

COMPUTER AND INFORMATION SCIENCES: COMPUTER SCIENCE (A.S.)

ASSOCIATE OF SCIENCE

The computer science program provides basic knowledge and skills, with an emphasis on building both a theoretical framework for computer science and providing practical skills needed to apply computer science to other fields of study. The program offers a curriculum emphasizing analytical thinking, problem solving, and effective communication.

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
Major Requirements		
CIS 180	Programming in C/C++	3.5
CIS 280X	Object-Oriented Programming in C++	3.5
MATH 170	Analytic Geometry and Calculus I	4.0
MATH 190	Analytic Geometry and Calculus II	4.0
PHYS 201	Engineering Physics	4.0
Total Units		19

ASSOCIATE OF SCIENCE DEGREE REQUIREMENTS

Complete 60 units to include (1) the above required courses, (2) Complete the General Education requirements and electives to achieve a minimum of 60 units.