Bachelor of Science in Computer Science

Students in this degree program do not need to take courses in the General Education categories A3 Critical Thinking and B2 Life Science.

Students in this major are able to substitute CSE 4880 for B5 Upper Division Scientific Inquiry.

Requirements (89)

Total units required for graduation: 125

Requirements for the B.S. in Computer Science

(Program Code: CSCI)

Lower-division requirements (39)		
CSE 2010	Computer Science I	4
CSE 2020	Computer Science II	4
CSE 2130	Machine Organization	3
MATH 2210	Calculus I	4
MATH 2220	Calculus II	4
MATH 2265	Statistics with Applications	3
MATH 2310	Applied Linear Algebra	4
MATH 2372	Discrete Mathematics	3
PHYS 2500	General Physics I	4
PHYS 2500L	General Physics I Lab	1
PHYS 2510	General Physics II	4
PHYS 2510L	General Physics II Lab	1
Upper-division requirements (50)		
CSE 3100	Digital Logic	4
CSE 4010	Contemporary Computer Architecture	4
CSE 4100	Computer Networking and Security	3
CSE 4310	Algorithm Analysis	3
CSE 4550	Software Engineering	3
CSE 4600	Operating Systems	3
CSE 4880	Ethics Senior Seminar	3
Ethics Senior Seminar will count towards the GE Writing Intensive Requirement.		
CSE 5000	Introduction to Formal Languages and Automata Theory	3
CSE 5120	Introduction to Artificial Intelligence	3
or CSE 5140	Computational Intelligence	
or CSE 5160	Machine Learning	
CSE 5250	Parallel Algorithms and Programming	3
CSE 5700	Compilers	3
CSE 5720	Database Systems	3
Twelve units chosen from CSE 4000-level and above courses and not previously taken.		12
Total Units		**89**