Academic Year

2022 - 2023

Associate in Science in Computer Science for Transfer (A.S.-T.)

Please visit your counselor to apply for certificates or degrees and for academic planning assistance.

A.A.-T./A.S.-T. Degree for Transfer Requirements

1. Completion of all major courses with a C grade or higher. Major courses may be used to satisfy GE requirements.
2. Completion of either the California State University General Education-Breadth pattern (CSU GE) or the Intersegmental General Education Transfer Curriculum (IGETC) pattern in full; students transferring to CSU using IGETC must complete Area 1C.
3. Completion of a minimum of 90 CSU-transferable quarter units with a minimum overall GPA of 2.0 in all CSU-transferable units.

Note: While a minimum 2.0 GPA is required for admission to CSU, many majors and campuses require a higher GPA. Please consult with a counselor or academic adviser.

Note: A minimum of 18 degree-applicable quarter units must be earned at De Anza College.

Associate in Science in Computer Science for Transfer

A.S.-T. Degree

The Computer Science major consists of courses appropriate for an Associate in Science in Computer Science for Transfer degree, which provides a foundational understanding of the discipline, a breadth of coursework in the discipline and preparation for transfer to any CSU that accepts the Transfer Model Curriculum (TMC). It is a starting point for students who are preparing for careers in software engineering, network administration and data base management, where scientific and technical skills are in great demand. It also provides a foundation for majors in physical science, math and engineering. The Associate in Science in Computer Science for Transfer is intended for students who plan to complete a bachelor's degree in Computer Science (or an approved similar major) at a CSU campus. Students completing this degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students transferring to a CSU campus that does accept this degree will be required to complete no more than 60 (semester) units after transfer to earn a bachelor's degree. This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system. In all cases, students should consult with a counselor for more information on university admission and transfer requirements.

Program Learning Outcomes: Upon completion, students will be able to

- Create, design, implement and debug solutions for computing systems of different levels of complexity using an object orientated language
- Create, design, implement and debug solutions for low-level systems using assembly language

1. Meet the A.A.-T./A.S.-T. degree for transfer requirements.
2. Complete the following.

Required Core:		**36.5**
CIS 21JA	Introduction to x86 Processor Assembly Language and Computer Architecture	4.5
MATH 1A	Calculus	5
or MATH 1AH	Calculus - HONORS	
MATH 1B	Calculus	5
or MATH 1BH	Calculus - HONORS	
MATH 1C	Calculus	5
or MATH 1CH	Calculus - HONORS	
MATH 22	Discrete Mathematics	5
or MATH 22H	Discrete Mathematics - HONORS	
PHYS 4A	Physics for Scientists and Engineers: Mechanics	6
PHYS 4B	Physics for Scientists and Engineers: Electricity and Magnetism	6

Required Core - Complete one option:		**9-13.5**
Option 1:		
CIS 22A	Beginning Programming Methodologies in C++ (4.5)	
CIS 22B	Intermediate Programming Methodologies in C++ (4.5)	
or CIS 22BH	Intermediate Programming Methodologies in C++ - HONORS (4.5)	
CIS 22C	Data Abstraction and Structures (4.5)	
or CIS 22CH	Data Abstraction and Structures - HONORS (4.5)	

Option 2:		
CIS 22C	Data Abstraction and Structures (4.5)	
or CIS 22CH	Data Abstraction and Structures - HONORS (4.5)	
CIS 35A	Java Programming (4.5)	

Major	*Computer Science for Transfer*	*45.5-50*
Transfer GE	*IGETC for CSU (51-62 units)*	
Electives	*CSU-transferrable elective courses required when the major units plus transfer GE units total is less than 90 units*	
	Total Units Required **90**	