



Field trips

Every year or two, the Rice Earth Science Department goes on a field trip! However, this is not just a “load up the yellow school bus and take your sack lunch” field trip. We plan our trips to visit what we call “type-locale” field trips. That means that the location is one of the best places in the World to observe a particular type of geological features. For example, we went to the Big Island, Hawaii, to observe active volcanic processes. While there, we got to dip our rock hammers in flowing lava. Another trip was to the Swiss and Italian Alps to look at exposures of the upper mantle of the Earth, and to see mountains built by stacking up many of layers of crustal rocks as they were crushed between Europe and Africa. You get the idea. Over the last ten or so years, we have also gone to Belize, Cuba, The Canadian Rockies, Spain, Morocco, Chile and more. When we go, it is not just the professors. We go with young researchers, graduate students, and undergraduate students! How cool is that!

Recent destinations include:

- Hawaii
- Belize
- California
- Texas
- Cuba
- The Alps
- Canadian Rockies
- Spain
- Chile
- Antarctica
- US Rockies
- Morocco



Research opportunities

Most Rice Earth Science undergraduates participate in research activities under the supervision of Rice Professors. Their projects may involve laboratory work, data acquisition in far flung parts of the world, oceanographic expeditions, field mapping, and more. The students write-up their conclusions and travel to international science meetings to present their results. This kind of research experience is exactly what employers and graduate schools are looking for!

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B.S. & B.A. programs in Earth Science



EARTH SCIENCE DEPARTMENT



Do you want to

- Sail around Antarctica?
- Climb active volcanoes?
- Explore the world's oceans and coral reefs?
- Help understand the global environment?
- Join geophysical expeditions?
- Learn advanced laboratory skills?
- Study the Earth's deep interior?
- Gain valuable job experience?

...then explore the undergraduate BS and BA degrees offered by the Rice Department of Earth Science (ESCI). All ESCI undergraduates can choose among many research projects and work closely with world-renowned faculty. Many undergraduates present their own research projects at national and international conferences.

Our recently revised curriculum teaches skills for the 21st Century. Undergraduates can choose tracks in geology, geophysics, geochemistry, environmental geology, and more. All undergraduates take a four-course sequence, typically in their sophomore and junior years. These core courses encompass Earth processes, materials, observations, and history. ESCI majors also take introductory courses in mathematics, chemistry, and, in many cases, physics and



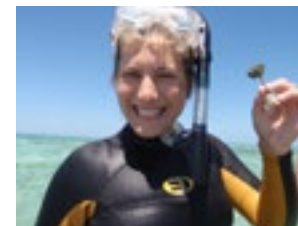
biology. The selection of upper division courses and additional science courses depends on the degree (BS or BA). The BS degree is for students planning a career in Earth Science or a related field. The BA in Earth Science degree has fewer requirements and might be a good choice for students planning a career for which Earth Science is incidental. All tracks typically include experience with analytical equipment, computer systems and fieldwork.

Most students with a Bachelor's degree in earth science elect to continue their education in graduate school. They may seek a Masters degree in order to put their geological, geophysical or geochemical knowledge to work in industry, governmental agencies, or environmental firms. Some may seek a PhD degree in order to work in academia, industry research groups, or government agencies. Rice undergraduates are well prepared for graduate study, and are sought out by the finest universities in the US and abroad.

Special Factors

Houston is the center of the world's hydrocarbon industry. Folks here say that you can't throw a rock in Houston without hitting a geologist! The Department of Earth Science at Rice benefits from the tremendous geological and geophysical expertise just down the street or across Houston. These industry scientists come to our weekly seminars, visit to give lectures for our classes, and in some cases teach entire courses in their areas of expertise.

Houston is also the home of the NASA Johnson Space Center, the stomping ground of astronauts and the mission control centers for manned space flight. The Lunar and Planetary Institute, near NASA, is a research organization focused on exploring our solar system. Our faculty and students go there and their scientists come to Rice. Our students benefit directly from this exposure to the space and hydrocarbon industries. That translates into jobs and world-class research opportunities!



What can you do with a degree in Earth Science?

Earth scientists follow paths of exploration and discovery in quest of solutions to some of society's most challenging problems:

- Finding adequate supplies of natural resources
- Conserving soils and maintaining agricultural productivity.
- Developing natural resources in ways that safeguard the environment.
- Maintaining quality of water supplies.
- Reducing human suffering and property loss from natural hazards
- Determining geological controls on natural environments and habitats and predicting the impact of human activities on them.
- Understanding global climate patterns and change.