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 new $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 25 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.

“My years at Queen’s have left me with nothing but good memories. It was a great experience, a great city and a great education. It was a solid foundation to launch a career.”
– Will N. Rogers, PhD

Program STRUCTURE

MSc (2 years): course work and thesis.

RESEARCH Areas

- Analytical/Environmental
- Biological
- Inorganic/Organometallic
- Materials/Polymer
- Organic
- Physical
- Theoretical/Computational

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

Visit the Chemistry Department website to read faculty profiles and learn more about faculty members’ research areas. 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. This is also an opportunity for you to find out if the faculty member is accepting new graduate students to supervise.
**Chemistry MSc MAP**

**GETTING STARTED**
- Start with key priorities like developing your relationship with your supervisor, forming your committee, and doing your coursework.
- Complete WHMIS safety training.
- Find your way through the academic process with help from the departmental and *Expanding Horizons* professional development workshops, the department Grad Chair and the SGS Habitat.

**INTERMEDIATE STAGE**
- Complete your coursework; begin to research and write your thesis.
- Complete your annual Research Progress Reports.
- Attend or present at a graduate conference such as the Canadian Chemistry Conference and Exhibition.
- Attend the weekly seminar series (CHEM 802).
- Expand your research audience through social media such as Twitter or a blog.
- 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 CTL, *Expanding Horizons*, MITacs, or other sources to boost your skills.
- Take advantage of the state-of-the-art research facilities, which feature NMR, mass spectrometry, X-ray diffractometer, a laser lab, and more.
- Do some targeted networking with people working in careers of interest, through QULC's *Intercultural Competency Certificate*.
- Complete your coursework; begin to research and write your thesis.
- Participate in your graduate and professional community through activities such as graduate student outreach programs, organizing conferences, and research groups like Material Matters.
- Prepare for work or studies in a multi-cultural environment by taking courses such as *Science Rendezvous*, *Weekend Wellness* or *Community Service*.
- Consider joining professional associations like the Canadian Society for Chemistry, *Queens Alumni*, or find alumni in various careers through "Queen’s Graduate Chemistry Society websites, and using LinkedIn to connect with Queen’s alumni, or find alumni in various careers through the SGS Habitat*.
- Complete and defend your thesis (CHEM 899).
- Consider publication options for your research.
- Attend a major conference in your field, such as the Canadian Chemistry Conference and Exhibition.
- Start to think about the audiences for your research.
- If you will be continuing graduate studies, apply for NSERC and OGS funding.
- Explore different careers of interest by reading alumni profiles on the SGS website, and using *QueensConnects* on LinkedIn to connect with Queen’s alumni, or find alumni in various careers through *Ask an Alum*.
- Check out the free online modules at MyGradSkills to help you plan your career.
- If you are considering a PhD, explore programs of interest reach out to faculty, and apply to PhD programs and external scholarships.
- 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*.
- Find your way through the academic process with help from the departmental and *Expanding Horizons* professional development workshops, the department Grad Chair and the SGS Habitat.

**WRAPPING UP**
- Consider volunteering with different community organizations, museums, or cultural study groups such as the *Science Rendezvous*.
- Take part in events put on by the *Queen’s Chemistry Innovation Council*.
- Explore how you can connect with your community through experiential opportunities on- and off-campus.
- Consider volunteering with different community organizations, museums, or cultural study groups such as the *Science Rendezvous*.
- Participate in your graduate and professional community through activities such as graduate student outreach programs, organizing conferences, and research groups like Material Matters.
- Prepare for work or studies in a multi-cultural environment by taking courses such as *Science Rendezvous*, *Weekend Wellness* or *Community Service*.
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- Find your way through the academic process with help from the departmental and *Expanding Horizons* professional development workshops, the department Grad Chair and the SGS Habitat.

**WHAT WILL I LEARN?**
A graduate degree in Chemistry 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 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:
- Research chemist
- Research engineer
- Scientist
- Technical leader
- ICP Analyst
- Professor

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

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*This map is intended to provide suggestions for activities and careers, but everyone's abilities, experiences, and constraints are different. Build your own Grad Map using our online My Grad Map tool.*
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.
- 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 to be considered for awards. Later applications are accepted.
- Notification of acceptance: Accepted students are notified as the applications are reviewed.

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

What about FUNDING?

M.Sc. students in Chemistry receive minimum funding of $23,000 per year. Many students are awarded scholarships and awards, which allow them to exceed this level of income.

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, or see what awards are offered through the Chemistry Department.