

# Bachelor of Science in Computer Science

---

Sixteen units chosen from CSE 400-level and above courses and not previously taken. 16

Total Units 123

## Requirements (123 units)

Total units required for graduation: 187

Students in this degree program do not need to take a course in the General Education category A4 Critical Thinking

## Requirements for the B.S. in Computer Science (Program Code: CSCI)

### Lower-division requirements (53)

CSE 201	Computer Science I	4
CSE 202	Computer Science II	4
MATH 211	Basic Concepts of Calculus	4
MATH 212	Calculus II	4
MATH 213	Calculus III	4
MATH 262	Applied Statistics	4
MATH 272	Discrete Mathematics	4
PHYS 221	General Physics I	5
PHYS 222	General Physics II	5
PHYS 223	General Physics III	5
BIOL 100	Topics in Biology	5
or BIOL 200	Biology of the Cell	

One additional science course (with lab component), not previously taken, from the following areas: 5

Astronomy

Biology

Chemistry

Geological Sciences

Physics (excluding PHYS 100, PHYS 121, PHYS 122 and PHYS 123)

### Upper-division requirements (70)

CSE 310	Digital Logic	5
CSE 313	Machine Organization	4
CSE 320	Programming Languages	4
CSE 330	Data Structures	4
CSE 401	Contemporary Computer Architecture	5
CSE 431	Algorithm Analysis	4
CSE 460	Operating Systems	4
CSE 461	Advanced Operating Systems	4
CSE 488	Ethics and the Computing Professional	2
CSE 489	Senior Seminar	2
CSE 500	Introduction to Formal Languages and Automata	4
CSE 570	Compilers	4
MATH 372	Combinatorics	4
CSE 455	Software Engineering	4
or CSE 555	Software Design and Architecture	