

Civil Engineering, B.S.

Accredited by the Engineering Accreditation Commission of ABET, <https://www.abet.org/>

Course	Title	Semester Credit Hours
Freshman Year		
Semester 1		
AEEN 1310	Computer Graphics	3
Rhetoric & Composition		3
MATH 2413	Calculus I	4
PHYS 2325 & PHYS 2125	University Physics I and University Physics I Lab	4
GEEN 1201	Engineering as a Career	2
Semester Credit Hours		16
Semester 2		
Rhetoric & Composition		3
American History		3
MATH 2414	Calculus II	4
CHEM 1311 & CHEM 1111	General Chemistry I and General Chemistry I Lab	4
ARCH 1302	Architectural History II	3
Semester Credit Hours		17
Sophomore Year		
Semester 1		
CEEN 2113	Surveying Lab	1
CEEN 2212	Surveying	2
CEEN 2301	Statics	3
American History		3
Government/Political Science		3
PHYS 2326 & PHYS 2126	University Physics II and University Physics II Lab	4
Semester Credit Hours		16
Semester 2		
CEEN 3311	Strength of Materials	3
MATH 3320	Differential Equations	3
MEEN 2302	Mechanics II Dynamics	3
Lang/Phil/Culture		3
Science Elective ¹		3
Semester Credit Hours		15
Junior Year		
Semester 1		
CEEN 3143	Geotechnical Eng Lab	1
CEEN 3303	Structural Analysis	3
CEEN 3342	Geotechnical Engineering	3
CEEN 3390	Fluid Mechanics	3
STAT 4303	Statistical Methods	3
CEEN 3315	Computer Methods in Civil Engineering	3
Semester Credit Hours		16
Semester 2		
CEEN 3145	Construction Materials Lab	1
CEEN 3167	Hydraulics/Fluid Mechanics Lab	1

CEEN 3317	Engineering Economics	3
CEEN 3344	Construction Materials	3
CEEN 3393	Hydraulic Engineering	3
CEEN 4359	Principles of Transportation Engineering	3
Structural Design Elective ²		3
Semester Credit Hours		17
Senior Year		
Semester 1		
CEEN 4279	Senior Design Project I	2
CEEN 4362	Hydrology	3
Government/Political Science		3
Engineering Elective (p. 2)		3
CEEN 4326	Construction Engineering	3
Semester Credit Hours		14
Semester 2		
CEEN 4289	Senior Design Project II (WI)	2
Engineering Elective (p. 2)		3
Social/Behavioral		3
Communication		3
Math and Sci Elective (p. 2)		3
Semester Credit Hours		14
Total Credit Hours Required:		125

¹ Approved science electives: BIOL 1306, GEOL 1303.

² Structural Design Elective: CEEN 3304 or CEEN 4316. Both courses may be taken and one used as an Engineering Elective.

Math and Science Elective

Additional mathematics and science electives recommended:

CHEM 1312 or any approved upper-level biology, chemistry, or physics course.

Code	Title	Semester Credit Hours
MATH 3415	Calculus III	4
MATH 4341	Linear Alg and Matrix Theory	3
MATH 4372	Math for Physics and Eng I	3
MATH 4374	Numerical Analysis	3

Or any other approved upper-level mathematics course.

Engineering Electives

Code	Title	Semester Credit Hours
CEEN 3304	Reinforced Concrete Design	3
CEEN 3365	Environmental Engineering	3
CEEN 3389	Structural Vibration	3
CEEN 4314	Matrix Structural Analysis	3
CEEN 4316	Structural Steel Design	3
CEEN 4336	Selected Topics	1-3
CEEN 4340	Eng Proj Est, Plan & Control	3
CEEN 4350	Professional Preparation	3
CEEN 4364	Dsgn Wtr and Wstwr Convay Sys	3

CEEN 4367	Geoenvironmental Engineering	3
CEEN 4368	Foundation Engineering	3
CEEN 4369	Transportation Eng Design	3
AEEN 3325	Design Codes and Ordinances	3
AEEN 3310	Building Information Modeling	3