

# ENTOMOLOGY, B.S.

Entomology is the study of insects, who have dominated the terrestrial planet for more than 350 million years. While entomologists have recognized and named more than one million different species of insects, experts vary widely on the true number of insects species—with estimates ranging from 3 to 30 million unique species. At any given moment, 200+ million insects live for every human on Earth; over 70 percent of all animal species are insects. They have achieved something that has eluded humans—sustainable development. Insects are the primary consumers of plants, yet they are also the dominant pollinators, thus ensuring plant reproduction. They play a critical role in disease transmission yet the service they provide to ecological maintenance is unparalleled.

Entomologists conduct insect-based research in numerous areas ranging from general biology, natural history, systematics, ecology and behavior, to molecular biology, physiology and development, to medical and agricultural entomology. Emerging areas include invasive species, biodiversity, pollination ecology, forensics, global health, and genomics. Entomology is a very specific discipline, yet at the same time, an immensely broad and diverse field of study touching a wide array of other subjects. As such, entomological training provides many choices and opportunities for those interested in the diversity of nature. While some entomologists work in the field, others work in the laboratory, classroom, or museum settings.

Students majoring in entomology study in a variety of fundamental and applied fields. Graduates find employment in college and university teaching, community education, research and extension work, state and federal government service, industry, and research institutes.

## Learn through hands-on, real world experiences

Entomology students learn in many field and lab courses, including classes that focus on taxonomy, physiology, parasitology, insects and human culture, issues in global health, and medical entomology. Students can complete their capstone requirement as part of a summer field course. There are also numerous internships and research opportunities available both on and off-campus.

## Build community and networks

The UW-Madison Entomology Department is committed to the UW System's (<http://www.wisconsin.edu/campuses/>) goal to provide Wisconsin's citizens with opportunities to benefit from and contribute to the state's growing "knowledge economy" through the land-grant university three-fold mission of teaching, research and public service.

In the spirit of The Wisconsin Idea (<http://www.wisconsinidea.wisc.edu/>), Entomology Department faculty and students fulfill the public service mission through entomology outreach engagement. Entomology Department interactions with the surrounding and statewide community encompass a wide range of insect and human affairs from human medical issues such as West Nile Virus and Lyme disease, to forest products and natural resources entomology, integrated pest management programs for agriculture, turf and ornamental and household settings, K-12 primary and secondary school education, and more.

## Customize a path of study

Students are often able to customize their program of study by exploring a double major and/or undergraduate certificates based on their unique

areas of interest. Both faculty and staff advisors are available to help students choose electives based on their educational and professional goals.

## Make a strong start

Freshman who are interested in Entomology are encouraged to participate in a First-Year Interest Group (<https://figs.wisc.edu/what/>) (FIG) program. During Fall semesters, the department has historically offered a fascinating FIG titled "Global Biodiversity and the 6th Mass Extinction" where students explore what the immense richness of biodiversity means not only to the human species but to the very health of the planet. This program includes field trips, a museum experience, and other hands-on and experiential learning opportunities to bring concepts and classmates together for an eye-opening journey.

## Gain global perspective

The Entomology major is a great choice for students who wish to participate in a study abroad experience. Students can choose from a multitude of destinations world-wide, and can travel abroad during Summer, Spring, or Fall terms. Students can explore studying abroad as an Entomology major by utilizing the Entomology Major Advising Page. Students work with their advisor and the CALS study abroad office to identify appropriate programs.