

# COMPUTER PROGRAMMING CERTIFICATE

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Programming is an essential skill for solving problems in many fields. Programming gives maximum flexibility in processing and understanding data, constructing computational models, and building user friendly applications. Programming skills are in high demand in the marketplace. Completing this certificate could be the first step towards a career that involves software development.

Students will apply object-oriented principles to develop software systems. Students will learn to apply and program data structures like lists, trees, and hash tables. The elective course allows the student to learn about software engineering, web programming, mobile device programming, or user interface design.

## Post-Secondary Certificate - Computer Programming

### Summary

Code	Title	Hours
Required Courses		13
<b>Total Hours</b>		<b>13</b>

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Degree Specific Credits: 13

Required Cumulative GPA: 2.0

### Required Courses

**Note:** A placement examination exempts some students from taking CSCI 150. Those students take a CSCI course of 200 level or higher instead. CSCI 215E and CSCI 315E are writing classes and cannot be applied toward this certification.

Code	Title	Hours
<b>Complete all of the following courses:</b>		
CSCI 150	Introduction to Computer Science	3
CSCI 151	Interdisciplinary Computer Science I	3
CSCI 152	Interdisciplinary Computer Science II	3
CSCI 232	Intermediate Data Structures and Algorithms	4
<b>Total Hours</b>		<b>13</b>

Minimum Required Grade: C-