

Mechanical & Materials Engineering

MASc Map

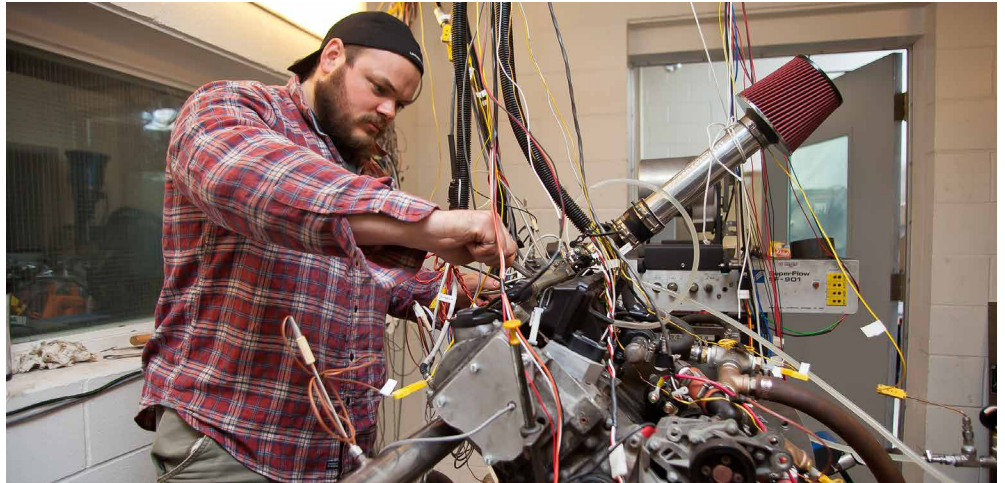
Applying to and Navigating Graduate Studies

Why Graduate Studies in Mechanical & Materials Engineering?

As a Master's student in the field of Mechanical and Materials Engineering (MME), you can play a vital role in future developments in such areas as: ergonomics, biomechanics and tissue engineering, assistive technologies, emerging techniques in MRI and CTI imaging, fuel cells, fluid flow, gas turbines, design optimization, robotics, ceramics and polymers, atomistic simulations on long and short timescales, corrosion and environmental degradation of materials, development of improved materials for nuclear reactor applications, laser additive manufacturing of metals, and many other areas. Mechanical & Materials Engineering continues to play a vital role in modern life. Graduate students and their work are an important part of an ongoing research process that provides the community with ways of understanding natural, cultural, imaginative, social, and technological phenomena.

Why Queen's?

As a Master's student in Mechanical and Materials Engineering at Queen's you are part of one of the most research intensive universities in Canada. Our research program is internationally renowned with a wide range of research activities in all of the major specialization areas of Mechanical and Materials Engineering. The Mechanical and Materials graduate program has been recognized for the quality of its academic and research programs. It also focuses on



"My [...] research project has involved collaboration with a surgeon in Sweden, researchers at the U of Queensland, Australia and NRC in Ottawa. This may sound extraordinary, but it is in fact closer to the norm for our Department." – Melanie Thompson, MASc

multidisciplinary, collaborative research with faculty in other departments, other faculties, and other universities.

Program Structure

MASc (2-years): Research-based program with 4 term-length courses and a thesis. Seminar course also required (MECH 897). This course is a pass/fail only. Students present their research to their peers in year two (2).

Combined BASc and MASc program: BASc students can take 2 MASc courses in their 4th year, and the other 2 courses during their MASc.

Research Areas

- Biomechanical
- Energy and Fluid Systems
- Manufacturing, Mechatronics

and Dynamic Systems

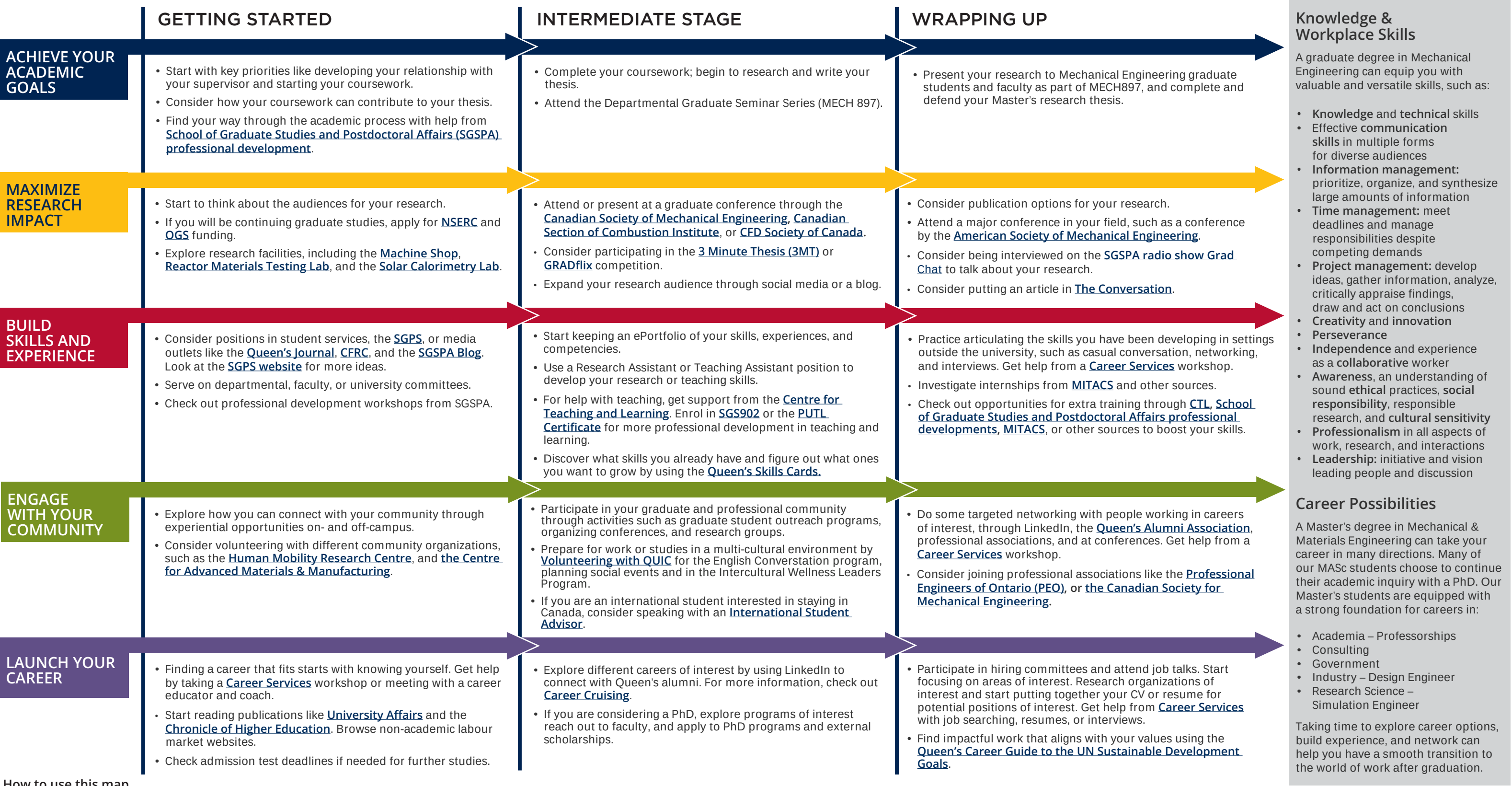
- Materials Engineering

We encourage you to identify an area of research interest and contact a potential supervisor before applying. Visit the [Mechanical and Materials Engineering website](#) to read about research groups and faculty profiles. When you find a faculty member with similar research interests to yours, contact them and tell them about your interest in graduate work and related experience. This is also an opportunity for you to find out if the faculty member is accepting new graduate students to supervise. Meet with your potential supervisor at departmental events for prospective students.



Mechanical & Materials Engineering MAsc Map

MASTER OF APPLIED SCIENCE (MASc)



How to use this map

Use the 5 rows of the map to explore possibilities and plan for success in the five overlapping areas of career and academics. To make your own custom map, use the My Grad Map tool: [careers.queensu.ca/gradmaps](#).

Graduate Studies FAQs

How do I make the most of my time at Queen's?

Use the Grad Map to plan for success in five overlapping areas of your career and academic life. Everyone's journey is different - the ideas on the maps are just suggestions to help you explore possibilities. For more support with your professional development, take advantage of the SGSPA professional development framework and the new Professional Development Plan (PDP) process to set customized goals to help you get career ready when you graduate.

Where can I get help?

Queen's provides you with a broad range of support services from your first point of contact with the university through to graduation. Ranging from help with academics and careers, to physical, emotional, or spiritual resources – our welcoming environment offers the programs and services you need to be successful, both academically and personally. Check out the [SGSPA website](#) for available resources.

What is the community like?

Queen's offers graduate students from every discipline a close-knit intellectual community where they can learn, discover, and build lasting connections. With more than 130 graduate programs across 50+ departments and research centres, students benefit from world-class scholars, prize-winning professional development, generous funding packages, and life in the historic waterfront city of Kingston. The campus sits at the heart of Kingston, just a 10-minute walk from downtown's shops, restaurants, and waterfront, and is deeply integrated with the local community. For more on Kingston's history and culture, see Queen's University's Discover Kingston page.

Application FAQs

What do I need to know to Apply?

ACADEMIC REQUIREMENTS

- Honours Bachelor's degree in Applied Science or Engineering.
- **Grade requirements:** minimum cumulative average of a B (73-76.9%).

ADDITIONAL REQUIREMENTS

- If English is not a first language, nor was the language of instruction in undergraduate studies, prospective students must meet English language proficiency requirements in writing, speaking, reading, and listening as part of the application process, and before final acceptance is granted, as per School of Graduate Studies and Postdoctoral Affairs' regulations.

KEY DATES & DEADLINES

- **Application deadline:** No hard deadline. It is encouraged that prospective international students apply before March 1st to allow time to receive Visas.
- **Notification of acceptance:** End of March to July for September admissions.

Before you start your application, please review the Graduate studies application process.

What about Funding?

Currently, MASc students receive minimum funding of \$20,000 (domestic)/\$25,000 (international) per year which includes mandatory teaching assistantships. Students are funded through a combination of research assistantships, teaching assistantships, and/or scholarships.

Apply for external funding from OGS and other sources. For more information, see the School of Graduate Studies and Postdoctoral Affairs' information on awards and scholarships.

