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.
   - Cutting-edge research in drug development and human toxicology, cancer biology, genetics, reproduction, microbiology, experimental medicine, and neuroscience.

2. Our internship program (QUIP) offers a range of careers to explore and companies to learn from.

3. Summer research (SWEP) assistant positions with professors.

4. Home to the Cancer Research Institute, the Centre for Neuroscience Studies, and the Cardiac, Circulation, and Respiratory Group.

### 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

### 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


That is a degree from Queen’s.
# 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 PHYS 120/3U or BCHE 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.

## 2ND YEAR
- Start getting deeper into the discipline of Life Sciences, while considering a minor and/or certificate such as Disability and Physical Activity.
- Attend Degree + in the Fall term to 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.

## 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.

## 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.
- 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 Biological Life Sciences & Diagnostics Association.
- Join groups on LinkedIn reflecting specific careers or topics of interest in Life Sciences.

## GET THE COURSES YOU NEED
- Join teams or clubs on campus such as the Synthetic Biology Organization, Queen’s First Aid or Universities Allied for Essential Medicines. See the AMS Clubs Directory or the Queen’s Get Involved page for more ideas.

## GET RELEVANT EXPERIENCE
- 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 IEM Team or local charities.

## GET CONNECTED WITH THE COMMUNITY
- Prepare for work or studies in a multi-cultural environment by taking QUC’s Intercultural Competency Certificate, and research possible immigration regulations.
- Speak to a QUC advisor to get involved in their programs, events, and training opportunities.

## GET THINKING GLOBALLY
- 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.

## GET READY FOR LIFE AFTER GRADUATION
- 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 and Biochemistry.
- Explore different careers of interest by reading books in the Career Services Career Advising and Resource Area, such as Academia to Biotechnology. For more information, connect with alumni on LinkedIn.
- Attend Canadians Studying Medicine Abroad offered by the Associate Dean, Life Sciences and Biochemistry.

## CONSIDER A 12-16 MONTH QUIP INTERNSHIP
- 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 (QICI) and the Summer Company program.
- Consider applying for a 12-16 month QUIP internship between your third and fourth year.

## 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.

## 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 groups
  - Time and resource management

## 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.
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.

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.