**Academic Requirements**

- **MSc in Biology or direct entry from B.Sc for exceptional candidates.**

**English Language Proficiency Requirements**

- (1) TOEFL:  Writing (24/30); Speaking (22/30); Reading (22/30); Listening (20/30), for a total of 88/120 (applicants must have the minimum score in each test as well as the minimum overall score), or (3) IELTS: 7.0 (academic module overall band score), or (4) PTE: 65.

**Key Dates & Deadlines**

- Application due: March 1 (domestic students), February 15 (international students).
- Notification of acceptance: Students are accepted on a rolling basis as applications are reviewed.

Before you start your application, please review the Graduate studies application process.

**What about FUNDING?**

The minimum funding guarantee for Biology PhD students is $23,895 per year, throughout years 1-4. The funding package may be comprised of graduate awards and teaching assistantships.

Apply for external funding from OGS, NSERC and other sources. Queen’s will automatically consider external funding with your application. Students are accepted on a rolling basis as applications are reviewed.

**Why QUEEN’S?**

The Biology Department at Queen’s is one of the largest departments on campus with approximately 100 graduate students supervised by 32 faculty with research opportunities in a range of disciplines. Our faculty are world leaders in several research fields, including many Canada and Queen’s Research Chairs and winners of national and international awards for research and teaching excellence.

We offer a broad and challenging program in one of the top Biology departments in the country. We have an impressive range of sophisticated infrastructure for cell biology, biochemistry, molecular biology, evolution, and ecological research including: a confocal microscopy suite, research facilities, and a state-of-the-art phytotron. We have an impressive range of sophisticated program including: a confocal microscopy suite, research facilities, and a state-of-the-art phytotron.
Biology

PhD MAP *

DOCTOR OF PHILOSOPHY (PHD)

**ACHIEVE YOUR ACADEMIC GOALS**

- Key priorities include forming your committee, coursework, field exams, and language exams.
- Meet early with your supervisor to discuss and set expectations, roles, responsibilities, program requirements, resources, research/occupational goals, timelines, and any required accommodation plans.
- Attend and participate in graduate seminars such as Departmental Seminars, EEB Limnology, and MCIB Seminar, as well as the Al Downe Lecture.

**YEAR I**

- Write and defend your thesis proposal.
- Attend or present at a graduate conference such as the Canadian Society for Ecology and Evolution, Society for Experimental Biology, Canadian Society of Plant Biology, or the many other groups that feature graduate research.
- Attend the Graduate Student Travel Grant for Doctoral Field Research.

**YEAR II**

- Attend or present at a graduate conference such as those hosted by the Canadian Society for Ecology and Evolution, Society for Experimental Biology, Canadian Society of Plant Biology, or the many other groups that feature graduate research.
- Attend conferences in your field.
- Do some targeted networking with people working in your field.
- Think about audiences for your research.

**YEAR III**

- Serve on departmental, faculty or university committees. Talk to the Biology Graduate Student Council for tips on getting involved.
- Attend professional development workshops.
- Attend conferences and present at them.

**YEAR IV & TRANSITIONING**

- Plan date of thesis submission for examination.
- Present your research to graduate students and faculty at conferences and workshops and write a supervisor prepared for defence.
- Review submission and examination guidelines.
- Secure necessary oral defence accommodations.
- Continue to present at conferences.
- Seek experiential/professional development opportunities.

**MAXIMIZE RESEARCH IMPACT**

- Honed skills for non-academic employment by continuing involvement on committees and in the community.
- Start keeping an eportolio of your skills, experiences and competencies.
- For help with teaching, get support from the Centre for Teaching and Learning.

**BUILD SKILLS AND EXPERIENCE**

- Serve on departmental, faculty or university committees. Talk to the Biology Graduate Student Council for tips on getting involved.
- Consider positions in student services, the SGPS or media outlets like the Queen's Journal, CFRC, and the SGSP Blog. Look in the AMS Clubs Directory.
- Use a Teaching Assistant or Research Assistant position to develop your skills and experience.

**ENGAGE WITH YOUR COMMUNITY**

- Consider volunteering with different community organizations such as Science Rendezvous.
- Consider volunteering with different community organizations, museums, and cultural studies groups, such as the Kingston Field Naturalists.
- Participate in your graduate and professional community through activities such as graduate student outreach programs, organizing conferences, and research groups like Material Matters.

**LAUNCH YOUR CAREER**

- Finding career fit starts with knowing yourself. Take a Career Services career planning workshop or meet with a career counselor for help. Check out books like So What Are You Going to Do With That? or Planning a Scientific Career in Industry from the Career Resource Area for advice on various career options.
- Start reading publications like University Affairs and the Chronicle of Higher Education. Browse non-academic labour market websites.
- Stay on the lookout for special events like Graduate Student Career Week to explore your career pathways.
- Build connections with faculty outside of your department. Pursue interviews for faculty positions and apply for post-doc fellowships and positions.
- Apply to jobs or make plans for other adventures. Get help from Career Services with job searching resumes, or interviews.
- If considering jobs abroad, research possible immigration regulations. If you are an international student interested in staying in Canada, consider speaking with an International Student Advisor.

**WHAT WILL I LEARN?**

A graduate degree in Biology can equip you with valuable and versatile skills, such as:
- Knowledge and technical skills
- Effective communication skills in multiple forms for diverse audiences
- Information management: prioritize, organize and synthesize large amounts of information
- Time management: Meet deadlines and manage responsibilities despite competing demands
- Project management: develop ideas, gather information, analyze, critically appraise findings, draw and act on conclusions
- Creativity and innovation
- Perserverance
- Independence and experience as a collaborative worker
- Awareness of an understanding of sound ethical practices, social responsibility, responsible research and cultural sensitivity
- Professionalism in all aspects of work, research, and interactions
- Leadership: initiative and vision leading people and discussion

**WHERE CAN I GO?**

A PhD in Biology can take your career in many directions. In Canada, less than 40% of all PhDs will work in post-secondary education – the majority will work in industry, government, or non-profits.
- Academia and teaching
- Agriculture
- Pharmacy and medicine
- Environmental law, patent law
- Government research centres and organizations
- Biotechnology industries
- Wildlife conservation
- Environmental consulting

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

Visit careers.queensu.ca/gradmaps for the online version with links!