

Civil Engineering, M.S.

This program requires a minimum of 30 semester credit hours.

No more than three graduate-level courses (9 credits) from outside Civil Engineering may be applied to this degree. The first three graduate-level courses (9 credits total) must be Civil Engineering courses.

Thesis Option

Code	Title	Semester Credit Hours
Core Requirements		
Select one course in each of the four civil engineering technical areas:		
Geotechnical Engineering		3
CEEN 5320	Foundation Engineering I	
CEEN 5342	Adv Geotechnical Engineering I	
Structural Engineering		3
CEEN 5311	Adv Reinforced Conc Design	
CEEN 5321	Structural Dynamics	
CEEN 5337	Advanced Structural Analysis	
Transportation Engineering		3
CEEN 5350	Transportation Eng I	
CEEN 5357	Advanced Concrete Pavement	
CEEN 5358	Transportation Planning	
Water Resources Engineering		3
CEEN 5315	Hydraulics of Open Channels	
CEEN 5340	Water Resources Engineering	
CEEN 5355	Groundwater Hydrology	
Thesis Requirement		
CEEN 5306	Thesis	3
CEEN 5306	Thesis	3
Approved Electives		12
Select 12 hours from the following:		
CEEN 5303	Advance Topics in Civil Eng	
CEEN 5304	Internship in Civil Eng	
CEEN 5305	Graduate Research Project	
CEEN 5311	Adv Reinforced Conc Design	
CEEN 5312	Reinforced Conc Slab Design	
CEEN 5314	Finite Element Methods	
CEEN 5315	Hydraulics of Open Channels	
CEEN 5316	Fiber Composite Mechanics	
CEEN 5320	Foundation Engineering I	
CEEN 5321	Structural Dynamics	
CEEN 5324	Heavy Construction	
CEEN 5325	Risk Management Construction	
CEEN 5326	Adv Construction Management	
CEEN 5332	Structural Wood Design	
CEEN 5333	Advanced Strength of Materials	
CEEN 5335	Prestressed Concrete	
CEEN 5337	Advanced Structural Analysis	
CEEN 5340	Water Resources Engineering	
CEEN 5342	Adv Geotechnical Engineering I	

CEEN 5350	Transportation Eng I	
CEEN 5352	Design of Asphalt Pavements	
CEEN 5354	Pavement Management Systems	
CEEN 5355	Groundwater Hydrology	
CEEN 5357	Advanced Concrete Pavement	
CEEN 5358	Transportation Planning	
CEEN 5360	Adv Structural Engineering	
CEEN 5361	Adv Structural Steel Design	
Total Semester Credit Hours		30

Course Only Option

Code	Title	Semester Credit Hours
Core Requirements		
Select one course in each of the four civil engineering technical areas:		
Geotechnical Engineering		3
CEEN 5320	Foundation Engineering I	
CEEN 5342	Adv Geotechnical Engineering I	
Structural Engineering		3
CEEN 5311	Adv Reinforced Conc Design	
CEEN 5321	Structural Dynamics	
CEEN 5337	Advanced Structural Analysis	
Transportation Engineering		3
CEEN 5350	Transportation Eng I	
CEEN 5357	Advanced Concrete Pavement	
CEEN 5358	Transportation Planning	
Water Resources Engineering		3
CEEN 5315	Hydraulics of Open Channels	
CEEN 5340	Water Resources Engineering	
CEEN 5355	Groundwater Hydrology	
Approved Electives		18
Select 12 hours from the following:		
CEEN 5303	Advance Topics in Civil Eng	
CEEN 5304	Internship in Civil Eng	
CEEN 5305	Graduate Research Project	
CEEN 5311	Adv Reinforced Conc Design	
CEEN 5312	Reinforced Conc Slab Design	
CEEN 5314	Finite Element Methods	
CEEN 5315	Hydraulics of Open Channels	
CEEN 5316	Fiber Composite Mechanics	
CEEN 5320	Foundation Engineering I	
CEEN 5321	Structural Dynamics	
CEEN 5324	Heavy Construction	
CEEN 5325	Risk Management Construction	
CEEN 5326	Adv Construction Management	
CEEN 5332	Structural Wood Design	
CEEN 5333	Advanced Strength of Materials	
CEEN 5335	Prestressed Concrete	
CEEN 5337	Advanced Structural Analysis	

CEEN 5340	Water Resources Engineering
CEEN 5342	Adv Geotechnical Engineering I
CEEN 5350	Transportation Eng I
CEEN 5352	Design of Asphalt Pavements
CEEN 5354	Pavement Management Systems
CEEN 5355	Groundwater Hydrology
CEEN 5357	Advanced Concrete Pavement
CEEN 5358	Transportation Planning
CEEN 5360	Adv Structural Engineering
CEEN 5361	Adv Structural Steel Design
Total Semester Credit Hours	
30	