Bachelor of Science in Geosciences

The Geosciences encompass a diverse array of disciplines in geology, geophysics, geochemistry, paleobiology, geomorphology and paleoclimatology, to name a few, 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 will play an increasingly important role in human sustainability and leads the way as we adapt to the rapidly changing global environments in which we live.

Career Potential

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

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

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

- Environmental, energy and mineral resources industries.
- Government agencies associated with natural resources, environmental concerns 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 be practitioners of geology. Students generally should continue their studies in geosciences or closely related programs in graduate schools and attain an MS or PhD 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 involvement within the University and the general community:

facebook.com/groups/2210080549

Fast Track

The MS Fast Track program, with partial support from Pioneer Natural Resources, enables exceptionally gifted UT Dallas students to include master's level courses in their undergraduate degree plans. Students who meet the requirements for admission to graduate school and the minimum GPA requirement (~3.50) for their major can take up to 15 hours of graduate level coursework that can apply toward their undergraduate and graduate level coursework. To take graduate courses in the Fast Track program upper-division undergraduates must have completed 90 semester credit hours and petition their Associate Dean for permission to take graduate courses.

High School Preparation

High school students should have 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 physics, 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.
- 29 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, mathematics, physics

**Master of Science:** Actuarial science, bioinformatics and computational biology, biotechnology, chemistry, geosciences, mathematics, molecular and cell biology, physics, statistics

**Master of Arts:** Teaching in mathematics education, teaching in science education

**Doctor of Philosophy:** Chemistry, geosciences, mathematics, molecular and cell biology, physics, statistics

Certificates

Postbaccalaureate certificate in biomedical science

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