



# Program Planning Guide

## Coding & Programming Certificate, C25590P

**Program Length:** 2 semesters

**Program Sites:** Lee Main Campus, Day (some courses available in evening)

**Career Pathway Options:** Associate in Applied Science Degree in Information Technology-Business Systems and Operation Support; Diploma in Information Technology, Business Systems and Operation Support; Certificate in Coding and Programming Certificate

Suggested Course Schedule		Class	Lab	Work	Credits	Notes:
<b>1st Semester (fall)</b>						
CSC 134	C++ Programming	2	3	0	3	
CTI 110	Web, Pgm, and Db Foundation	2	2	0	3	
CIS 115	Intro to Programming & Logic	2	2	0	3	
<b>Total Semester Hours</b>		<b>6</b>	<b>7</b>	<b>0</b>	<b>9</b>	
<b>2nd Semester (spring)</b>						
CSC 151	JAVA Programming	2	3	0	3	
WEB 115	Web Markup and Scripting	2	3	0	3	
DBA 120	Database Programming I	2	2	0	3	
<b>Total Semester Hours</b>		<b>6</b>	<b>8</b>	<b>0</b>	<b>9</b>	
<b>Total Semester Hours Required to Graduate: 18</b>						



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## Course Descriptions

**CSC 134      C++ Programming**

This course introduces computer programming using the C++ programming language with object-oriented programming principles. Emphasis is placed on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger. Upon completion, students should be able to design, code, test and debug at a beginning level. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.

**CSC 151      JAVA Programming**

This course introduces computer programming using the JAVA programming language with object-oriented programming principles. Emphasis is placed on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger. Upon completion students should be able to design, code, test, debug JAVA language programs. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.

**CTI 110      Web, Pgm, & Db Foundation**

This course covers the introduction of the tools and resources available to students in programming, mark-up language and services on the Internet. Topics include standard mark-up language Internet services, creating web pages, using search engines, file transfer programs; and database design and creation with DBMS products. Upon completion students should be able to demonstrate knowledge of programming tools, deploy a web-site with mark-up tools, and create a simple database table.

**DBA 120      Database Programming I**

This course is designed to develop SQL programming proficiency. Emphasis is placed on data definition, data manipulation, and data control statements as well as on report generation. Upon completion, students should be able to write programs that create, update, and produce reports.

**WEB 115      Web Markup and Scripting**

This course introduces Worldwide Web Consortium (W3C) Internet programming using JavaScript. Topics include basic syntax, object-oriented programming, functions, variables, events, arrays, validation, accessibility, and web standards. Upon completion, students should be able to write, debug, maintain well-formed and well documented interactive web content using JavaScript code.