

COMPUTER SCIENCE, CERTIFICATE OF ACHIEVEMENT

Banner Code: 1_CN_CSPR

Control Number: 22387

Financial Aid Eligible

This certificate is designed to provide the student with a comprehensive grounding in the theory and practice of modern computer programming. Based on the recommendations of the Association of Computing Machinery, the Computer Science Certificate prepares students to work as entry-level programmers. Courses in this program may or may not qualify for transfer credit at four-year colleges or universities. Students should review the transfer information section of this catalog and consult with a counselor to obtain specific information and guidance about transfer requirements and course applicability at specific colleges and universities.

Program Outcome

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.

Review Certificate Requirements (<https://catalog.cccd.edu/orange-coast/graduation-requirements/certificates/#achievementtext>).

Course	Title	Units
Required Courses		
CS A131	Python Programming I	3-4
or CS A100	Survey of Computer Science and Programming	
or CS A122	Programming Concepts and Methodology 1	
or CS A170	Java Programming 1	
CS A150	C++ Programming Language 1	4
CS A250	C++ Programming Language 2	4
CS A200	Data Structures	3-4
or CS A262	Discrete Structures	
<i>Select one of the following:</i>		5
MATH A180/ A180H	Calculus 1	
MATH A182H	Calculus 1 and 2 Honors	
MATH A185/ A185H	Calculus 2	
Total Units		19-21

Program Sequence

These sequences at Orange Coast College are curriculum maps for students to finish all requirements for the certificate. There may be advisories, prerequisites, or time requirements that students need to consider before following these maps. **Students are advised to meet with an Orange Coast College Counselor for alternate sequencing.**

Course	Title	Units
Year 1		
Semester 1		
CS A131	Python Programming I	3-4
or CS A100	or Survey of Computer Science and Programming	
or CS A122	or Programming Concepts and Methodology 1	
or CS A170	or Java Programming 1	
Units		3-4
Semester 2		
CS A150	C++ Programming Language 1	4
MATH RESTRICTED ELECTIVE- CHOOSE ONE		5
MATH A180	Calculus 1	
or	or Calculus 1 Honors	
MATH A180H		
MATH A182H	Calculus 1 and 2 Honors	
MATH A185	Calculus 2	
or	or Calculus 2 Honors	
MATH A185H		
Units		9
Year 2		
Semester 1		
CS A250	C++ Programming Language 2	4
Units		4
Semester 2		
CS A200	Data Structures	3-4
or CS A262	or Discrete Structures	
Units		3-4
Total Units		19-21