

COMPUTER SCIENCE, ASSOCIATE IN SCIENCE FOR TRANSFER (AS-T)

Overview

Computer science courses provide a combination of theoretical study and programming fundamentals. The core sequence covers object-oriented programming, data structures, discrete mathematics, and computer architecture. Specialized areas include mobile applications, software engineering, and data science.

The Associate in Science for Transfer degree in Computer Science provides students with the foundational knowledge necessary to make a successful transition into a Baccalaureate Degree at any of the CSU campuses. The Associate Degree for Transfer (AA-T or AS-T) is a special degree offered at California Community Colleges. Students who earn an AA-T or AS-T degree are guaranteed admission to a campus within the California State University (CSU) system in a similar major, although not necessarily to a specific campus. Students who complete an AA-T or AS-T are given priority consideration when applying to a particular program that is similar to the student's community college major and will be given a special GPA advantage when applying to CSU impacted campuses or majors. Students who are planning to pursue an AA-T or AS-T are strongly advised to meet with a counselor for additional information about this transfer program. Visit <https://adegreewithaguarantee.com/> for more information about these degrees.

Requirements

Associate Degree for Transfer Graduation Requirements

Complete all of the following:

1. All Major Requirements listed below with a "C" or better or "P" in each course.
2. Cal-GETC pattern (<https://catalog.sbccc.edu/transfer-curricula/#igetctext>).
3. At least 60 CSU transferable semester units.
4. Achieve a minimum GPA of 2.0 in all CSU transferable coursework.
5. A minimum of 12 units through SBCC.

Code	Title	Units
Major Requirements		
Required Core		
BIOL 103	Cell and Molecular Biology	5
CS 105	Programming Methodology	3
CS 106	Data Structures and Algorithms	3
CS 107	Computer Architecture and Organization	3
CS 108	Discrete Structures	4
MATH 150	Calculus with Analytic Geometry I	5
MATH 160	Calculus with Analytic Geometry II	5
PHYS 121	Mechanics Of Solids And Fluids	5
Total Units		33.00

Students are advised to consult the CSU ADT Major & Campus Search (<https://www.calstate.edu/apply/transfer/Pages/associate-degree->

[for-transfer-major-and-campus-search.aspx](https://www.calstate.edu/apply/transfer/Pages/associate-degree-for-transfer-major-and-campus-search.aspx)) database to determine which bachelor's degree programs offered by the CSU campuses are deemed similar to the AS-T in Computer Science. Students are also advised to consult ASSIST (www.assist.org) (<https://assist.org/>) and to meet with an academic counselor to discuss the best combination of courses to take for their AS-T to ensure they receive the admission benefits associated with it, and to meet the requirements of the transfer institution to which they are intending to transfer.

Learning Outcomes

1. Decompose problems into algorithms.
2. Create programs that use flow control and looping constructs (e.g. for and while).
3. Develop programs that use object-oriented concepts and standard data structures (e.g. queues and lists).
4. Describe computer architecture.
5. Deliver and test programs while using current programming environments.

Recommended Sequence

Make an appointment with your SBCC academic counselor through Starfish to create a Student Education Plan that reflects a recommended course sequence for this program that is tailored to your individual needs.

How to schedule an Academic Counseling appointment (<https://www.sbccc.edu/counselingcenter/counselingappointments.php>).