

# EVOLUTIONARY BIOLOGY (MS)

Graduate School

Program Website (<https://ecologyandevolution.cornell.edu/graduate/>)

CIP: 26.1303 | HEGIS: 0401.00 | NYSED: 17070

## Graduate Field

Ecology and Evolutionary Biology (<https://catalog.cornell.edu/graduate-school/ecology-evolutionary-biology/>)

## Program Description

The Graduate Program in Ecology and Evolutionary Biology offers students rich opportunities to study organic diversity, including its origins, maintenance, and consequences. The program provides broad exposure to concepts and research approaches in ecology and evolution, alongside in-depth study in one or more subdisciplines. Students pursue research questions that address fundamental issues in basic and applied sciences, spanning a wide range of spatial and temporal scales and employing experimental, observational, theoretical, statistical, molecular, and chemical approaches. Some students focus on Discipline-Based Education Research to develop evidence-based knowledge and practices to improve STEM education.

Each student's course of study is tailored to their individual goals and interests. The program emphasizes broad, integrative thinking and encourages students to be both interdisciplinary and independent. It is particularly well suited to those who can take full advantage of Cornell's expansive intellectual and technological resources in the life sciences and related fields.

Excellent laboratory and nearby field facilities are available, along with extensive collections and libraries.

*\*The field does not usually admit students for a terminal M.S. degree.*

## Concentrations

- Ecological genetics
- Paleobiology
- Population biology
- Systematics

## Program Information

- Instruction Mode: In Person
- Location: Ithaca, NY
- Minimum Credits for Degree: 52.5

## Program Requirements

- Minimum Semesters for Degree: 4

## Graduate School Milestones

- Responsible Conduct of Research Training: Required
- Open Researcher and Contributor ID (ORCID): Required
- Student Progress Reviews (SPR) begin: First Year
- Masters Exam (M Exam): Summer of second year
- Thesis: Summer of second year

## Course Requirements

Additional course requirements may be set by the student's Special Committee. Program specific requirements that apply to all students are included below.

- BIOEE 7670 Current Topics in Ecology and Evolutionary Biology, taken in the first semester

## University Graduation Requirements Requirements for All Students

In order to receive a Cornell degree, a student must satisfy academic and non-academic requirements.

### Academic Requirements

A student's college determines degree requirements such as residency, number of credits, distribution of credits, and grade averages. It is the student's responsibility to be aware of the specific major, degree, distribution, college, and graduation requirements for completing their chosen program of study. See the individual requirements listed by each college or school or contact the college registrar's office (<https://registrar.cornell.edu/service-resources/college-registrar-directory/>) for more information.

### Non-academic Requirements

**Conduct Matters.** Students must satisfy any outstanding sanctions, penalties or remedies imposed or agreed to under the Student Code of Conduct (Code) or Policy 6.4. Where a formal complaint under the Code or Policy 6.4 is pending, the University will withhold awarding a degree otherwise earned until the adjudication process set forth in those procedures is complete, including the satisfaction of any sanctions, penalties or remedies imposed.

**Financial Obligations.** Outstanding financial obligations will not impact the awarding of a degree otherwise earned or a student's ability to access their official transcript. However, the University may withhold issuing a diploma until any outstanding financial obligations owing to the University are satisfied.

## Learning Outcomes

- Demonstrate a general knowledge in the discipline of Ecology, Evolutionary Biology, Organismal Biology, or some combination
- Make a strong, publishable contribution to the sub-discipline
  - Produce new knowledge and write up contribution.
- Demonstrate strong research skills
  - Be knowledgeable of historical development and able to articulate and discuss concepts and evidence in sub-discipline.
  - Be knowledgeable of organisms and ecological or evolutionary systems pertinent to research.
  - Develop knowledge of observational, experimental and analytical methods.
  - Adhere to ethical standards of scientific research.
  - Demonstrate ability to communicate research findings, through oral presentation and written publications.