

## Curriculum

### □ Undergraduate Course

Classification	Subject No.	Subject Name	Lecture:Lab.:Credit (Homework)	Semester	Remark
Mandatory Major	CE201	Mechanics of Materials	3:0:3(15)	Spring	
	CE202	Structural Mechanics I	3:0:3(6)	Fall	
	CE203	Fluid Mechanics	3:0:3(8)	Spring	
	CE303	Vibration Engineering	3:1:3(12)	Spring	
Elective Major	CE205	Engineering Drawings and Computer Graphics	2:3:3(6)	Fall	
	CE207	Elementary Structural Engineering and Laboratory	2:3:3(14)	Fall	
	CE211	Elementary Civil Environmental Engineering	3:0:3(5)	Spring	
	CE230	Soil Mechanics and Laboratory I	2:3:3(5)	Spring	
	CE231	Soil Mechanics and Laboratory II	2:3:3(5)	Fall	
	CE251	Hydraulics	3:0:3(8)	Fall	
	CE272	Environmental Science	3:2:3(2)	Spring	
	CE273	Environmental Microbiology	3:2:3	Fall	
	CE291	Surveying and Gls	3:2:3(10)	Fall	
	CE312	Structural Mechanics II	3:0:3(5)	Spring	
	CE313	Computational Methods in Structural Analysis	3:0:3(12)	Fall	
	CE314	Design of Reinforced Concrete Structures	3:0:3(6)	Fall	
	CE315	Reinforced Concrete and Laboratory	2:3:3(5)	Spring	
	CE331	Rock Mechanics	3:0:3(4)	Fall	
	CE332	Foundation Eng.	3:0:3(7)	Spring	
	CE333	Soil Dynamics	3:1:3(7)	Fall	
	CE354	Coastal and Harbor Engineering	3:0:3	Fall	
	CE371	Environmental Chemistry	3:1:3	Spring	
	CE372	Water and Wastewater Engineering	3:0:3(8)	Fall	
	CE373	Hydrology	3:0:3(15)	Fall	
	CE374	Unit Operation in Environmental Engineering	3:0:3(8)	Fall	
	CE376	Wastes Management Engineering	3:1:3	Spring	
	CE411	Practice in Structural Engineering	2:3:3	Spring	
	CE412	Design of Steel Structures	3:0:3	Fall	
	CE413	Prestressed Concrete	3:1:3(4)	Fall	**
	CE414	Structural Planning	3:0:3(6)	Spring	**
	CE415	Design in Civil Engineering	1:6:3	Fall	
	CE417	Structural Design of Building	3:1:3(5)	Spring	**
	CE418	Design Practice of Structure	3:2:3(5)	Fall	
	CE431	Geotechnical Engineering Practice	2:3:3	Spring	
	CE433	Pavement and Traffic Engineering	3:1:3	Fall	
	CE434	Computer Methods in Geotechnical Engineering	2:3:3(5)	Fall	
	CE435	Geotechnical Engineering I	3:0:3(6)	Spring	**
	CE436	Geotechnical Engineering Design II	3:0:3(6)	Fall	**
	CE471	Sanitary Systems Engineering and Design	3:1:3(5)	Spring	**
	CE474	Environmental Management Engineering	3:1:3(8)	Fall	**
	CE481	Environmental Engineering Practices	3:0:3	Spring	
	CE491	Civil Construction Technology	3:0:3	Spring	**
	CE493	Construction Management and Project Scheduling	3:0:3	Fall	
Research	CE490	B.S. Thesis Research	0:6:3		
	CE495	Individual Study	0:6:1		

※ \*\* courses credits can be counted as master courses credits

□ Graduate Course

Classification	Subject No.	Subject Name	Lecture:Lab.:Credit (Homework)	Semester	Remark
Mandatory General	CC510	Introduction to Computer Application	2:3:3(10)	Spring / Fall	
	CC511	Probability and Statistics	2:3:3(6)	Spring / Fall	
	CC512	Introduction to Materials and Engineering	3:0:3(3)	Spring / Fall	
Mandatory Major	CE501	Advanced Mechanics of Solids	3:0:3(5)	Spring	**
	CE502	Advanced Soil Mechanics	3:1:3(4)	Spring	**
	CE503	Advanced Fluid Mechanics	3:1:3(8)	Spring	**
	CE504	Advanced Environmental Chemistry	3:1:3(6)	Spring	**
	CE505	Applied Mathematics	3:0:3	Spring	**
Elective Major	CE513	Properties of Concrete	3:1:3(5)	Fall	**
	CE514	Structural Dynamics	3:1:3(12)	Spring	**
	CE515	Mechanics of Composite Materials	3:1:3(12)	Spring	
	CE516	Finite Element Analysis	3:1:3(6)	Spring	
	CE517	Computer Methods in Structural Engineering	1:6:3(6)	Fall	
	CE518	Reliability Analysis of Structures	3:0:3(8)	Fall	**
	CE519	Bridge Engineering	3:1:3(6)	Fall	**
	CE520	Introduction to Smart Structure Technology	2:3:3(5)	Fall	**
	CE521	Design of Structures under Wind Load	2:3:3(6)	Spring	**
	CE531	Geotechnical Experiments	1:6:3(6)	Summer	**
	CE532	Rock Engineering	3:1:3(4)	Fall	**
	CE533	Site Investigation and Monitoring	3:1:3(6)	Spring	
	CE534	Theoretical Soil Mechanics	3:0:3(4)	Fall	
	CE535	Advanced Foundation Engineering	3:0:3(4)	Fall	
	CE536	Underground Structures	3:1:3(4)	Spring	
	CE537	Soil Improvement & Reinforcement	3:1:3	Spring	
	CE539	Earth Retaining Structures	3:0:3(4)	Fall	**
	CE571	Environmental Engineering Laboratory	1:6:3(10)	Summer	**
	CE573	Biological Wastewater Treatment Processes	3:1:3(6)	Spring	
	CE575	Industrial Wastewater Treatment	3:0:3(4)	Fall	
	CE577	Water Quality Management	3:1:3(5)	Fall	**
	CE578	Advanced Groundwater Engineering	3:0:3(5)	Spring	**
	CE579	Hazardous and Industrial Waste Treatment	3:1:3(8)	Fall	
	CE611	Inelastic Analysis of Reinforced Concrete Structures	3:1:3(6)	Fall	
	CE612	Plastic Design	3:1:3	Spring	
	CE613	Optimal Design of Structures	3:0:3	Spring	
	CE614	Stability of Structures	3:1:3(6)	Spring	
	CE615	Application of Finite Element Method	3:1:3(12)	Fall	
	CE616	Probabilistic Methods in Structures Dynamics	3:1:3(8)	Fall	
	CE617	Earthquake Engineering	3:1:3(8)	Spring	
	CE618	Computational Methods in Structures Dynamics	3:1:3(12)	Fall	
	CE619	Vibration Control of Structures	3:1:3(12)	Fall	
	CE620	Nonlinear Computational Mechanics	3:1:3(6)	Fall	
	CE621	Advanced Design of Steel Structures	3:0:3	Fall	
	CE622	Structures Analysis of Plates and Shells	3:0:3	Fall	
	CE631	Advanced Numerical Soil Mechanics	2:3:3(6)	Fall	
	CE632	Soil Behavior	3:0:3(4)	Spring	
	CE633	Advanced Soil Dynamics	3:1:3(6)	Spring	

Classification	Subject No.	Subject Name	Lecture:Lab.:Credit (Homework)	Semester	Remark
Elective Major	CE634	Signal Processing for Civil Engineering	3:0:3(4)	Spring	
	CE635	Seepage & Slope Stability	3:0:3(4)	Spring	
	CE636	Geotechnical Earthquake Engineering	3:0:3(4)	Fall	
	CE637	Theory of Geophysics	3:0:3(4)	Fall	
	CE638	Pavement Engineering	3:0:3	Fall	
	CE671	Water Quality Modeling	3:1:3(5)	Fall	
	CE672	Physical Principles in Environmental Engineering	3:1:3(5)	Fall	
	CE673	Contamination of Soil and Groundwater	3:1:3(4)	Fall	
	CE715	Special Topics in Structural Engineering	2:3:3	Spring	
	CE731	Special Topics in Geotechnical Engineering	3:1:3(4)	Spring	
	CE771	Special Topics in Environmental Engineering	3:1:3(4)	Spring	
Research	CE960	M.S. Thesis			
	CE966	M.S. Seminar	1:0:1		
	CE980	Ph.D. Thesis			
	CE986	Ph.D. Seminar	1:0:1		

※ \*\* courses can be counted as either Bachelor or Master courses credits.