

IUP GEOSCIENCE DEPARTMENT

Studies in the Department of Geoscience focus on the Earth and its environment. We offer classes in geology, astronomy, meteorology and oceanography. Our programs prepare students for careers in exploration and responsible utilization of energy resources, understanding and mitigating regional and global environmental issues, and understanding processes that shape the Earth.



Field studies are integral to our program. Many courses provide opportunities to study rocks and sediments in their natural setting.



Summer field courses are offered each year to all corners of North America.

If you want more information or are ready to become a geologist, please stop by our office!

DEPARTMENT OFFICE
111 WALSH HALL

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Degree Programs:

- B.S. Geology
- B.S. Energy Resources
- B.S. Environmental Geoscience
- B.S. Ed. Earth and Space Science

“Rocks are records of events that took place at the time they formed. They are books. They have a different vocabulary, a different alphabet, but you learn how to read them.” -John McPhee



Students work closely with faculty mentors and gain valuable experience with cutting-edge research.

GEOSCIENCE DEPARTMENT

Degree Programs

As a Geology major, you'll get an education that provides both a rock-solid foundation and forward-looking preparation for a career in the field of energy or environment or a successful launch to graduate studies.

You'll take a core of required Geoscience courses and will choose from a list of classes in related areas. Free electives can be used to add an internship, independent study, or classes from other departments.

In the Geoscience Department, hands-on learning, fieldwork, and student-oriented research are emphasized. We also offer field courses at distant sites such as Newfoundland, the Yellowstone region, the Bahamas, and the American Southwest.



Students field mapping rock outcrops in the Northern Rockies.

B.S. Geology (Geology Track)

The B.S. degree in Geology (Geology Track) is, in a sense, a dual-purpose degree program. Not only is it designed to graduate well-trained, competent geologists, able to compete for positions as professional geologists in the job market; it is also designed to provide the student with the necessary allied science and mathematics background to enable the good student to qualify for admission to the graduate school of his/her choice in Geology.

B.S. Geology (Environmental Track)

The Environmental Track offers the student a broad-based science background. In addition to a firm foundation in Geology-Geoscience courses, the student will also acquire a background in Biology and Chemistry. This will provide thorough training for the rapidly growing field of Environmental Geoscience, both for students who plan to pursue postgraduate training in this field and for those who plan to enter directly into jobs in federal and state agencies and private consulting firms.

B.S. Geology (Energy Resources Track)

The Energy Resources Track is designed for students who wish to pursue careers in the energy sector. Western Pennsylvania is a historic coal and natural gas producing region with the potential for significant growth in the natural gas industry due to development of the Marcellus Shale. The Energy Resources Track will prepare students for direct entry into the energy industry with a focus on the discovery and development of energy resources and geophysical exploration techniques.

B.S. Ed. Earth and Space Science

The department recognizes as one of its functions the role of serving the field of public education by the preparation of qualified and certified teachers of earth and space science. Upon successful completion of this program students receive a B.S. in Education and are prepared in all content areas of Earth Science as well as effective pedagogy.

GEOSCIENCE FACULTY

Dr. Karen Rose Cercone

PhD – University of Michigan, MFA – University Pittsburgh; groundwater modeling, aqueous geochemistry, teaching of science

Dr. Ken Coles (Planetarium Director)

*PhD – Columbia University
science education, astronomy, geophysics*

Dr. Katie Farnsworth

*PhD – Virginia Institute of Marine Science
coastal processes, fluvial sediment transport, global flux of sediments*

Dr. Tommy Gerber

*PhD – Duke University
energy resources, sedimentary basin analysis, geophysics*

Dr. Steve Hovan (Chair)

*PhD – University of Michigan
paleoceanography, deep sea sediments, eolian systems*

Dr. Jonathan Lewis

*PhD – University of Connecticut
structural geology, earthquake geology, plate boundary deformation, neotectonics*

Dr. Michael Poage

*PhD – Dartmouth College
soil geochemistry, paleoclimate, paleoaltimetry*

Dr. John Taylor

*PhD – University of Missouri
paleontology, stratigraphy, carbonate petrology*

For more information about our program see our website:

www.iup.edu/geoscience

or contact our Department Chair:

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