Bachelor of Science in Geosciences

The Geosciences encompass a diverse array of fields, such as geology, geophysics, geochemistry, paleobiology, geomorphology and paleoclimatology with the aim of understanding the origin and evolution of Earth and other planetary bodies in our solar system. Geoscientists study the composition, structure, and deep time history of Earth. Research in the geosciences continues to play a major role in human sustainability and leads the way as we adapt to the rapidly changing environments in which we live.

Career Potential

Jobs with local domestic oil and gas companies and environmental companies have been relatively abundant for graduates with Bachelor of Science degrees. The MS degree does remain the degree of choice for most employers in the oil and gas as well as mining and environmental industries, and BS degree recipients will be well-served to have as strong a background in the supporting sciences and communication skills as possible.

Those working in environmental geology are advised to take the Fundamentals of Geology portion of the National Association of State Boards of Geology licensing exam during their senior year. The UT Dallas curriculum specifically addresses areas covered in this exam.

Current rates of population growth together with demands for economic growth will further stress water and natural resources. The impacts of impacts of climate change may add to these stresses. The need for well-trained, responsible, and solution-driven geoscientists has never been greater. Job opportunities abound in:

- Environmental, energy and mineral resources industries.
- Government agencies associated with natural resources, environment and the impacts of climate change.
- Occupations concerned with law, management, economics and environmental management.

The University’s Career Center is an important resource for students pursuing their careers. Licensed counselors are available to provide strategies for mastering job interviews, writing professional cover letters and resumes and connecting with campus recruiters, among other services.

Geosciences at UT Dallas

The Bachelor of Science degree is intended for students who want to “get their hands dirty” and be practitioners of geology. Students generally will continue their studies in geosciences or closely related programs in graduate schools and attain a master’s or doctorate degree.

Students must earn 120 hours to graduate: 42 hours from the University’s core curriculum, 58-64 hours in the major, plus elective requirements where students can tailor their learning experience more closely to their interests.

Visit the GeoClub, a registered student organization devoted to promoting geoscience awareness and knowledge within the University and the general community:

facebook.com/groups/2210080549

Fast-Track

The Fast-Track Program gives exceptionally motivated undergraduate students the opportunity to transition into a MS program [with thesis] toward the end of their undergraduate tenure. For entry into the program, students are required to have a high GPA [about 3.5 or higher] and to have identified a faculty MS thesis advisor. The hours required to complete the MS degree are reduced by the number of Fast-Track graduate hours completed.
High School Preparation
High school students need to demonstrate an aptitude for science and an interest in the physical world around them, including nature, the environment and the outdoors in general. A background in geography, geology, chemistry and mathematics will help ensure success at the undergraduate level.

School of Natural Sciences and Mathematics
UT Dallas’ School of Natural Sciences and Mathematics offers degree programs for undergraduate and graduate students in biology, chemistry, geosciences, mathematics and physics. In addition to regular coursework, undergraduates are encouraged to participate in research alongside the faculty and graduate students. From the world-renowned Alan G. MacDiarmid NanoTech Institute, headed by Dr. Ray Baughman, to the William B. Hanson Center for Space Sciences—where Dr. John Hoffman helped discover water on Mars—the science education at UT Dallas is a hands-on, high quality experience for undergraduates and graduate students alike.

The UTeach Dallas program offers students the opportunity to complete the requirements for high school teacher certification along with their regular BS or BA degrees.

Quick Facts about the School of Natural Sciences and Mathematics
- Established in 1975.
- Six departments.
- More than 3,100 students.
- 26 degrees offered.
- Faculty include a Nobel Prize winner and a member of the National Academy of Engineering.

Degrees Offered
- Bachelor of Science: Actuarial science, biochemistry, biology, chemistry, geosciences, mathematics, molecular biology, physics
- Bachelor of Arts: Biology, chemistry, physics
- Master of Science: Actuarial science, bioinformatics and computational biology, biotechnology, cell and molecular biology, chemistry, geosciences, mathematics, physics
- Master of Arts: Teaching in mathematics education, teaching in science education
- Doctor of Philosophy: Cell and molecular biology, chemistry, geosciences, mathematics, physics

Certificates
- Postbaccalaureate certificate in biomedical science

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