### LIFE SCIENCES

Specialization, Bachelor of Science (Honours)

Sample Year by Year

**1ST YEAR**
- BIOL 102/3.0
- BIOL 103/3.0
- CHEM 112/6.0
- 6.0 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
- CHEM 281/3.0
- CHEM 282/3.0
- PHYG 215/3.0
- PHYG 216/3.0
- ANAT 215/3.0
- ANAT 216/3.0
- 9.0 units from LISC Options
- 3.0 units of electives

**3RD YEAR**
- BCHM 310/9.0 or (BCHM 315/3.0 and BCHM 316/3.0)
- PHAR 340/3.0
- 3.0 units from MICR at the 300 or 400 level
- 9.0 units from LISC Options
- 6.0 units of electives

**4TH YEAR**
- PHAR 450/3.0
- 18.0 units in Sub-Plan (Biomedical Discovery, Biomedical Sciences, Cancer Research, Cardiorespiratory Science, Drug Development and Human Toxicology, and Neuroscience)
- 9.0 units of electives

*Please note if you were admitted to the Plan prior to May 2018 your requirements are slightly different.

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

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**GET THE COURSES YOU NEED**

**Specialization (Science) Bachelor of Science (Honours)**

LISC-P-BSH

**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.

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**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**

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**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*
GET THE COURSES YOU NEED

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.

2ND YEAR

Start going deeper into the discipline of Life Sciences, while considering a certificate such as Employment Relations. Attend Degree + in the Fall term to learn more about Certificates and Internship options.

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.

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 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

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.

Consider getting involved with the Departmental Student Council (DSC).

Start or continue volunteering with organizations such as the Canadian Undergraduate Conference on Healthcare (CUUCOH).

GET THINKING GLOBALLY

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 READY FOR LIFE AFTER GRADUATION

Grappling with program decisions? Go to Majors Night or get some help wondering about career options from Career Services.

Attend Information Sessions in November and January offered 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 Academic to Biotechnology. For more information, connect with alumni on LinkedIn.

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

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

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

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

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.

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

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
- Neurosciences
- Optometry
- Public health
- Toxicology

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