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

Alumni Story

“...”

-Meaghan Frank, Life Sciences Major Graduate

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.


That is a degree from Queen’s.

healthsci.queensu.ca/liscbchm
2023-2024

Life Sciences MAJOR MAP
BACHELOR OF SCIENCE (HONOURS): MAJOR, MINOR, SPECIALIZATION

1ST YEAR

GET THE COURSES YOU NEED
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!

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
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.

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.

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, 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).

3RD YEAR

Start getting to know the world of work and set your goals.
Consider applying for a 12-16 month QUIP Summer Initiative (QICSI) and the Summer Research Opportunity.
Volunteer during the summer, work in a laboratory, or apply for an external summer internship between your third and fourth year.
Consider entrepreneurial opportunities via the Queen’s Innovation Connector.

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 of
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.

**RD YEAR**

- 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 happens even adding a Minor.
- Meet with an Academic Advisor in Life Sciences and Biochemistry Program Office, to make sure you are on track.

**3RD YEAR**

- 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

- Visit during the summer, work in a startup, or apply for an external summer research opportunity.
- Consider entrepreneurial opportunities via programs like the Queen’s Innovation Connector and the Summer Company program.
- Consider applying for a 12-16 month QUIP internship between your third and fourth year.
- 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 interests or topics of interest in Life Sciences.
- Volunteer during the summer, work in a startup, or apply for an external summer research opportunity.
- Consider networking with alumni working 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.
- Id your intercultural competence by getting involved with other cultures or by practicing or improving your language skills.
- Attend Town Hall meetings offered by the Associate Dean, Life Sciences, Biochemistry and Health Sciences and provide input into the Program.
- 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

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

**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.
- Consider applying for a 12-16 month QUIP internship.
- What will I learn?
  - Method, and experimental design
  - 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?

- Consider joining professional associations like the Analytical, Life Science & Diagnostics Association.
- Join groups on LinkedIn reflecting specific interests 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.
- Taking 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.