

CIVIL ENGINEERING

Courses highlighted below are available at Elon University
Curriculum Example*

FRESHMAN YEAR

_____ 4 CH 1010 General Chemistry
 _____ 3 ENGL 1030 Accelerated Composition
 _____ 2 ENGR 1020 Engineering Discipline and Skills¹
 _____ 4 MATH 1060 Calculus of One Variable I
 _____ 3 Gen Ed²
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_____ 3 ENGR 1410 Programming and Problem Solving¹
 _____ 2 ENGR 2100 Computer-Aided Design & Engr. Applic.
 _____ 3 GEOL 1010 Physical Geology
 _____ 1 GEOL 1030 Physical Geology Lab.
 _____ 4 MATH 1080 Calculus of One Variable II
 _____ 3 PHYS 1220 Physics with Calculus I
 _____ 1 PHYS 1240 Physics Lab. I
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SOPHOMORE YEAR

_____ 3 CE 2010 Statics
 _____ 3 CE 2550 Geomatics
 _____ 4 MATH 2060 Calculus of Several Variables
 _____ 3 PHYS 2210 Physics with Calculus II
 _____ 1 PHYS 2230 Physics Lab. II
 _____ 3 Gen Ed²
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_____ 4 CE 2060 Structural Mechanics
 _____ 2 CE 2080 Dynamics
 _____ 2 CE 3520 Economic Evaluation of Projects
 _____ 3 COMM 2500 Public Speaking
 _____ 4 MATH 2080 Int. to Ordinary Differential Eqtns
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JUNIOR YEAR

_____ 3 CE 3010 Structural Analysis
 _____ 3 CE 3310 Construction Engineering and Mgt.
 _____ 4 CE 3410 Introduction to Fluid Mechanics
 _____ 4 CE 3510 Civil Engineering Materials
 _____ 3 MATH 3020 Statistics for Science and Engineering
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_____ 3 CE 3110 Transportation Engineering Planning & Design
 _____ 4 CE 3210 Geotechnical Engineering
 _____ 3 CE 3420 Applied Hydraulics and Hydrology
 _____ 1 CE 3530 Professional Seminar
 _____ 3 EES 4010 Environmental Engineering
 _____ 3 Design Technical Requirement³
 17

SENIOR YEAR

_____ 3 ENGL 3140 Technical Writing
 _____ 3 Design Technical Requirement³
 _____ 6 Technical Requirement⁴
 _____ 3 Technical Requirement Restricted⁵
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_____ 3 CE 4590 Capstone Design Project
 _____ 3 Gen Ed²
 _____ 3 Gen Ed²
 _____ 3 Technical Requirement⁴
 _____ 3 Elective
 15

129 Total Semester Hours

All Clemson engineering students begin in our General Engineering program and move into their specified major once the departmental standards are completed. Clemson courses ENGL 1030, MATH 1060 and 1080, PHYS 1220, CH 1010, ENGR 1020 and ENGR 1410/or CHE 1300 must all be completed with a "C" or higher before declaring and starting courses in your engineering major.

Footnotes:

- ¹ ENGR 1070, ENGR 1080 and ENGR 1090 may be substituted for ENGR 1410; ENGR 1050 and ENGR 1060 may be substituted for ENGR 1020
² See Policy on Humanities and Social Sciences for Engineering Curricula. Six of these credit hours must also satisfy General Education Cross-Cultural Awareness and Science and Technology in Society Requirements.
³ Six credits selected from the following: CE 4210 or CE 4240; CE 4020, CE 4040, CE 4060, CE 4070 or CE 4080; CE 4110 or CE 4560; CE 4470; EES 4020
⁴ Select from BE 4840, CE 4010, CE 4020, CE 4040, CE 4060, CE 4070, CE 4080, CE 4100, CE 4110, CE 4120, CE 4210, CE 4240, CE 4330, CE 4340, CE 4360, CE 4380, CE 4390, CE 4430, CE 4460, CE 4470, CE 4560, CE 4570, CE 4620, CE 4820, CE 4910, CRP 4120, CSM 3040, CSM 3050, EES 4020, EES 4100, EES 4300, EES 4840, EES 4850, EES 4860, LAW 3220, LAW 3330, ME 3100, MSE 2100.
 Technical Requirements and electives may be used to complete an emphasis area in one or more of the following fields: Construction Engineering and Management Emphasis Area; Construction Materials Emphasis Area; Environmental Engineering Emphasis Area; Geotechnical/Geoenvironmental Engineering Emphasis Area; Structural Engineering Emphasis Area; Transportation Systems Emphasis Area; Water Resources Engineering Emphasis Area
⁵ Select from BE 4840, CE 4100, CE 4110, CE 4120, CE 4210, CE 4240, CE 4560, CE 4820, CRP 4120, EES 4100, EES 4300, EES 4840, EES 4850, EES 4860

General Education Requirements						
LIT	Non-Lit	SS1	SS2		CCA	STS
Other						
LIFE	Palmetto Fellows	Honors	Athlete	RiSE	ROTC	Med School

Comments: