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.

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.

healthsci.queensu.ca/liscbchm
GET THE COURSES YOU NEED
Direct entry students (QS) will have the chance to explore the foundations of Life Sciences in biology, chemistry, math, and physics along with CSC 151/3U and PATH 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. Interested in getting a head start in learning and working in a digital world? Take ASCS 150 and develop future-ready skills!

1ST YEAR
- 1ST YEAR
- Direct entry students (QS) will have the chance to explore the foundations of Life Sciences in biology, chemistry, math, and physics along with CSC 151/3U and PATH 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. Interested in getting a head start in learning and working in a digital world? Take ASCS 150 and develop future-ready skills!

2ND YEAR
- 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 academic writing skills. 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 (ASC 300).

3RD YEAR
- 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
- 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 ASCS 400 and develop your consulting and project management skills.

GET RELEVANT EXPERIENCE
- Join teams or clubs on campus such as the Synthetic Biology Organization, Queen’s First Aid Organization, or the Student Anti-Slavery & Human Trafficking Society. Get the AMS Clubs Directory page for more ideas.
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GET CONNECTED WITH THE COMMUNITY
- 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.

GET THINKING GLOBALLY
- 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 (CUCH) and Médecins Sans Frontières (Doctors Without Borders).
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GET READY FOR LIFE AFTER GRADUATION
- Is an exchange in your future? Start thinking about careers in: Animal research, Drug development, Epidemiology, Food science and technology, Genetics, Medical and clinical research, Neurosciences, Optometry, Public health, Toxicology.
- Consider a 12-16 month QUIP internship between your third and fourth year. Check out the Career Services skills workshops.
- Consider joining professional associations like the Analytical, Life Science & Diagnostics Association (ALSDA).
- 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 and an 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
- Neurosciences
- Optometry
- Public health
- Toxicology

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