

# CLOUD COMPUTING, CERTIFICATE OF COMPETENCY (CCCC)

Effective: Fall 2025

The Cloud Computing certificate program will prepare students for employment in Cloud Computing fields such as Cloud Administration, Cloud Development, Security, Architecture, Data, DevOps, and Machine Learning. The material presented in the Cloud Computing certificate program will provide the students with the knowledge and skills necessary to successfully deploy and manage cloud services and systems including virtualized computing, storage, networking, database, and security and governance of these services.

Courses taken in this certificate program specifically relate to and will help prepare students for the following industry certification exams;

AZ-900 Microsoft Azure Fundamentals, AZ-104 Microsoft Azure Administrator, AWS Certified Cloud Practitioner.

## Program Outcomes

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

- Configure, deploy, and manage Cloud services including compute, networking, storage, database, security and application services.
- Explain Cloud concepts in terms of economics and design principles.
- Provision and manage cloud resources utilizing Azure portal, AWS console, and Azure and AWS command-line interfaces.
- Define and design for security and compliance.

## 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
CS 113	Database Management Systems	3
NET 110	Network Communications	3
NET 116	Microsoft Hybrid Server: Core Infrastructure	4
<b>Hours</b>		<b>13</b>
Second Semester		
CS 142	Introduction to Cloud Computing Concepts and Administration using Microsoft Azure	3
CS 143	Introduction to Cloud Computing Concepts and Administration using Amazon Web Services	3
NET 230	Linux Operating Systems I	4
<b>Hours</b>		<b>10</b>
<b>Total Hours</b>		<b>23</b>

## Notes Career