Why GRADUATE STUDIES in CIVIL ENGINEERING?

As a Master's student in the field of Civil Engineering, you can play a vital role in future developments in such areas as rock mechanics, design of foundations, water quality, sediment transportation, pipeline flow, construction and rehabilitation of structures, and many other areas. Civil Engineering has a wide range of applications that contribute to modern life and its infrastructure.

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. Check out whygradstudies.ca for more reasons to choose graduate studies in engineering.

Why QUEEN’S?

As a Master's student in Civil 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 Civil Engineering.

The Queen’s graduate programs in Civil Engineering are home to some of the finest minds in the fields of civil and environmental engineering. Students have the chance to study engineering in an environment where multidisciplinary research and activities are encouraged and facilitated. Research activity in the Department is generally classified under two fields: Civil Engineering Environment and Civil Engineering Infrastructure.

The Civil Engineering Department’s objective is to provide a broadly-based education in civil engineering which is intrinsically supported by world-class research in the areas of Structural, Geotechnical, Hydrotechnical, and Environmental Engineering.

Program STRUCTURE

MASc (2 years): 4 graduate term length courses, research, and a thesis.

RESEARCH Areas

- Geotechnical Engineering
- Environmental Engineering
- Hydrotechnical Engineering
- Structural Engineering

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

Visit the Civil Engineering website to read about research areas and learn more about faculty members' research specialization. When you find a faculty member with similar research interests to yours, contact him/her and tell them about your interest in graduate work and related experience.
Civil Engineering

MASc MAP *

GETTING STARTED

**ACHIEVE YOUR ACADEMIC GOALS**
- Start with key priorities like developing your relationship with your supervisor, and completing your coursework.
- Consider how your course papers can contribute to your MASc research thesis.
- Find your way through the academic process with help from departmental and Expanding Horizons professional development workshops, the department Grad Chat and the GSS Habits.

**MAXIMIZE RESEARCH IMPACT**
- Start to think about the audiences for your research.
- If you will be continuing graduate studies, apply for NSERC and GSS funding.

**BUILD SKILLS AND EXPERIENCE**
- Consider positions in student services, the GSS, or media outlets like the Queen’s Journal, CFRC, and the GSS Blog. Look in the AMS Clubs Directory for more ideas.
- Serve on departmental or university committees. Talk to the Graduate Student President for tips on getting involved.
- Check out professional development workshops from Expanding Horizons and the Chemical Engineering Department.

**ENGAGE WITH YOUR COMMUNITY**
- Explore how you can connect with your community through experiential opportunities on- and off-campus.
- Consider volunteering with different community organizations, such as one of the Engineering Society’s Design Teams.

**LAUNCH YOUR CAREER**
- Finding a career that fits starts with knowing yourself. Get help by taking a Career Services career planning workshop or meeting with a career counsellor. Check out books like So What Are You Going to Do With That? for advice on various career options.
- Start reading publications like University Affairs and the Chronicle of Higher Education. Browse non-academic labour market websites. Stay on the lookout for special events like Graduate Student Career Forum to explore your career pathways.
- Check admission test deadlines if needed for further studies.

INTERMEDIATE STAGE

**GETTING STARTED**

**WRAPPING UP**

- Complete your coursework; begin to research and write your thesis.
- Complete the module mandatory course(s) in laboratory safety (CIVL 801).
- Learn about academic integrity at Queen’s.

**MAXIMIZE RESEARCH IMPACT**
- Attend or present at a graduate conference which your supervisor can advise as to which conference would be best for you.
- Consider participating in the 3 Minute Thesis (3MT) competition.
- Expand your research audience through social media such as Twitter or a blog.
- Set up a meeting with the School of Graduate Studies for a Grad Chat to discuss your research interests.

**BUILD SKILLS AND EXPERIENCE**
- Start keeping an ePortfolio of your skills, experiences and competencies.
- Use a Teaching Assistant position to develop your research or teaching skills.
- For help with teaching, get support from the Centre for Teaching, and Learning. Enroll in SSS901 or the PUTL certificate for more professional development in teaching and learning.

**ENGAGE WITH YOUR COMMUNITY**
- Participate in your graduate and professional community through activities such as graduate student outreach programs, organizing conferences, and research groups.
- Prepare for work or studies in a multi-cultural environment by taking the QUIC and Four Directions Aboriginal Student Centre’s Training Certificate.
- If you are an international student interested in staying in Canada, consider speaking with an International Student Advisor.

**LAUNCH YOUR CAREER**
- Explore different careers of interest by reading alumni profiles on the SGS website, and using Queen’sConnects on LinkedIn to connect with Queen’s alumni, or find alumni in various careers through Ask an Alum.
- If you are considering a PhD, explore programs of interest reach out to faculty, and apply to PhD programs and external scholarships.

- Practice articulating the skills you have been developing in settings outside the university, such as casual conversation, networking, and interviews. Get help from a Career Services workshop.
- Check out opportunities for extra training through CTI, Expanding Horizons, Mtacs, or other sources to boost your skills.
- Investigate internships from Mtacs and other sources.

- Do some targeted networking with people working in careers of interest, through Queen’sConnects on LinkedIn, the Queen’s Alumni Association, professional associations, and at conferences. Get help from a Career Services workshop.
- Consider joining professional societies like the Canadian Society for Civil Engineers.

- Participate in hiring committees and attend job talks. Start focusing on areas of interest. Research organizations of interest and start putting together your CV or resume for potential positions of interest. Get help from Career Services with Job searching, resumes, or interviews.

WHERE CAN I GO?

A Master’s degree in Civil Engineering can take your career in many directions. Many of our MASc students choose to continue their academic inquiry with a PhD. Our Master's students are equipped with a strong foundation for careers in:
- Academia and Research
- Consulting
- Public sector
- Manufacturing
- Policy and Governance
- Civil Engineering in the public domain
- Law

Taking time to explore career options, build experience, and network can help you have a smooth transition to the world of work after graduation.

WHAT WILL I LEARN?

A graduate degree in Civil Engineering can equip you with valuable and versatile skills, such as:
- Knowledge and technical skills
- Effective communication skills in multiple forms for diverse audiences
- Information management: prioritize, organize and synthesize large amounts of information
- Time management: meet deadlines and manage responsibilities despite competing demands
- Project management: develop ideas, gather information, analyze, critically appraise findings, draw and act on conclusions
- Creativity and innovation
- Perseverance
- Independence and experience as a collaborative worker
- Awareness, an understanding of sound ethical practices, social responsibility, professional practice, research and cultural sensitivity
- Professionalism in all aspects of work, research, and interactions
- Leadership: initiative and vision

Visit careers.queensu.ca/gradmaps for the online version with links!
Application FAQs

What do I need to know to APPLY?

ACADEMIC REQUIREMENTS
- 4-year Bachelor's degree in Engineering or a cognate science.
- Grade requirements: minimum B (70%-+) average over the four years of undergraduate study. Grades in specific courses in the final two years are also considered.

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 School of Graduate Studies requires the following minimum scores: TOEFL (paper-based): 550, (2) TOEFL iBT: Writing (24/30); Speaking (22/30); Reading (22/30); Listening (20/30), for a total of 88/120 (applicants must have the minimum score in each test as well as the minimum overall score), or (3) IELTS: 7.0 (academic module overall band score), or (4) PTE Academics: 65.

KEY DATES & DEADLINES
- Application deadline: March 1 to qualify for internal funding.
- Notification of acceptance: 2-3 months after the full application has been received.

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

What about FUNDING?

The basic funding package for Civil Engineering Master's students may include teaching or research assistantships and graduate awards. The funding package is something to be discussed between yourself and your supervisor before accepting the offer.

Apply for external funding from OGS, NSERC and other sources. Queen's will automatically issue a $5,000 top-up to Masters winners of federal government tri-council awards. For more information, see the School of Graduate Studies' information on awards and scholarships.