

## AS-T Computer Science

Completion of the AS-T in computer science prepares students for transfer to a 4-yr institution to complete their Bachelor's degree in computer science or computer science engineering. This degree can be completed in either C<sup>+</sup> or JAVA programming languages. Students will need to determine which language is preferred by the transfer institution.

### Career Opportunities

Students completing this degree will be ready to transfer to a 4-yr institution to complete study in computer science. A basic knowledge of computer structure and programming adds to many jobs - both as a programmer, working with programmers and as a content expert developing programs for projects in that field.

### Program Learning Outcomes

Students completing this program will be able to:

1. Apply knowledge of math, science and computer science to identify, formulate, and solve computer science problems.
2. Communicate effectively and work well in situations that require teamwork.
3. Design and perform tests or experiments, analyze and interpret data, and prepare a report summarizing the results of the tests of experiments.
4. Develop a design or system given a set of requirements and specifications
5. Use techniques, skills, and modern engineering and computer tools necessary for engineering or computer science practice.

### AS-T Degree Requirements

#### Major: Core and Selective Requirements

Complete Core Courses, 30 units		Units
CIS 242	Computer Architecture and Assembly Language	3 units
CIS 250	Introduction to Object Oriented Programming: C++	3 units
<b>OR</b>		
CIS 284	Introduction to Object Oriented Programming- Java	3 units
CIS 252	Introduction to Data Structures - C++	3 units
<b>OR</b>		
CIS 286	Introduction to Data Structures - Java	3 units

CIS 262	Discrete Mathematics for Computer Science	3 units
MATH 251	Analytical Geometry and Calculus I	5 units
MATH 252	Analytical Geometry and Calculus II	5 units
PHYS 250	Physics with Calculus I	4 units
PHYS 260	Physics with Calculus II	4 units

**General Education** - certified completion of one of the following:

- California State University General Education-Breadth pattern (CSU GE Breadth),
- **OR**
- Intersegmental General Education Transfer Curriculum (IGETC/CSU) pattern

**Elective courses:** If applicable, additional courses to meet the minimum 60 CSU transferable units requirement.

*Please refer to Associate Degree for Transfer (ADT) Requirements for more information.*

