

COMPUTER SCIENCE FOR TRANSFER

PROGRAM

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

DESCRIPTION

The Computer Science and Information Systems program offers courses that are intended to create interests and enrichment through the study of computer science fundamentals, programming concepts, and hardware. The major courses provide a strong well-rounded background in computer science for students transferring to four-year institutions who are interested in careers such as software developers, software engineers, researchers and teachers.

LEADS TO CAREER OPPORTUNITIES SUCH AS:

- Administrator
- Computer Science Teacher
- Network and Computer Systems
- Programmer Analyst
- Software Developer
- Web Developer



**HARTNELL
COLLEGE**

TRANSFER PREPARATION

Courses that fulfill major requirements for an associate degree may differ from those needed to prepare for transfer. Students who plan to transfer to a four-year college or university should schedule an appointment with a Hartnell College counselor to develop a student education plan before beginning their program.

TRANSFER RESOURCES

www.ASSIST.org – CSU and UC Articulation Agreements and Major Search Engine

CSU System Information -
<http://www2.calstate.edu>

FINANCIAL AID

Paying for the cost of a college education requires a partnership among parents, students and the college. As the cost of higher education continues to rise we want you to know that Hartnell College offers a full array of financial aid programs, federal loan programs, and fee waivers.

<https://www.hartnell.edu/students/fa/net-price-calculator.html>

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)

<input type="checkbox"/>	CSS-2A – Object Oriented Programming	4.0
<input type="checkbox"/>	CSS-2B – Data Structures and Algorithms	4.0
<input type="checkbox"/>	CSS-3 – Computer Architecture and Assembly	4.0
<input type="checkbox"/>	CSS-7 – Discrete Structures	4.0
<input type="checkbox"/>	MAT-3A – Analytic Geometry and Calculus I	4.0
<input type="checkbox"/>	MAT-3B – Analytic Geometry and Calculus II	4.0
<input type="checkbox"/>	PHY-4A – General Physics I/Mechanics	4.0
<input type="checkbox"/>	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 74)

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



**A Degree With A
Guarantee.comSM**
*Associate Degree
for Transfer*

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

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) 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.