A.S.-T. DEGREE:
COMPUTER SCIENCE

This program is designed to prepare students who wish to transfer to a CSU and major in Computer Science. This program will provide students with an alignment of courses required for transfer and a cohesive group of courses in the area of Computer Science. Courses such as programming, discrete structures, computer architecture and organization will enable the student to demonstrate ability to engage in critical thinking and problem-solving in the application of computer science principles. The Associate in Science in Computer Science for Transfer Degree includes curriculum which focuses on practical application of problem solving skills and theory.

Students who complete the degree will be able to demonstrate competence in the application of computer science. The Associate in Science in Computer Science for Transfer is intended for students who plan to complete a bachelor's degree in Computer Science 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 units after transfer to earn a bachelor's degree. Potential careers in the Computer Science field include Computer Programmers, Computer Science Teachers, Software and Web Developers, and Computer and Information Systems Managers.

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 REQUIREMENTS

To receive an Associate of Science for Transfer Degree in Computer Science, the student must complete the requirements detailed in the Associate Degree for Transfer Pathway. All courses must be completed with a C or better or "P" (Pass).

THE FOLLOWING IS REQUIRED FOR THE ASSOCIATE IN SCIENCE IN COMPUTER SCIENCE FOR TRANSFER (AS-T IN COMPUTER SCIENCE) DEGREE:

1. Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
   (A) The California State University-General Education-Breadth pattern (CSU GE Breadth); OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern.
   (B) A minimum of 18 semester or 27 quarter units in the major or area of emphasis as determined by the community college district.

2. Obtainment of a minimum grade point average of 2.0. All courses within the ADTs also require that students must earn a C or better or a "P" (Pass) in all courses required for the major or area of emphasis.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. Describe the organizational structure of computer hardware and its connection to computer software.
2. Describe how formal tools of symbolic logic and discrete structures are used to model real-life situations and relate the ideas of computational induction to recursion and recursively defined structures.
3. Design, implement, test, and debug algorithms to solve a variety of problems.
4. Design, implement, test, and debug computer programs using fundamental constructs and a variety of data structures.
5. Apply structured and object-oriented approaches to the design and implementation of computer programs.

REQUIRED CORE

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<tr>
<th>Course</th>
<th>Units</th>
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<tr>
<td>CSCI 204</td>
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TOTAL UNITS REQUIRED IN A.S.-T MAJOR ................................. 28

TOTAL UNITS THAT MAY BE DOUBLE-COUNTED............................... 7

GENERAL EDUCATION (CSU-GE or IGETC) UNITS .......................... 37-39

ELECTIVE (CSU TRANSFERABLE) UNITS ..................................... 2

TOTAL UNITS REQUIRED FOR A.S.-T DEGREE ............................. 60

Note: Double counting courses in GE and the major is permissible. MJC Guidance and Activities requirements are not required for this degree.