



Computing &
Engineering
Accreditation
Commissions

UNDERGRADUATE PROGRAM

GEOLOGY

2019
UNDERGRADUATE
ENROLLMENT:

39

APPROX. TOTAL
CREDIT HOURS*:

121

*Dependent on emphasis

Geologists gather and interpret data about the Earth to improve the quality of human life. By nature, geology is a multidisciplinary study of Earth processes, materials, and history. Geologists often work in the field, quantify in the lab, travel, puzzle-solve, and have a deep appreciation and understanding of the physical world around us.

Here are just a few tasks of a professional geologist: locate and recover natural resources (water, energy, minerals); address environmental problems related to sustainability, urbanization, pollution, and waste disposal; reduce loss associated with Earth hazards such as earthquakes, volcanic eruptions, floods, and landslides; describe global cycles that impact climate, ecological systems, and resource supplies.



GEOLOGY AT CLEMSON

There are about 40 to 50 undergraduate geology majors at Clemson. As a relatively small program, students and faculty get to know one another quickly.

There are nine faculty who focus primarily on geology and three more who teach geology and some engineering courses. This gives the program an excellent faculty-to-student ratio of about 1:4. The multidisciplinary nature of our faculty also provides students with a broad knowledge of geology and related fields.

clemson.edu/ees

GEOLOGY

PROGRAM DETAILS:

Professional geological groups who track the job market estimate that demand for geologists will grow by about 20% in the next ten years. Starting salaries are attractive too. Geology consistently ranks in the top ten most valuable degrees according to Forbes magazine.

Besides taking lots of geology classes, geology majors also take two semesters of chemistry, two semesters of calculus, and at least one semester of physics. Geology majors also take six credit hours of field courses and 12 hours of research courses. Several of our classes contain field trips, and many student research projects also involve extensive field work.

Unlike many majors that follow a very strict list of classes you must take, Clemson's geology major is very flexible and allows students to choose several classes that match their own interests.

LABS AND FACILITIES FOR HANDS-ON TRAINING

The geology program includes a computer lab for Geographic Information Systems (GIS) training, a geoprobe for fieldwork, and facilities for preparing samples for radiometric dating.

CLUBS AND ORGANIZATIONS

The Geology Club organizes a range of activities each semester, providing students from all majors opportunities to network, help others in the Clemson community, go on field trips, participate in professional meetings, and attend professional development workshops. There are many other student groups on campus that also help students engage in Earth science.

GLOBAL ENGAGEMENT

We offer multiple field courses for students to choose from, including spring break excursions in the Caribbean and western U.S.

GRADUATE AND PROFESSIONALSCHOOL OPPORTUNITIES

Do you have to go to graduate school to be a geologist? It depends on what your career goals are. Many careers in geology require a master's degree. Other jobs do not require a graduate degree, but promotion and advancement can be faster if you have one. Among Clemson alumni, about three-quarters go straight into the job market upon graduating, while the other one-quarter goes straight to graduate school. Many students who enter the workforce obtain a graduate degree later.

SCHOLARSHIPS AND AWARDS

Our geology majors are competitive for regional and national scholarships, with students winning awards from the Geological Society of America and other geologic societies in recent years.

Thomas Logan, Jr. Geology Merit Award – This award is presented to a senior majoring in Geology with outstanding achievement and possessing personal attributes necessary for success in this discipline.

CLEMSON



UNDERGRADUATE RESEARCH

All geology majors are required to do their own research projects to graduate. Each student works with a faculty mentor. At the end of their senior year, students present their research at a professional conference, which gives them a great opportunity to showcase what they have done before a group of professional geoscientists from around the Southeast.

CO-OPS AND INTERNSHIPS

Clemson geology students have won several prestigious internships in recent years, such as opportunities to work at Lawrence Livermore National Laboratory, the Southern California Earthquake Center, the SAGE geophysics field program, and attend ExxonMobil's Bighorn Basin field course

EMPLOYERS

Nationally, about one-third of geology majors are employed by the oil-and-gas industry. The other two-thirds are hired by a range of employers, including:

- environmental consulting firms
- government agencies
- research groups
- nonprofit agencies



Department of
**ENVIRONMENTAL ENGINEERING AND
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