

# ENTOMOLOGY (PHD)

Graduate School

Program Website (<https://cals.cornell.edu/entomology/education/entomology-graduate-studies/>)

CIP: 26.0702 | HEGIS: 0421.00 | NYSED: 13160

## Graduate Field

Entomology (<https://catalog.cornell.edu/graduate-school/entomology/>)

## Program Description

We house the oldest entomology program in the United States and has a world-wide impact on entomological research.

Our program has particular strengths in the following areas: insect-plant interactions and chemical ecology; insect-microbe interactions; pest-management and biological control; outreach, public education, and citizen science; and insect diversity and systematic entomology.

## Concentrations

- Acarology
- Apiculture
- Applied entomology
- Aquatic entomology
- Biological control
- General entomology (minor)
- Insect behavior
- Insect biochemistry
- Insect ecology
- Insect genetics
- Insect morphology
- Insect pathology
- Insect physiology
- Insect systematics
- Insect toxicology and insecticide chemistry
- Integrated pest management
- Medical and veterinary entomology

## Program Information

- Instruction Mode: In Person
- Location: Ithaca, NY
- Minimum Credits for Degree: 72

## Program Requirements

- Minimum Semesters for Degree: 6

## Graduate School Milestones

- Responsible Conduct of Research Training: Required
- Open Researcher and Contributor ID (ORCID): Required
- Student Progress Reviews (SPR) begin: First Year

- Examination for admission to candidacy (A Exam): Spring of second year
- Defense of Dissertation (B Exam): Spring of fifth 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.

- ENTOM 7670 Professional Development in Entomology, 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 intellectual engagement and become an established member of the research/teaching/extension community through participation in departmental seminars, journal clubs, scientific meetings, lab group meetings.
- Develop the ability to assimilate information and knowledge from multiple sources to form hypotheses and questions by becoming familiar with the relevant literature and be able to discuss their research with peers and faculty.
- Develop critical thinking skills, including the ability to identify and evaluate assumptions in an argument, analyze arguments, and formulate coherent opinions and place their own research into context.
- Demonstrate the ability to write scientifically including research proposals, peer-reviewed papers and/or extension or outreach articles.

- Conduct research by mastering appropriate research methodologies, analyzing and interpreting their own research findings.
- Develop oral communication skills, including the ability to present research and/or extension and/or outreach material in a way that is compelling and audience appropriate. Beginning in the second year, students are expected to give an annual presentation in a Cornell venue such as the Entomology Department seminar series, the January symposium, journal club, or discussion group.
- Develop written communication skills. We recommend students get involved in the writing of proposals, scientific publications in the primary literature and extension/outreach publication for the general public. Written communication may be both traditional and web-based. There is also a required written component to our A- Exam.
- Work independently and in groups including mentoring junior colleagues and/or in research, teaching and extension assistantships. Use resourcefulness and persistence to take advantage of opportunities and overcome challenges that occur in graduate school.
- Build the Department and University community by promoting diversity, equity and inclusion.