Biology

Few fields can compare to the revolutionization Biology has seen in the past several decades. Our ability to address cutting-edge problems at scales from molecules to ecosystems puts Biology at the centre of solutions to some of the most pressing questions and crises facing our planet – from the inner workings of cells to the origins and conservation of species. Our programs emphasize interactive learning with hands-on laboratories, field courses, small senior seminar modules, and independent research.

REASONS TO Study BIOLOGY

- Relevance to critical questions and problems of our times including global change, conservation, genomics, and biotechnology.
- 2 Courses focused on cutting-edge Biology topics across the full range from individual molecules to whole ecosystem scales.
- Interact closely with professors in class, in labs, in the field, and during our many events held throughout the year.
- QUBS: a field station and environmental education center unmatched in the country, providing hands-on learning opportunities.
- 5 Summer Work Experience (SWEP) and Internship Programs, with specific jobs for all types of biological research.

Alumni Story

"The Queen's Biology program provided me access to a wide range of interesting courses taught by engaging professors. Aside from traditional coursework, it allowed me to complete an honour's thesis project accompanied by field work that gave me many transferrable skills that I use in my current research position."

-Molly Gautreau, BScH '24

TOP ALUMNI JOBS

of alumni work in GOVERNMENT & NON-PROFIT

of alumni work in GOVERNMENT & NON-PROFIT

BUSINESS & LAW

16% of alumni work in HEALTH CARE

35% of alumni work in EDUCATION

add a CERTIFICATE

Data Analytics

Disability and Physical Activity

Employment Relations

Geographic Information Science

Indigenous Languages and Cultures

Sexual and Gender Diversity

Urban Planning Studies

QUartsci.com/certs

2025-26 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? Check in with your department to learn more about what opportunities and resources are available for you!

Acquire Skills. Gain Experience. Go Global.

That is a degree from Queen's.

biology.queensu.ca

Biology MAJOR MAP

BACHELOR OF SCIENCE: HONOURS DEGREE (SPECIALIZATION/MAJOR/MINOR) OR GENERAL DEGREE



	1ST YEAR	2ND YEAR	3RD YEAR	4TH OR FINAL YE	EAR	
GET THE COURSES OU NEED	In first year you will have the chance to explore the foundations of Biology in biology, chemistry, geography, and geology along with some electives. Attend Majors Night in the Winter term to learn more about Plan options. Interested in getting a head start in learning and working in a digital world? Take ASCX 150 and develop future-ready skills!	Start going deeper into the discipline of Biology, while considering a minor and/or certificate such as Media Studies. 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) for some help.	A chance to start grouping courses in areas of interest, or to keep it more general and explore many areas of Biology. Meet with an Academic Advisor to make sure you are on track and have planned out your courses for next year. Consider independent research projects in faculty labs and in the field.	participate in research-based c can lead to <u>Graduate School</u> or career path. Make sure to finish		
SET RELEVANT EXPERIENCE	Join teams or clubs on campus such as <u>Queen's</u> First Aid, and the <u>Queen's Genetically Engineered</u> Machine Team (<u>QGEM</u>). See the <u>AMS Clubs</u> <u>Directory</u> or the <u>Queen's Get Involved</u> page for more ideas.	Volunteering is a great way to get practical experience and build your Resume towards getting Biology jobs during your degree. Look into summer jobs by talking to the department or Career Services about work through SWEP or NSERC .	Consider applying to research opportunities at Queen's University Biological Station or through the Biology Undergraduate Summer awards. Consider applying to do a 12-16 month QUIP internship between your third and fourth year. Consider applying for research project funding through ASURF (ASUS).	Investigate requirements for fu or other opportunities related to interest. Assess what experience and fill in gaps with volunteerin internships – check out the Careskills workshop for help. Partici @ Queen's undergraduate studies.	o careers of e you're lack g, clubs, or eer Services pate in Inqui	
ET ENGAGED /ITH THE OMMUNITY	Volunteer on- or off-campus with different community organizations, such as <u>Queen's</u> Health Outreach, Let's Talk Science, and <u>Women in Science</u> & Engineering at Queen's University (WISE).	Get involved with the Departmental Student Council (DSC). Start or continue volunteering with organizations. If interested, attend conferences and talks like the Canadian Undergraduate Conference on Healthcare (CUCOH).	Do some targeted networking with alumni working in careers of interest through LinkedIn. Check out Career Services networking workshops. Connect with professors at events or workshops hosted by the Departmental Student Council (DSC).	Consider joining professional as like Canadian Society for Molect Biosciences, BIOTECanada, Society for Econogy and the Conservation Biology and Evolution Join groups on LinkedIn reflecting careers or topics of interest in Econogy and Evolution Careers or topics of interest in Econogy and Evolution Careers or topics of interest in Econogy and Evolution Careers or topics of interest in Econogy and Evolution Careers or topics of interest in Econogy and Evolution Careers or topics of interest in Econogy and Evolution Careers or topics of interest in Econogy and Econo	ular lety of anadian on. ng specific	
SET ENGAGED SLOBALLY	Prepare for work or studies in a multi-cultural environment by taking QUIC's Intercultural Awareness Certificate, 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 study abroad. Apply in January for a third year exchange through the International Programs Office. Look into a BIOL 307/317 Field Biology International Program.	Build your intercultural competence by getting involved with other cultures or by practicing and improving your language skills.	International students interested in Canada can speak with an Instructional Student Advisor.		
GET CAREER READY	Grappling with program decisions? Go to Majors Night or get some help considering career options from Career Services. Build your transferable skills in time management, problem-solving, writing, and more with Student Academic Success Services.	Explore different careers of interest in the Career Services Information Area. For more information check out <u>Career Cruising</u> or by finding and connecting with alumni on LinkedIn.	Start focusing on areas of interest. Research education requirements for careers of interest. If needed, prepare to take any required tests (like the MCAT or GMAT) and get help thinking about Grad School from Career Services.	Apply to jobs or future education plans for other adventures. Get Career Services with job search interviews, Grad School application other decisions. Find impactful work that aligns yalves using the Outen's Caree	help from ing, resumes tions, or with your	

Knowledge & Workplace Skills

Gaining a biology degree enables you to:

- Develop knowledge of biological functions
- Use laboratory equipment and instruments
- Gain hands-on experience studying biology in the field
- Comply with quality control and safety regulations
- Collect and preserve organisms
- Design experimental studies
- Present literature and research findings in posters and seminars
- Observe and make measurements
- Write, review, and summarize reports/scientific writing
- Analyze and evaluate information
- Statistical analysis of biological data
- Solve quantitative problems

Career Possibilities

A degree in Biology 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:

- Agricultural Sciences
- Bioeconomics
- Biotechnology
- Chiropractics
- Dentistry
- Environmental conservation
- Environmental sustainability
- Fisheries science
- Marine biology
- Medicine
- Medical technology
- Occupational therapy
- OptometryPharmacology
- Physical therapy
- Physical therapyTeaching
- Toxicology

values using the **Queen's Career Guide to**

the UN Sustainable Development Goals.

Veterinary medicine

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

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.

Biology



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 SCIENCE

Biology Department Biosciences Complex 116 Barrie Street 613-533-6344 biology.queensu.ca

QUEEN'S UNDERGRADUATE INTERNSHIP PROGRAM

START DATES

in May, September, or January

POSITIONS

are paid and full-time

WORK TERMS

are 12-16 months long

PROGRAM OVERVIEW

- Graduate with "Professional Internship" on your degree
- Learn about current advances, practices and technologies in business and industry
- Explore a career path, earn a salary, and build workplace skills

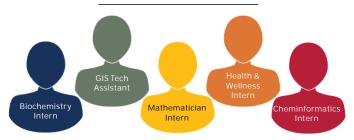
ELIGIBILITY

- Complete 1st year before you register
- Complete 2nd or 3rd year before your internship
- Minimum GPA of 1.9
- Return to Queen's after your internship to finish your degree

WHY QUIP?

- 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

versity doser 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 the CANADA Queen's experience of a Beijing / 15 hrs lifetime at Queen'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 h Kingston recognized Denver/3 hrs among New York / 1.5 hrs UNITED the best. STATES Dallas / 3.5 hrs Atlanta / 2 hrs Bermuda / 2 hrs