

Environmental Geoscience

Have you ever wondered why and how natural disasters such as earthquakes, volcanoes, hurricanes, tornadoes, drought, floods, landslides or tsunamis, occur? Or how humanity deals with the aftermath of such phenomenon? Have you ever wondered about the sustainability of the human race as populations continue to increase amid decreasing natural resources? Have you ever wondered about?

- The physical processes involved in the creation and evolution of landforms?
- Soils analysis?
- Fossil fuel and mineral resource exploration and extraction?
- Understanding past ecosystems and climates?
- Glaciation and its effect on landscapes?
- Stream analysis and landforms shaped by fluvial processes?

If so, the Environmental Geoscience degree program is right for you.

With natural resources dwindling and human populations increasing, the field of Geoscience has increased focus on mineral resource exploration and extraction. Utica and Marcellus Shale reserves, oil shale, and safe and effective deep water drilling have recently dominated the media. The Environmental Geoscience degree program (and also the Geology degree program) creates graduates who are well trained to enter such workplace environments. Graduates also are adept at the preservation of ecosystems and the environment.

Additionally, the program seeks to place the context of humans within Earth processes. Humans are both affected by and affect the natural world. Environmental Geoscience and Geology explores critical relationships between humans and the physical world so that better decisions may be made regarding natural resource use and resulting impacts. The application of Geographic Information Science, the most rapidly growing computer-based technology on the planet, is a primary tool which aids the link between the natural and human worlds. GIS is a multi-dimensional computer mapping system utilized in a huge array of sciences and human endeavors.

Environmental Geoscience seeks to provide a strong foundation in the basics of physical earth processes. The Environmental Geoscience degree program has four concentration areas. Students must choose at least one concentration area but may choose more than one. The areas of concentration are:

- Geographic Information Science (GIS)
- Geoscience
- Mineral Resources Exploration
- Atmospheric/Oceanic Science

Considerable overlap between the Geoscience and Mineral Resources Exploration concentrations and the Geology degree program allows students to dual major in both Environmental

Geoscience and Geology with no additional schooling required. Such endeavors are possible due to the flexibility inherent in each program, specifically with regard to in-major electives.