

**Santa Clara University**  
**Sample Four-Year Plan: B.S. in Computer Engineering**

	Fall	Winter	Spring
Freshman Year	MATH 11 - Calculus I	MATH 12 - Calculus II	MATH 13 - Calculus III
	CHEM 11 – Chemistry I	PHYS 31 - Physics I	PHYS 32 - Physics II
	University Core	University Core	University Core
	ENGL 1 - English I	University Core	ENGL 2 - English II
	ENGR 1 - Introduction to Engineering (1 unit)		

Sophomore Year	MATH 21 - Calculus IV	AMTH 106 - Differential Equations	MATH 53 - Linear Algebra
	PHYS 33 - Physics III	AMTH 108 - Probability and Statistics	ELEN 50 - AC/DC Circuits
	COEN 21 - Logic Design	COEN 19 - Discrete Math	COEN 20 - Embedded Systems
	University Core	COEN 11 - Advanced Programming	COEN 12 - Data Structures

Junior Year	ELEN 115 - Electronics	ELEN 153 - Digital IC Design	ENGL 182 – Engineering Communications
	COEN 177 - Operating Systems	COEN 146 - Networks	COEN 179 - Algorithms
	COEN 174 - Software Engineering	COEN 70 - Advanced Data Structures	Computer Engineering Elective
	University Core	Computer Engineering Elective	University Core

Senior Year	COEN 194 - Senior Design I	COEN 195 - Senior Design II	COEN 196 - Senior Design III
	Computer Engineering Elective	COEN 175 - Compilers	COEN 122 - Computer Architecture
	Educational Enrichment Slot	Educational Enrichment Slot	Educational Enrichment Slot
	University Core	Educational Enrichment Slot	Free Elective

A study abroad is usually taken during fall quarter of the junior year. A co-op in industry is usually taken during spring and summer quarters of the junior year. Both options fulfill the Educational Enrichment requirement, and the junior and senior years adjusted to use the Educational Enrichment slots to cover the courses not taken during the quarter away. Students without previous programming experience should take COEN 10 (Introduction to Programming) in fall of their sophomore year instead of a University Core class.