FACULTY OF GRADUATE STUDIES

BIOSCIENCE, TECHNOLOGY AND PUBLIC POLICY (MSc)

The Master of Science (MSc) in Bioscience, Technology and Public Policy is a research-intensive degree that provides advanced training in the life sciences while also helping students place life sciences research into the broader context of a modern society.

This program provides students with theoretical background and technical skill in their field of biology, while also helping them understand the implications of bioscience research for policy development and develop skills to communicate about their research to a range of audiences. Our students are trained in science and ethics, science and public policy and science in the context of national and international issues.

Students in the program spend the bulk of their time working with a faculty supervisor on a Master of Science thesis project in a range of fields such as genetics and genomics, bioinformatics, cell biology, physiology, behavioural ecology, and natural resource management.

In addition to the thesis, students also complete at least 12 credit hours of courses which provides training in policy application and development, communication to scientists and non-scientists and technical skill in bioscience. The expected time to graduate is 2 to 3 years; the maximum is 5 years.

SAMPLE CAREERS

This graduate program is designed to provide an excellent basis for a Ph.D. in Biology and related fields. In addition, our graduates are well-qualified for employment in industry, the public-sector, and academia. Below are a few examples of careers and Ph.D. positions obtained by our students following graduation:

- Fish and Habitat Protection Biologist, Department of Fisheries and Oceans, Canada
- Laboratory Technician, National Microbiology Laboratory
- Biologist, Wood Environment and Infrastructure Solutions, Inc.
- NSERC Canada Graduate Scholar Ph.D. Candidate, Department of Organismal and Evolutionary Biology, Harvard University
- Vanier Canada Graduate Scholar Ph.D. Candidate, Natural Resource Sciences, McGill University

SAMPLE COURSES

Bioscience and Policy This course focuses on the relationship between government, industry and the academic sciences and the processes that shape science policy. Students gain a better understanding of the role of science policy in government and industry and where policy issues "fit" with respect to legislation and regulations, management planning and implementation, procedures and guidelines.

Current Topics in Genetics & Genomics The field of Genetics has experienced explosive change in recent years. Advances in molecular techniques and computer sciences make it feasible to address old questions and raise new ones. A consequence of this advancement is the birth of Genomics and the evolution of the field into structural, functional and comparative genomics. This course is a combination of readings, oral presentations and discussions that examine current topics in the field.

MORE SAMPLE COURSES

- **Molecular Biotechnology**
- **Seminars in Biology**
- **Current Topics in Ecology**
- **Geographic Information Analysis**

ADMISSION REQUIREMENTS

Applicants to the program must hold a recognized 4-Year Bachelor of Science or equivalent with a minimum overall GPA of 3.0 (70%) and no grade less than C+ in the last two years of full-time university study.

English Requirement (if applicant's first language is not English): Minimum TOEFL score 550 (paper-based), 213 (computer-based), (80) internet-based OR International English Language Testing System IELTS (6.5) OR Duolingo (120). Test must have been taken within two years of the date a completed application is filed. See UWinnipeg English Language Requirements

HOW TO APPLY

1. Before applying, students should consult the list of potential supervisors available here. Students should then contact a potential supervisor doing work that interests them, and confirm that the supervisor has funding to support them and an available opening in their laboratory. It is a good idea to review your proposed supervisor's research via their web page and/or publications and, at minimum, include a resume or C.V. when contacting them.
2. Once you have identified a prospective supervisor, complete the online application form: uwinnipeg.ca/apply-to-grad-studies
3.In addition to the completed application form, the following must also be included with the application:

a. Transcripts are required from ALL recognized, post-secondary institutions attended, whether or not a degree has been awarded. For initial assessment purposes only, copies of unofficial transcripts are acceptable and preferred. Official transcripts, sent directly from the post-secondary institutions, will only be required if you are recommended for admission.
b. Supply two letters of recommendation and reference forms from individuals familiar with your academic work.
c. Provide English language requirement (where applicable).
d. Other supporting documents *may* include: scanned copies of name change (if applicable), CV/ resumé and proof of permanent residency (if applicable).
e. In addition to the maximum 300-word summary of the proposed research on the application form, you may also include up to an additional 2-pages (maximum) describing the proposed research.
f. Official documents should be sent to the Graduate Studies Admissions Office, The University of Winnipeg, 515 Portage Avenue, Winnipeg, MB Canada R3B 2E9.

Deadline to submit a complete application package, including all supporting documents, is **February 1**. The vast majority of students begin their program in September but in rare cases (e.g., if a supervisor's funding arrangements require an earlier start) a Spring (May) intake can be considered.

CONTACT US

E: bioscience@uwinnipeg.ca
W:http://www.uwinnipeg.ca/biology/graduate/index.html

Graduate Studies Admissions Office
P: 204.786.9309
E: gradstudies@uwinnipeg.ca

In any case where the University's Academic Calendar and this fact sheet differ, the current Calendar takes precedence.