Bachelor of Science in Civil Engineering

Civil Engineering (BSCE)

Degree Program Guide*

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
First Semester		
MATH 211	Calculus I (Grade of C or better required)	4
CHEM 121N	Foundations of Chemistry I Lecture	3
CHEM 122N	Foundations of Chemistry I Laboratory	1
ENGN 121	Introduction to Engineering and Technology	4
Human Creativity		3
	Credit Hours	**15**
Second Semester		
ENGN 122	MATLAB and C++ Programming for Engineers	4
ENGL 110C	English Composition (Grade of C or better required)	3
MATH 212	Calculus II (Grade of C or better required)	4
PHYS 231N	University Physics I	4
	Credit Hours	**15**
Sophomore		
First Semester		
CEE 204	Statics (Grade of C or better required)	3
COMM 101R	Public Speaking	3
MATH 312	Calculus III (or MATH 285)	4
PHYS 232N	University Physics II	4
CEE 240	Geographic Information Systems in Civil and Environmental Engineering	2
	Credit Hours	**16**
Second Semester		
CEE 205	Enginering Dynamics	3
CEE 220	Mechanics of Deformable Bodies	3
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Literature		3
Science Elective (BIOL 110N/111N or OEAS 111N)		4
	Credit Hours	**16**
Junior		
First Semester		
MATH 307	Ordinary Differential Equations (or MATH 280)	3
CEE 304	Probability and Statistics for Civil Infrastructure	3
CEE 310	Structures I (Grade of C or better required)	3
CEE 320	Civil Engineering Materials	3
CEE 330	Hydromechanics (Grade of C or better required)	3
	Credit Hours	**15**
Second Semester		
CEE 305	Numerical Methods for Civil and Environmental Engineering	1
CEE 323	Soil Mechanics (Grade of C or better required)	3
CEE 324	Soil Mechanics Laboratory	1
CEE 340	Hydraulics and Water Resources	3
CEE 341	CE Hydraulics and Water Resources Laboratory	1
CEE 350	Environmental Pollution and Control	3
Interpreting the Past		3
	Credit Hours	**15**
Senior		
First Semester		
CEE 370	Transportation Fundamentals	3
CEE 410	Concrete Design	3
CEE 430	Foundation Engineering	3
CEE 402	Professional Practice of Engineering	1
Gen Ed - Upper Level Requirement 1		3
Human Behavior		3
	Credit Hours	**16**
Second Semester		
CEE 403W	Civil Engineering Design Project and Professional Practice (Grade of C or better required)	3
CEE 4XX		3
CEE 4XX		3
ENMA 480	Ethics and Philosophy in Engineering Applications **	3
Gen Ed - Upper Level Requirement 2		3
	Credit Hours	**15**
	Total Credit Hours	**123**

* Does not include the University's General Education language and culture requirement. Additional hours may be required.

** Meets philosophy and ethics general education requirement.