Located in the Appalachian Mountain belt, Millersville Geology explores the earth's diverse systems. By studying everything from the microscopic properties of minerals to large-scale plate tectonics, our geology majors leave Millersville University well-versed in the fundamentals of geology, and confident that they have the skills necessary for the future.

**Why be a geologist?**

Students completing our B.S. in geology and our B.A. in environmental geology exceed requirements for professional geology licensure and are prepared for entry into either the workforce or graduate school. According to the U.S. Department of Labor, the median annual salary for geoscientists is slightly over $90,000, and job growth through the next decade is projected to be faster than average.

*BACHELOR OF SCIENCE (B.S.)*

**Geology** – The undergraduate program in geology provides an excellent foundation in modern geoscience and offers students an understanding of everything from earth's formation to the interrelationship between humans and the geosphere. The geology program offers small class sizes, hands-on learning opportunities, field study and research experiences.

*BACHELOR OF ARTS (B.A.)*

**Earth Sciences** – Multidisciplinary in design, this program exposes students to the foundations of the processes that influence the earth, atmosphere and oceans.

**Earth Sciences with an Environmental Geology Option** – The environmental geology option is for students who want to delve more deeply into an applied science concerned with the practical application of the principles of geology in the solving of environmental problems.

**CLUBS AND ACTIVITIES**

The Geology Club provides opportunities for students to become better acquainted, to promote interest in geology and the earth sciences, and to provide opportunities beyond the classroom to explore geology. Highlights of the club include mineral and fossil digging, trips to regional natural history museums and the annual club trip to one of our national parks. Students have visited such geologically rich locations as the Grand Canyon, Glacier National Park, and Yellowstone.

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*www.bls.gov/ooh/life-physical-and-social-science/geoscientists.htm*

Geoscience majors have one of the lowest jobless rates compared to college graduates with other majors (www.cbsnews.com/news/25-college-majors-with-lowest-unemployment-rates), and the American Geological Institute predicts that by 2022, there will be a shortage of over 100,000 geoscientists compared to workforce needs. As a result, demand for geologists will be very strong in the years to come.

*DEGREES/CONCENTRATIONS*

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*Geology Field Trips* – Many geology classes include field trips; the average student will spend over 100 hours in the field while earning their geology degree. Shown above, Dr. Walsh, our newest faculty member, is helping students identify and measure folds at Chickies Rock. Students spent the day identifying rocks and measuring structures to better understand the geologic history of central Pennsylvania.

*www.bls.gov/ooh/life-physical-and-social-science/geoscientists.htm*
INTERNSHIPS
Opportunities Beyond Millersville:
We encourage every student majoring in geology or environmental geology to pursue an internship experience outside the department; many students undertake significant scientific research projects.

FACILITIES AND EQUIPMENT
• Student Study Room – Equipped with computers, chalkboards, reference books and textbooks.
• Software – In addition to GIS and statistical software, the earth sciences department has licenses for GMS-MODFLOW groundwater modeling software, Rockworks (a suite of geologic utilities) and PETRA core-logging software. A laptop-equipped classroom facilitates incorporation of professional software into classes.
• Equipment – The geology program hosts a broadband seismograph; in addition to a microscope lab, there is a research-grade petrographic microscope. The program also has a rock saw, water-quality meters and a magnetometer. Many students undertake significant scientific research projects.

ABOUT OUR GRADUATES
Geology majors will leave Millersville University with a broad range of skills that will open many job opportunities, including petroleum exploration, mineral exploration and environmental consulting/remediation. Students also gain abundant experience in the field in their upper-division coursework.

Geology majors who continue on to graduate school find themselves able to hit the ground running. One Millersville alum who recently completed a master's program at Temple University said, “I was very happy with how Millersville prepared me for graduate school.” Feedback from alums who go into industry has been similar—they feel that they have better preparation in skills needed for their job than graduates of other programs.

ALUMNI SPOTLIGHT
Mark Sutcliffe, Exploration Geologist at Newfield Exploration
Mark received his B.S. from Millersville in 2007, with a double major in geology and economics. He went on to earn an M.S. in structural geology/metamorphic petrology from the University of Missouri-Columbia. He currently works to discover new energy resources for Newfield Exploration, a major international energy company.

“I love Millersville. It prepared me so well for graduate school and later industry. Attending the regional and national meetings of the Geological Society of America with Millersville University inspired me to continue on with geology.”
– Mark Sutcliffe, B.S. in geology and economics, ’07