

Business and Computing Division

COMPUTER PROGRAMMING

CERTIFICATE OF ACHIEVEMENT

This certificate is designed to provide the student with comprehensive grounding in the theory and practice of modern computer programming. Based on the recommendations of the Association of Computing Machinery, the Computer Programming Certificate prepares students to work as entry-level programmers. Students should not expect that they will necessarily meet the lower division requirements at specific colleges or universities. Students should consult the Transfer Information section of this catalog for specific transfer information.

Program Outcomes

Based on the recommendations of the Association for Computing Machinery, The Computer Programming Certificate prepares students to work as entry-level programmers, or used to fulfill some of the requirements for transfer to a Computer Science program at a four-year university.

Required Courses

Course	Course Number	Units
C++ Programming 1	CS A150	4
Java Programming 1	CS A170	4
Data Structures	CS A200	4
Computer Architecture	CS A216	4
Software Engineering	CS A220	4
C++ Programming 2	CS A250	4
Boolean Algebra & Logic	CS A257	3
Discrete Structures	CS A262	3
Calculus 1 Honors	MATH A180H	4
Or		
Calculus 1 and 2 Honors	MATH A182H	5
Or		
Calculus 2	MATH A185	4
	Total Units:	34-35

ASSOCIATE IN SCIENCE DEGREE

Complete the Computer Programming Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.