

# COMPUTER SCIENCE (AS-T)

## ASSOCIATE IN SCIENCE FOR TRANSFER (AS-T)

Upon successful completion of the Associate in Science in Computer Science Transfer degree, students will be able to:

- apply structured and object-oriented approaches to the design and implementation of software systems
- use data structures and algorithms to solve a variety of problems
- design, implement, test, and debug computer programs using a structured language, a low-level language, or an object-oriented language.

This degree is for seamless transfer to CSU.

## Program Student Learning Outcomes

- Student apply principles of physics to solve a variety of programming problems.
- Students describe the role of assembly language programming to modern programming.
- Students distinguish between various programming paradigms.
- Students explain the fundamentals of programming computers.
- Students recognize the organization of the motherboard and its components.
- Students use high level mathematics to develop programming solutions.

## Program Requirements

Code Number	Course Title	Units
<b>Required Core</b>		
CIS 183	Java Programming	3.5
CIS 292	Data Structures	3.0
CIS 231	Computer Organization and Assembly Language Programming	3.5
CIS 185	Discrete Structures	3.0
MATH 170	Analytic Geometry and Calculus I	4.0
MATH 190	Analytic Geometry and Calculus II	4.0
PHYS 201	Engineering Physics	4.0
PHYS 202	Engineering Physics	4.0
<b>Total Units</b>		<b>29</b>

## ASSOCIATE IN SCIENCE FOR TRANSFER DEGREE REQUIREMENTS

- Completion of 60 semester units or 90 quarter units of degree-applicable courses,
- Minimum overall grade point average of 2.0,
- Minimum grade of "C" (or "P") for each course in the major, and
- Completion of IGETC and/or CSU GE-Breadth.