

Computer Information Systems-Software Developer Certificate

The Computer Information Systems - Software Developer Certificate provides a foundation in skills needed to analyze business problems and develop software solutions using current industry standard development tools. The certificate provides an academic credential reflecting enhanced job skills for those seeking advancement in their information services career or for individuals with a prior degree in another discipline seeking a career change.

Suggested/Sample Course Sequence

The sequence taken by the student may vary depending on prerequisites, course availability, and personal/ professional responsibilities.

(Major Code 5180; State CIP Code 11.0201)

First Semester

| | | |
|-------------|------------------------------------|---|
| CS 134 | Programming Fundamentals | 4 |
| or CIS 142 | Beginning Programming using Python | |
| WEB 110 | HTML and CSS | 3 |
| Total Hours | | 7 |

Second Semester

| | | |
|-----------|--|---|
| CIS 204 | UNIX Scripting and Utilities* | 3 |
| CS 200 | Concepts of Programming Algorithms Using C++* | 4 |
| or CS 201 | Concepts of Programming Algorithms using C#* | |
| or CS 205 | Concepts of Programming Algorithms using Java* | |

Note: Transfer students should take the language that transfers to their chosen school. Java or C# is recommended for most career students. C++ is recommended for embedded systems and Java for mobile development.

| | | |
|-------------|------------------------------|---|
| WEB 114 | Web Scripting: JavaScript I* | 2 |
| Total Hours | | 9 |

Third Semester

| | | |
|------------|---|---|
| CIS 242 | Introduction to System Design and Analysis* | 3 |
| CIS 260 | Database Management* | 4 |
| CIS 275 | Web-Enabled Database Programming* | 4 |
| CS 235 | Object-Oriented Programming Using C++* | 4 |
| or CS 236 | Object-Oriented Programming Using C#* | |
| or CIS 240 | Advanced Topics in Java* | |

| | | |
|-------------|--|----|
| Total Hours | | 15 |
|-------------|--|----|

Total Program Hours: 31