

CEEC Graduate Course Offering
3-Year Plan (2024/25 to 2026/27)

Construction

Semester and Year	Course Prefix	Name of the courses
Fall 2024	CEE 785/CEM 705	Construction Engineering Management
	CEE 730/ CEM 730	Foundations of Big Data Analy. for Infrastr. Appl.
	CEE 681/ CEM 680	Sustainable Construction for Infrastructure Projects
	CEE 673 / CEM 653	Construction Scheduling for Infrastructure Projects
	CEE 672 / CEM 651	Construction Estimating for Infrastructure Projects
	CEM 654	Heavy Construction Equipment and Methods
Spring 2025	CEE 710/ CEM 710	Modular Construction
	CEM 685	Construction Law and Contracts
	CEE 681/CEM 680	Sustainable Construction for Infrastructure Projects
	CEE 633/CEM 632	Temporary Struct. for Constr. of Infrastr. Projects
Fall 2025	CEE 720/ CEM 720	Information and Sensing Technology in Constr.
	CEE 673/ CEM 653	Construction Scheduling for Infrastructure Projects
	CEE 672/CEM 651	Construction Estimating for Infrastructure Projects
	CEE 681/CEM 680	Sustainable Construction for Infrastructure Projects
	CEM 654	Heavy Construction Equipment and Methods
Spring 2026	CEE 785/ CEM 705	Construction Engineering Management
	CEE 730/CEM 730	Foundations of Big Data Analy. for Infrastr. Appl.
	CEM 685	Construction Law and Contracts
	CEE 681/CEM 680	Sustainable Construction for Infrastructure Projects
	CEE 633/CEM 632	Temporary Struct. for Constr. of Infrastr. Projects
Fall 2026	CEE 710/CEM 710	Modular Construction
	CEE 681/CEM 680	Sustainable Construction for Infrastructure Projects
	CEE 673/CEM 653	Construction Scheduling for Infrastructure Projects
	CEE 672/CEM 651	Construction Estimating for Infrastructure Projects
	CEM 654	Heavy Construction Equipment and Methods
Spring 2027	CEE 720/CEM 720	Information and Sensing Technology in Constr.
	CEM 685	Construction Law and Contracts
	CEE 681/CEM 680	Sustainable Construction for Infrastructure Projects
	CEE 633/CEM 632	Temporary Struct. for Constr. of Infrastr. Projects

Geotechnical

Semester and Year	Course Prefix	Name of the courses
Fall 2024	CEE 635	Foundations Engineering
Spring 2025	CEE 610	Highway Construction Materials
Fall 2025	CEE 635	Foundations Engineering
Spring 2026	CEE 610	Highway Construction Materials
Fall 2026	CEE 635	Foundations Engineering
Spring 2027	CEE 610	Highway Construction Materials

Structural

Semester and Year	Course Prefix	Name of the courses
Summer 2024	CEE 680	Concrete Structure Design
	CEE 682	Design of Timber Structures
Fall 2024	CEE 744	Design of Prestressed/ Post-Tensioned Concrete Structures
	CEE 644	Steel Structural Design
Summer 2024	CEE 680	Concrete Structure Design
	CEE 682	Design of Timber Structures
Spring 2025	CEE 775	Seismic Response of Structures
	CEE 680	Concrete Structure Design
Summer 2025	CEE 680	Concrete Structure Design
	CEE 682	Design of Timber Structures
Fall 2025	CEE 7xx	Advanced Cementitious Materials (To be created)
	CEE 644	Steel Structural Design
Spring 2026	CEE 780	Advanced Reinforced Concrete Structures
	CEE 680	Concrete Structure Design
Summer 2026	CEE 680	Concrete Structure Design
	CEE 682	Design of Timber Structures
Fall 2026	CEE 744	Design of Prestressed/ Post-Tensioned Concrete Structures
	CEE 644	Steel Structural Design
Spring 2027	CEE 775	Seismic Response of Structures
	CEE 680	Concrete Structure Design

Transportation

Semester and Year	Course Prefix	Name of the courses
Fall 2024	CEE 727	Transportation Safety
	CEE 726	Railroad Operations
	CEE 670	High Speed Rail
	CEE 663	Traffic Engineering
Spring 2025	CEE 763	Advanced Traffic Engineering
	CEE 661	Introduction to Railroad Transportation
Fall 2025	CEE 761	Transportation Demand Analysis
	CEE 725	Freight Transportation
	CEE 667	Computer Applications in Transportation Engineering
	CEE 662	Railroad Engineering
Spring 2026	CEE 762	Operations Research Applications in Civil Engineering
	CEE 671	Public Transportation Systems
Fall 2026	CEE 727	Transportation Safety
	CEE 670	High Speed Rail
	CEE 663	Traffic Engineering
Spring 2027	CEE 763	Advanced Traffic Engineering
	CEE 661	Introduction to Railroad Transportation

Water Re./ Env.

Semester and Year	Course Prefix	Name of the courses
Summer 2024	CEE 668	GIS Applications in Civil Engineering
Fall 2024	CEE 755	Advanced Physicochemical Methods for Water Treatment
	CEE 651	Environmental Water Chemistry and Analysis
	CEE 650	Unit Operations/ Processes in Environmental Engineering
	CEE 607	Computer Applications in Envir. And Water Resourc. Eng.
Spring 2025	CEE 752	Applied Environmental Chemistry and Analysis
	CEE 654	Solid and Hazardous Wastes Engineering
	CEE 613	Water Resources Engineering
Summer 2025	CEE 668	GIS Applications in Civil Engineering
Fall 2025	CEE 750	Urban Runoff Quality and Control
	CEE 712	Advanced Hazardous Waste Management
	CEE 707	Life Cycle Assessment
	CEE 650	Unit Operations/ Processes in Environmental Engineering
Spring 2026	CEE 756	Advanced Waste Treatment Design
	CEE 654	Solid and Hazardous Wastes Engineering
	CEE 613	Water Resources Engineering
Summer 2026	CEE 668	GIS Applications in Civil Engineering
Fall 2026	CEE 755	Advanced Physicochemical Methods for Water Treatment
	CEE 707	Life Cycle Assessment
	CEE 651	Environmental Water Chemistry and Analysis
	CEE 650	Unit Operations/ Processes in Environmental Engineering
	CEE 604	Open Chanel Flow
Spring 2027	CEE 768	Applied Geographic Information Systems
	CEE 754	Biochemical Wastewater Treatment Fundamentals
	CEE 752	Applied Environmental Chemistry and Analysis
	CEE 654	Solid and Hazardous Wastes Engineering
	CEE 613	Water Resources Engineering