

## 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

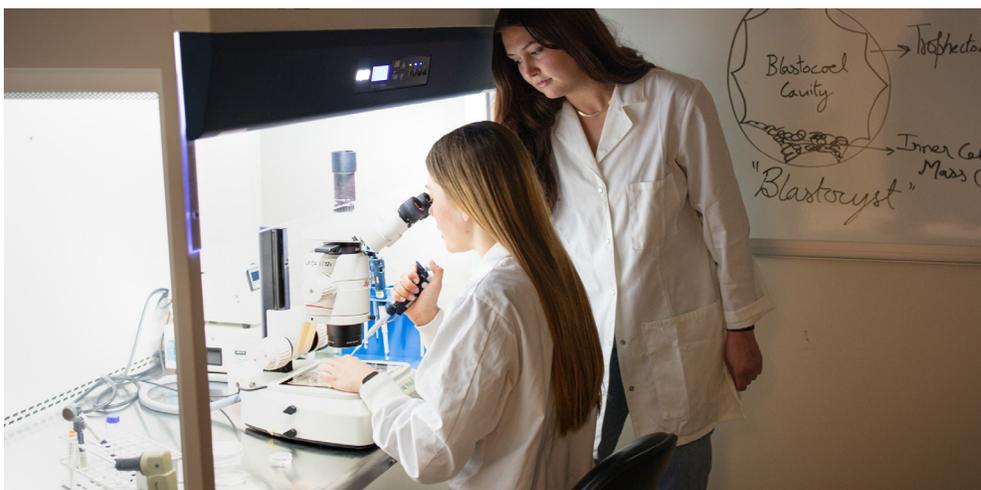
The department of Biomedical Sciences offers expertise in a number of areas:

- 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:

Dr. Craig Bailey  
[baileyc@uoguelph.ca](mailto:baileyc@uoguelph.ca)

# Master of Biomedical Sciences: MBS

The Master of Biomedical Sciences (MBS) is a coursework master’s program offered by the Ontario Veterinary College that draws on expertise across three departments: Biomedical Sciences, Clinical Studies, Pathobiology. The MBS program develops graduate training and provides students with hard and soft skills that will prepare them for successful careers.

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

## PROGRAM

The Master of Biomedical Science (MBS) program is a course-based program completed in approximately 3 semesters (1 year).

## COLLABORATIVE SPECIALIZATIONS

Collaborative Specializations allow students to enhance their degrees with multidisciplinary research. The MBS program participates in the following Collaborative Specializations:

- Neuroscience
- Regenerative Medicine
- Toxicology

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

## AREAS OF STUDY

The departments of Biomedical Sciences, Clinical Studies, and Pathobiology offer expertise in a number of areas:

- Neuroscience
- Immunology
- Reproductive biology and development
- Toxicology and pharmacology
- Prevention, diagnosis and treatment of disease
- Translational and comparative models, technologies, and studies

## ADMISSION REQUIREMENTS

For the MBS program, the minimum admission requirements are an honours undergraduate degree in a relevant field with a minimum average of 73% (B).



Applicants should consult the Biomedical Sciences website before applying for information on confirming an advisor. 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. See specific dates below.

### Entry: Fall / Winter / Summer

[See website for deadlines.](#)

Applications can be submitted any time before the deadline and are reviewed on an ongoing basis. Applicants are responsible for ensuring all documents are submitted promptly to receive a timely decision. We recommend having all documents submitted within 15 days of completing the OUAC application.

## ARE YOU INTERESTED IN:

- How different body systems work
- How cancer cells grow and spread
- How to develop and apply advanced medical technology
- How to communicate about health and medical issues
- How to improve animal and human health

## CAREER OPPORTUNITIES:

- Human medicine
- Veterinary medicine
- Research and development scientist
- Government or regulatory officer
- Embryologist or Andrologist
- Medical writer

## CONTACT INFORMATION

**OVC Graduate Research and Programs Team:**

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

**Graduate Program Coordinator:**

Dr. Laura Favetta

[lfavetta@uoguelph.ca](mailto:lfavetta@uoguelph.ca)