Geobiology is the study of the interactions that occur between the biosphere (living organisms and their products) and the geosphere (solid part of the Earth). Geobiologists apply the principles and tools of biology to study the Earth and construct a picture of life through time. Geobiologists search for clues of how changes to the Earth in the past have affected life on Earth and vice versa. By studying key aspects of the environment, geobiologists seek an understanding of how stressors affect entire populations, evolution, and extinctions.
Overview

Geobiology encompasses the fields of paleobiology and paleontology, biogeochemistry, geomicrobiology, and astrobiology. The program provides students with a strong background in general science and especially in geosciences and biology, with core selections from both disciplines. Students gain practical field experience in the study of the physical environment and ecological properties. Students will be well prepared for advanced studies in this emerging discipline, and for careers in the environmental sciences.

Geobiology is critical to the study of environmental quality, global change, and environmental-human health interactions, all having profound impact in legal, economic, and policy arenas.

You might be a good fit if...

♦ You want to understand the complexity of environmental factors that led to the origin and evolution of life on Earth and contributed to past mass extinctions.
♦ You like to do field work outdoors, such as searching for fossils.
♦ You are analytical and like gathering clues to paint a picture of past life.
♦ You like thinking about the big picture of Earth’s evolution.

Internships and scholarships

The College of Earth and Mineral Sciences awards more than $2.5 million annually, including more than $92,000 exclusively for students interested in Geobiology.

Clubs and activities

♦ Geosciences Club
♦ Association for Women Geoscientists

Why choose Penn State?

Students will be well prepared for advanced studies in this emerging discipline, and for careers in the environmental sciences. Geobiology is critical to the study of environmental quality, global change, and environmental-human health interactions, all of which have profound importance in legal, economic, and policy arenas.

“The opportunities for students are unfathomable. I highly recommend getting involved and finding your niche in the Geosci community. This program is amazing. Through it, I learned to SCUBA dive, got to go to the Florida Keys, and collect so many fossils!”

~ Travis Krivitski