

Associate in Science Degree: Computer Science

The Computer Science program is designed to address problems in organizing, representing, manipulating, and presenting information in an automatic processing environment. Computerized information systems are being developed and used in almost every field where information must be processed. The goal of the Computer Science program is to provide understanding of the functions of the modern computer and operational skills in programming. The following list is a sample of the many career options available for the computer science major. While a few require an associate degree, most require baccalaureate degrees and some require a graduate degree: programmer, computer hardware specialist, data base specialist, computer operator, systems analyst, programmer analyst, software engineer, and instructor.

Degree Student Learning Outcome:

Students will be able to identify, evaluate, analyze, and present fundamental software solutions and their applications.

Program Requirements:

Units Required: 37 - 38

	Units:
CMPSCI-111 Introduction to Algorithms and Programming/Java	3.0
CMPSCI-111L Introduction to Algorithms and Programming Lab	1.0
CMPSCI-122 Computer Architecture and Assembly Language	3.0
CMPSCI-182 Data Structures and Program Design	3.0
CMPSCI-182L Data Structures and Program Design Lab	1.0
CMPSCI-235 'C' Programming	3.0
CMPSCI-282 Advanced Data Structures	3.0

Plus six units from the following:

CMPSCI-132 Introduction to Programming	3.0
CMPSCI-190 Web Programming: JavaScript	3.0
CMPSCI-192 PHP Programming	3.0
CMPSCI-222 Computer Organization	3.0
CMPSCI-236 C++ Object Oriented Programming	3.0
PHILOS-230 Symbolic Logic	3.0

Plus fourteen to fifteen units from the following (for Transfer students)

MATH-211 Calculus I	5.0
OR	
MATH-211X Calculus I with Support	6.0
MATH-212 Calculus II	5.0
MATH-214 Linear Algebra	4.0

OR

Plus 14 units from the following (for Non-Transfer students)

MATH-211 Calculus I	5.0
AND	

Nine additional units from the above CMPSCI courses that have not already been taken