

## Biomedical Sciences: MSc, PhD

The Department of Biomedical Sciences provides unique opportunities for translating fundamental research into practical applications that enhance animal and human health. Our expertise spans several disciplines including biomechanics, cancer biology, endocrinology, neuroscience, pharmacology and toxicology, reproductive biotechnology, cardiovascular biology, and stem cell and regenerative biology.

[ovc.uoguelph.ca/biomedical-sciences](http://ovc.uoguelph.ca/biomedical-sciences)

### PROGRAM

The Master of Science (MSc) program is a thesis-based program completed in approximately 6 semesters (2 years). The MSc program requires the successful completion and defence of a research-based thesis.

The PhD program in Biomedical Sciences is a thesis-based program completed in approximately 12 semesters (4 years). The PhD program requires the successful completion of a qualifying exam and the completion and defence of a research-based thesis.

### FIELDS

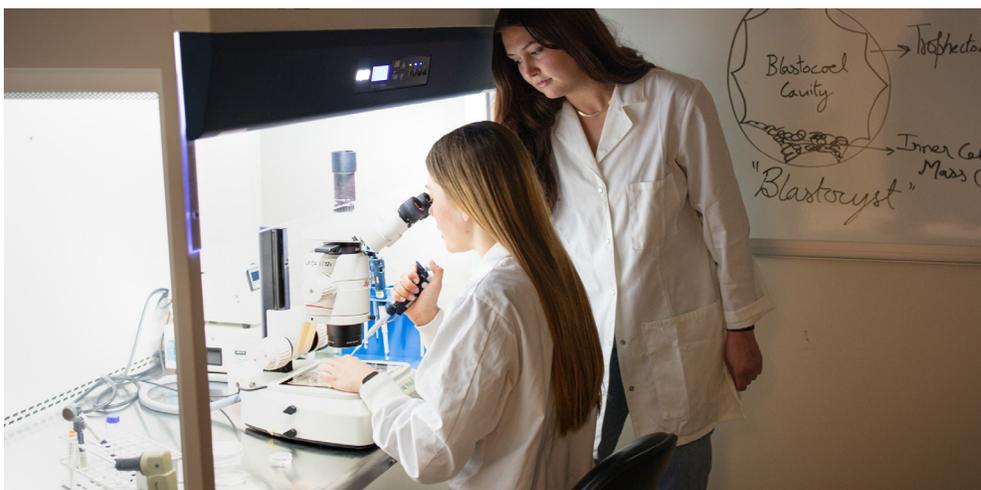
The department of Biomedical Sciences offers expertise in a number of areas:

- Reproductive Biology and Development
- Cardiovascular Physiology
- Cellular and Molecular Basis of Health and Disease
- Cancer Biology
- Toxicology and Pharmacology
- Neuroscience
- Stem Cell Biology and Regenerative Medicine

### COLLABORATIVE SPECIALIZATIONS

Collaborative Specializations allow students to enhance their degrees with multidisciplinary research. The MSc and PhD programs in the Department of Biomedical Sciences participate in the following Collaborative Specializations:

- Neuroscience
- One Health
- Regenerative Medicine
- Toxicology



Additional information on these options can be found in the [Graduate Calendar](#).

### ADMISSION REQUIREMENTS

- MSc: an honours undergraduate degree in a relevant field with a minimum average of 77% (B+)
- PhD: an approved Master's degree with a minimum average of 77% (B+)

Applicants must also confirm a faculty advisor before they apply. Please direct any questions regarding admission requirements to the Graduate and Research Programs team.

### APPLICATION DEADLINES:

Domestic applications will be accepted until 2 months prior to the semester. International applications will be accepted until 6 months prior to the semester.

**Entry: Fall / Winter / Summer**

[See website for deadlines.](#)

Applications are reviewed on an ongoing basis. We recommend having all documents submitted within 15 days of completing the OUAC application.

### ARE YOU INTERESTED IN:

- How the brain works
- How the heart and circulatory system work
- How pregnancy is maintained and regulated
- How drugs and toxins affect the body
- How cancer cells grow and spread

### CAREER OPPORTUNITIES:

- Professor
- Research Scientist
- Doctor (Veterinary or Medical)
- Dentist
- Pharmaceutical or Biotech Professional
- Legal Professional (Lawyer or Patent Agent)

### CONTACT INFORMATION

**OVC Graduate Research and Programs Team:**

[ovc.biomgrad@uoguelph.ca](mailto:ovc.biomgrad@uoguelph.ca)

**Graduate Program Coordinator:**

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