of graduating.

10% of our alumni currently work at the executive level (CIO, CFO, CEO, President, etc.) or are founders of their own companies.

Don Pether Incubation Centre
Work in the Don Pether Incubation Centre at the McMaster Innovation Park, created to support W Booth students and recent graduates. Take advantage of a professional workspace, equipped with workstations, meeting space, wifi, and printing, at no cost. Space is awarded competitively.
The W Booth School teaches a very holistic way of looking at engineering; they don’t necessarily only look at the technical details or the design of something, but they want you to know the context of the design. W Booth has allowed me to foster my automotive passions and has given me the freedom to follow them.”

Callan Yan - Master of Engineering Design
THE PROGRAM (18 units/6 courses + Project)

Courses:

All focus areas:

• SEP 760 / Design Thinking (3 units)
• SEP 773 / Leadership for Innovation (3 units)

Product Design

• SEP 762 / Prototyping Tools and Methods (3 units)
• SEP 763 / Special Topics in Engineering Design (3 units)
• 2 additional elective courses (3 units each)

Process and Production Systems

• 4 additional elective courses, with the following courses strongly recommended:
  • SEP 753 / Process Modelling and Optimization (3 units)
  • SEP 762 / Prototyping Tools and Methods (3 units)
  • CHEM ENG 765 / Multivariate Statistical Methods for Process Monitoring and Analysis (3 units)

Sustainable Community Infrastructure

• 4 additional elective courses, with the following course strongly recommended:
  • SEP 748 / Development of Local Sustainable Communities (3 units)

All full-time candidates are required to successfully complete:

• SEP 771 / Practitioner’s Forum (0 units) - seminar series aimed at networking and community building
• SEP 772 / Innovation Studio (0 units) - weekly working sessions for students across disciplines to develop projects from conception to delivery

Project:

• Students must also complete an industrially oriented project that solves complex problems requiring synthesis of knowledge from several disciplines and presenting the students with an opportunity to develop the solution in an industrial environment.
So you want to be an entrepreneur?

Kick-off your own hi-tech start-up while earning a Master’s degree in a globally recognized, award-winning program.

At the same time, you will learn tools and concepts for creating a new business using an industry-proven process. While starting your business, our network of seasoned mentors will help you to translate your novel idea into a commercial innovation.

You will gain innovation and entrepreneurial skills that will help you professionally, no matter where your career is headed.

“Our program stands above all others around the world because of its impressive mix of curricular programming and real world, high stakes technology ventures developed by students.”

Dr. Lotfi Belkhir, Associate Professor and Chair of Eco-Entrepreneurship

Dr. Lotfi Belkhir
Associate Professor

Dr. David Potter
Associate Professor
### Degree Admission Start Date FT Length PT Length

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<thead>
<tr>
<th>Degree</th>
<th>Admission</th>
<th>Start Date</th>
<th>FT Length</th>
<th>PT Length</th>
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<tbody>
<tr>
<td>Engineering Entrepreneurship and Innovation</td>
<td>STEM Degree, B- average in in last 10 technical courses</td>
<td>September</td>
<td>16 months</td>
<td>28 months</td>
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<tr>
<td>Technology Entrepreneurship and Innovation</td>
<td>Degree from any discipline, with evidence of ability to successfully complete technical courses, B- average in final year</td>
<td>September</td>
<td>16 months</td>
<td>28 months</td>
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While students in the Master of Technology program are not expected to have any engineering or scientific background, they must embrace creativity and innovation. Familiarity with technology is expected, but the required technological depth will depend on the student’s chosen project.

### THE PROGRAM (18 units/6 courses + Project)

**Courses:**
- SEP 6E03 / Entrepreneurial Opportunity Identification (3 units)
- SEP 753 / Enterprise Opportunity Development (3 units)
- SEP 755 / Business Launch and Development (3 units)
- SEP 773 / Leadership for Innovation (3 units)
- 2 additional elective courses (3 units each)

All full-time candidates are required to successfully complete:
- SEP 771 / Practitioner’s Forum (0 units) - seminar series aimed at networking and community building
- SEP 772 / Innovation Studio (0 units) - weekly working sessions for students across disciplines to develop projects from conception to delivery

**Project:**
- The Engineering Enterprise Project runs throughout the entire program length, resulting in both a business and a technical plan for an engineering prototype product (ideally with an actual prototype device or software produced) with an identified customer base and a plan outlining the way to commercialization. The project unites two complementary streams of activities, one technical and the other entrepreneurial, to bring an idea to the proof of concept phase.

Apply for seed-funding from the W Booth School through a competitive process to help get your business started.

“We discovered the problem that our enterprise is trying to solve by using the customer development model taught in the Entrepreneurship and Innovation program. The advice and mentorship of the faculty has made all the difference in building our confidence in our presentation skills.”

*Jacob Jackson, Master of Engineering Entrepreneurship and Innovation, Co-founder of Healthcare Innovation in NeuroTechnology*
Do you want to be a voice of change for a sustainable society?

Master of Engineering and Public Policy

Students in the Engineering and Public Policy program become integrative problem solvers, armed with the interdisciplinary skills to find solutions that can balance competing societal needs.

- As researchers and policy makers, graduates work in both the public and private sectors to drive decision-making.
- Using the skills learned through interdisciplinary course work, as well as real-world experience gained while working with community partners to complete your research, you’ll be ready to make a difference in your chosen career.

“\nThis degree opened a world of opportunities for me. It gave me the proficiency to design and implement high quality, policy-strengthening information technology processes within my workplace.”

Alex Braun, Master of Engineering and Public Policy

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<td>STEM Degree, B- average in last 10 technical courses</td>
<td>September or January</td>
<td>12 months</td>
<td>24 months*</td>
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<td>* under review</td>
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<td>* under review</td>
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Applicants who did not attain the required standing in their undergraduate degree, but who have at least four years of relevant work experience may be considered.

THE PROGRAM (21 units/7 courses + Inquiry Paper)

Courses:
- SEP 701 / Theory and Practice of Policy Analysis: Frameworks and Models (3 units)
- SEP 702 / Systems Engineering and Public Policy (3 units)
- SEP 709 / Emerging Issues, Technology and Public Policy (3 units)
- SEP 773 / Leadership for Innovation (3 units)
- 3 additional elective courses (3 units each)

All full-time candidates are required to successfully complete:
- SEP 771 / Practitioner’s Forum (0 units) - seminar series aimed at networking and community building
- SEP 772 / Innovation Studio (0 units) - weekly working sessions for students across disciplines to develop projects from conception to delivery

Inquiry Paper/Thesis:
- Students select a research topic at the interface of engineering, science and public policy and carry out inquiry-driven research. You will complete a formal research paper and prepare to publish your results for broad dissemination.
The Manufacturing program allows me to focus in depth in my subject areas – mechatronics, mechanical, and automation engineering. My professors have had experience working in industry and they bring this with them to the classroom. 

Zuri Gomez, Master of Engineering – Manufacturing Engineering

With a focus on Industry 4.0, you will focus on how to create, regulate, protect, and improve networked manufacturing systems for the purpose of developing “smarter” and more sustainable engineering and business processes.

You will work with an industry partner and academic mentor to complete a real-world project (of your choosing and design) focusing on one of the following three areas:

- Advanced Manufacturing
- Automotive
- Automation and Smart Systems

### Admission

<table>
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<tr>
<th>Engineering Degree, B average in Degree</th>
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<th>PT Length</th>
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<tr>
<td>Engineering Degree, B average in Degree</td>
<td>September or January (limited enrolment)</td>
<td>12 months</td>
<td>24 months</td>
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Applicants who did not attain the required standing in their undergraduate degree, but who have at least four years of relevant work experience may be considered.

### THE PROGRAM (24 units = 6 courses + Project)

**Courses:**
Choose 6 courses (3 units each) from a range of options in Manufacturing, Chemical, Materials Science, and Mechanical engineering.

All full-time candidates are required to successfully complete:
- \* SEP 771 / Practitioner’s Forum (0 units) - seminar series aimed at networking and community building

**Project:**
- \* MANUF 701 / Project (6 units) – Students will address a specific problem found in a manufacturing facility related to trouble-shooting, re-design or optimization of an existing process or problem. The project could stem from an undergraduate co-op, employment experience or an industry partner that students have connected with. Students may take 2 courses in lieu of the project component (pending University approval).

Accelerated program option available for existing McMaster B.Tech. and B.Eng. students.

Credit for 2 courses taken at the 600 level during undergraduate studies will be considered. Contact wbooth@mcmaster.ca to find out more.
How to Apply

1. Review your eligibility for our programs: wbooth.mcmaster.ca/how_to_apply.html

2. Complete the online application and submit all required documentation, including:
   - 1-2 page statement of interest
   - 2 confidential letters of reference
   - Resume
   - Transcripts for all post-secondary education completed in Canada or internationally
   - Proof of English language proficiency (if required)

3. Qualified applicants will be invited to complete an interview with a W Booth School faculty member in person or online

Industry & Community Partners

We Welcome Industry & Community Partners!

Some partners present us with real world innovation challenges that become student projects. Others support students who have generated their own project ideas yet require mentorship and expert insights. Either way, our Innovation Studio graduate course is the platform for dynamic school-community collaborations.

What’s in it for our partners?

- Early access to emerging talent – a pipeline to tomorrow’s leaders
- Added resources to tackle complex challenges
- Interactions with world-class faculty
- Affiliation with the wider McMaster community
- Invitations to special events throughout the year
- Opportunity to join the W Booth School Advisory Council
Interested in working with W Booth graduate students on a potential innovation challenge? Contact wbooth@mcmaster.ca

Our team sees this as an excellent opportunity to share knowledge, leverage available resources and see first-hand how the W Booth School can assist the City in implementing our ideas for the waterfront.

Gavin Norman,
Manager, Waterfront Development (City of Hamilton)