## 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.

# Reasons To Study Life Sciences

- 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.
- Our internship program (QUIP) offers a range of careers to explore and companies to learn from.
- Summer research (SWEP) assistant positions with professors.
- 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

of alumni work in PHARMACEUTICALS

27% of alumni work in EDUCATION & RESEARCH

33% of alumni work in HEALTH CARE

## add a CERTIFICATE

Data Analytics

Disability and Physical Activity

Geographic Information Science

Global Action and Engagement

Indigenous Languages and Cultures

International Studies

Sexual and Gender Diversity

Urban Planning Studies

## 2024-25 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 <a href="mailto:Experiential Learning website">Experiential Learning website</a>. You can also reach out to the team directly at <a href="mailto:asc.el@queensu.ca">asc.el@queensu.ca</a>.

**QUartsci.com/certs** 

## Acquire Skills. Gain Experience. Go Global.

That is a degree from Queen's.

healthsci.queensu.ca/liscbchm

## Life Sciences MAJOR MAP



#### BACHELOR OF SCIENCE (HONOURS): MAJOR, MINOR, SPECIALIZATION **1ST YEAR** 2ND YEAR **3RD YEAR GET THE** Direct entry students (QL) will have the chance to Start going deeper into the discipline of Life **COURSES** Start grouping courses in areas of interest explore the foundations of Life Sciences in biology, Sciences, while considering a minor and/or (Specialization route), or to keep it more **YOU NEED** chemistry, math, and physics along with CISC certificate such as Disability and Physical Activity. general, by exploring courses in broad subject 151/3U and PATH120/3U or BCHM 102/3U in your Learn more about Certificates and Internship areas through the Life Sciences Major route perhaps even adding a Minor. options. Students transferring into Life Sciences in second Meet with an Academic Advisor in Life Visit SASS (Student Academic Support Services) and year (QS) will have the chance to explore the Sciences and Biochemistry Program Office, to the Writing Centre for help improving your study foundations of Life Sciences in biology, chemistry, habits and academic writing skills. make sure you are on track. math, and physics along with some electives. Interested in getting a head start in learning and working in a digital world? Take <u>ASCX 150</u> and develop future-ready skills!

Look into summer jobs by talking to the dept. or Career Services for SWEP or NSERC

Consider entrepreneurial opportunities via programs like the Queen's Innovation Connector Summer Initiative (QICSI). Consider volunteering with Student Wellness Services or other health centres. Take more responsibilities within different clubs or extracurriculars.

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 (CUCOH) and Médecins Sans Frontières (Doctors Without Borders).

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.

Do targeted networking with alumni working in careers of interest by joining the LinkedIn group Queen's Connects. Check out Career Services <u>networking workshops</u>.

Volunteer during the academic year, work in

Consider entrepreneurial opportunities via

Summer Initiative (QICSI) and the Summer

Consider applying for a 12-16 month QUIP

internship between your third and fourth year.

research opportunity.

Company program.

a laboratory, or apply for an external summer

programs like the Queen's Innovation Connector

Connect with professors at events or workshops hosted by the DSC.

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

Start focusing on areas of interest. Research the If needed, prepare to take any required tests (like

Attend Canadians Studying Medicine Abroad

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.

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Consider joining Life Sciences Ontario as a student member.

Join groups on LinkedIn reflecting specific careers 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.

Knowledge & Workplace

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

#### Career Possibilities

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.

#### **GET ENGAGE** WITH THE **COMMUNITY**

**GET ENGAGE** 

**GLOBALLY** 

**GET CAREER** 

**READY** 

**GET RELEVANT** 

**EXPERIENCE** 

Get involved with the Departmental Student Council (DSC).

Join teams or clubs on campus such as the

or Universities Allied for Essential Medicine.

<u>Involved</u> page for more ideas.

Synthetic Biology Organization, Queen's First Aid,

See the AMS Clubs Directory or the Queen's Get

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.

Attend Majors Night to learn more about Life

Wondering about career options? Check out

Attend Information Sessions in November and

January hosted by the Associate Dean, Life

Sciences, Biochemistry, and Health Sciences.

Sciences' programs.

Career Services.

Speak to a QUIC advisor to get involved in their programs, events, and training opportunities.

> Explore different careers of interest in the Career Services Career Advising and Resource Area. For more information, connect with alumni on LinkedIn.

educational requirements for careers of interest. the MCAT) and get help thinking about Graduate School from Career Services.

hosted by the Associate Dean, Undergraduate Studies QHS (Life Sciences, Biochemistry, and

#### 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.

## Life Sciences



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.



**ARTS AND** 

**Faculty of Health Sciences** Botterell Hall, Room 815 18 Stuart Street 613-533-6527 healthsci.queensu.ca/liscbchm

## QUIPQUEEN'S UNDERGRADUATE

#### START DATES

in May, September, or January

are paid and

#### POSITIONS WORK TERMS

are 12-16 months long



- Graduate with a "Professional Internship" degree
- Learn about current advances, practices and technologies in business and industry.
- Test drive a career, earn a competitive salary, and get real world experience.

**ELIGIBILITY** 

- 2nd or 3rd Year Students
- Minimum GPA of 1.9



- Gain a year of career-related work experience.
- Build network connections.
- Receive support from Queen's staff in job search and during internship.

#### SAMPLE PAST INTERNSHIPS



For more information, contact quip@queensu.ca or visit the Program Website.

## Why study in Kingston?

Since 1841, 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

th Ne're closer than you think 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 London / 7 hrs CANADA the experience of a Oueen's Beijing / 15 hrs lifetime at Oueen's Dubai / 14 hrs - and graduate Calgary / 4 hrs Vancouver / 5 hrs with a degree that is globally Halifax / 2 hrs San Francisco / 5.5 hrs Kingston recognized among Denver/3 hrs New York / 1.5 hrs UNITED the best. STATES

Atlanta / 2 hrs

Bermuda / 2 hrs