

COMPUTER SCIENCE - ASSOCIATE IN SCIENCE

Plan Code: 2119

This degree prepares a student for an entry-level job in the computer software and hardware related fields by teaching them to apply the foundational skills and theory of Computer Science to a variety of problem domains, as well as a broad-based general education to prepare the students for global citizenship. This degree may help students succeed after transferring to a CSU or UC School Computer Science major program. Students wishing for a bachelor's degree (transfer program) should meet with a counselor to discuss the transferability of courses. Each CS course meets the California C-ID content standards for Computer Science.

Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Demonstrate a knowledge of common algorithms, their performance, and what applications to use them for.
- Create computer programs with object-oriented design principles, and demonstrate a solid understanding of the practice of programming.
- Articulate the basic structures of a processor and their relation to each other and performance, and demonstrate an understanding of assembly language.

Program Requirements

This degree requires the completion of General Education coursework plus the following:

Code Number	Course Title	Units
REQUIRED COURSES		
CS 11 or CS 21 or CS 31	Introduction to Computer Science-C++ Introduction to Computer Science-Java Introduction to Computer Science-Python	3
Subtotal Units		3
IN ADDITION, complete the following:		
CS 22	Data Structures and Algorithms	3
CS 51	Introduction to Computer Architecture	3
CS 61	Discrete Structures	3
MATH 60/60H	First Calculus Course	5
MATH 70/70H	Second Calculus Course	5
PHYS 3A	Physics for Sci. & Eng. - Mechanics	5.5
PHYS 3B	Physics for Sci. & Eng. - E & M	4.5
Subtotal Units		29
Required Subtotal		32
Complete one of the following: ¹		19-39
LBCC General Education (Plan A) (https://lbcc-public.courseleaf.com/academic-requirements/general-education-transfer-degree-certificate-requirements/general-education-plans/plan-a/)		
CSU GE Breadth (Plan B) (https://lbcc-public.courseleaf.com/academic-requirements/general-education-transfer-degree-certificate-requirements/general-education-plans/plan-b/)		

IGETC Pattern (Plan C) (<https://lbcc-public.courseleaf.com/academic-requirements/general-education-transfer-degree-certificate-requirements/general-education-plans/plan-c/>)

Electives (as needed to reach 60 degree-applicable units)²

Minimum Degree Total 60

¹ Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations.

² Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units.

