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.

**LIFE SCIENCES AND BIOCHEMISTRY**

**alumni STORY**

"Life Sciences opened my eyes to the opportunities and careers available in the science field. The hands-on labs gave me practical experience that was extremely valuable for my subsequent studies."

- Jan Slipka, BScH '14

**2018-19 thresholds**

- 3.2 cGPA AUTOMATIC ACCEPTANCE
  - min pass in CHEM 112

- 2.0 cGPA PENDING LIST
  - min pass in CHEM 112

*Thresholds are made on a competitive basis and are updated annually. For the latest information please visit QUarts.com*

**Sample Year by Year**

**1ST YEAR**
- BIOL 102/3.0
- BIOL 103/3.0
- CHEM 112/6.0
- 0.0 units from PHYS 104/6.0, PHYS 106/6.0, PHYS 117/6.0
- 6.0 units from MATH 120/6.0, MATH 121/6.0, (MATH 123/3.0 and MATH 124/3.0)
- 6.0 units of electives

**2ND YEAR**
- BCHM 281/3.0
- MICR 221/3.0 or MICR 271/3.0
- CHEM 281/3.0
- CHEM 282/3.0
- PHGY 215/3.0
- PHGY 216/1.0
- 12.0 units of electives and/or minor

**3RD YEAR**
- 15.0 units from LISC_List_A at the 300 level or above
- 15.0 units of electives and/or minor

**4TH YEAR**
- 12.0 units from LISC_List_A
- 3.0 units from LISC_List_A at the 400 level or above
- 15.0 units of electives and/or minor

Note that degree requirements are revised regularly. The most current requirements, including course lists and options, are found in the Academic Calendar at QUarts.com/academic-calendar.
MAJOR BACHELOR OF SCIENCE (HONOURS)

LIFE SCIENCES MAJOR MAP

1ST YEAR

In first year you will have the chance to explore the foundations of Life Sciences in biology, chemistry, geography and geology along with some electives. See the back page for specific courses to consider. Attend Majors Night in the Winter term to learn more about Plan options.

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.

2ND YEAR

Start going 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.

GET THE COURSES YOU NEED

Want to make sure your academics are where you want them to be? Visit SASS (Student Academic Support Services) and the Writing Centre for some help.

3RD YEAR

A chance to start grouping courses in areas of interest, or to keep it more general and explore many areas of Life Sciences. Meet with an Academic Advisor to make sure you are on track and have planned out your courses for next year — for some ideas, see the back page.

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.

4TH OR FINAL YEAR

In fourth year you will have the chance to participate in research-based courses that can lead to Graduate School or to your future career path. Make sure to finish up all your courses for your degree and your optional certificate(s).

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.

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

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 READY FOR LIFE AFTER GRADUATION

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.

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 and Biochemistry and provide input into the Program.

What will I learn?

A degree in Life Sciences can equip you with valuable and versatile skills, such as:

- 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 procedure laboratory reports and present a report to a 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. 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.