



### ***Twin Cities Campus***

## **Ecology, Evolution and Behavior M.S.**

*Ecology, Evolution & Behavior*

### **College of Biological Sciences**

Link to a [list of faculty](#) for this program.

#### **Contact Information:**

Ecology, Evolution, and Behavior Graduate Program, 100 Ecology, 1987 Upper Buford Circle, St. Paul, MN 55108 (612-624-6770, fax: 612-624-6777)

Email: [eebgrad@umn.edu](mailto:eebgrad@umn.edu)

Website: <http://www.cbs.umn.edu/explore/departments/eeb/graduate/about-program>

- Program Type: Master's
- Requirements for this program are current for Spring 2018
- Length of program in credits: 30
- This program requires summer semesters for timely completion.
- Degree: Master of Science

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

The graduate program in ecology, evolution, and behavior (EEB) links faculty and students interested in the biology of organisms from molecules to ecosystems. Studies address questions from molecular mechanisms of evolution, the interactions of organisms in social groups and populations, the distributions and abundances of species in communities and ecosystems, to global biogeochemical processes. The program provides broad training in the general areas of ecology, evolution, and animal behavior, and specialized courses and research in vertebrate and invertebrate zoology; behavior and ethology; evolution; population genetics; molecular evolution; systematics; population, community, and ecosystem ecology; global ecology; limnology; ecology of vegetation; and theoretical ecology. Opportunities for field research are available in Africa, Central America, and other parts of the world, as well as in local ecosystems, including the Cedar Creek Ecosystem Science Reserve and Itasca Biological Station. Seminars and individually designed tutorials are an important part of student programs and provide an exciting intellectual environment.

## **Program Delivery**

This program is available:

- via classroom (the majority of instruction is face-to-face)

## **Prerequisites for Admission**

Other requirements to be completed before admission:

Courses in inorganic chemistry, organic chemistry, biochemistry, general physics, one year of college calculus, animal biology, genetics, physiology, and plant biology are strongly recommended and provide an important background to pursue graduate work in EEB. Proficiency in a foreign language is not required but is strongly recommended for students who expect to pursue field work in a country where English is not the native language. Deficiencies must be made up early in the graduate program.

#### **Special Application Requirements:**

Students are admitted only in fall semester. Deadline for application is December 1. Refer to the EEB website for more details.

International applicants must submit score(s) from one of the following tests:

- TOEFL
  - Internet Based - Total Score: 79
  - Internet Based - Writing Score: 21
  - Internet Based - Reading Score: 19
  - Paper Based - Total Score: 550
- IELTS
  - Total Score: 6.5
- MELAB
  - Final score: 80

Key to [test abbreviations](#)(TOEFL, IELTS, MELAB).

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.



## Program Requirements

**Plan A:** Plan A requires 14 major credits, 6 credits outside the major, and 10 thesis credits. The final exam is oral.

**Plan B:** Plan B requires 24 major credits and 6 credits outside the major. The final exam is oral.

This program may be completed with a minor.

Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.

A minimum GPA of 3.00 is required for students to remain in good standing.

At least 2 semesters must be completed before filing a Degree Program Form.

The MS is offered under both Plan A (with thesis) and Plan B (without thesis). Plan A requires 20 course credits in the major and 10 thesis credits. Plan B requires 30 course credits in the major and one to three research papers, which may be written in conjunction with graduate courses. Significant field or laboratory experience and competence in statistics, to include hypothesis testing, regression, and correlation are required. Degree programs are planned by the student and an advisory committee of three faculty members to meet the student's interests and needs.

### Plan A and Plan B course options

#### Plan A

##### Elective courses

Take 20 or more credit(s) from the following:

- [EEB 5042](#) - Quantitative Genetics (3.0 cr)
- [EEB 5407](#) - Ecology (3.0 cr)
- [EEB 5601](#) - Limnology (3.0 cr)
- [EEB 5605](#) ~~(Inactive)~~ (2.0 cr)
- [EEB 8201](#) - Graduate Foundations in Ecology, Evolution and Behavior Semester 1 (4.0 cr)
- [EEB 8202](#) - Graduate Foundations in Ecology, Evolution and Behavior - Semester 2 (4.0 cr)
- [EEB 8360](#) - Behavioral Biology Seminar (1.0 cr)
- [EEB 8500](#) - NSF GRF Graduate Research Fellowship Proposal Writing Seminar (1.0 cr)
- [EEB 8301](#) - Prelim Proposal Writing Seminar (1.0 cr)
- [EEB 8302](#) - EEB Written Prelim Workshop (1.0 cr)
- [EEB 8601](#) - Introduction to Stream Restoration (3.0 cr)
- [EEB 8602](#) - Stream Restoration Practice (2.0 cr)
- [EEB 8641](#) - Spatial Ecology (3.0 cr)
- [EEB 8980](#) - Seminar on Current Topics (1.0 - 3.0 cr)
- [EEB 8990](#) - Graduate Seminar (1.0 - 3.0 cr)
- Students may select graduate level courses outside of EEB in consultation with their advisor.

##### Thesis credits

10 master's thesis credits are required.

[EEB 8777](#) - Thesis Credits: Master's (1.0 - 18.0 cr)

-OR-

#### Plan B

Students may select from the courses listed below, or, in consultation with their advisor, choose other graduate-level courses with other designators.

Take 30 or more credit(s) from the following:

- [EEB 5042](#) - Quantitative Genetics (3.0 cr)
- [EEB 5407](#) - Ecology (3.0 cr)
- [EEB 5601](#) - Limnology (3.0 cr)
- [EEB 5605](#) ~~(Inactive)~~ (2.0 cr)
- [EEB 8201](#) - Graduate Foundations in Ecology, Evolution and Behavior Semester 1 (4.0 cr)
- [EEB 8202](#) - Graduate Foundations in Ecology, Evolution and Behavior - Semester 2 (4.0 cr)
- [EEB 8301](#) - Prelim Proposal Writing Seminar (1.0 cr)
- [EEB 8302](#) - EEB Written Prelim Workshop (1.0 cr)
- [EEB 8360](#) - Behavioral Biology Seminar (1.0 cr)
- [EEB 8500](#) - NSF GRF Graduate Research Fellowship Proposal Writing Seminar (1.0 cr)
- [EEB 8601](#) - Introduction to Stream Restoration (3.0 cr)
- [EEB 8602](#) - Stream Restoration Practice (2.0 cr)
- [EEB 8641](#) - Spatial Ecology (3.0 cr)



- [EEB 8980](#) - Seminar on Current Topics (1.0 - 3.0 cr)
- [EEB 8990](#) - Graduate Seminar (1.0 - 3.0 cr)
- Students may select graduate-level courses outside of EEB in consultation with their advisor.