

### 4-Year Course Plan with Study Abroad 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 <sup>1</sup>	COEN 11 - Advanced Programming	COEN 12 - Data Structures
ENGR 1 - Introduction to Engineering (2 units)		

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	MATH 53 - Linear Algebra
PHYS 33 - Physics III	AMTH 108 - Probability and Statistics	ELEN 50 - Electric Circuits
COEN 21 - Logic Design	COEN 79 - OO Programming and Advanced Data Structures	COEN 20 - Embedded Systems

Fall	Winter	Spring
Study Abroad (8 units minimum)	University Core	ENGL 181 - Engineering Communications
	COEN 171 - Programming Languages	ELEN 153 - Digital IC Design
	COEN 146 - Computer Networks	COEN 179 - Algorithms
	Computer Engineering Elective	Computer Engineering Elective

Fall	Winter	Spring
University Core	University Core	University Core
COEN 177 - Operating Systems	Computer Engineering Elective	University Core
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

<sup>1</sup>Students 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.