

B.S. Computer Engineering (CS 25): Major Checklist, Fall 2015

Completed	Lower Division (72 units)
	Intro to Computer Science
	CSE 8B/11, Introduction To Computer Science: Java
	Lower-Division Computer Science
	CSE 12, Basic Data Structures and Object-Oriented Programming
	CSE 15L (2 units), Software Tools and Technique Laboratory
	CSE 20 or Math 15A, Introduction to Discrete Mathematics
	CSE 21 or Math 15B, Mathematics for Algorithms and Systems
	CSE 30, Computer Organization and Systems Programming
	Lower-Division Elective (2 units from): CSE 3, CSE 4GS, CSE 5A, CSE 6GS, CSE 7, CSE 8A, MAE 8, MAE 9, COGS 10, COGS 18, ECE 15, NANO 15, CENG 15, CSE 80, CSE 86, CSE 90, CSE 91, CSE 99 or CSE upper-division course
	Mathematics
	Math 20A, Calculus for Science and Engineering
	Math 20B, Calculus for Science and Engineering
	Math 20C, Calculus and Analytical Geometry for Science and Engineering
	Math 20D, Introduction to Differential Equations
	Math 20F, Linear Algebra
	Physics
	Phys 2A, Physics-Mechanics
	Phys 2B, Physics-Electricity and Magnetism
	Phys 2C, Physics-Fluids, Waves, Thermodynamics And Optics
	Electrical Computer Engineering
	ECE 35, Introduction to Analog Design
	ECE 45, Circuits and Systems
	ECE 65, Components and Circuits Laboratory
	Statistics
	ECE 109, Engineering Probability and Statistics
Completed	Upper Division (68 units)
	Upper-Division
	CSE 100, Advanced Data Structures
	CSE 101, Design and Analysis of Algorithms
	CSE 110, Software Engineering
	CSE 120, Principles of Computer Operating Systems
	CSE 140, Components and Design Techniques for Digital Systems
	CSE 140L (2 units), Digital Systems Laboratory
	CSE 141, Introduction to Computer Architecture
	CSE 141L (2 units), Project in Computer Architecture
	Linear Systems: ECE 101
	Electrical Circuits and Systems: ECE 108* <i>offered for a final time SP14, may take UD CSE/ECE Elective</i>
	Upper-Division Electives
	ECE 111, Advanced Digital Design Project or ECE 118, Computer Interfacing
	CSE or ECE Elective
	CSE or ECE Elective
	CSE or ECE Elective
	CSE or ECE Elective
	CSE or ECE Elective
	CSE or ECE Elective (may also be from approved list of Technical Electives)

ALL major requirements must be taken for letter grade with the exceptions of: CSE 91, CSE 197, CSE 198, and CSE 199.