Application FAQs

What do I need to know to APPLY?

ACADEMIC REQUIREMENTS
  • MSc in Biology or direct entry from B.Sc for exceptional candidates.

ADDITIONAL REQUIREMENTS
  • Correspond with potential supervisors (May require C.V.).
  • If English is not a native language, prospective students must meet the
    English language proficiency requirements: (1) TOEFL: Paper-based: 550; Internet-based: 80;
    (2) IELTS: 7.0; (3) PTE Academic: 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.

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
issue a $10,000 award to incoming PhD students who have won federal government tri-
council awards. For more information, see the School of Graduate Studies’ information on
awards and scholarships.

Why GRADUATE STUDIES in BIOLOGY?

There is no end to the fascinating questions we can ask about how the natural world functions,
from dissecting the molecular mechanisms at play in cells to understanding the complexity of
interactions in the biosphere, the beauty and mystery of nature. It is an incredibly exciting
time to do biological research and
we are learning about the natural world at a rate unprecedented in history. The remarkable
power of modern research tools, from powerful
gene editing techniques to bioinformatics
to ecosystem modelling, is driving exciting discoveries daily. These discoveries are made by
graduate students. Regardless of your area of
interest, there is something in biology for you,
questions waiting to be answered, and riddles of
natural to be solved.

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, ecology, and evolutionary
research including: a confocal microscopy suite,
DNA and RNA sequencing services, aquatic
research facilities, and a state-of-the-art phytotron.
Our field station, comprising more than 200
hectares of woodland, fields and lakes is a short
drive away and
has excellent research facilities and
living quarters.

“When I started my [Biology graduate degree] at Queen’s, all of a sudden
I had this new network of friends
who were interested in the same
biological questions that I was- it was a
lot of fun.”
– Roslyn Dakin, PhD

Program STRUCTURE

PHD (4 years): research thesis and defense. (Some courses may be required)

RESEARCH Areas
  • Animal Physiology
  • Cell and Molecular Biology
  • Ecology, Evolution and Behaviour
  • Plant Sciences
  • Mathematical Modeling & Bioinformatics

We encourage you to identify an area of research interest and contact a potential supervisor before
applying.
YOU CAN DO IT

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, criticize, appraise findings, draw and act on conclusions
- Creativity and innovation
- Perseverance
- Independence and experience as a collaborative worker
- Awareness, 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.

- Academic and teaching
- Agriculture
- Pharmacy and medicine
- Environmental law, patent law
- Government research centres and organizations
- Biotechnology industries
- Wildlife conservation and environmental consulting

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