

# CIVIL ENGINEERING

Courses highlighted below are available at Newberry College

## Curriculum Example\*

### FRESHMAN YEAR

\_\_\_\_\_ 4 CH 1010 General Chemistry  
 \_\_\_\_\_ 3 ENGL 1030 Accelerated Composition  
 \_\_\_\_\_ 2 ENGR 1020 Engineering Discipline and Skills<sup>1</sup>  
 \_\_\_\_\_ 4 MATH 1060 Calculus of One Variable I  
 \_\_\_\_\_ 3 Gen Ed<sup>2</sup>  
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\_\_\_\_\_ 3 ENGR 1410 Programming and Problem Solving<sup>1</sup>  
 \_\_\_\_\_ 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 Ed<sup>2</sup>  
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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 Requirement<sup>3</sup>  
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### SENIOR YEAR

\_\_\_\_\_ 3 ENGL 3140 Technical Writing  
 \_\_\_\_\_ 3 Design Technical Requirement<sup>3</sup>  
 \_\_\_\_\_ 6 Technical Requirement<sup>4</sup>  
 \_\_\_\_\_ 3 Technical Requirement Restricted<sup>5</sup>  
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\_\_\_\_\_ 3 CE 4590 Capstone Design Project  
 \_\_\_\_\_ 3 Gen Ed<sup>2</sup>  
 \_\_\_\_\_ 3 Gen Ed<sup>2</sup>  
 \_\_\_\_\_ 3 Technical Requirement<sup>4</sup>  
 \_\_\_\_\_ 3 Elective  
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**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

Footnotes: and ENGR 1410/or CHE 1300 must all be completed with a "C" or higher before declaring and starting courses in your engineering major.

<sup>1</sup> ENGR 1070, ENGR 1080 and ENGR 1090 may be substituted for ENGR 1410; ENGR 1050 and ENGR 1060 may be substituted for ENGR 1020

<sup>2</sup> 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.

<sup>3</sup> 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

<sup>4</sup> 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

<sup>5</sup> Select from BE 4840, CE 4100, CE 4110, CE 4120, CE 4210, CE 4240, CE 4560, CE 4820, CRP 4120, EES 4020, EES 4100, EES 4300, EES 4840, EES 4850, EES 4860

\*See catalog for current curriculum at [catalog.clemson.edu](http://catalog.clemson.edu)

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

Comments: