Master of Science in Earth and Environmental Science (Energy Geoscience Professional)

About This Program

Master of Science in Earth and Environmental Science Energy Geoscience Professional option is intended for those interested in a career in the petroleum Industry. In addition to core geology courses, students are required to participate in a networking program with industry professionals, work as an intern or in a part time job in petroleum geoscience, take a course in project economics, and participate in course activities that emphasize business ethics, teamwork and communications. Thesis or non thesis options are available. However, all new students are admitted into the non-thesis option. During the first year, students may transfer to the thesis option after obtaining a faculty thesis supervisor. A thesis supervisor is not guaranteed.

Competencies

1. Upon graduation the student should be able to demonstrate expertise in methods found in sustainable energy geoscience.
2. Upon graduation the student should be able critically analyze scientific data in energy geosciences and critically evaluate resources and risks of exploration.
3. Upon graduation the student should be able to integrate methodologies found in scientific and engineering disciplines into a multi-disciplinary scientific framework.
4. Upon graduation the student should be able to analyze complex information from energy geosciences using written reports, and oral presentations to specialists and non#specialists.

Admissions Criteria

For unconditional admission a student must meet the following requirements:

1. A BS in an earth science discipline with the following courses or their equivalent: mineralogy, petrology, structure, stratigraphy/sedimentology, field geology and geophysics, or paleontology. In addition, one semester of biology, calculus I and II, and a year of chemistry and physics is required.
2. A minimum undergraduate GPA of 3.0 on a 4.0 scale, as calculated by the graduate admissions.
3. Graduate Record Examination (GRE) scores are used in conjunction with GPA's. For example a person with a GPA below 3.0 will need a GRE score better than average. Masters students who have succeeded in the Earth and Environmental Science s Program typically score higher than the 60th Percentile on the verbal and quantitative portion of the GRE.
4. For applicants whose native language is not English and have not completed a Bachelors degree at a US institution, they must meet~~English, a minimum score of 550 on~~ the following minimums: TOEFL iBT (minimum 81 overall, with sectional scores of at least 22 writing, 23 speaking, 20 reading, ~~Test of English as a Foreign Language (or an equivalent score on a computer-based test)~~ or 16 listening) or IELTS (minimum overall band of 6.5, with a speaking score ~~a score~~ of 7.0).
5. Favorable letters of recommendation from people familiar with the applicant’s academic work.

Curriculum

Foundations		
GEOL 5454	STATISTICS FOR EARTH AND ENVIRONMENTAL SCIENTISTS	4
GEOL 5351	SUSTAINABLE ENERGY RESOURCES	3
GEOL 5190	GEOSCIENCE INTERNSHIP	1
or GEOL 5199	TECHNICAL SESSIONS	
IE 5304	ADVANCED ENGINEERING ECONOMY	3
Specialization		
Select 13 hours from one of the following departments: Biology, Chemistry, Earth and Environmental Sciences, or Civil and Environmental Engineering		13
Select thesis or non-thesis option		6
Non-thesis option		
Select an additional advisor-approved course		
GEOL 5395	MASTER'S PROJECT	
Thesis option		
GEOL 5698	THESIS	
Total Hours		**30**

Advising Resources

First time in college students should plan to speak to a program advisor when starting their second year. or have an academic advising hold. Transfer students should contact program advising when enrolled or have an academic advising hold.

Location:

SH 328C

Email:

kaycee.nikses@uta.edu

Phone:

817-272-9686

Web:

Schedule an appointment (https://outlook.office365.com/book/PHYSGEOLEESADVISING@mavs.uta.edu/)