B.S. Computer Science (CS 26): Major Checklist, Fall 2019

Important: ALL major requirements must be taken for _letter_ grade AND passed with a _C- or better_ with the exceptions of: CSE 95, CSE 197, CSE 198, and CSE 199.

Complete	*Lower Division (52 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 & 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 95, 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 18, Linear Algebra
	General Science, Any two courses chosen from the following list (the courses do not need to be sequential):
	Phys 2A, Phys 2B, Phys 4A, Phys 4B, Chem 6A or Chem 6AH, Chem 6B or Chem 6BH, BILD 1, BILD 2, BILD 3, or BICD 100
	Statistics
	Math 183, Statistical Methods **or** ECON 120A, Econometrics A **or** ECE 109, Engineering Probability and Statistics **or** CSE 103, Practical Intro. to Probability and Statistics
Complete	*Upper Division (72 units)*
	Upper-Division (Core) Computer Science
	CSE 100, Advanced Data Structures and Programming
	CSE 101, Design and Analysis of Algorithms/Theory
	CSE 105, Theory of Computability/Algorithms
	CSE 110, Software Engineering
	Systems/Networks: CSE 120 or CSE 123 or CSE 124
	PL/Databases: CSE 130 or CSE 132A
	Security/Cryptography: CSE 107 or CSE 127
	Learning/Vision/Graphics: CSE 150A or CSE 151A or CSE 151B or CSE 152 or CSE 158 or CSE 167
	CSE 140 (4 units), Components and Design Techniques for Digital Systems
	CSE 140L (2 units), Digital Systems Laboratory
	CSE 141 (4 units), Introduction to Computer Architecture
	CSE 141L (2 units), Project in Computer Architecture
	Electives (7 total, 4 units each)
	CSE Elective
	CSE Elective
	CSE Elective
	CSE Elective
	CSE Elective
	CSE Elective (may also be from approved list of Technical Electives)
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