## 4-Year Course Plan with Co-Op Experience 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 (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 79 - OO Programming and Advanced Data Structures s	COEN 20 - Embedded Systems		

Fall	Winter	Spring
University Core	University Core	
ELEN 153 - Digital IC Design	COEN 171 - Programming Languages	Co-op Experience: 6 months
COEN 177 - Operating Systems	COEN 146 - Computer Networks	(Spring and Summer)
Computer Engineering Elective	Computer Engineering Elective	

Fall	Winter	Spring		
University Core	University Core	University Core		
ENGL 181 - Engineering Communications	Computer Engineering Elective	COEN 179 - Algorithms		
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)		

_	-		i
Humanities & Social Science	Math & Science	Engineering	Other

Last modified: 5/10/2016

<sup>&</sup>lt;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.