

## Computer Programming 26.5 unit certificate • 60 unit degree

The Computer Programming certificate focuses on writing and implementation of computer programs, and procedures of software design and computer programming.

### Required Courses (to earn certificate)

#### **CIS-1A Intro to Computer Information Systems (3 units)\***

Introduction to computer concepts, theory and application.

#### **CIS/CSC-2 Fundamentals of Systems Analysis (3 units)\***

Structured analysis of user requirements related to information systems, for eventual design/development of the system.

#### **CIS/CSC-5 Programming Concepts & Methodology I: C++ (4 units)\***

*Advisory: CIS-1A*

Fundamentals of problem definition, algorithm development and structured programming, logic for business, science and mathematical applications.

#### **CIS-21 Intro to Operating Systems (3 units)\***

*Prerequisite: CIS-1A*

Intro to operating system concepts, structure, performance, function and management.

#### **CIS-72A Intro to Web Page Creation (1.5 units)\***

*Advisory: Competency in the use of a computer, familiarity with the internet; CIS/CAT-95A*

Intro to web page creation using Hypertext Markup Language (HTML).

Plus, an additional 12 units of programming electives from these groups:

Choose 6 units from group one and 6 units from group two:

**Group one:** CIS/CSC-12\*, CIS/CSC-14A\*, CIS-14B, CIS/CSC-17A\*, CIS/CSC-18A\*

**Group two:** CIS/CSC-11\*, CIS-17B\*, CIS-17C\*, CIS-18B\*, CIS-18C\*

*Some of these courses may have prerequisites or advisories. Refer to College Catalog for more information.*

*\*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.*

## Computer Programming

Tuition \$1,219 • Duration of Study: 16 months

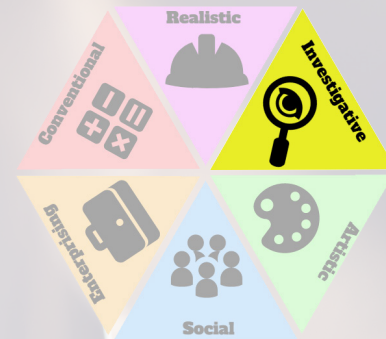
An Associate of Science Degree in Computer Programming will be awarded upon completion of the required courses (26.5 units) plus the General Education requirements. Please refer to the Norco College Catalog or visit the Counseling Center.

### Job & Wage Information

- Computer Programmer  
Wage Range\*: \$24.67-51.31  
5% decrease in employment expected in CA 2016-2026; 2,270 openings annually  
More info:  
<http://bit.ly/CompProgrammerNC>
- Software Developer, Applications  
Wage Range\*: \$25.64-69.47  
40% increase in employment expected in CA 2016-2026; 15,500 openings annually  
More info:  
<http://bit.ly/SoftwareDeveloperNC>

\*2018, 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?

NORCO COLLEGE  
SCHOOL OF  
Science, Technology,  
Engineering & Mathematics

Visit [www.norcollege.edu/STEM](http://www.norcollege.edu/STEM)  
for more information about this program.  
View gainful employment information at:  
[www.norcollege.edu/academicaffairs/cte](http://www.norcollege.edu/academicaffairs/cte)