

Microcomputer Programmer Analyst Certificate

The Microcomputer Programmer/Analyst 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 5030; State CIP Code 11.0201)

- Gainful Employment - Microcomputer Program Analyst (<http://www.jccc.edu/computing-sciences-and-information-technology/ge-voc-microprg.html>)
- Computing Sciences and Information Technology (<http://www.jccc.edu/computing-sciences-and-information-technology>)

Prerequisite for Required Courses

Note: Prior to beginning the program, the student must take the following prerequisite, or have taken an equivalent transfer course, or have passed the waiver test (if applicable), or have obtained a waiver from the department.

CS 134	Programming Fundamentals	4
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First Semester

CS 200	Concepts of Programming Algorithms Using C++* (NOTE: CS 200 students must take either CS 250 or CIS 235. CS 205 students must take CS 255)	4
or CS 205	Concepts of Programming Algorithms using Java*	
CS 210	Discrete Structures I*	3
CIS 162	Database Programming*	4
Total Hours		11

Second Semester

CIS 235	Object-Oriented Programming Using C++*	4
or CIS 240	Advanced Topics in Java*	
CIS 242	Introduction to System Design and Analysis*	3
CIS 204	UNIX Scripting and Utilities*	3
Total Hours		10

Third Semester

CS 250	Basic Data Structures using C++*	4
or CS 255	Basic Data Structures using Java*	
CIS 275	Web-Enabled Database Programming*	4
CIS 260	Database Management*	4
Total Hours		12

Total Program Hours: 33