

Master of Civil Engineering (MCE):

Total Minimum Hours: 30

The minimum coursework requirement is 30 credit hours for students with an undergraduate Engineering degree. Students without an engineering BS are required to complete undergraduate engineering pre-requisite courses.

Core Requirements

- A maximum of 12 credits taken outside the CEE department may be applied to meet the degree requirements.
- A maximum of 6 credits of 4000 level courses may be applied to meet the degree requirements.
- A maximum of 6 credits of independent study may be applied to meet the degree requirements.

Portfolio

These degrees are coursework only degrees and do not require a thesis; however, a portfolio providing examples of the following is required at the end of the program: (1) written and oral communication skills, (2) solution of complex engineering problems.

GEOTECHNICAL ENGINEERING (GTL)

Curriculum Program of Study Form

Area of concentration: Geotechnical Engineering (GTL)

30 Total Credits of Coursework:

- ≤ 4 courses outside CEE
- ≤ 6 credits of 4000 level
- ≤ 6 credits independent study

Graduate Program Coordinator: Signature and Date

MATERIALS ENGINEERING (MTL)

Curriculum Program of Study Form

Name:		USF ID #	
Term/Year Admitted into Program:			
Address:			
Phone:			
Email:			
Advisor:			
Area of concentration: Materials Engineering & Science (MTL)			

30 Total Credits of Coursework:

Course Title	Number	Credits	Semester	Outside CEE?
At least two of the following:				
Concrete Construction Materials	CGN 6933	3		
Electrochemical Diagnostic Techniques	CGN 6720	3		
Structural Life Prediction	CGN 6933	3		
Corrosion of Materials	CGN 6933	3		
Characterization of Materials	ECH 6931	3		
9 Additional credits in Materials Engineering or related areas:				
15 Additional credits:				
• ≤ 4 courses outside CEE • ≤ 6 credits of 4000 level			Total Credits Outside CEE	
			Total Credits at 4000 Level	
			Total Credits Independent Study	
			Total Credits (30 required)	

Graduate Program Coordinator: Signature and Date

**MASTER OF CIVIL ENGINEERING (MCE) WITH A CONCENTRATION IN
STRUCTURAL ENGINEERING (STR)**

Curriculum Program of Study Form

Name:		USF ID #	
Term/Year Admitted into Program:			
Address:			
Phone:			
Email:			
Advisor:			
Area of concentration: Structural Engineering (STR)			

30 Total Credits of Coursework:

Course Title	Number	Credits	Semester	Outside CEE?
At least one of the following (design course):				
Advanced Concrete Design	CES 6706	3		
Design of Masonry Structures	CES 6835	3		
Prestressed Concrete	CES 5715C	3		
At least one of the following (analysis course):				
Applied Finite Elements	CES 6118	3		
Applied Elasticity	EML 6653	3		
Advanced Mechanics of Materials	CES 5105C	3		
Nonlinear Analysis	MAP 5316	3		
9 additional credits of coursework in Structural Engineering or related areas:				
15 additional credits of coursework:				
			Total Credits Outside CEE	
			Total Credits at 4000 Level	
			Total Credits Independent Study	
			Total Credits (30 required)	

- ≤ 4 courses outside CEE
- ≤ 6 credits of 4000 level
- ≤ 6 credits independent study

Graduate Program Coordinator: Signature and Date

TRANSPORTATION ENGINEERING (TPT)

Curriculum Program of Study Form

Name:		USF ID #	
Term/Year Admitted into Program:			
Address:			
Phone:			
Email:			
Advisor:			
Area of concentration: Transportation Engineering (TPT)			

30 Total Credits of Coursework:

Course Title	Number	Credits	Semester	Outside CEE?
Required Core Courses:				
Traffic Systems Engineering	TTE 5205	3		
Transportation Planning and Economics	TTE 5501	3		
Travel Demand Modeling	TTE 6507	3		
6 additional credits of coursework in Transportation Engineering or related areas:				
15 additional credits of coursework:				
≤ 4 courses outside CEE ≤ 6 credits of 4000 level			Total Credits Outside CEE	
			Total Credits at 4000 Level	
			Total Credits Independent Study	
			Total Credits (30 required)	

- ≤ 4 courses outside CEE
- ≤ 6 credits of 4000 level
- ≤ 6 credits independent study

Graduate Program Coordinator: Signature and Date

MASTER OF CIVIL ENGINEERING (MCE) WITH A CONCENTRATION IN
WATER RESOURCES ENGINEERING (WRS)
Curriculum Program of Study Form

Name:		USF ID #	
Term/Year Admitted into Program:			
Address:			
Phone:			
Email:			
Advisor:			
Area of concentration: Water Resources Engineering (WRS)			

30 Total Credits of Coursework:

Course Title	Number	Credits	Semester	Outside CEE?
A minimum of 4 courses (12 credits) from the following:				
Free Surface Flow	CWR 6235	3		
Waves and Beach Protection	CWR 6239	3		
Urban Hydrology	CWR 6305	3		
Coastal and Estuary Modeling	CWR 6534	3		
Hydrologic Models	CWR 6535	3		
Vadose Zone Hydraulics	CWR 6933	3		
Groundwater Hydraulics	CGN 6933	3		
Advanced Computational Fluid Mechanics	GLY 6836	3		
Numerical Modeling of Hydrogeologic Systems	GLY 6836	3		
Advanced Hydrogeology	GLY 6827C	3		
3 additional credits of coursework in Water Resources Engineering or related areas:				
15 additional credits of coursework:				
• ≤ 4 courses outside CEE • ≤ 6 credits of 4000 level			Total Credits Outside CEE	
			Total Credits at 4000 Level	
			Total Credits Independent Study	
			Total Credits (30 required)	

Graduate Program Coordinator: Signature and Date