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 LIFE SCIENCES?

- Knowledge of the cellular structures, organic systems, organic chemistry, and the functions of the human body
- Understanding of statistical research methods, the scientific method and experimental design
- Research skills leading to an ability to draw relevant information out of a large amount of data
- Experience working in a laboratory setting and operating equipment
- Attention to detail to analyze and interpret scientific data
- Problem solving to adopt a systematic approach to problems
- Oral and written communication for procedure laboratory reports and present a report to a group
- Time and resource management

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 will help you 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, and Queen’s wants you to succeed! Check out the Student Affairs website for available resources.

Get to know LIFE SCIENCES

The Life Sciences program at Queen’s University is one of our largest Bachelor of Science degree plans on campus. It is in high demand by students who wish to pursue careers in biomedical research and health care focusing on human life. The Life Sciences plan offers courses ranging from human anatomy and physiology to the bacteria and viruses that compromise organ function to the cells that give rise to carcinomas and to the drugs that are used to cure us from infection and disease.

Maclean’s Canadian Universities Guidebook cited Life Sciences at Queen’s as a Standout Program, having strength in “the integration of basic health sciences with natural and physical science.” Students are drawn to the strengths of the program, which include their ability to explore specific interests in Cancer Biology, Cardiorespiratory Sciences, Drug Development and Human Toxicology or Neurosciences.

“One of the most popular programs at Queen’s.”

Degree OPTIONS

Bachelor of Science (Honours) Major/Major/Minor in Environmental Life Sciences, Life Sciences, Life Science
Bachelor of Science (General) Bachelor of Science (General) Online 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, Advanced Functions 4U, Calculus and Vectors 4U, plus two of Biology 4U, Chemistry 4U or Physics 4U.

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-exploration, and while you settle into university life, you have the chance to work with our advisors and faculty to uncover where your real interests and opportunities for success are. 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.

That is a degree from Queen’s.
### 1ST YEAR

For the Major or Specialization, take BIOL 102 and BIOL 103, CHEM 112, MATH 121, and PHYS 117. Each Plan will have at least one required first-year course, including minors. It is important to take a variety of first-year courses to keep as many pathways open as possible for you going into second year. For details see the Arts and Science Academic Calendar.

### 2ND YEAR

For the Major, in the Fall take CHEM 281 and PHGY 214. In the Winter, take CHEM 282, MICR 221, and PHGY 214.

For the Specialization, in the Fall take ANAT 215, CHEM 281, PHGY 214. In the Winter, take ANAT 216, BCHM 218, CHEM 282, MICR 221, PHGY 214.

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.

### 3RD YEAR

Majors: take 33.0 option units in 3rd and 4th year.

Specializations: See course requirements and stream options in the Arts and Science Academic Calendar for the Life Sciences plan requirements. Contact the Program Assistant for additional help. Begin researching and securing a 499 Project for your fourth year.

### 4TH OR FINAL YEAR

Use the Academic Advisement Report to ensure you have the courses you need to graduate. Students in Biomedical Discovery, Biomedical Sciences, Cancer Research, Cardiorespiratory Science, Drug Discovery and Human Toxicology, and Neuroscience subplans ensure that you have declared your plan and have the right courses for the plan.

By fourth year you should be working on your remaining option and elective courses. Make sure to map your minor and / or certificate(s) as well. Apply to graduate in SOLUS.

### GET THE COURSES YOU NEED

- **For the Major or Specialization, take BIOL 102 and BIOL 103, CHEM 112, MATH 121, and PHYS 117.**
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### GET RELEVANT EXPERIENCE

- **Join teams or clubs on campus such as the Synthetic Biology Organization, Queen’s First Aid or Universities Allied for Essential Medicine.**
- See the AMS Clubs Directory or the Queen’s Get Involved page for more ideas.

### GET CONNECTED WITH THE COMMUNITY

- **Volunteer on or off-campus with different community organizations, such as Let’s Talk Science (LTS), Queen’s Union on Tropical Access to Health, or local charities.**

### GET THINKING GLOBALLY

- **The Queen’s University International Centre is your first stop to learn how to internationalize your degree or to leverage your existing cross-cultural experience.**
- **Speak to a QUIC advisor or get involved in their programs, events and training opportunities.**

### 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 Information Sessions in November and January offered by the Associate Dean, Life Sciences and Biochemistry.**

### MAJOR MAP

**1ST YEAR** - For the Major or Specialization, take BIOL 102 and BIOL 103, CHEM 112, MATH 121, and PHYS 117. Each Plan will have at least one required first-year course, including minors. It is important to take a variety of first-year courses to keep as many pathways open as possible for you going into second year. For details see the Arts and Science Academic Calendar.

**2ND YEAR** - For the Major, in the Fall take CHEM 281 and PHGY 214. In the Winter, take CHEM 282, MICR 221, and PHGY 214.

For the Specialization, in the Fall take ANAT 215, CHEM 281, PHGY 214. In the Winter, take ANAT 216, BCHM 218, CHEM 282, MICR 221, PHGY 214.

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### C O N S I D E R A 1 2 - 1 6 M O N T H Q U I P I N T E R N S H I P

- **Investigate requirements for full-time jobs or other opportunities related to careers of interest.**
- **Assess what experience you're lacking and fill in gaps with volunteering, clubs, or internships – check out the Career Services skills workshop for help.**

### C O N S I D E R J O I N I N G P R O F E S S I O N A L A S S O C I A T I O N S

- **Consider joining professional associations like the Analytical, Life Science & Diagnostics Association.**
- **Join groups on LinkedIn reflecting specific careers or topics of interest in Life Sciences.**


- **Get help from Career Services with job searching, resumes, interviews, grad school applications, or other decisions.**
- **Attend Town Hall meetings offered by the Associate Dean, Life Sciences and Biochemistry and provide input into the Program.**

### Where could I go after graduation?

- **Animal research**
- **Audiology**
- **Biochemistry**
- **Biotechnology**
- **Dentistry**
- **Drug development**
- **Environmental management**
- **Epidemiology**
- **Ergonomics**
- **Food science and technology**
- **Forensics**
- **Genetics**
- **Health administration**
- **Kinesiology**
- **Law**
- **Medical and clinical research**
- **Medical illustration**
- **Medicine**
- **Microbiology**
- **Neuroscience**
- **Nutrition & dietetics**
- **Occupational health and safety**
- **Optometry**
- **Pharmacy**
- **Pharmaceutical Industry**
- **Physical therapy**
- **Public and private research laboratories**
- **Public health**
- **Toxicology**

**CONSIDER A 12-16 MONTH QUIP INTERNSHIP**

- **Prepare for work or studies in a multi-cultural environment by taking QUIP Intercultural Competency Certificate, and research possible immigration regulations.**
- **International students interested in staying in Canada can speak with an International Student Advisor.**

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