

## RESEARCH OPPORTUNITIES

The Jackson School hosts one of the largest geosciences communities in the world, with more than 30 research programs and centers, nearly 50 faculty members, more than 190 researchers and hundreds of research locations around the globe. Students have the opportunity to work with top faculty and research scientists at the school's Department of Earth and Planetary Sciences, Bureau of Economic Geology and University of Texas Institute for Geophysics. The researchers across these units are leaders in their fields and often work on the frontiers between disciplines where major developments are taking place. Ongoing work includes:

- Carbon sequestration projects and research headed by the Gulf Coast Carbon Center, a leader in developing carbon storage options and technology for more than 20 years;
- Regional- to local-scale hydroclimate modeling to determine future impacts of extreme weather on water resources, the environment and human communities;
- A comprehensive cradle-to-grave study of the environmental impacts of all methods of electric energy production;
- Mapping the substructure of vulnerable ice sheets in Antarctica and Greenland and studying their potential impact on global sea-level rise;
- The use of artificial intelligence and machine learning to analyze massive amounts of data and improve scientists' understanding of what drives earthquakes;

## RESEARCH OPPORTUNITIES, *continued*

- NASA collaborations to explore Mars and Jupiter's icy moon Europa, as well as efforts to help forecast floods and droughts here on Earth;
- Studies of the Chicxulub impact crater to understand how impact-generated hydrothermal systems provide a habitat for thermophilic life;
- Drilling and sampling of methane hydrate in the Gulf of Mexico to determine the substance's potential contribution to climate change and suitability as an energy source of the future, funded by a \$110 million U.S. Department of Energy grant;
- Monitoring and research of induced and natural seismic activity throughout Texas and using the data to protect Texas communities and economic activity. The work is done through the statewide TexNet seismic monitoring system and is supported by the Center for Integrated Seismicity Research;
- Ongoing research into the interaction between the geosphere and the biosphere including responses to global climate change, mass extinction and evolutionary innovations;
- Investigations of areas impacted by natural disasters soon after they occur through the school's Rapid Response program;
- Research to determine what makes a habitable world, including integrated planetary modeling through the Center for Planetary Systems Habitability.

## SUPERVISORS AND LABS

Learn more about the world-class scientists who could be your graduate supervisor and find an exciting lab to join at the links below:

- [jsg.utexas.edu/education/graduate/supervisors](https://jsg.utexas.edu/education/graduate/supervisors)
- [ig.utexas.edu/labs](https://ig.utexas.edu/labs)
- [eps.jsg.utexas.edu/research/research-facilities](https://eps.jsg.utexas.edu/research/research-facilities)
- [beg.utexas.edu/facilities/labs](https://beg.utexas.edu/facilities/labs)

## LEARN MORE AND APPLY

Apply to the Jackson School following the standard procedures for The University of Texas at Austin:

- [gradschool.utexas.edu/admissions](https://gradschool.utexas.edu/admissions)

For more information on applying to the Jackson School:

- [jsg.utexas.edu/education/graduate/admissions](https://jsg.utexas.edu/education/graduate/admissions)

## DEADLINES

**December 1** for fellowship consideration\*

**January 1** for all applications

*\*Students who miss this deadline are eligible for all other types of financial assistance.*

## CONTACT

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*Updated September 2023, based on most current data.*

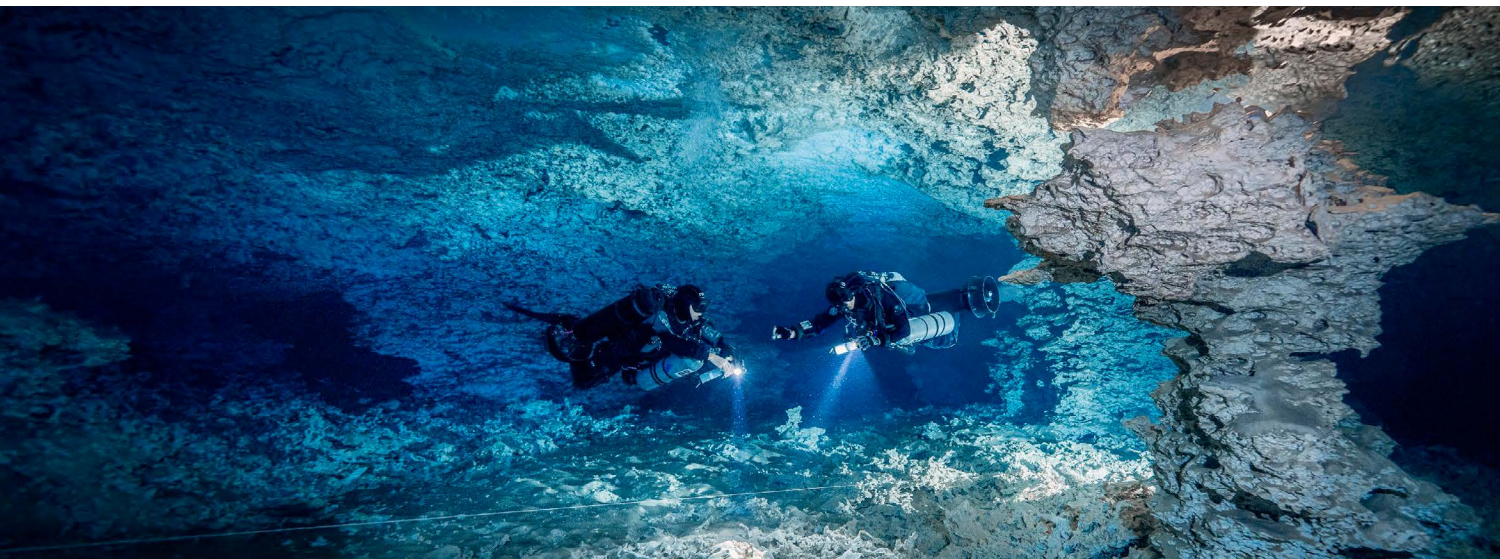
# GRADUATE PROGRAMS

*Find Your Future In:*

- **Geosciences, or**
- **Energy and Earth Resources**



The University of Texas at Austin  
Jackson School of Geosciences



## DEAN'S WELCOME



Now more than ever, the world needs geoscientists. Whether working to understand climate change impacts, natural disasters, soil and water resources, or helping society make an environmentally and economically sound transition to clean energy, geoscientists are at the forefront of the most important challenges facing our society.

These are the issues that students, faculty and researchers at the Jackson School of Geosciences work hard to solve every day. We are the largest geosciences community in the nation and one of the very best in the world. But we are also a close-knit, inclusive community that strives to make all feel welcome.

The Jackson School is unique in the depth and breadth of the science it teaches and pursues. We offer graduate students a wealth of interdisciplinary and multidisciplinary courses of study and career paths through our programs in Geosciences and Energy and Earth Resources. We are made up of three world-class research and academic units—the Bureau of Economic Geology, the Department of Earth and Planetary Sciences and the University of Texas Institute for Geophysics—that bring a diversity of expertise and culture to both applied and fundamental research. This unique geoscience community allows the Jackson School to offer students research and education opportunities unmatched by any other school. Couple that with robust funding packages and strong historic ties to industry and potential employers, and there is no better place to pursue your educational goals and begin to contribute to a more sustainable future for the planet.

Claudia Mora, Dean

## GRADUATE DEGREE PROGRAMS

### Energy and Earth Resources

The Energy and Earth Resources Graduate Program (EER) allows students to pursue interdisciplinary studies in areas of geosciences, engineering, management, finance, economics, law and policy. Many students enter the EER program with several years of work experience, giving them additional insight regarding their objectives.

The EER program is supported by approximately 35 faculty from the Jackson School of Geosciences, McCombs School of Business, Cockrell School of Engineering, LBJ School of Public Affairs, Law School and Energy Institute, who teach and act as research mentors.

The course of study is both multidisciplinary and flexible. Graduates may concentrate their interests in fields such as energy economics, decision and risk analysis, policy and regulatory frameworks, strategic planning or technical issues involving the environment, water, oil and gas production and renewable energy. The exceptionally diverse EER student body and the global nature of the related industries result in graduates launching their careers all over the world.

#### ***EER Degree Options:***

- Master of Science in Energy and Earth Resources (MSEER)
- Master of Arts in Energy and Earth Resources (MA)
- Dual Master's Degree in EER (MA/MS) and Public Affairs (MPAff)
- Dual Master's Degree in EER (MA/MS) and Global Policy Studies (MGPS)
- Dual Master's Degree in EER (MA/MS) and Business Administration (MBA)



## GRADUATE DEGREE PROGRAMS

### Geosciences

The Jackson School of Geosciences is one of the largest and most prestigious Earth science programs in the world. Graduate students have access to faculty and researchers in the school's three world-class academic and research units:

- The Department of Earth and Planetary Sciences is the school's academic unit with nearly 50 faculty members and research that spans all areas of Earth science, including geology, hydrology, environmental science, energy, and climate.
- The Bureau of Economic Geology is the State Geological Survey of Texas and is known for its research at the intersection of energy, the environment and economics in Texas and throughout the world.
- The University of Texas Institute for Geophysics is a world leader in expeditionary-scale geophysical research, known for mounting missions to subduction zones, ice sheets, and even icy worlds beyond the Earth.

This powerful combination of academic and research units reaches across many disciplines and offers students an unmatched breadth and depth of education and research opportunities. In nearly every area of the geosciences, you are likely to find an outstanding graduate supervisor, great peers, and a mix of professional and research opportunities.

#### ***Geosciences Degree Options:***

- Doctor of Philosophy (PhD)
- Master of Science (MS)

## 2023 U.S. GRADUATE SCHOOL RANKINGS

### ***U.S. News & World Report, "Best Graduate Schools," 2023***

- #2 in Geology (*#1 among public universities*)
- #7 in Earth Sciences (*#3 among public universities*)
- #5 in Geophysics & Seismology (*#2 among public universities*)
- #3 in Paleontology (*#1 among public universities*)
- #13 in Geochemistry (*#7 Among public universities*)

### ***Nature Index, 2023***

- #8 in Earth and Environmental Sciences, North America (*#5 among public universities*)
- #20 in Earth and Environmental Sciences, Globally

## STUDENT SUPPORT

- The Jackson School offers highly competitive support packages for graduate students in Geosciences that are guaranteed for two years (MS) to five years (PhD) for students in good standing. They are available to both domestic and international students. In addition, the school's dozens of endowed scholarships offer additional support for students and their research.
- EER students may receive some scholarship support. Many work as industry interns in the summer and are supported, in full or in part, for their thesis research.
- Graduate students in all programs may hold summer research positions at our three major research units: the Bureau of Economic Geology, the Department of Earth and Planetary Sciences, and the University of Texas Institute for Geophysics.
- Our alumni relations staff acts as a bridge to the Jackson School's 5,000 alumni, giving students access to the largest alumni group of any geosciences school in the country for mentoring opportunities, networking and advice.
- The school's career services office connects students with prospective employers at job fairs, recruiting interviews and other career exploration opportunities. The school also offers assistance creating resumes, preparing for interviews, building an online presence and other vital professional skills to help students find and pursue a fulfilling career.

## CAREER RESOURCES

Geosciences and EER graduates find careers in a wide variety of fields and industries. They work in environmental firms, government jobs, academia, and fields related to water resources, hazards, insurance, finance and many more. Many take advantage of Texas' booming energy economy to work for oil and gas, wind, solar and geothermal companies. Others work on carbon sequestration efforts or hydrogen energy.

The list of employers that have hired graduates in recent years includes companies such as Wood Mackenzie, Repsol, Siemens, ExxonMobil, Shell, Chevron, Tesla, Amazon, Lazard, the U.S. Department of Energy, and the Texas Commission on Environmental Quality.