Why GRADUATE STUDIES in MECHANICAL & MATERIALS ENGINEERING?

As a PhD 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 CT imaging, fuel cells, fluid flow, gas turbines, design optimization, robotics, 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 PhD 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.

“My research work provides me with skills and experience working on cutting edge healthcare technology which in the future I will be able to apply in industrial or academic positions.”

– Rick Helgason, PhD

The Mechanical and Materials graduate program has been recognized for the quality of its academic and research programs. It also focuses on multidisciplinary, collaborative research with faculty in other departments, other faculties, and other universities.

RESEARCH Areas

- Biomechanical
- Energy and Fluid Systems
- Manufacturing and Dynamic Systems
- Materials Engineering

We encourage you to identify an area of research interest and contact a potential supervisor before applying.

Program STRUCTURE

PhD (4 years): course work, comprehensive exams, seminar course (MECH 997) which is “pass/fail” only, and the research thesis.

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.

“Applying to and Navigating Graduate Studies”

GRAD MAP FOR PhD STUDENTS
Graduate Studies FAQs

Application FAQs

What do I need to know to APPLY?

ACADEMIC REQUIREMENTS
- Master's degree in Applied Science or Engineering.
- Exceptional BSc students may be admitted directly to the PhD program.

ADDITIONAL REQUIREMENTS
- If English is not a native language, prospective students must meet the English language proficiency requirements in writing, speaking, reading, and listening. The following minimum scores are required: (1) TOEFL iBT: Writing (24/30); Speaking (22/30); Reading (22/30); Listening (20/30). Applicants must have the minimum score in each test as well as the minimum overall score, or (2) IELTS: 7.0 (academic module overall band score and a 7.0 for each test band), or (3) PTE Academics: 65, or (4) CAEL CE -70 (minimum overall score).

KEY DATES & DEADLINES
- Application deadline: No hard deadline. It is encouraged that prospective domestic and international students apply before March 1st to qualify for internal awards or 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?

Minimum funding guarantee for PhD students $25,000/year (increasing to $27,000 for September 2024 start) throughout years 1-4 which includes mandatory teaching assistantships. Students are typically funded through a combination of research assistantships, teaching assistantships, and/or scholarships.

We encourage all students, if eligible, to apply for external funding – for example tri-council (NSERC) during the Fall semester, Ontario Graduate Scholarships (OGS) during February/March, and from other sources. Queen's will automatically issue a one-time $10,000 award to incoming PhD students who have won federal government tri-council awards. See the School of Graduate Studies and Postdoctoral Affairs’ for more information on awards and scholarships.

Jane Davies, Graduate Assistant
(613) 533-6928
mme.graduate@queensu.ca
me.queensu.ca/graduate