

GENERAL PROGRAMMER CERTIFICATE

11 Semester Credit Hours; Curriculum: 0118

This certificate allows the student to select programming courses needed to attain their professional or personal computer programming goals. It is intended for the individual who has a strong computer background and would like a credential showing current programming knowledge. This certificate can be completed in one semester.

Code	Title	Hours
Courses for a Certificate		
Select a minimum of 11 credit hours in courses from the following list or from courses approved by the program coordinator:		11
CIS 171	Advanced Web Page Development	
CIS 180	Introduction to Visual Basic .NET Programming	
CIS 188	Active Server Pages	
CIS 208	Visual Basic for Applications	
CIS 209	Database Programming for PCs	
CIS 210	Visual Basic .NET Programming for Files and Databases	
CIS 211	Java Programming	
CIS 213	Advanced Topics in Visual Basic .NET Programming	
CIS 215	Assembly Language For The Microcomputer	
CIS 220	Introduction to C Programming	
CIS 222	Java Programming Using Files and Databases	
CIS 227	C# Programming	
CIS 231	Advanced Java Programming	
CIS 232	Web Scripting	
CIS 248	Web Database Management	
CIS 257	Apps Programming for Apple Mobile Devices	
CIS 258	Apps Programming for Android Mobile Devices	
CIS 267	Advanced Apps Programming Using Apple Mobile Devices	
CIS 268	Advanced Apps Programming for Android Mobile Devices	
CSC 240 or CSC 241	C++ Data Structures Java Data Structures	
CSC 255	Objects and Algorithms	
Total Hours		11

Program Learning Outcomes

1. Write computer programs that use programming concepts (e.g. variables, arrays, menus) and programming structures (e.g. loops, conditions) to solve a variety of business applications.
2. Demonstrate their ability to use effective team work skills.
3. Discuss the ethical and societal concerns regarding computer technology.
4. Demonstrate appropriate workplace behaviors in the classroom environment.