

Structural Engineering Accelerated MS Recommended Courses

Degree Requirements

Total Credits	30
CEE Credits	18
600+ level Credits	15

	Recommended
	Optional

Odd Year Start Recommended Courses for Accelerated MS Students

Fall (odd)		Select 3 of 4 to take at the 500 level or above to be applied to BS and MS Degrees (9 credits)
CEE 553	Steel Design	
CEE 652	Prestressed Concrete	
Spring (even)		
CEE 551	Wood Design	
CEE 655	Mechanics of Composites	
Fall (even)		Recommended (12 credits)
CEE 557	Indeterminate Structures	
CEE 757	Advanced Concrete Materials	
CEE 641	Earthquake Engineering	
CEE 547	Foundation Engineering	
CEE 746	Stability of Soil and Rock Slope	Select 1 of 4 (yellow highlighted)
Spring (odd)		Recommended (6 credits)
CEE 651	Advance Steel Design	
CEE 657	Advanced Structural Analysis	
CEM 610	Construction Project Management	Select 1 of 4 (yellow highlighted)
CEM 640	Temporary Structures	
CEE 548	Applied Geotechnical Engineering	

Even Year Start Recommended Courses for Accelerated MS Students

Fall (even)		Select 3 of 4 to take at the 500 level or above to be applied to BS and MS Degrees (9 credits)
CEE 553	Steel Design	
CEE 557	Indeterminate Structures	
Spring (odd)		
CEE 651	Advanced Steel Design	
CEE 657	Advanced Structural Analysis	
Fall (odd)		Recommended (9 credits)
CEE 652	Prestressed Concrete	
CEE 547	Foundation Engineering	
CEE 747	Earth and Earth Retaining Structures	Select 1 of 5 (yellow highlighted)
CEM 610	Construction Project Management	
CEE 642	Principles of Ground Improvement	
Spring (even)		Recommended (9 credits)
CEE 551	Wood Design	
CEE 655	Mechanics of Composites	
CEE 745	Advanced Foundations	Select 1 of 5 (yellow highlighted)
CEM 640	Temporary Structures	
CEE 548	Applied Geotechnical Engineering	
CEE 743	Advanced Soil Mechanics	

Other Courses for Consideration

EM 680	Advanced Mechanics of Materials
CEE 743	Advanced Soil Mechanics
CEM 612	Construction Estimating

Geotechnical Engineering Accelerated MS Recommended Courses

Degree Requirements

Total Credits	30
CEE Credits	18
600+ level Credits	15

	Recommended
	Optional

Odd Year Start Recommended Courses for Accelerated MS Students

Fall (odd)		Select 3 of 4 to take at the 500 level or above to be applied to BS and MS Degrees (9 credits)
CEE 547	Foundation Engineering	
CEE 642	Ground Improvement	
Spring (even)		
CEE 548	Applied Geotechnical Engineering	
Fall (even)		Recommended (12 credits)
CEE 641	Earthquake Engineering	
CEE 746	Stability of Slopes	
CEE 553	Steel Design	
CEE 557	Indeterminate Structures	
Spring (odd)		Recommended (6 credits)
CEE 743	Advanced Soil Mechanics (Bret)	
CEE 568	Highway Engineering (Bret or Tejo)	
CEE 651	Advanced Steel	Select 1 of 5 (yellow highlighted)
CEE 657	Advanced Structural Analysis	
CEM 610	Construction Project Management	
CEM 612	Construction Estimating	

Even Year Start Recommended Courses for Accelerated MS Students

Fall (even)		Select 3 of 4 to take at the 500 level or above to be applied to BS and MS Degrees (9 credits)
CEE 547	Foundation Engineering	
CEE 641	Earthquake Engineering	
Spring (odd)		
CEE 548	Applied Geotechnical Engineering	
CEE 568	Highway Engineering (Bret or Tejo)	
Fall (odd)		Recommended (9 credits)
CEE 642	Ground Improvement	
CEE 747	Earth Retaining Structures	
CEE 553	Steel Design	
Spring (even)		Recommended (9 credits)
CEE 745	Advanced Foundations	
CEE 551	Wood Design	
CEE 575	Groundwater	Select 1 of 5 (yellow highlighted)
CEE 655	Mechanics of Composites	
CEM 610	Construction Project Management	
CEM 612	Construction Estimating	

Other Courses for Consideration

EM 680	Advanced Mechanics of Materials

Water Resources Emphasis Accelerated MS Recommended Courses

Degree Requirements

Total Credits	30
CEE Credits	18
600+ level Credits	15

	Recommended
	Optional

Odd Year Start Recommended Courses for Accelerated MS Students

Fall (odd)		Select 3 of 4 to take at the 500 or 600 level to be applied to BS and MS Degrees (9 credits)	
CEE 537	Watershed and Floodplain modeling		
CEE 615	Earth Systems Modeling		
Spring (even)		Select 2 of 5 (yellow highlighted)	
CEE 533	Open Channel Flow		
CEE 524	Climate and Weather Resiliency		
Fall (even)		Recommended (9 credits)	
GEOL 516*	Introduction to GIS		
CEE 634	Surface Water Hydrology		
CEE 792	Water Law and Policy	Select 2 of 5 (yellow highlighted)	
GEOE 556	Statistical Methods in Geology		
AES 519	High-Perf Comp in Earth Sciences		
CEM 750	Environmental Permitting	Recommended (6 credits)	
Spring (odd)			Select 2 of 5 (yellow highlighted)
CEE 575*	Ground Water Hydrology		
CEE 735	Sediment Transport		
AES 506	Global Environmental Change	Select 2 of 6 (yellow highlighted)	
CEM 610*	Construction Project Management		

*Courses offered every semester

Even Year Start Recommended Courses for Accelerated MS Students

Fall (even)		Select 3 of 4 to take at the 500 or 600 level to be applied to BS and MS Degrees (9 credits)	
CEE 537	Watershed and Floodplain modeling		
CEE 634	Surface Water Hydrology		
Spring (odd)		Recommended (9 credits)	
CEE 533	Open Channel Flow		
CEE 575*	Ground Water Hydrology		
Fall (odd)		Select 2 of 6 (yellow highlighted)	
CEE 615	Earth Systems Modeling		
CEE 739	Techniques of Water Investigations		
GEOL 516*	Introduction to GIS	Recommended (6 credits)	
AES 775	Applied Freshwater Science		
GEOE 556	Statistical Methods in Geology		
GEOE 782	Fluvial Processes	Select 2 of 6 (yellow highlighted)	
Spring (even)			Recommended (6 credits)
CEE 734	Vadose Zone Flow and Transport		
CEE 524	Climate and Weather Resiliency		
AES 506	Global Environmental Change	Select 2 of 6 (yellow highlighted)	
AES 780	Stream Ecology		
CEM 610*	Construction Project Management		

*Courses offered every semester

Other Courses for Consideration

CEM 751	Construction Stormwater Management
GEOE 582	Applied Geomorphology
GEOL 633	Sedimentation

Environmental Engineering Accelerated MS Recommended Courses

Degree Requirements

Total Credits	30
CEE Credits	18
600+ level Credits	15

	Recommended
	Optional

Odd Year Start Recommended Courses for Accelerated MS Students

Fall (odd)		Select 3 of 4 to take at the 500 level or above to be applied to BS and MS Degrees (9 credits)
CEE 528	Oil and Gas Development	
CEE 527	EnvE Biological Process Design	
CEE 627	Advanced Wastewater Treatment	
Spring (even)		
CEE 692	Life Cycle Analysis	
Fall (even)		Recommended (12 credits)
CEE 525	Sustainable Engineering	
CEE 634	Surface Water Hydrology	
CEE 692	<i>TBD (Aqueous Chemistry)</i>	
CBE 555	Pollution Phenomena and Process	
CEE 575	Ground Water Hydrology	Optional
Spring (odd)		Recommended (9 credits)
CEE 526	EnvE Chemical Process Design	
CEE 692	Renewable Energy	
CEE 692	<i>TBD (Advanced Drinking Water)</i>	Optional
CEE 792	EnvE Topics	
AES 506	Global Environmental Change	
CEE 533	Open Channel Flow	

Even Year Start Recommended Courses for Accelerated MS Students

Fall (even)		Select 3 of 5 to take at the 500 level or above to be applied to BS and MS Degrees (9 credits)
CEE 525	Sustainable Engineering	
CEE 634	Surface Water Hydrology	
CEE 692	<i>TBD (Aqueous Chemistry)</i>	
Spring (odd)		
CEE 692	Renewable Energy	
CEE 692	<i>TBD (Advanced Drinking Water)</i>	
Fall (odd)		Recommended (9 credits)
CEE 528	Oil and Gas Development	
CEE 527	EnvE Biological Process Design	
CEE 627	Advanced Wastewater Treatment	Select 1 of 5 (yellow highlighted)
CEE 525	Sustainable Engineering	
CEE 575	Ground Water Hydrology	
Spring (even)		Recommended (9 credits)
CEE 692	Life Cycle Analysis	
CEE 526	EnvE Chemical Process Design	
CEE 734	Vadose Zone Hydrology	Select 1 of 5 (yellow highlighted)
CEE 521	Climate and Weather Resiliency	
CEE 575	Ground Water Hydrology	

Other Courses for Consideration

CEM 610	Construction Project Management
CEM 750	Environmental Permitting
CEM 751	Construction Stormwater Management