## **M.S. in Environmental Engineering**

## **Degree Requirements**

For students lacking an appropriate background, a customized program of bridge courses will be developed in consultation with the graduate advisor. These courses are in addition to the degree requirements and may have prerequisite courses that must also be completed.

A minimum of 30 degree credits is required (excluding bridge courses). Students must consult with their graduate advisor to develop a suitable program of study. A minimum GPA of 3.0 must be maintained in core courses and overall. Students who receive financial aid as Research Assistants must complete 6 credits of Master's Thesis.

With permission of their research advisor, students intending to do an MS thesis should first register in the ENE 700B (Masters Project). Students must receive a satisfactory (S) grade in 700B before registering for ENE 701B (Master's Thesis). Students taking ENE 701B must register in the immediate following semester with the same advisor. The MS thesis topic should be continuation of the work done in ENE 700B.

## M.S. in Environmental Engineering

Code	Title	Credits		
Bridge Courses				
CE 320	Fluid Mechanics			
CE 321	Water Resources Engineering			
CE 341	Geotechnical Engineering			
CE 341A	Geotechnical Engineering Laboratory			
CHEM 126	General Chemistry II			
CS 101	Computer Programming and Problem Solving			
ECON 265	Microeconomics			
MATH 112	Calculus II			
MATH 279	Statistics and Probability for Engineers			
MECH 320	Statics and Strength of Materials			
0	<b>T</b> 24-	0		
	litie	Credits		
Core Courses		9		
Student may select from the courses	IISTED DEIOW.			
ENE 030	Physical Processes of Env Syst			
ENE 661	Environmental Microbiology			
ENE 663	Water Chemistry	10.04		
Specialty Electives		12-21		
Students may select from the courses	s listed below.			
CE 602	Geographic Information System			
CE 612	Machine Learning and Data Analytics for Civil Engineering Systems			
CE 613	Resilient Systems Planning and Design			
CE 618	Applied Hydrogeology			
CE 620	Open Channel Flow			
CE 621	Hydrology			
CE 638	Nondestructive Testing Methods in Civil Engineering			
CE 644	Applied Engineering Geology			
CE 647	Geotechnical Aspects of Solid Waste			
CE 671	Performance and Risk Analysis of Infrastructure Systems			
CE 672	Security Management of Critical Infrastructure			
ENE 660	Introduction to Solid and Hazardous Waste Problems			
ENE 662	Site Remediation			
ENE 664	Physical and Chemical Treatment			
ENE 665	Biological Treatment			
ENE 666	Analysis of Receiving Waters			
ENE 667	Solid Waste Disposal Systems			

Т	otal Credits		30
	ACCT 615	Management Accounting	
	CE 711	Methods Improvement in Construction	
	CE 616	Construction Cost Estimating	
	CE 611	Project Planning and Control	
	CE 610	Construction Management	
S	tudents may select from the courses	s listed below.	
Management/Leadership Electives			0-9
	TRAN 655	Land Use Planning	
	ENE 726	Independent Study II	
	ENE 725	Independent Study I	
	ENE 720	Environmental Chemodynamics	
	ENE 703	Biogeochemical Applications in Environmental Engineering	
	ENE 702	Special Topics in Environmental Engineering	
	ENE 701C	Master's Thesis	
	ENE 701B	Master's Thesis	
	ENE 700B	Master's Project	
	ENE 673	Sustainability and Life Cycle Analysis	
	ENE 672	Stormwater Management	
	ENE 671	Environmental Impact Analysis	