

## **CIVIL AND ENVIRONMENTAL ENGINEERING (MS)**

Code	Title	Units
REQUIRED COURSES		
CE 5591	Graduate Seminar I	1
CE 5592	Graduate Seminar II	1
Culminating Experience		
Select from the following:		1
CE/ENVE 5597	Comprehensive Examination	
CE/ENVE 5599	Thesis <sup>1</sup>	
Project Management		
CE 5575	Engineering Project Management	4
Computational Literacy		
Select from the following: <sup>2</sup>		4
CE 5502	Finite Element Analysis of Structures	
CE 5504	Finite Element Analysis of Continua	
CE 5529	Modeling and Simulation in Transportation	
CE 5536	Advanced Modeling in Water Resources	
CE 5537	Groundwater Contamination	
CE 5581	Advanced Geotechnical Engineering	
CE/ENVE 5599	Thesis <sup>1</sup>	
Sustainability, Resilience, and Dive	ersity	
Select from the following: 2		4
CE 5523	Transportation Systems Planning	
CE 5526	Transportation Safety	
CE 5533	Sustainable Urban Stormwater Management	
CE 5537	Groundwater Contamination	
CE 5541	Extreme Events and Climate Change in Water Resources	
CE 5553	Ductile Design of Steel Structures	
CE 5557	Seismic Analysis and Design	
CE 5558	Structural Health Monitoring	
CE 5583	Geotechnical Earthquake Engineering	
Technical Electives		
	es from the College of Engineering; the College of Science and Mathematics; the College	15
of Agriculture, Food, and Environn	nental Sciences; and/or, the College of Architecture and Environmental Design <sup>1, 2, 3</sup>	
Total Units		30

A combined total of 6 units of ENVE 5599 are required for the thesis option. Thesis-option students may apply a maximum of 4 units of ENVE 5599 to meet the Computational Literacy requirement and a maximum of 1 unit of ENVE 5599 toward Technical Electives.

Courses may only be used once for degree credit.

A minimum of 3 units must be at the 5000 level, a maximum of 12 units can be taken at the 4000 level, and technical electives must be approved by an advisor.