

# Life Sciences

The unique group of scientists and faculty involved with Life Sciences at Queen's share a common goal: to lessen the impact of disease and trauma by training the next generation of health care scientists and professionals. One of the largest Bachelor of Science degree programs at Queen's, Life Sciences is in high demand by students who wish to pursue careers in biomedical research and health care.

## TOP 5 Reasons To Study Life Sciences

- 1 Preparation for a career in health care or biomedical research.
- 2 Cutting-edge research in drug development and human toxicology, cancer biology, genetics, reproduction, microbiology, experimental medicine, and neuroscience.
- 3 Our internship program (QUIP) offers a range of careers to explore and companies to learn from.
- 4 Summer research (SWEP) assistant positions with professors.
- 5 Home to the Cancer Research Institute, the Centre for Neuroscience Studies, and the Cardiac, Circulation, and Respiratory Group.

### Alumni Story

"The Life Sciences major program offered a supportive community where I could explore various areas of science to discover where my passion was. The application-based courses provided several unique opportunities to apply course content to real life scenarios!"

-Meaghan Frank, Life Sciences Major Graduate

## TOP ALUMNI JOBS

5% of alumni work in GOVERNMENT

9% of alumni work in PHARMACEUTICALS

27% of alumni work in EDUCATION & RESEARCH

33% of alumni work in HEALTH CARE

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](https://quartsci.com/certs)

## 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](https://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](mailto:asc.el@queensu.ca).

## Acquire Skills. Gain Experience. Go Global.

That is a degree from Queen's.

[healthsci.queensu.ca/liscbchm](https://healthsci.queensu.ca/liscbchm)

# Life Sciences MAJOR MAP

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

## 1ST YEAR

Direct entry students (QL) will have the chance to explore the foundations of Life Sciences in biology, chemistry, math, and physics along with CISC 151/3U and PATH120/3U or BCHM 102/3U in your first year.

Students transferring into Life Sciences in second year (QS) will have the chance to explore the foundations of Life Sciences in biology, chemistry, math, and physics along with some electives.

Interested in getting a head start in learning and working in a digital world? Take [ASCX 150](#) and develop future-ready skills!

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 involved with the Departmental Student Council (DSC). Consider becoming a tutor or mentor through the ASUS programs. Volunteer on or off-campus with different community organizations, such as Let's Talk Science (LTS), Queen's Union on Tropical Access to Health, Science Rendezvous, and the Queen's iGEM Team or local charities.

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.

Attend Majors Night to learn more about Life Sciences' programs.

Wondering about career options? Check out Career Services.

Attend Information Sessions in November and January hosted by the Associate Dean, Life Sciences, Biochemistry, and Health Sciences.

## 2ND YEAR

Start going deeper into the discipline of Life Sciences, while considering a minor and/or certificate such as Disability and Physical Activity. Learn more about Certificates and Internship options.

Visit SASS (Student Academic Support Services) and the Writing Centre for help improving your study habits and academic writing skills.

Develop your entrepreneurial skills by participating in the [Dean's Changemaker Challenge](#) (ASCX 200/300).

Look into [summer jobs](#) by talking to the dept. or Career Services about work through [SWEP](#) or [NSERC](#).

Take more responsibility within different clubs or extracurriculars. Consider volunteering with [Student Wellness Services](#) or other health centres.

Get involved with the Departmental Student Council (DSC). Connect with professors at socials or attend speaker events.

Start or continue volunteering with organizations such as the Canadian Undergraduate Conference on Healthcare (CUCHO) and Médecins Sans Frontières (Doctors Without Borders).

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](#).

Explore different careers of interest in the Career Services [Career Advising and Resource Area](#). For more information, connect with alumni on [LinkedIn](#).

Attend Canadians Studying Medicine Abroad offered by the Associate Dean, Life Sciences, Biochemistry, and Health Sciences.

## 3RD YEAR

Start grouping courses in areas of interest (Specialization route), or to keep it more general, by exploring courses in broad subject areas through the Life Sciences Major route perhaps even adding a Minor.

Meet with an Academic Advisor in Life Sciences and Biochemistry Program Office, to make sure you are on track.

Volunteer during the summer, work in a laboratory, or apply for an external summer research opportunity.

Consider entrepreneurial opportunities via programs like the Queen's Innovation Connector Summer Initiative (QICSI) and the Summer Company program.

Consider applying for a 12-16 month QUIP internship between your third and fourth year.

Do targeted networking with alumni working in careers of interest by joining the LinkedIn group [Queen's Connects](#). Check out Career Services [networking workshops](#).

Connect with professors at events or workshops hosted by the DSC.

Build your intercultural competence by getting involved with other cultures or by practicing or improving your language skills.

Start focusing on areas of interest. Research the educational requirements for careers of interest. If needed, prepare to take any required tests (like the MCAT) and get help thinking about Graduate School from Career Services.

Attend Canadians Studying Medicine Abroad hosted by the Associate Dean, Life Sciences, Biochemistry, and Health Sciences.

## 4TH OR FINAL YEAR

In fourth year, you will develop skills of inquiry on advancing research applications in industry and academia and explore governmental regulations and ethics in research and information dissemination.

SSP students will participate in an honours thesis project that can lead to Graduate School or a future career in Medicine, Health Research, or Biotechnology, etc.

Interested in working on a real-world problem with an actual client? Take [ASCX 400](#) and develop your consulting and project-management skills.

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 workshops to build new skills. Participate in Inquiry @ Queen's undergraduate student conference.

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.

International students interested in staying in Canada can speak with an [International Student Advisor](#).

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. Attend Town Hall meetings offered by the Associate Dean, Life Sciences, Biochemistry and Health Sciences and provide input into the Program.

### What will I learn?

A degree in Life Sciences can equip you with:

- 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
- Fieldwork skills to design and carry out site investigations to solve problems
- 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 laboratory reports and presenting reports to group
- Time and resource management

### Where can I go?

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

- Animal research
- Drug development
- Epidemiology
- Food science and technology
- Genetics
- Medical and clinical research
- Neuroscience
- Optometry
- Public health
- Toxicology

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

CONSIDER A 12-16 MONTH QUIP INTERNSHIP

### GET THE COURSES YOU NEED

### GET RELEVANT EXPERIENCE

### GET CONNECTED WITH THE COMMUNITY

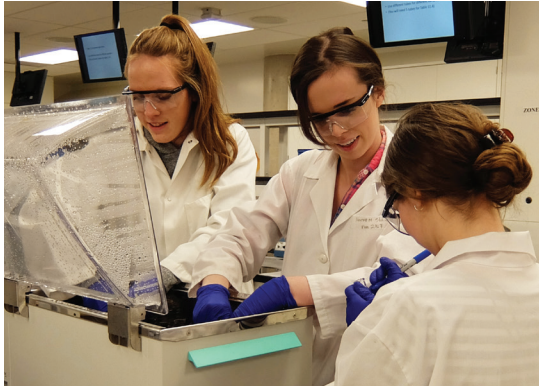
### GET THINKING GLOBALLY

### GET READY FOR LIFE 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.

# Life Sciences



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.



Faculty of Health Sciences  
Botterell Hall, Room 815  
18 Stuart Street  
613-533-6527  
[healthsci.queensu.ca/liscbchm](http://healthsci.queensu.ca/liscbchm)

# 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.

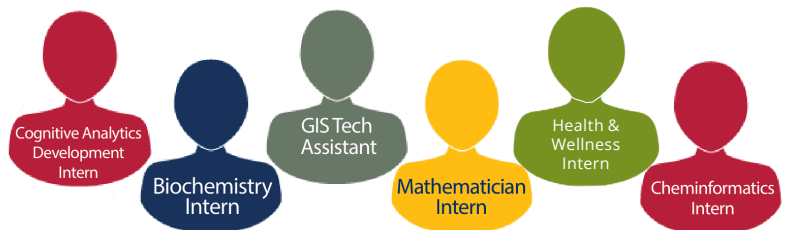
## ELIGIBILITY

- 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](mailto: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.

*We're closer than you think.*

