Succeed in the workplace

What employers want

The Canadian Council of Chief Executives list the top 6 skills sought by employers as:

1. People skills
2. Communication skills
3. Problem-solving skills
4. Analytical abilities
5. Leadership skills
6. Industry-specific knowledge

Take the time to think about the unique skills you have developed at Queen’s, starting with the skills list here for ideas. Explaining your strengths with compelling examples will be important for applications to employers and further education. For help, check out the Career Services skills workshop.

What can I learn studying CHEMISTRY?

• Research skills to conduct research, understand scientific journal articles, trouble-shooting, clearly explain and interpret research data
• Organizational skills to compile, organize and maintain accurate records
• Ability to operate laboratory equipment and to employ appropriate scientific lab techniques
• Proficiency in mathematics
• Sensitivity to the health and safety of others - safe handling, storage and disposal of hazardous chemicals
• Written and oral communication skills to prepare and present reports from research ideas and information using current technology
• Observation and decision making skills
• Resource and time management
• Logical reasoning

Get the help you need

Queen’s provides you with a broad range of support services from your first point of contact with the university through to graduation. At Queen’s, you are never alone. We have many offices dedicated to helping you learn, think and do.

Ranging from help with academics and careers, to physical, emotional, or spiritual resources – our welcoming living and learning environment offers the programs and services you need to be successful, both academically and personally.

Get to know CHEMISTRY

Frequently called the central science because it provides the basis for studies in many other disciplines ranging from biology to materials science, in addition to being a booming discipline of its own, chemistry explores the composition, structure and transformation of matter. Located in Chernoff Hall, Queen’s Department of Chemistry is regarded as one of the best in Canada for both teaching and research. Our aim is to offer a stimulating learning environment for undergraduate students, primarily through participating in engaging, practical laboratory work. In upper years, depending on your interests, undergraduates can specialize in one of the more fundamental branches of the discipline, such as analytical, inorganic, organic, physical, or theoretical chemistry. Others may choose to explore newer applications, such as environmental, materials, biological, computational, or polymer chemistry.

Professional chemists play major roles in such diverse and important areas as the design and synthesis of pharmaceuticals and polymers, the development of alternative energy sources, and the protection of the environment.

A Common START

Students in our Faculty are admitted into Arts, Science or Computing but the focus is on a common first year. Through self-exploitation, and while you settle into university life, you have the opportunity to work with our advisors and faculty to discover your real interests and identify opportunities for success. Sometimes that discovery happens fairly quickly, and for other students it takes some work and time before the “ah-ha!” happens – either way your first year at Queen’s will be a great experience.

Course HIGHLIGHTS

The first year course in Chemistry is a survey of modern chemistry covering molecular structure, bonding, phases of matter, thermodynamics, electrochemistry, equilibrium, kinetics, polymers, organic and biochemistry with extensive lab participation. Some popular upper year courses include Synthetic Organic Chemistry, Biological Chemistry, Polymer Chemistry, Environmental and Green Chemistry and Quantum Mechanics.

Degree OPTIONS

Bachelor of Science (Honours)
• Major / Minor / Specializations in Chemistry, Environmental Chemistry

Bachelor of Science (General)
• Bachelor of Arts (General)

Internship option available

Queen’s ADMISSION

Students apply to Queen’s Science (QS) through the OUAC (Ontario Universities Application Centre) website (ouac.on.ca). Secondary School prerequisites include English 4U, Calculus and Vectors 4U, Advanced Functions 4U and two of Chemistry 4U, Biology 4U or Physics.


That is a degree from Queen’s.
**Chemistry Major Map**

**1ST YEAR**
- In 1st year take CHEM 112, PHYS 106 (or 104, 117), MATH 121 (or 120), MATH 112 (or 110, 111).
- Each Science Plan will have several required first-year courses, including minors. For details see the Arts and Science Academic Calendar.
- Want to enhance your degree? Consider a certificate in Academic Writing or explore other certificates available.

**2ND YEAR**
- Look into summer jobs by talking to the dept. or Career Services about work through SWEP, NSERC-USB or Work Study.
- Consider entrepreneurial opportunities via programs like the Queen's Innovation Connector Summer Initiative (QICSI).

**3RD YEAR**
- Try to complete all of the 3rd year core Chemistry course requirements (CHEM 311, 312, 313, and 397 in the Fall term, and 321, 322, 323, and 397 in the Winter term). For the Specialization Plan in Chemistry, 90.0 core/option units are required and planning for the extra 3rd and 4th year Chemistry courses is needed.
- Need help mapping all of your core, option, supporting and elective courses (including those not listed above) to make sure you will have what you need to complete your degree? Use the Course Mapping Tool on the Arts and Science website.

**4TH OR FINAL YEAR**
- Investigate requirements for full-time jobs, graduate studies, or other opportunities. Assess what you’re lacking and fill in gaps – check out the Career Services skills workshop for help.
- Consider presenting your research results at the Southern Ontario Undergraduate Student Chemistry Conference in the Spring.
- Prepare for work or studies in a multi-cultural environment by taking QIC’s Intercultural Competency Certificate, and research possible immigration regulations.

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**GET THE COURSES YOU NEED**

**GET RELEVANT EXPERIENCE**

**GET CONNECTED WITH THE COMMUNITY**

**GET THINKING GLOBALLY**

**GET READY FOR LIFE AFTER GRADUATION**

**WHERE COULD I GO AFTER GRADUATION?**

Agricultural sciences
Biomedical engineering
Botany
Complementary medicine
Conservation
Dentistry
Ecology
Education
Epidemiology and community health
Environmental research
Food science and technology
Forensic science
Genetics
Industrial processes
Journalism
Management (business and health administration)
Manufacturing
Marketing
Medical laboratories
Medicine
Nutrition and dietetics
Patent law
Pharmaceuticals
Pharmacy
Physiology
Public health
Public or private research
Teaching
Technician
Toxicology
Veterinary medicine
Zoology

Some careers may require additional training.

Visit careers.queensu.ca/majormaps.html for the online version with links!