COMPUTER SCIENCE FOR TRANSFER DEGREE (AS-T)

The Associate in Science in Computer Science for Transfer (AS-T) degree will fulfill the mission of both Grossmont College and the community college system by providing a specific group of baccalaureate-level courses that will meet lower division degree requirements in the discipline and allow for seamless transfer to a California State University to complete a baccalaureate degree in a TMC (Transfer Model Curriculum) discipline or similar major.

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree / certificate requirements in this program. Students will:

1. Define and apply current Software Engineering design patterns, algorithms, and data structures to produce efficient, well-engineered software applications.
2. Apply problem-solving skills and the knowledge of computer science to solve real-world problems.
3. Define and demonstrate the concept of object oriented programming and object oriented design.

The Associate in Science in Computer Science for Transfer (AS-T.) degree is designed to facilitate transfer to a California State University in keeping with SB 1440. A total of 33 units are required to fulfill the major portion of this degree. Students must also complete the Intersegmental General Education Transfer Curriculum (IGETC) (see the "General Education Requirements and Transfer Information" section of the catalog). Students should speak with a counselor to verify that the requirements for this degree have been met. In addition, students planning to transfer to San Diego State University should consult with a counselor.

The following requirements must be met to be awarded an Associate in Science in Computer Science for Transfer (AS-T) 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 Intersegmental General Education Transfer Curriculum (IGETC).
   b. A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
2. Obtainment of a minimum grade point average of 2.0. Students are also required to earn a "C" grade or higher or "Pass" in all courses required for the major.

Most careers in computer science require a bachelor's degree, and some require a graduate-level degree. The coursework for this associate degree prepares students who plan to transfer and major in computer science with the lower-division computer programming and mathematics coursework required by most colleges and universities. It is designed to provide a strong foundation in programming methodology and skills, and computer organization. Additionally, students gain the necessary theoretical and practical knowledge necessary to work in a variety of computer related fields such as Software Engineering, Computer Engineering, Computer Systems Analysis, Network Engineering, Cloud Computing, Mobile Application Development, Computer Support, Computer Information Systems, Database Administration, Network Security, and Web Development.

Associate in Science in Computer Science for Transfer Degree

Note: All courses must be completed with a letter grade of "C" or higher or "Pass."

Code	Title	Units
Required Core		
BIO-230	Principles of Cellular, Molecular and Evolutionary Biology	4
CSIS-165	Assembly Language and Machine Architecture	4
CSIS-240	Discrete Structures	3
CSIS-293	Introduction to Java Programming	4
CSIS-294	Intermediate Java Programming and Fundamental Data Structures	4
MATH-180	Analytic Geometry and Calculus I	5
MATH-280	Analytic Geometry and Calculus II	4
PHYC-201	Mechanics and Waves	5
Units for the major		**33**
Plus General Education Requirements (CSU GE or IGETC) (https://catalog.gcccd.edu/grossmont/admission-information/general-education-transfer/)		37-39
Total Units		**60**

Students completing IGETC may be awarded the degree, but they must complete a course from Area 1C: Oral Communication to meet CSU admission requirements.