Master of Science in Earth and Environmental Science (Environmental Science)

About This Program

Master of Science in Earth and Environmental Science (Environmental Science) provides graduate students with an integrated, multidisciplinary education, requiring a breadth of understanding and mastery of a spectrum of scientific and engineering principles. A thesis option, designed for those interested in an in-depth experience in some particular topic, and a non-thesis option are available. 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 have gained expertise in their chosen environmental challenge discipline area(s).
2. Upon graduation the student should be able evaluate and design environmental monitoring programs or models.
3. Upon graduation the student should be able to integrate methodologies found in physics, chemistry, biology, engineering, and social scientific disciplines into a multi-disciplinary scientific framework.
4. Upon graduation the student should be able to communicate complex environmental information 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 biology, chemistry, geoscience, mathematics, or engineering with the following courses or their equivalent: 1 semester of introductory physics for science majors, 2 semesters of introductory chemistry for science majors, Calculus I and II. Students with a bachelor's degree in other sciences will also be considered, subject to satisfactory completion of deficiency courses.
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.
6. Favorable letters of recommendation from people familiar with the applicant's academic work.

Curriculum

Foundations		
EVSE 5303	TOPICS IN SUSTAINABILITY	3
EVSE 5454	STATISTICS FOR EARTH AND ENVIRONMENTAL SCIENTISTS	4
For engineering select one of the following:		3
CE 5321	ENGINEERING FOR ENVIRONMENTAL SCIENTISTS	
CE 5319	PHYSICAL-CHEMICAL PROCESSES II	
or CE 5328	FUNDAMENTALS OF AIR POLLUTION	
For science select any 5000-level EVSE or GEOL course except 5000-level research courses		3
For City and Regional Planning select any 5000-level PLAN course		3
Specialization		
Select 2 courses from one of the following departments: Biology, Chemistry, Earth and Environmental Sciences, Civil and Environmental Engineering, or Urban and Public Affairs		6
Two semesters of GEOL 5199 or EVSE 5199		2
Select thesis or non-thesis option		6
Non-thesis option		
Select an additional elective in the area of specializtion.		
EVSE 5395	MASTER'S PROJECT	

Successful completion of the Master's Comprehensive Examination in the final semester		
Thesis option		
EVSE 5698	THESIS	
Total Hours		**30**

1 Students with less than 20 undergraduate hours in biology, chemistry, or geology will need to take a third environmental systems course as a deficiency. Students entering with a BS degree in one of these areas must take their two courses in the other areas.

2 Must include at least 6 hours in department(s) outside that in which the first 9 hours of electives are taken.

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/)