Geology

The geosciences include all topics relating to the physical aspects and structure of Earth; this includes the environment, the atmosphere, and the planetary sciences.

At Stony Brook University, the major emphasizes the development of skills that are applicable to addressing issues in the earth and its environment. Students will learn specialized topics like geochemistry, crystallography, mineral and rock physics, petrology, sedimentary geology, seismology, tectonics, environmental geology, and planetary geology. The exploration of these topics will guide students in developing the necessary skills for research, analysis, and a variety of industries. Some of these include private and public research laboratories, non-profit organizations, oil and gas extraction, museums, education, state and national parks, writers for scientific publications, and academia.

To qualify for a license as a professional geologist, applicants in New York State will be, as of November 2016, required to apply with the Education Department of New York State. In order to apply, an individual must have a geological science bachelor's degree; have at least five years of experience; pass a written exam; and be at least 21 years old. Individuals must renew their license once every three years.

Transferable Skills

- Thinking critically on scientific data and research
- Developing innovative approaches to explore solutions
- Technical writing
- Leading and contributing to a team
- Public speaking, presentation, and didactic skills
- Analyzing statistical data, reports, and research
- Conducting research and laboratory tests
- Writing scientific reports and papers

Career Communities to Consider

- Public Service
- Research
- Education & Helping Professions