

Bachelor of Science in Civil Engineering -- 129 Credits

JCE-BSE (RG 7273)
Effective August 2020

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				
Course	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				
Course	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				
Course	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				
Course	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				
Course	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				
Course	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				
Course	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				
Course	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				
Course	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			
Geol 0010 Principles of Astronomy	4			
Geol 0015 Physical Geology	4			
Geol 0024 Meteorology	4			
Geol 0083 Intro Physical Oceanography	3			
Geol 0090 Earthquakes and Volcanos	3			
Geol 0086 Environmental Geology	3			
Geol 0087 Earth, Climate & Life thru Time	3			
Geol 0091 Prehistoric Life	3			
Geol 0092 Geology of National Parks	3			
Geol 0210 Earth Materials	4			
Geol 0220 Fossil Fuels	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 Prmg & Intro to Data Structures	3			
Engr 0022 Material Structure and Properties	3			
Engr 1115 Engineering Leadership	3			
Geog 1440 Geographic Information Systems*	4			
Math 1181 Linear Algebra	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 6/27/22

* Consent Required