# 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.



"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

of alumni work in GOVERNMENT

of alumni work in PHARMACEUTICALS

27% of alumni work in EDUCATION & RESEARCH

33% of alumni work in HEALTH CARE

#### 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. add a CERTIFICATE

Data Analytics

Disability and Physical Activity

Employment Relations

Entrepreneurship, Innovation and Creativity

French for Professionals

Geographic Information Science

Global Action and Engagement

Indigenous Languages and Cultures

International Studies

Media Studies

Sexual and Gender Diversity

Urban Planning Studies

QUartsci.com/certs

### Acquire Skills. Gain Experience. Go Global.

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	2ND YEAR	3RD YEAR	4TH OR F
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 <u>ASCX 150</u> and develop future-ready skills!	<ul> <li>Start going deeper into the discipline of Life Sciences, while considering a minor and/or certificate such as Disability and Physical Activity.</li> <li>Learn more about Certificates and Internship options.</li> <li>Visit SASS (Student Academic Support Services) and the Writing Centre for help improving your study habits and academic writing skills.</li> <li>Develop your entrepreneurial skills by participating in the <u>Dean's Changemaker Challenge</u> (ASCX 200/300).</li> </ul>	Sciences and Biochemistry Program Office, to make sure you are on track.	In fourth year, you advancing research academia and exple- ethics in research a SSP students will pa project that can lea future career in Me Biotechnology, etc. Interested in workin an actual client? Ta consulting and proj
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.	Look into <u>summer jobs</u> by talking to the dept. or Career Services about work through <u>SWEP</u> or <u>NSERC</u> . Take more responsibility within different clubs or extracurriculars. Consider volunteering with <u>Student Wellness Services</u> or other health centres.	Volunteer during the summer, work in a laboratory, or apply for an external summer research opportunity. Consider entrepreneurial opportunities via programs like the Queen's Innovation Connector Summer Initiative (QICSI) and the Summer Company program. Consider applying for a 12-16 month QUIP internship between your third and fourth year.	<ul> <li>Investigate require or other opportun interest. Assess wi and fill in gaps wit internships.</li> <li>Check out the Car to build new skills Queen's undergra</li> </ul>
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 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).	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> . Connect with professors at events or workshops hosted by the DSC.	Consider joining p like the Analytical, Association. Join groups on Lin careers or topics o
GET THINKING GLOBALLY	Prepare for work or studies in a multi-cultural environment by taking <u>QUIC's Intercultural</u> <u>Competency Certificate</u> , and research possible immigration regulations. Speak to a QUIC advisor to get involved in their programs, events, and training opportunities.	Is an exchange in your future? Start thinking about where you would like to <u>study abroad</u> . Apply in January for a third year exchange through <u>the International Programs Office</u> .	Build your intercultural competence by getting involved with other cultures or by practicing or improving your language skills.	<ul> <li>∠</li> <li>∠</li> <li>⊥</li> <li>⊥</li></ul>
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.	Explore different careers of interest in the Career Services <u>Career Advising and Resource</u> Area. For more information, connect with alumni on <u>LinkedIn</u> . Attend Canadians Studying Medicine Abroad offered by the Associate Dean, Life Sciences, Biochemistry, and Health Sciences.	Start focusing on areas of interest. Research the educational requirements for careers of interest. If needed, prepare to take any required tests (like the MCAT) and get help thinking about Graduate School from Career Services. Attend Canadians Studying Medicine Abroad hosted by the Associate Dean, Life Sciences, Biochemistry, and Health Sciences.	Apply to jobs or fu make plans for ot help from Career searching, resume School application Attend Town Hall Associate Dean, L and Health Science the Program.

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.



#### FINAL YEAR

bu will develop skills of inquiry on rch applications in industry and plore governmental regulations and n and information dissemination.

participate in an honours thesis ead to Graduate School or a Medicine, Health Research, or tc.

king on a real-world problem with Take <u>ASCX 400</u> and develop your roject-management skills.

uirements for full-time jobs unities related to careers of what experience you're lacking with volunteering, clubs, or

areer Services skills workshops lls. Participate in Inquiry @ raduate student conference.

g professional associations al, Life Science & Diagnostics

inkedIn reflecting specific s of interest in Life Sciences.

udents interested in staying peak with an <u>International</u> <u>c</u>.

r future education, or other adventures. Get er Services with job mes, interviews, Grad ions, or other decisions. all meetings offered by the , Life Sciences, Biochemistry ences and provide input into

#### 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 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?

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. © Career Services, Queen's University, 2023-20

## 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 <u>Student Affairs</u> <u>website</u> for available resources.



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

#### **QUIP**QUEEN'S UNDERGRADUATE INTERNSHIP PROGRAM

START DATES I in May, September, or January	POSITIONS WORK TERMS are paid and full-time long				
<ul> <li>Graduate with a "Professional Internship" degree</li> <li>Learn about current advances, practices and technologies in business and industry.</li> <li>Test drive a career, earn a competitive salary, and get real world experience.</li> </ul>					
FI IGIBILITY	d or 3rd Year Students nimum GPA of 1.9				
<ul> <li>Gain a year of career-related work experience.</li> <li>Build network connections.</li> <li>Receive support from Queen's staff in job search and during internship.</li> </ul>					
SAMPLE PAST INTERNSHIPS					
	STech sistant Mathematician				

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

Intern

Intern

### Why study in Kingston?

Intern

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 h Nersity Nere closer than you think 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 CANADA London / 7 hrs **Oueen's** the experience of a Beijing / 15 hrs lifetime at Queen's Dubai / 14 hi and graduate Calgary / 4 hrs Vancouver / 5 hrs with a degree that is globally Halifax / 2 hrs San Francisco / 5.5 hrs Kingston Toronto recognized Denver/3 hrs among UNITED New York / 1.5 hrs the best. STATES Dallas / 3.5 hrs Atlanta / 2 hrs Bermuda / 2 hrs