

Sample 4-Year Course Plan for Computer Science & Engineering

Fall	Winter	Spring
University Core (Critical Thinking & Writing 1)	University Core (Critical Thinking & Writing 2)	COEN 19 - Discrete Math
MATH 11 - Calculus I	MATH 12 - Calculus II	MATH 13 - Calculus III
CHEM 11 - Chemistry I	PHYS 31 - Physics I	PHYS 32 - Physics II
COEN 10 - Introduction to Programming ¹	COEN 11 - Advanced Programming	COEN 12 - Data Structures
ENGR 1 & 1L - Introduction to Engineering (1 unit each to be taken in any order during the first year)		

Fall	Winter	Spring
University Core (Cultures & Ideas 1)	University Core (Cultures & Ideas 2)	University Core ²
MATH 14 - Calculus IV	AMTH 106 - Differential Equations	MATH 53 - Linear Algebra
PHYS 33 - Physics III	AMTH 108 - Probability and Statistics	ELEN 50 - Electric Circuits
COEN 20 - Embedded Systems / COEN 21 - Logic Design / COEN 79 - OO Programming and Advanced Data Structures (can be taken in any order)		

Fall	Winter	Spring
University Core ³	University Core	University Core
COEN 171 - Programming Languages	ELEN 153 - Digital IC Design	ENGL 181 - Engineering Communications
Computer Engineering Elective	Computer Engineering Elective	Computer Engineering Elective
COEN 146 - Computer Networks / COEN 177 - Operating Systems / COEN 179 - Algorithms (can be taken in any order)		

Fall	Winter	Spring
University Core	University Core	Educational Enrichment Elective
Educational Enrichment Elective	Educational Enrichment Elective	Educational Enrichment Elective
COEN 174 - Software Engineering	COEN 175 - Compilers	COEN 122 - Computer Architecture
COEN 194 - Senior Design I (2 units)	COEN 195 - Senior Design II (2 units)	COEN 196 - Senior Design III (2 units)

Humanities & Social Science
 Math & Science
 Engineering
 Other

¹ Students with previous programming experience may replace COEN 10 with a free elective.

² An RTC 1 course such as ENGR 16 is recommended during the sophomore year.

³ An Ethics course such as ENGR 19 is recommended during the junior year.