# Civil Engineering MEng Map

### Applying to and Navigating Graduate Studies

### 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 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.

### 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.



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

**MEng (1 year)**: Complete 8 term length courses pre-approved by the department.

### **STUDY** Areas

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

Visit the <u>Civil Engineering website</u> to read course descriptions.







GRADUATE STUDIES AND POSTDOCTORAL AFFAIRS

### 2023-2024 **Civil Engineering MEng Map** MASTER OF ENGINEERING (MEng)

	GETTING STARTED	INTERMEDIATE STAGE	WRAPPING UP
ACHIEVE YOUR ACADEMIC GOALS	<ul> <li>Start with key priorities like completing your coursework.</li> <li>Find your way through the academic process with help from departmental and <u>School of Graduate Studies and</u> <u>Postdoctoral Affairs professional development workshops</u>, the department Grad Chair, and the <u>SGSPA website</u>.</li> <li>Complete the module courses such as APSC 801.</li> </ul>	<ul> <li>Complete your coursework.</li> <li>Learn about academic integrity at Queen's.</li> </ul>	• Ensure that you have enough credi
MAXIMIZE LEARNING IMPACT	<ul> <li>Consider possible connections between your degree and future careers, and how you can explore topics of interest with coursework and projects.</li> </ul>	<ul> <li>Attend or present at a graduate conference, such as the <u>Canadian Society for Civil Engineering Annual Meeting</u>. Your supervisor can also advise as to which conference would be best for you.</li> <li>Set up a meeting with the School of Graduate Studies and Postdoctoral Affairs for a Grad Chat to discuss your research interests.</li> </ul>	<ul> <li>Attend a major conference in your signaduate students from Civil Engine exceptionally well. See your superv</li> <li>Consider putting an article in <u>The C</u></li> </ul>
BUILD SKILLS AND EXPERIENCE	<ul> <li>Consider positions in student services, the SGPS, or media outlets like the Queen's Journal, and the SGSPA Blog. Look in the <u>AMS Clubs Directory</u> for more ideas.</li> <li>Serve on departmental or university committees. Talk to the Graduate Student President for tips on getting involved.</li> <li>Check out professional development workshops from SGSPA and the Civil Engineering Department.</li> </ul>	<ul> <li>Start keeping an eportfolio of your skills, experiences, and competencies.</li> <li>Use a Teaching Assistant position to develop your research or teaching skills.</li> <li>For help with teaching, get support from the <u>Centre for Teaching and Learning</u>. Enrol in SGS902 or the PUTL Certificate for more professional development in teaching and learning.</li> </ul>	<ul> <li>Practice articulating the skills you h outside the university, such as casu and interviews. Get help from a Car</li> <li>Investigate internships from MITAC</li> <li>Check out opportunities for extra tr of Graduate Studies and Postdocto development, MITACS, or other source</li> </ul>
ENGAGE WITH YOUR COMMUNITY	<ul> <li>Explore how you can connect with your community through experiential opportunities on- and off-campus.</li> <li>Consider volunteering with different community organizations, such as one of the Engineering Society's Design Teams.</li> </ul>	<ul> <li>Participate in your graduate and professional community through activities such as graduate student outreach programs, organizing conferences, and research groups.</li> <li>Prepare for work or studies in a multi-cultural environment by taking the Intercultural Awareness Training Certificate hosted by QUIC and Four Directions Indigenous Student Centre.</li> <li>If you are an international student interested in staying in Canada, consider speaking with an International Student. Advisor.</li> </ul>	<ul> <li>Do some targeted networking with of interest, through <u>Queens Conne</u> <u>Queen's Alumni Association</u>, profes conferences. Get help from a Caree</li> <li>Consider joining professional socie <u>Society for Civil Engineers</u>.</li> </ul>
LAUNCH YOUR CAREER	<ul> <li>Finding a career that fits starts with knowing yourself. Get help by taking a Career Services workshop or meeting with a career educator and coach.</li> <li>Start reading publications like <u>University Affairs</u> and the <u>Chronicle of Higher Education</u>. Browse non-academic labour market websites. Stay on the lookout for special events like Graduate Student Career Week to explore your career pathways.</li> <li>Check admission test deadlines if needed for further studies.</li> </ul>	<ul> <li>Explore different careers of interest by using <u>Queens Connects</u> on LinkedIn to connect with Queen's alumni. Check out Career Cruising for more information.</li> <li>If you are considering a PhD, explore programs of interest reach out to faculty, and apply to PhD programs and external scholarships.</li> </ul>	<ul> <li>Participate in hiring committees an focusing on areas of interest. Rese interest and start putting together potential positions of interest. Get with job searching, resumes, and in</li> </ul>

### 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. The map just offers suggestions – you don't have to do it all! To make your own custom map, use the <u>My Grad Map</u> tool.



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<u>e Conversation</u>.

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ACS and other sources.

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and attend job talks. Start esearch organizations of er your CV or resume for iet help from Career Services d interviews.

### 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, responsible research and cultural sensitivity
- Professionalism in all aspects of work, research, and interactions
- Leadership: initiative and vision leading people and discussion

### WHERE CAN I GO?

A Master's degree in Civil Engineering can take your career in many directions. Many of our MEng students choose to continue their academic career with an MASc or a PhD. Our Master's students are also equipped with a strong foundation for careers in:

- Academia and Research
- Civil Engineering in the public domain
- Consulting
- Law
- Manufacturing
- Policy and Governance
- Public sector

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

## 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 Individual. Development Plan (IDP) 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 <u>SGSPA website</u> for available resources.

### What is the community like?

At Queen's, graduate students from all disciplines learn and discover in a closeknit intellectual community. You will find friends, peers and support among the graduate students enrolled in Queen's more than 130 graduate programs within 50+ departments & research centres. With the world's best scholars, prize-winning professional development opportunities, excellent funding packages and life in the affordable, historic waterfront city of Kingston, Queen's offers a wonderful environment for graduate studies. Queen's is an integral part of the Kingston community, with the campus nestled in the core of the city, only a 10-minute walk to downtown with its shopping, dining and waterfront. For more about Kingston's history and culture, see Queen's University's Discover Kingston page.



# Graduate 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 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: March 1st.
- **Notification of acceptance:** 2-3 months after the full application has been received.

Before you start your application, please review the <u>Graduate studies application</u> <u>process</u>.

### What about FUNDING?

Civil Engineering MEng graduate students are required to be self-funded.



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