4-Year Course Plan with Co-Op Experience for Computer Science & Engineering under Core 2009

	Fall	Winter	Spring
Freshman	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 (1 unit)		

	Fall	Winter	Spring
Sophomore	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 70 – Advanced Data Structures	COEN 20 – Embedded Systems

	Fall	Winter	Spring
Junior	University Core	University Core	Co-op Experience: 6 months (Spring and Summer)
	Free Elective	ELEN 115 – Electronic Circuits	
	COEN 177 – Operating Systems	COEN 146 – Networks	
	Computer Engineering Elective	Computer Engineering Elective	

	Fall	Winter	Spring
Senior	University Core	University Core	ELEN 153 – Digital IC Design
	University Core	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)
	ENGL 181 – Technical Writing I (2 units)		ENGL 182 – Technical Writing II (1 unit)

Humanities & Social Science | Math & Science | Engineering | Other

[1]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. Such students should take a University Core course instead of COEN 10 in their freshman year.