Why GRADUATE STUDIES in CHEMICAL ENGINEERING?

As a Master’s student in the field of Chemical Engineering, you can play a vital role in future developments in such areas as biological conversion, pollution degradation, tissue engineering, process control and optimization, (bio)chemical sensing, nanocomposites, and many of other areas. Chemical Engineering has a wide range of applications that contribute to modern life and its technologies.

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 Chemical 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.

The Chemical Engineering Department has links to a number of multi-disciplinary centres at Queen’s, including: the Human Mobility Research Centre, Green Centre Canada, Innovation Park, the Queen’s Centre for Energy and Power Electronics Research (ePOWER), and the Queen’s Innovation Connector. The Department also houses the Polymers Research Group (PRG), with strengths in polymer reaction engineering, processing and rheology.

Program STRUCTURE

MASc (approximately 2 years): course work, seminar, and thesis.

RESEARCH Areas

- Biomedical Engineering
- Macromolecular Science and Technology
- Process Analytics, Optimization, and Control
- Microfluidics, Colloids, Biosensors
- Sustainable energy sources, processes, products, and environmental remediation

We suggest that you review the specific research projects currently being investigated by faculty members to identify a potential supervisor. Please note, however, that contacting a faculty member does not guarantee acceptance and you will need to submit your full application in order to be considered.

Visit the Chemical Engineering Department website to read faculty profiles and learn more about faculty members’ research areas.

“...I enjoyed the interaction between the students and faculty and our industrial partners. It was like a built-in work experience while you’re in school, [giving me] real world experience that I can add to my résumé.”

– Adeboyega Babasola, MSc
WHAT WILL I LEARN?
A graduate degree in Chemical Engineering can equip you with:
- 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 and 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 Chemical 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
- Consulting
- Finance
- Manufacturing
- Petroleum
- Pharmaceuticals

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

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

What do I need to know to APPLY?

ACADEMIC REQUIREMENTS
- Bachelor's degree in Engineering or other relevant program.
- Grade requirements: minimum B+ (77%) average.

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 due: There is a constant intake with no set deadline. It is recommended that the application be completed at least 4 months ahead of the desired admission cycle, especially for international students.
- Notification of acceptance: Rolling acceptances for September, January, and May academic cycles.

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

What about FUNDING?

Chemical Engineering graduate students have a minimum funding of $25,000. As part of the minimum funding package, you may serve as a Teaching Assistant for at least one term per year.

Apply for external funding from OGS, SSHRC 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.