COMPUTER INFORMATION SYSTEMS: COMPUTER PROGRAMMING CERTIFICATE

Program code: CISP-CC

Location: Capital, Gateway, Housatonic, Middlesex, Naugatuck Valley, Northwestern, Tunxis

Program Description

The Computer Programming certificate educates students in the areas of programming and systems design. Courses are designed to educate students for positions in the industry and provide a solid foundation for continuation in our two-year associate degree in Computer Information Systems Technology.

Learning Outcomes

1. Demonstrate the use of objects in application programs.
2. Define and implement efficient object-oriented solutions using C++, JAVA, and Visual Basic, Python, or others.
3. Write, compile, and execute programs using a programming language.
4. Create applications using object-oriented features.
5. Use inheritance and interfaces to create robust, reusable, programming code.
6. Demonstrate a basic understanding of relational database concepts.
7. Preparedness to advance one's career, or move on to more advanced study in MIS, CIS, or related fields.

Certificate Requirements

CSC 1201 Introduction to Programming *and* CSC 2213 Object Oriented Programming *are not allowed in this program. Students are encouraged to take* CSC 1211 Java I *or other programming language.*

Code	Title	Credits
Required Courses		
CIS 1001	Introduction to Computers	3
or CIS 1141	Introduction to Management Information Systems	
Choose one of the following:		3
CSC 1211	Java I	
CSC 1205	Visual Basic	
CSC 1203	Python Fundamentals	
CSC 2235	Introduction to Database Design	3
Choose three of the following directed electives:		9-10
CSC 2274	Client-Side Web Development	
CSC 2251	Mobile Device Programming	
CSC 2252	Programming Mobile Devices I	
CSC 1203	Python Fundamentals	
CSC 1205	Visual Basic	
CSC 1211	Java I	
CSC 2212	Java II	
CSC 2214	C++ Programming	
or CIS 2144	Systems Analysis and Design	
Total Credits		**18-19**

Students may earn only one Associate degree in this discipline, but can earn additional certificates.

- Computer Information Systems: Cloud Computing Certificate
- Computer Information Systems: Computer Networking Certificate
- Computer Information Systems: Generalist, AS
- Computer Information Systems: IT Support Certificate
- Computer Information Systems: IT Support, AS
- Computer Information Systems: Networking, AS
- Computer Information Systems: Programming, AS