

## C++ Programming 13 unit certificate

The C++ Programming certificate covers structured and object-oriented programming using C++ for business, gaming, mathematical and scientific applications.

### Required Courses

**CIS/CSC-5 Programming Concepts and Methodology I: C++ (4 units)\* (Must be completed first)**

Advisory: CIS-1A

Intro to the fundamentals of problem definition, algorithm development and structured programming logic for business, science and mathematical applications.

**CIS/CSC-17A Programming Concepts and Methodology II: C++ (3 units)\***

Pre-requisite: CIS/CSC-5

A comprehensive study of the syntax and semantics of the C++ language and methodology of object-oriented program development.

**CIS-17B C++ Programming: Advanced Objects (3 units)\***

Advisory: Take CIS/CSC-17A before CIS/CSC-17B and

CIS/CSC-17C

Advanced C++ Programming course for students familiar with object-oriented programming and utilization of basic graphical interface techniques.

**CIS-17C C++ Programming: Data Structure (3 units)\***

Advisory: Take CIS/CSC-17A before CIS/CSC-17B and

CIS/CSC-17C

A thorough presentation of the essential principles and practices of data structures using the C++ programming language.

\*This class transfers toward one or more CSUSB or CalPoly majors. Visit [www.assist.org](http://www.assist.org) or the Counseling office for details.

## C++ Programming

Tuition \$46/unit • Duration of Study: 8 months

A Certificate in C++ Programming will be awarded upon completion of the required courses (13 units). Please refer to the Norco College Catalog or visit the Counseling Center.

### Job & Wage Information

- Computer Programmer  
Wage Range\*: \$32.85-52.69  
8% decrease in employment expected in CA 2019-2029; 1,330 openings annually  
More info:  
<http://bit.ly/CompProgrammerNC>
- Software Developer  
Wage Range\*: \$35.34-62.01  
29% increase in employment expected in CA 2019-2029; 13,530 openings annually  
More info:  
<http://bit.ly/SoftwareDeveloperNC>

\*2020, Riverside/Ontario/San Bernardino Metro Area

### What type of interests might be a good fit for this career choice?



### Investigative

People who like to observe, learn, investigate, analyze, evaluate, or solve problems primarily of a scientific or mathematical nature.

For more information on careers that fit this category of interests, visit the Career Center in the Center for Student Success.

### What's Your School?



Visit [www.norcollege.edu/STEM](http://www.norcollege.edu/STEM) for more information about this program.