

Program Planning Guide Programming Certificate (C25590P)

Program Length: 2 semesters

Career Pathway Options: Information Technology Associate in Applied Science Program Site/s: Lee Main Campus - Day (Limited Night Availability)

Suggested Course Schedule:		Hours				
		Class	Lab Clinical	Clinical	Credit	Notes:
1st Semester	(Fall)					
CSC-134	C++ Programming	2	3	0	3	
CTI-110	Web, Pgm, and Db Foundation	2	2	0	3	
					6	
2nd Semeste	r (Spring)					
CIS-115	Intro to Programming & Logic	2	3	0	3	
CSC-151	JAVA Programming	2	3	0	3	
					6	

Total semester hours required for graduation: 12

Course Descriptions:

CIS 115 Introduction to Programming and Logic 2-3-3

Prerequisites: Take One Set: Set 1: DMA-010, DMA-020, DMA-030, and DMA-040; Set 2: DMA-025 & DMA-040; Set 3: MAT 121, Set 4: MAT-171; Set 5: MAT-003

This course introduces computer programming and problem solving in a structured program logic environment. Topics include language syntax, data types, program organization, problem solving methods, algorithm design, and logic control structures. Upon completion, students should be able to manage files with operating system commands, use top-down algorithm design, and implement algorithmic solutions in a programming language. This course has been approved for transfer under the CAA and ICAA as a general education course in Mathematics.

CSC 134 C++ Programming 2-3-3

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 2-3-3

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, Programming & Database Foundation 2-2-3

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.