

4-Year Course Plan for Computer Science & Engineering

First year	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 - Introduction to Engineering (2 units)			

Sophomore	Fall	Winter	Spring
	University Core (Cultures & Ideas 1)	University Core (Cultures & Ideas 2)	University Core (Religion, Theology & Culture 1)
	MATH 14 - Calculus IV	AMTH 106 - Differential Equations ²	MATH 53 - Linear Algebra
	PHYS 33 - Physics III	AMTH 108 - Probability and Statistics	ELEN 50 - Electric Circuits
COEN 21 - Logic Design	COEN 70 - Advanced Data Structures	COEN 20 - Embedded Systems	

Junior	Fall	Winter	Spring
	University Core	University Core	University Core
	Free Elective	COEN 171 - Programming Languages	ELEN 153 - Digital IC Design
	COEN 177 - Operating Systems	COEN 146 - Networks	COEN 179 - Algorithms
Computer Engineering Elective	Computer Engineering Elective	Computer Engineering Elective	

Senior	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)
ENGL 181 - Applied Engr. Communications I (2 units)	ENGL 182A - Applied Engr. Communications IIA (1 unit)	ENGL 182B - Applied Engr. Communications IIB (1 unit)	

Humanities & Social Science
 Math & Science
 Engineering
 Other

¹Students with previous programming experience, as determined by advanced placement credit or the department's programming diagnostic exam, may replace COEN 10 with a free elective. Such students should take a University Core course instead of COEN 10 in their first year.

²Students may take another upper division Math class in place of AMTH 106.