## Sample 4-Year Course Plan for Computer Science & Engineering

Fall	Winter	Spring	
University Core (Critical Thinking & Writing 1)	University Core (Critical Thinking & Writing 2)	CSEN 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	
CSEN 10 - Introduction to Programming <sup>1</sup>	CSEN 11 - Advanced Programming	CSEN 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 2)	University Core <sup>2</sup>	
MATH 14 - Calculus IV	AMTH 106 - Differential Equations	MATH 53 - Linear Algebra	
PHYS 33 - Physics III	AMTH 108 - Probability and Statistics	ECEN 50 - Electric Circuits	
CSEN 20 - Embedded Systems / ECEN 21 - Logic Design / CSEN 79 - OO Programming and Advanced Data Structures (can be taken in any order)			

Fall	Winter	Spring	
University Core <sup>3</sup>	University Core	University Core	
CSEN 171 - Programming Languages		ENGL 181 - Engineering Communications	
Computer Engineering Elective	Computer Engineering Elective	Computer Engineering Elective	
CSEN 146 - Computer Networks / CSEN 177 - Operating Systems / CSEN 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	
CSEN 174 - Software Engineering	CSEN 175 - Compilers	CSEN 122 - Computer Architecture	
_	CSEN 195 - Senior Design II (2 units)	CSEN 196 - Senior Design III (2 units)	
Humanities & Social Science Math & Science Engineering Other			

<sup>&</sup>lt;sup>1</sup> Students with previous programming experience may replace CSEN 10 with a free elective.

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<sup>&</sup>lt;sup>2</sup> An RTC 1 course such as ENGR 16 is recommended during the sophomore year.

 $<sup>^{\</sup>rm 3}\,\mbox{An}$  Ethics course such as ENGR 19 is recommended during the junior year.