Chemistry

Chemistry explores the composition, structure, and transformation of matter. Frequently called the central science, 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.

TOP 5 Reasons To Study Chemistry

1. Chemistry opens very broad career options.
2. With extensive experimental training, Chemistry studies are very hands-on and fun!
3. Queen's Chemistry Department is a very supportive and nurturing environment; our graduating class is small and close-knit.
4. All major and specialization students conduct research in fourth year as part of their plan.
5. Queen's Chemistry programs are accredited by the Canadian Society for Chemistry.

Alumni story

Not too long ago, Jenny Du was a student at Queen's. Now she's living the California lifestyle at a cool startup. As the Director of Extraction, Jenny works with a team at Apeel Sciences to use natural plant extracts to formulate edible coatings that work to extend the shelf-life of fresh produce.

TOP ALUMNI JOBS

10% of alumni work in GOVERNMENT

11% of alumni work in HEALTH & MEDICINE

14% of alumni work in RESEARCH & DEVELOPMENT

32% of alumni work in EDUCATION

2023-24 Plan Thresholds

Thresholds are made on a competitive basis and are updated annually. To see the thresholds for all programs as well as the latest information, please visit quartsci.com/planselection

Interested in finding out how to augment your degree with Experiential Learning? Learn what opportunities and resources are available for you on the Experiential Learning website. You can also reach out to the team directly at asc.el@queensu.ca.

add a CERTIFICATE

- Data Analytics
- Disability and Physical Activity
- Employment Relations
- Entrepreneurship, Innovation and Creativity
- French for Professionals
- Geographic Information Science
- Global Action and Engagement
- Indigenous Languages and Cultures
- International Studies
- Media Studies
- Sexual and Gender Diversity
- Urban Planning Studies

QUartsci.com/certs

Acquire Skills. Gain Experience. Go Global.

That is a degree from Queen's.

chem.queensu.ca

2023-2024

Chemistry MAJOR MAP

BACHELOR OF SCIENCE (HONOURS): SPECIALIZATION, MAJOR, MINOR

	1ST YEAR	2ND YEAR	3RD YEAR	4TH OR FINAL YEAR
GET THE COURSES YOU NEED	In first year you will have the chance to explore the foundations of Chemistry in biology, chemistry, geography, and geology along with some electives. Attend Majors Night in the Winter term to learn more about Plan options. Interested in getting a head start in learning and working in a digital world? Take ASCX 150 and develop future-ready skills!	Start going deeper into the discipline of Chemistry, while considering a minor and/or certificate such as French for Professionals. Learn more about Certificates and Internship options. Want to make sure your academics are where you want them to be? Visit SASS (Student Academic Support Services) and the Writing Centre for some help. Develop your entrepreneurial skills by participating in the Dean's Changemaker Challenge (ASCX 200/300).	A chance to start grouping courses in areas of interest, or to keep it more general and explore many areas of Chemistry. Meet with an Academic Advisor to make sure you are on track and have planned out your courses for next year.	In fourth year you will have the chance to participate in research-based courses that can lead to Graduate School or to your future career path. Make sure to finish up all your courses for your major and your optional minor and/or certificate(s). Interested in working on a real-world problem with an actual client? Take ASCX 400 and develop your consulting and project-management skills.
GET RELEVANT EXPERIENCE	Join clubs on campus such as Let's Talk Science, Women in Science and Engineering or the Undergraduate Science Case Competition. See the AMS Clubs Directory or the Queen's Get Involved page for more ideas.	Look into summer jobs by talking to the dept. or Career Services about work through SWEP, NSERC-USRA, or Work-Study. Consider entrepreneurial opportunities via programs like the Queen's Innovation Connector Summer Initiative (QICSI).	Consider applying to do a 12-16 month QUIP internship between your third and fourth year. Consider presenting and publishing your work through Inquiry@Queen's.	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 or at Inquiry@Queen's.
GET CONNECTED WITH THE COMMUNITY	Volunteer on or off-campus with community organizations such as Science Rendezvous. Consider joining an intramural sports or an athletics team. Check out the Athletics and Recreation site.	Get involved with the Departmental Student Council (DSC). Connect with professors at socials or attend speaker events. Start or continue volunteering.	Do some targeted networking with alumni working in careers of interest by joining the LinkedIn group Queen's Connects. Check out Career Services networking workshops. Participate in meetings with the Queen's Chemistry Innovation Council (QCIC).	Consider joining associations like the Chemical Institute of Canada or the Association of the Chemical Profession of Ontario. Join groups on LinkedIn reflecting specific careers or topics of interest in Chemistry.
GET THINKING GLOBALLY	Prepare for work or studies in a multi-cultural environment by taking QUIC's Intercultural Competency Certificate, and research possible immigration regulations. Speak to a QUIC advisor to get involved in their programs, events, and training opportunities.	Is an exchange in your future? Start thinking about where you would like to study abroad. Apply in January for a third year exchange through the International Programs Office.	Build your intercultural competence by getting involved with other cultures or by practicing or improving your language skills.	International students interested in staying in Canada can speak with an International Student Advisor. Consider widening your global skills by applying to the dual MSc Queen's – Stuttgart degree. Do your research at the University of Stuttgart in Germany.
GET READY FOR LIFE AFTER GRADUATION	Grappling with program decisions? Go to Majors Night or get some help wondering about career options from Career Services. Attend departmental information sessions on Plan selection (March).	Explore different careers of interest in the Career Services Information Area. For more information check out Career Cruising or by finding and connecting with alumni on LinkedIn.	Start focusing on areas of interest. Research education requirements for careers of interest. If needed, prepare to take any required tests (like the LSAT or MCAT) and get help thinking about grad school from Career Services, as well as departmental resources; start looking into graduate school scholarship applications.	In 3rd year, consider applying for Accelerated MSc studies in Chemistry at Queen's to get a head start on graduate studies. Apply to jobs or future education, or make plans for other adventures. Get help from Career Services with job searching, resumes, interviews, Grad School applications, or other decisions.

CONSIDER A 12-16 MONTH QUIP INTERNSHIP

What will I learn?

A degree in Chemistry can equip you with:

- Academic and technical 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 mathematical and logical analysis
- 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
- Team working in a multidisciplinary context
- Practical and fundamental knowledge of all subdisciplines of chemistry

Where can I go?

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

- Environmental research
- Environmental sustainability
- Forensic science
- Materials science
- Patent law
- Pharmaceuticals
- Pharmacy
- Public health
- Quality control
- Sustainability design

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

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 My Major Map tool.

Chemistry

Get started thinking about the future now – where do you want to go after your degree? Having tentative goals (like careers or grad school) while working through your degree can help with short-term decisions about courses and experiences, but also help you keep motivated for success.

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. Queen's wants you to succeed! Check out the Student Affairs website for available resources.

QUIP QUEEN'S UNDERGRADUATE INTERNSHIP PROGRAM

START DATES in May, September, or January

POSITIONS are paid and full-time

WORK TERMS are 12-16 months long

PROGRAM OVERVIEW

- Graduate with a "Professional Internship" degree
- Learn about current advances, practices and technologies in business and industry.
- Test drive a career, earn a competitive salary, and get real world experience.

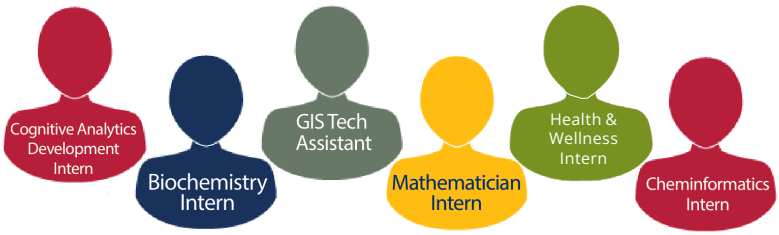
ELIGIBILITY

- 2nd or 3rd Year Students
- Minimum GPA of 1.9

WHY QUIP?

- Gain a year of career-related work experience.
- Build network connections.
- Receive support from Queen's staff in job search and during internship.

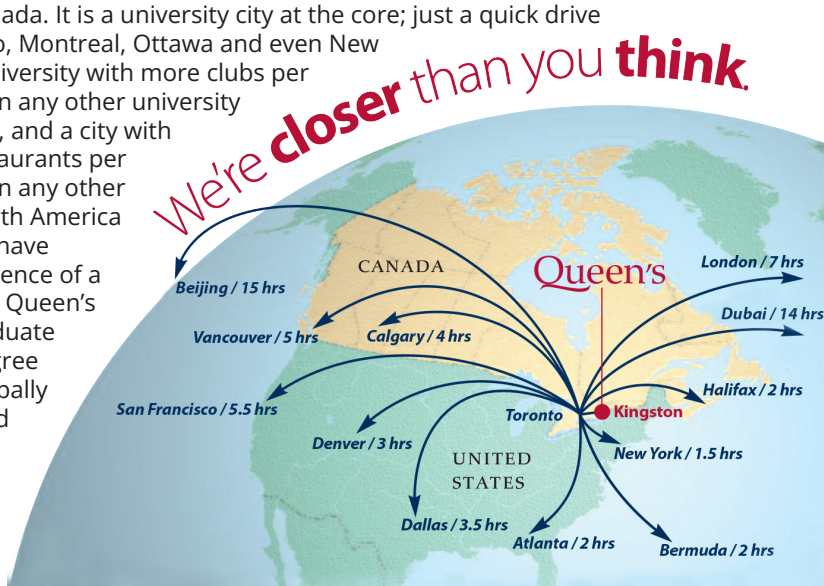
SAMPLE PAST INTERNSHIPS



For more information, contact quip@queensu.ca or visit the Program Website.

Why study in Kingston?

For 175 years, our community has been more than a collection of bright minds – Queen's has attracted students with an ambitious spirit. Queen's has the highest retention rates, the highest graduation rates, and one of the highest employment rates among recent graduates. We are a research intensive university focused on the undergraduate experience. The BBC has identified Kingston as one of the GREATEST UNIVERSITY TOWNS in the world – and it is often awarded the safest city in Canada. It is a university city at the core; just a quick drive to Toronto, Montreal, Ottawa and even New York. A university with more clubs per capita than any other university in Canada, and a city with more restaurants per capita than any other city in North America – you will have the experience of a lifetime at Queen's – and graduate with a degree that is globally recognized among the best.



Queen's UNIVERSITY ARTS AND SCIENCE

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