

COMPUTER ENGINEERING

Courses highlighted below are available at Furman University

Curriculum Example*

FRESHMAN YEAR

_____ 4 CH 1010 General Chemistry	_____ 3 ENGR 1410 Programming and Problem Solving ^{1,2}
_____ 3 ENGL 1030 Accelerated Composition	_____ 4 MATH 1080 Calculus of One Variable II ²
_____ 2 ENGR 1020 Engineering Discipline and Skills ¹	_____ 3 PHYS 1220 Physics with Calculus I ²
_____ 4 MATH 1060 Calculus of One Variable I ²	_____ 6 Gen Ed ³
_____ 3 Gen Ed ³	_____ 16

SOPHOMORE YEAR

_____ 3 CPSC 1110 Introduction to Programming in C ²	_____ 1 ECE 2120 Electrical Engineering Lab. II ²
_____ 2 ECE 2010 Logic and Computing Devices ²	_____ 3 ECE 2220 Systems Programming Concepts for Computer Engineering ²
_____ 3 ECE 2020 Electric Circuit I ²	_____ 3 ECE 2620 Electrical Circuits II ²
_____ 1 ECE 2090 Logic and Computing Devices Lab.	_____ 3 ECE 2720 Computer Organization ²
_____ 1 ECE 2110 Electrical Engineering Lab. I ²	_____ 1 ECE 2730 Computer Organization Laboratory
_____ 4 MATH 2060 Calculus of Several Variables ²	_____ 4 MATH 2080 Int. to Ordinary Differential Eqtns ²
_____ 3 PHYS 2210 Physics with Calculus II ²	_____ 15

JUNIOR YEAR

_____ 3 ECE 2230 Computer Systems Engineering ²	_____ 3 ECE 3170 Random Signal Analysis ²
_____ 1 ECE 3110 Electrical Engineering Lab. III ²	_____ 3 ECE (CPSC) 3220 Intro. to Operating Systems ²
_____ 3 ECE 3200 Electronics I ²	_____ 3 ECE 3270 Digital Computer Design ²
_____ 3 ECE 3300 Signals, Systems, and Transforms ²	_____ 3 ECE (CPSC) 3520 Programming Systems ²
_____ 3 ECE 3710 Microcontroller Interfacing ²	_____ 3 MATH 4190 Discrete Math. Structures I
_____ 1 ECE 3720 Microcontroller Interfacing Lab.	_____ 15
_____ 3 MATH 3110 Linear Algebra ²	

SENIOR YEAR

_____ 3 COMM 1500 Intro. to Human Comm. <i>OR</i>	_____ 2 ECE 4960 Integrated System Design II
_____ 3 COMM 2500 Public Speaking	_____ 3 Gen Ed ³
_____ 3 ECE 4090 Intro. to Linear Control Systems ²	_____ 6 Computer Engr. Technical Requirement ⁴ _____
_____ 2 ECE 4950 Integrated System Design I ²	_____ 3 Special Requirement ⁵ _____
_____ 3 ENGL 3140 Technical Writing	_____ 14
_____ 6 Computer Engr. Technical Requirement ⁴ _____	

All Clemson engineering students begin in our General Engineering program and move into their specified major once the departmental standards are completed. **127 Total Semester Hours**
 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 This course must be passed with a grade of C or better either to transfer into Computer Engineering from General Engineering or to satisfy later course prerequisites.
 - ³ See General Education section. Six of these credit hours must also satisfy General Education Cross-Cultural Awareness and Science and Technology in Society Requirements.
 - ⁴ Twelve credits selected from BIOE 3700*, BIOE 4310*, BIOE 4350*, BIOE 4710*, ECE 3210*, ECE 4050+, ECE 4160*, ECE 4270, ECE 4300, ECE 4310, ECE 4380, ECE 4400, ECE 4420, ECE 4490, ECE 4550, ECE 4590*, ECE 4600, ECE 4670, ECE 4680, ECE 4730, ECE 4910+, ECE 4920+, ECE 4930+ and ECE 4990+. Three credits of this requirement must include ECE 4270, ECE 4300, or ECE 4400. A maximum of six credits of courses marked with an asterisk and a maximum of three credits of courses marked with a plus may be used to satisfy this requirement.
 - ⁵ Three additional credits of university or college approved Arts and Humanities or Social Science courses; or ELE 3010 or ELE 4010; or any additional three-credit, 4000-level course from footnote 4 above; or any course selected from the following: ECE 4040, ECE 4060, ECE 4180, ECE 4190, ECE 4200, ECE 4220, ECE 4320, ECE 4360, ECE 4370, ECE 4460, ECE 4570, ECE 4610, or ME 3100; or one additional course selected from MATH 4120, MATH 4340, MATH 4350, MATH 4400, MATH 4410 or MATH 4530.
- *See catalog for current curriculum at catalog.clemson.edu

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

Comments: