

BACHELOR OF SCIENCE IN CIVIL ENGINEERING - CONSTRUCTION AND INFRASTRUCTURE SYSTEMS ENGINEERING

Code	Title	Credit Hours
Wellness		
APPH 1040	Scientific Foundations of Health	2
	or APPH 10 The Science of Physical Activity and Health	
	or APPH 10 Flourishing: Strategies for Well-being and Resilience	
Core A - Essential Skills		
ENGL 1101	English Composition I	3
ENGL 1102	English Composition II	3
MATH 1552	Integral Calculus ³	4
Core B - Institutional Options		
CS 1371	Computing for Engineers	3
Core C - Humanities		
Any HUM		6
Core D - Science, Math, & Technology		
PHYS 2211	Introductory Physics I ^{2,3}	4
PHYS 2212	Introductory Physics II	4
MATH 1551	Differential Calculus ³	2
MATH 1553	Introduction to Linear Algebra ³	2
	or MATH 1554 Linear Algebra	
	or MATH 1554 Linear Algebra with Abstract Vector Spaces	
Core E - Social Sciences		
Select one of the following:		3
HIST 2111	The United States to 1877	
HIST 2112	The United States since 1877	
INTA 1200	American Government in Comparative Perspective	
POL 1101	Government of the United States	
PUBP 3000	American Constitutional Issues	
Select one of the following:		3
ECON 2100	Economic Analysis and Policy Problems	
ECON 2101	The Global Economy	
ECON 2105	Principles of Macroeconomics	
ECON 2106	Principles of Microeconomics	
Any SS		6
Core F - Courses Related to Major		
COE 2001	Statics ³	2
MATH 2551	Multivariable Calculus	4
MATH 2552	Differential Equations ³	4
CHEM 1310	Principles of General Chemistry for Engineers ³	4
Select one of the following:		4
BIOS 1107 & 1107L	Biological Principles and Biological Principles Laboratory	

BIOS 1108 & 1108L	Organismal Biology and Organismal Biology Laboratory	
EAS 2600	Earth Processes	
Ethics Requirement (Civil Engineering approved) ¹		
Major Requirements		
CEE 1770	Introduction to Engineering Graphics and Visualization	3
CEE 2040	Dynamics	2
CEE 2300	Environmental Engineering Principles	3
CEE 3000	Civil Engineering Systems	3
CEE 3020	Civil Engineering Materials	3
CEE 3040	Fluid Mechanics	3
Select one of the following:		3
CEE 3770	Statistics and Applications	
ISYE 3770	Statistics and Applications	
MATH 3670	Probability and Statistics with Applications	
CEE 4090	Capstone Design	3
College of Engineering Requirements		
COE 3001	Mechanics of Deformable Bodies	3
Select one of the following:		3
CHBE 2130	Chemical Engineering Thermodynamics I	
ME 3322	Thermodynamics	
MSE 3001	Chemical Thermodynamics of Materials	
Construction and Infrastructure Systems Engineering Concentration		
CEE 4100	Construction Engineering and Management	3
Concentration electives		9
CEE 4050	Infrastructure System Management	
CEE 4110	Construction Planning, Estimating, and Scheduling	
CEE 4120	Construction Equipment and Methods	
CEE 4130	Construction Safety and Health	
CEE 4140	Bldg Info Model Constr	
CEE 4150	Construction Management & Megaprojects	
CEE 4160	Smart and Sustainable Cities	
CEE 4170	Construction Law	
CEE 4803	Special Topics (Entrepreneurship in CEE)	
CEE 6651	Infrastructure Systems Management	
CEE 6652	Infrastructure Management: IT Applications	
CEE 8813	Special Topics (Data Analytics for CEE Systems)	
CEE 8813	Special Topics (Sustainable Buildings)	
CE Breadth Electives		
Select two of the following:		6
CEE 3051	Introduction to Structural Engineering	
CEE 4200	Hydraulic Engineering	
CEE 4300	Environmental Engineering Systems	
CEE 4405	Introduction to Geotechnical Engineering	
CEE 4600	Transportation Planning, Operations, and Design	
CEE 4200	Hydraulic Engineering	3
	or CEE 4405 Introduction to Geotechnical Engineering	
CE Technical Electives		

CE Electives ⁴	9
Approved Electives	
Approved Electives ⁵	6
Total Credit Hours	128

No pass-fail allowed, except for CS 1171.

CEE 4801 not allowed toward degree.

Students must earn a 2.0 average in all CEE courses.

¹ Students must complete one Ethics course during their program. For a complete list of Ethics courses, please see: Ethics

² If PHYS 2231 is taken, extra credit hour goes to Free Electives.

³ Minimum grade of C is required.

⁴ Any 3000-level or higher CEE course, with the exception of CEE 4801, CEE 8811, and CEE 8812. Maximum of 3 credit hours CEE 4699 and CEE 4900. Only one non-CEE course allowed: COA 4010, CP 4010, CP 4020, CP 4310, and CP 4510.

⁵ Maximum 3 credit hours CEE 2699 allowed. MATH 1113, PHYS 2802, PHYS 2XXX (AP credit), one-hour MUSI courses, GT 1000, and FREE XXXX are not allowed.