COMPUTER SCIENCE FOR TRANSFER (AST.CS)

ASSOCIATE IN SCIENCE FOR TRANSFER

Program Outcomes: Upon successful completion of this program a student will be able to:

- demonstrate the ability to communicate effectively with technical and non-technical colleagues through presentations and reports, and work effectively on a team project.
- design and construct significant computer application(s) using current programming languages and operating systems.
- describe the organization and operation of a computer architecture with respect to numerical representations and computations, digital logic, and computer components.
- demonstrate the ability to evaluate algorithms, select from a range of possible options, provide justification for that selection, and implement the algorithm using an appropriate programming language and context.
- demonstrate the ability to solve discrete mathematical problems, describe and apply discrete structures and logic principles, perform run-time analysis on algorithms and prove algorithm correctness.

Required Major Courses (33 units)

CSS-2A – Object Oriented Programming	4.0
CSS-2B – Data Structures and Algorithms	4.0
CSS-3 – Computer Architecture and Assembly	4.0
CSS-7 – Discrete Structures	4.0
MAT-3A – Analytic Geometry and Calculus I	4.0
MAT-3B – Analytic Geometry and Calculus II	4.0
PHY-4A – General Physics I/Mechanics	4.0
BIO-1 – Fundamental Biological Concepts	5.0

SUBTOTAL: 33 UNITS

General Education – Required Courses

Students must complete the following General Education Plans:

IGETC (see page 72)

37 units

Students can double-count required courses and courses for General Education

■ Electives (Courses Numbered 1-99) required when degree units plus GE units total fewer than 60.

TOTAL: 60 UNITS



In order to earn this degree, students must complete the Associate Degree for Transfer Requirements:

- 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) or the
 California State
 University GE –
 Breadth
 Requirements (CSU
 GE-Breadth).
 - 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

ADTs include (AA-T) and (AS-T) degrees. The law authorizing these degrees also requires that students must earn a "C" or better in all courses required for the major or area of emphasis. A "P" (Pass) grade is also an acceptable grade for courses in the major if the course is taken on a Pass/No Pass basis.