

Bachelor of Science in Computer Science

The undergraduate program in computer science is an interdisciplinary program leading to the Bachelor of Science in Computer Science. The program is designed to provide both an academic and professional orientation.

General admission requirements for the undergraduate program are the same as those of the university and the USC Viterbi School of Engineering and include three to five units of mathematics and one unit of science (biology, chemistry or physics) together with satisfactory scores on the Scholastic Aptitude Test and Achievement Tests. The requirement for the degree is 128 units. A cumulative scholarship average of C (2.0) is required for all courses taken at USC as well as for all computer science courses taken in the program. Computer science is a department in the USC School of Engineering; however, the Bachelor of Science degree with a major in computer science is awarded through the USC College of Letters, Arts and Sciences.

First Year, First Semester		Units
CSCI 101L	Fundamentals of Computer Programming	3
MATH 125	Calculus I	4
WRIT 140*	Writing and Critical Reasoning	4
General education VI*		4
		15
First Year, Second Semester		Units
CSCI 105	Object Oriented Programming	2
CSCI 107	Computers and Society	3
MATH 126	Calculus II	4
General education V		4
Foreign language I		4
		17
Second Year, First Semester		Units
CSCI 102L	Data Structures	4
EE 101	Introduction to Digital Logic	3
MATH 226	Calculus III	4
Foreign language II		4
Free elective		2

Second Year, Second Semester		Units
CSCI 201L	Principles of Software Development	4
CSCI 271	Discrete Methods in Computer Science	3
EE 201L	Introduction to Digital Circuits	2
MATH 225	Linear Algebra and Differential Equations	4
Foreign language III		4

17

Third Year, First Semester		Units
CSCI 303	Design and Analysis of Algorithms	3
EE 357	Basic Organization of Computer Systems	3
MATH 407	Probability Theory, or	4
EE 364	Introduction to Probability and Statistics for Electrical Engineering	3
Technical elective I		3
Basic science requirement I**		4

16-17

Third Year, Second Semester		Units
CSCI 377	Introduction to Software Engineering	3
EE 457x	Computer Systems Organization	3
General education IV		4
Technical elective II		3
Basic science requirement II **		4

17

Fourth Year, First Semester		Units
CSCI 402x	Operating Systems	3
General education I		4
Science elective***		4
Free elective		4

15

Fourth Year, Second Semester		Units
CSCI 477	Design and Construction of Large Software Systems	3
WRIT 340	Advanced Writing	3
General education II		4

Free elective 3

13

*Taken concurrently.

**Basic science requirement: PHYS 151L and PHYS 152L or CHEM 105aLbL or BISC 120L and BISC 220L.

***Any course in physics, biology or chemistry beyond the basic science requirement or in another scientific discipline. See department for approval.

Foreign Language Requirement

Three semesters of a single language and passing the skill level examination in that language or passing the skill level examination in a foreign language.

Technical Electives (two courses)

Applicable courses include: CSCI 351, CSCI 410, CSCI 445, CSCI 459, CSCI 460, CSCI 464, CSCI 480, CSCI 485, CSCI 490x, CSCI 499; EE 321, EE 450, EE 454L, EE 459L, EE 465, EE 477L, EE 490x, EE 499; MATH 458. Other courses may be applicable; please see an advisor for approval