

WEB DEVELOPMENT, CERTIFICATE OF COMPETENCY (WEB)

Effective: Fall 2014

This certificate option provides students with a multi-disciplinary approach to the design, networking and programming areas of web development. Designed to prepare students for entry-level employment as: Web Site Designer, Web Developer, Web Programmer. Students learn to integrate client-side and server-side technologies to build and manage real-world web-based applications. The program provides students with necessary skills for creating and managing web sites using current industry standards. The design and development of responsive web applications is also covered. Students also gain a foundation in current networking technologies and supporting Linux/UNIX systems.

Program Outcomes

Upon successful completion of this certificate, students should be able to:

- Plan for a professional web site.
- Create web sites using current HTML and CSS standards.
- Create responsive web applications that display appropriately on a variety of mobile, tablet, laptop and desktop screens.
- Incorporate scripting languages into web documents.
- Support current Linux/UNIX systems.
- Identify and explain the fundamentals of networking.
- Upload files to web server and update and maintain web sites.
- Identify career paths, academic programs and training opportunities in the field of web development.

Full-Time Academic Plan

The College will award a certificate of competency to students who complete an approved credit-bearing career program that requires less than 30 credits. General education courses may not be required for programs that have less than 30 credits. The student must have a cumulative GPA of 2.0 or higher. At least six (6) credits, or 50% of the total credits required, whichever is greater, must be completed at Delaware County Community College.

First Semester	Hours	
CS 101	Introduction to Computer Science	3
NET 110	Network Communications	3
CS 113	Database Management Systems	3
IMM 120	Web Page Design and Development	3
Hours		12
Second Semester	Hours	
CS 141	UNIX Operating Systems	3
CS 142 or CS 143	Introduction to Cloud Computing Concepts and Administration using Microsoft Azure or Introduction to Cloud Computing Concepts and Administration using Amazon Web Services	3
CS 214	jQuery/JavaScript	3
CS 240	Responsive Web Design	3
Hours		12
Total Hours		24

Notes

Optional Internship Opportunities:

Code	Title	Hours
Select one of the following:		
CS 190	Computer Programming Internship (1 credit)	1
CS 194	Computer Programming Internship (2 credit)	2
CS 199	Computer Programming Internship (3 credit)	3

Total Credits: 24-27

Part-Time Academic Plan

Course	Title	Hours
First Semester		
CS 101	Introduction to Computer Science	3
CS 113	Database Management Systems	3
NET 110	Network Communications	3
Hours		9
Second Semester		
IMM 120	Web Page Design and Development	3
CS 141	UNIX Operating Systems	3
CS 214	jQuery/JavaScript	3
Hours		9
Third Semester		
CS 240	Responsive Web Design	3
CS 142 or CS 143	Introduction to Cloud Computing Concepts and Administration using Microsoft Azure or Introduction to Cloud Computing Concepts and Administration using Amazon Web Services	3
Hours		6
Total Hours		24

Optional Internship Opportunities:

Code	Title	Hours
Select one of the following:		
CS 190	Computer Programming Internship (1 credit)	1
CS 194	Computer Programming Internship (2 credit)	2
CS 199	Computer Programming Internship (3 credit)	3

Total Credits: 24-27

Career