M.S. in Environmental Engineering

Educational Objectives

- Students will demonstrate an ability to apply advanced science and engineering concepts to the solution of complex engineering problems.
- Students will demonstrate an ability to communicate effectively orally and in written form.
- Students will demonstrate an ability to research, analyze, and/or design complex engineering systems to meet a desired need.

Admission Requirements

Applicants must have completed a bachelor's in civil engineering or another related engineering discipline. Candidates wishing to pursue acceptance into the program with a non-Civil/Environmental Engineering background are welcome to apply and should request specific detailed information regarding admission policy and possible leveling courses with the graduate advisor. Students need at least a 2.5 undergraduate grade point average to be considered for admission. Applicants from countries where English is not the first language are required to demonstrate English proficiency. Please consult the graduate school (http://catalog.utep.edu/admissions/graduate/graduate-student/) website for required scores.

Recommendations for admission are made on the basis of the following:

- Grade point average in upper-division or graduate work as appropriate.
- Resume or evidence of relevant personal or professional experience.
- Two letters of recommendation.
- Submission of GRE scores is required for applicants who do not have an earned degree in a closely related discipline from a U.S. university.

Degree Requirements

For the Master of Science in Environmental Engineering, thesis and non-thesis programs are available. Students enrolled in the thesis program normally take a minimum of 24 hours of coursework plus six (6) hours of CE 5398 (https://catalog.utep.edu/search/?P=CE%205398)-CE 5399 (https://catalog.utep.edu/search/?P=CE%205399), Thesis. Non-thesis students follow a 33-hour program which includes credit for CE 5396 (https://catalog.utep.edu/search/?P=CE%205396)-CE 5397 (https://catalog.utep.edu/search/?P=CE%205397), Graduate Projects.

Degree Plan

Required Credits: 30

Code	Title	Hours
MSENE in Environmental Engineering (All courses require a grade of C or better)		
Required Courses:		
CE 5398	Thesis	3
CE 5399	Thesis	3
Course Work:		
Select twenty-four hours of the following:		24
CE 5302	Grndwtr Hydro & Polltn	
CE 5304	Adv Design of Struct Systms	
CE 5305	Advanced Structural Analysis	
CE 5307	Finite Element Method	
CE 5310	Risk/Reliability Anal-Engr Sys	
CE 5312	Environmental Processes	
CE 5313	Water Reclamation & Reuse	
CE 5317	Stats Methods for Civil Eng	
CE 5318	Bridge Engineering	
CE 5320	Advanced Geotechnical Eng.	
CE 5323	Prestressed Concrete	
CE 5324	Construction Management	
CE 5325	Design for Dynamic Loads	
CE 5326	Air Pollution Control	
CE 5332	Methods Engineering Computatio	
CE 5340	Surface Water Hydrology	
CE 5341	Hydraulic Computer Application	

CE 5344	Biol Unit Operations/Processes
CE 5345	Adv Phy-Chem Water Treat
CE 5349	Design-Filtrat'n/Membrane Proc
CE 5351	Mech Pavement Design/Analysis
CE 5352	Foundation Design II
CE 5353	Geotech. Site Investigation
CE 5354	Adv Mech Electrical Construct
CE 5355	Advanced Civil Eng. Materials
CE 5356	Sustainable Engr Design
CE 5357	Structural Loads Models
CE 5358	Traffic Engineering
CE 5359	Foundation Design I
CE 5360	Highway Geometric Design
CE 5361	Traffic Flow/Simulat Modeling
CE 5362	Urban Transportation Planning
CE 5365	Infrastrct Syst Design & Eval
CE 5371	Construction Dispute Resolutn
CE 5381	Sustainable Construction
CE 5382	Adv Constr Cost Analysis & Bid
CE 5385	Construction Internship
CE 5386	Adv Construction Law & Ethics
CE 5387	Adv Construction Scheduling
CE 5388	Advanced Construction Safety
CE 5389	Adv Constr Methods & Materials
CE 5390	Special Topics Civil Engr
CE 5391	Individual Studies
CE 5392	Earth Construction
CE 5395	Construction Claims
CE 5409	Environmental Eng Chemistry
CE 6301	Infrastructure Management
CE 6303	Engineering Analysis
CE 6306	Infrastructure Engineering
CE 6313	Water Resources Mgmt
SC 5301	Fundamentals of Smart Cities
SC 5302	Smart Cities Design
Total Hours	**30**