

Civil Engineering

FIRST TERM

Credit	Class
4	MATH 0221 Calculus I
3	CHEM 0150 (previously Chem 0111) General Chem Eng 1
4	PHYS 0150 Phys for Eng 1
3	ENGR 0017 Intro to Eng Analysis
3	ENGCMP 0005 * Composition 1 (or a 650 or better on reading writing portion of SAT)
0	ENGR 0081 Freshman Seminar 1
17	TOTAL

THIRD TERM

Credit	Class	Pre/Co Req
4	MATH 0241 Calculus III	MATH 0231 Calc II (C or better)
4	ENGR 0020 Prob & Stats for Engr 1	MATH 0231 Calc II
3	ENGR 0132 Statics	ENGR 0150 Phys for Eng 1, <i>MATH 0231 Calc II</i>
3	CE 1503 Intro Envir Engr	CHEM 0151
3	Science Elective	
0	CE 1085 Dept Seminar	
17	TOTAL	

FIFTH TERM

Credit	Class	Pre/Co Req
3	CE 1330 Intro Structural Analysis	ENGR 0142 Mech of Matls
3	CE 1402 Fluid Mechanics	ENGR 0142 <i>MATH 1271</i>
3	CE 1811 Prin Soil Mech	ENGR 0142 Mech of Matls
3	CE 1703 Transportation	ENGR 0020
3	CE 1220 Surv. & Land Dev	CE 0110 Comp Methods in CE
0	CE 1085 Dept Seminar	
15	TOTAL	

SEVENTH TERM

Credit	Class	Pre/Co Req
3	CE 1200 Const Management	CE 1105
3	CE Design Elective	
3	CE Design Elective	
3	CE 1195 CE Prof Practice	
3	COMMRC 0052 Public Speaking	
0	CE 1085 Dept Seminar	
15	TOTAL	

SECOND TERM

Credit	Class	Pre/Co Req
4	MATH 0231 Calculus II	MATH 0221 Calc I (C or better)
3	CHEM 0151 with Lab (previously Chem 0115) General Chem Eng 2	CHEM 0150 Gen Chem Eng 1
4	PHYS 0152 Phys for Eng 2	PHYS 0150 Phys for Eng 1, <i>MATH 0231 Calc II</i>
3	ENGR 0018 Intro Eng Computing	ENGR 0018 Intro to Eng Analy, <i>MATH 0221 Calc I</i>
3	WOK (S&C, GH&C, A&CE)	
0	ENGR 0082 Fresh. Seminar 2	
17	TOTAL	

FOURTH TERM

Credit	Class	Pre/Co Req
3	MATH 1271 Differential Eq's	MATH 0241 Calc III
3	ENGR 0142 Mechanics of Materials	ENGR 0132 Statics, MATH 0231 Calc II
3	CE 0110 Computer Methods in CE	ENGR 0018
3	CE 1105 Materials of Const	<i>ENGR 0142 Mech of Matls</i>
3	ENGR 0152 Dynamics	ENGR 0132 Statics, MATH 0231 Calc II
3	ENGR 1103 Engr Economics	Sophomore level
0	CE 1085 Dept Seminar	
18	TOTAL	

SIXTH TERM

Credit	Class	Pre/Co Req
3	CE Design Elective	
3	CE 1412 Hydro & Water Resources	CE 1402 Fluid Mechanics
3	CE 1610 Engr & Sust Dev.	Soph Status
3	CE Design Elective	
3	WOK (S&C, GH&C, A&CE)	
0	CE 1085 Dept Seminar	
15	TOTAL	

EIGHTH TERM

Credit	Class	Pre/Co Req
3	WOK (S&C, GH&C, A&CE)	
3	CE 1199 Senior Design Project	CE 1195 CE Prof Practice
3	CE Elective	
3	Engineering Elective	
3	WOK (S&C, GH&C, A&CE)	
0	CE 1085 Dept. Seminar	
15	TOTAL	

Notes: 1) *italic lettering means co-req*

2)* students need a minimum of 129 credits to graduate.

Students who do not need to take ENGCMP 0005 (SAT-V greater than 650) will need to take another 3 credits to meet this requirement.

CE Schedule_Rev_2_23_2022-jws

Civil Engineering

CE DESIGN ELECTIVES

Area	Course	Term	Pre/Co Req
S	CE 1340 Concrete Design	F	CE 1330 Intro Struct Analysis
S	CE 1341 Steel Design	S	CE 1330 Intro Struct Analysis
S	CE 1347 Bridge Engineering	F	CE 1341 Steel Structures
E/WR	CE 1420 Hydraulic Design	S	CE 1402 Fluid Mechanics
E/WR	CE 1510 Water Supply & Waste Water	F	CE 1503 ENGR 0017
T	CE 1714 Pavement Design & Management	S	CE 1703 Transportation, CE 1811 Prin Soil Mech
T	CE 1730 Highway Surveying & Design	F	CE 1703 Transportation, CE 1220 Surv & Land Dev
G	CE 1814 Slopes, Seepage & Earth Structures	F	CE 1811 Prin Soil Mech
G	CE 1821 Foundation Engineering	S	CE 1811 Prin Soil Mech

Students take 4 design electives in a minimum of three different areas (S = structures, E/WR = Environmental/Water Resources, T = Transportation, G = Geotechnical)

CE ELECTIVE

An additional design elective from the list above, or CE 1198 Independent Study (no more than 3 credits of Independent Study may be counted as part of the curriculum requirements)

SCIENCE ELECTIVES

Course	Credits
GEO 0010 Principles of Astronomy	4
GEO 0015 Physical Geology	4
GEO 0024 Meteorology	4
GEO 0083 Intro. Physical Oceanography	3
GEO 0090 Earthquakes and Volcanos	3
GEO 0086 Environmental Geology	3
GEO 0091 Prehistoric Life	3
GEO 1110 Structural Geology Instructor consent required	4
BIOL 0080 Life Sciences	3
BIOL 0110 General Biology I	3
BIOL 0950 Anatomy and Physiology 1	3

ENGINEERING ELECTIVES

Course	Credits
Any CHE, EE, ENGR, or ME course for which Prerequisites are met (listed below)	3
CHE 0214 Intro to Chemical Product Design	3
EE 0031 Linear Circuits and Systems 1	3
EE 0445 Programming and Intro to Data Structures	3
ENGR 0022 Material Structure and Properties	3
ENGR 1115 Engineering Leadership	3
ME 0024 Intro to Mechanical Engineering Design	3
ME 0052 Thermo 1	3
ME 1173 Finite Element Methods (consent required)	3
MATH 1181 Linear Algebra	3
CE 1198 Independent Study (no more than 3 credits may be counted as part of the curriculum requirements)	3
Any CE Design Elective not taken elsewhere as a CE Design Elective or the CE Elective	3
CE Co-op (must earn 3 credits)	3
GEOG 1440 Geographic Information Systems (consent required)	3