Why GRADUATE STUDIES in CHEMISTRY?

A degree from Queen's Department of Chemistry is highly regarded and an important consideration in today’s competitive science and technology job market. Our $56 million state of the art building is home to the Nuclear Magnetic Resonance facility and its eight high-field instruments, an on-site Mass Spec facility with four mass spectrometers, an X-ray diffractometer, a CFI-funded facility for materials characterization and more unique equipment in faculty labs.

Why QUEEN’S?

Queen's University and the Department of Chemistry enjoy international reputations. With 27 award-winning faculty, and over 130 graduate students, post-doctoral fellows and research associates performing cutting-edge research in a multitude of areas, you will find this an exciting place to do research. Research is performed in the areas of analytical, inorganic, organic, physical, polymer, and theoretical chemistry. Research in these areas ranges from the most fundamental to very applied. A unique opportunity to obtain dual degrees from Queen’s University and the University of Stuttgart, Germany.

“Within the Stuttgart/Queen's double Master’s program I had the opportunity to conduct research at two different institutions and make valuable connections.”

- Matthias Hermann, MSc

Program STRUCTURE

MSc (2 years): course work and thesis.

Current Queen's undergraduate chemistry students entering their 4th year and have a A- (A minus) average may apply for an Accelerated Masters (https://www.chem.queensu.ca/undergraduate/accelerated-msc-program).

Students who show exceptional promise in their research have the option to promote to the PhD program in their second year.

“A Master’s in Chemistry is a versatile degree that has provided me with the analytical and critical thinking skills that are requisite to success in my future career as a lawyer”

- Kasia Donovan, MSc
The coronavirus pandemic may impact how some activities are delivered in 2020-2021. Please check directly with the host of any activity on the map for the latest information.

**WHAT WILL I LEARN?**

A graduate degree in Chemistry can equip you with:

- Knowledge and Technical Skills
  - Chemical synthesis
  - Spectroscopic characterization
  - 3D printing/rapid prototyping
  - Mass spectrometry analysis
  - Experimental design
  - Molecular modelling

- Communications
  - Manuscript writing
  - Conference oral presentation
  - Poster presentation (graphic)

- Creativity and Innovation
  - Scientific patent writing/patent protection

- Business skills in chemical industry
  - Grant writing, problem solving

- Leadership and Collaboration
  - Committee participation
  - Supervision of junior researchers
  - Industrial engagement

- Research with international experts/partners

**WHERE CAN I GO?**

A Master's degree in Chemistry can take your career in many directions. Many of our MSc students choose to continue their academic inquiry with a PhD. Our Master’s students are equipped with a strong foundation for careers in:

- Quality Control Chemist
- Doctoral Studies
- Forensic Scientist
- Environmental Law
- Patent Law
- Food Scientist
- Biochemistry
- Consumer Protection
- Pharmaceutical Chemist
- Materials Scientist
- Petroleum Engineer
- Chemical Education (University, College, Secondary/Primary)

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

**INTERMEDIATE STAGE**

- Complete your coursework; begin to research and write your thesis.
- Complete your annual Research Progress Reports.
- Consider attempting the PhD Candidacy/Comprehensive Exam for promotion to the PhD program.

**WRAPPING UP**

- Complete and defend your thesis (CHEM 899).

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Application FAQs

What do I need to know to APPLY?

ACADEMIC REQUIREMENTS
- 4 year Honour’s degree in Chemistry or a related science, including Biochemistry, Chemical Physics, Materials Science, or Chemical Engineering.
- Grade requirements: minimum upper second class standing (B+ average).

ADDITIONAL REQUIREMENTS
- Correspond with potential supervisors.
- Two official transcripts for all post-secondary studies.
- Two Letters of Recommendation.
- Curriculum Vitae.
- 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: February 1st for international applicants; Flexible deadline for domestic applicants.
- Notification of acceptance: Domestic students are notified on an ongoing basis as their applications are reviewed. International students are notified at the end of March.

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

What about FUNDING?

M.Sc. students in Chemistry receive minimum funding of $25,490 per year. Many students are awarded scholarships and awards, which allow them to exceed this level of income.

The funding package may comprise of graduate awards, research fellowships, and research and/or teaching assistantships.

Apply for external funding from OGS, NSERC and other sources. Queen’s will automatically issue a one time $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, or see what awards are offered through the Chemistry Department.