

# Bachelor of Science in Civil Engineering -- 129 Credits

JCE-BSE (RG 7273)

Effective August 2025

## Worlds of Knowledge (RQ 3787)

Complete 1 course in each of the following Worlds of Knowledge.

Aesthetic and Creative Expression				
Subject	Number	Course Title	CR	Satisfied/Term
			3	

Global History & Culture				
Subject	Number	Course Title	CR	Satisfied/Term
			3	

Societies & Civics				
Subject	Number	Course Title	CR	Satisfied/Term
			3	

Follow-up Courses				
Subject	Number	Course Title	CR	Satisfied/Term
			3	

## Freshman Year Curriculum (RG 7273)

Freshman Year Curriculum - 1st Term (RQ 3423)				
Complete the following Courses				
			CR	Satisfied/Term
Chem 0150	General Chem 1 for Engr		3	
EngCmp 0005	Composition 1		3	
Engr 0017	Intro Engr Analysis		3	
Engr 0081	Freshman Engr Sem 1		0	
Math 0221	Analytic Geom & Calc 1		4	
Phys 0150	Physics 1		4	
Requirement Satisfied			17	

Freshman Year Curriculum - 2nd Term (RQ 3424)				
Complete the following Courses				
			CR	Satisfied/Term
Chem 0151	General Chem 2 for Engr		3	
Engr 0018	Intro Engr Computing		3	
Engr 0082	Freshman Engr Sem 2		0	
Math 0231	Analytic Geom & Calc 2		4	
Phys 0152	Physics 2		4	
Requirement Satisfied			14	

## Sophomore Year Curriculum (RG 7273)

Soph Year Curriculum - 3rd Term (RQ 3425)				
Complete the following Courses				
			CR	Satisfied/Term
CE 1503	Intro Environmental Engr		3	
CE 1085	Dept Seminar		0	
Engr 0020	Prob & Stats for Engr 1		4	
Engr 0132	Statics		3	
Math 0241	Analytic Geom & Calc 3		4	
Requirement Satisfied			14	

Soph Year Curriculum - 4rd Term (RQ 3426)				
Complete the following Courses				
			CR	Satisfied/Term
CE 0110	Computer Meth in CE		3	
CE 1105	Materials of Construction		3	
CE 1085	Dept Seminar		0	
Engr 1103	Engineering Economics		3	
Engr 0142	Mechanics of Materials		3	
Engr 0152	Dynamics		3	
Math 1271	Differential Equations		3	
Requirement Satisfied			18	

## Junior Year Curriculum (RG 7273)

Junior Year Curriculum - 5th Term (RQ 3427)				
Complete the following Courses				
			CR	Satisfied/Term
CE 1220	Survey & Land Development		3	
CE 1330	Intro to Structural Analy		3	
CE 1402	Fluid Mechanics		3	
CE 1703	Transportation Engr		3	
CE 1811	Prin of Soil Mechanics		3	
CE 1085	Dept Seminar		0	
Requirement Satisfied			15	

Junior Year Curriculum - 6th Term (RQ 3436)				
Complete the following Courses				
			CR	Satisfied/Term
CE 1412	Hydro & Water Resrc		3	
CE 1610	Engr & Sustainable Dev		3	
CE 1085	Dept Seminar		0	
Requirement Satisfied			6	

## Senior Year Curriculum (RG 7273)

Senior Year Curriculum - 7th Term (RQ 3445)				
Complete the following Courses				
			CR	Satisfied/Term
CE 1085	Dept Seminar		0	
CE 1200	Construction Management		3	
CE 1195	CE Professional Practice		3	
Commrc 0052	Public Speaking		3	
Requirement Satisfied			9	

Senior Year Curriculum - 8th Term (RQ 3446)				
Complete the following Courses				
			CR	Satisfied/Term
CE 1085	Dept Seminar		0	
CE 1199	CE Senior Design Project		3	
Requirement Satisfied			3	

## Electives

Science Electives (RQ 3767)				
Complete one of the following courses				
			CR	Satisfied/Term
Biol 0080	Life Sciences		3	
Biol 0083	Human Ecology		3	
Biol 0110	General Biology 1		3	
Biol 0950	Anatomy and Physiology 1		3	
Geo 0010	Principles of Astronomy		4	
Geo 0083	Physical Oceanography		3	
Geo 0090	Earthquakes and Volcanos		3	
Geo 0091	Prehistoric Life		3	
Geo 0092	Our National Parks		3	
Geo 0220	Fossil Fuels and Economic Geology		3	
Requirement Satisfied			3	

Civil Engineering Design Electives (RQ 3768)				
Complete 4 of the following Electives.				
Must complete a minimum of 3 different design areas.				
Structures			CR	
CE 1340	Concrete Design		3	
CE 1347	Bridge Engineering		3	
CE 1341	Steel Design		3	
Environmental/Water Resources				
CE 1420	Hydraulic Design		3	
CE 1510	Water Supply & Waste Water		3	
Transportation				
CE 1714	Pavement Design & Mgmt		3	
CE 1730	Highway Survey & Design		3	
Geotechnical				
CE 1814	Slopes, Seepage & Earth Structure		3	
CE 1821	Foundation Engineering		3	
Requirement Satisfied			12	

Additional Electives (RQ 3769)				
Note: No more than 3 credits of CE 1198 Ind Study may count as part of the curriculum requirements.				
Civil Engineering Elective				
Complete an additional Design Elective or CE 1198 Ind Study (3 cr)				
			3	
Engineering Electives				
Complete one of the following courses (Preq must be met)				
CE 1198	Independent Study (max 3 cr)		3	
CHE 0214	Intro to Chemical Product Design		3	
EE 0031	Linear Circuits and Systems 1		3	
EE 0445	Prgmg & Intro to Data Structures		3	
Engr 0022	Material Structure and Properties		3	
Engr 1115	Engineering Leadership		3	
Geo 1550	Geographic Information Systems*		4	
Math 1178	Operations Research*		3	
Math 1179	Mathematical Modeling		3	
Math 1181	Linear Algebra		3	
MRKT 1675	UAS (Drone) Tech 101 - Video Marketing		3	
ME 0024	Intro to Mechanical Engr Design		3	
ME 0052	Thermodynamics 1		3	
ME 1173	Finite Element Methods*		3	
Any additional CE Design Elective			3	
Any Additional CE Elective			3	
Civil Engineering Co-Op			3	
Requirement Satisfied			3	

### IMPORTANT INFORMATION:

This sheet is an unofficial representation of the major requirements and the information is subject to change. It is not an official record of academic progress and should not be treated as such. Official degree information can only be obtained through the Division Office or the Office of the Registrar.

Updated 3/24/25

\* Consent Required