

**WILMINGTON UNIVERSITY
COLLEGE OF TECHNOLOGY
BASIC COURSE INFORMATION**

COURSE TITLE: Breaking Down Cloud Security

COURSE NUMBER: SEC325

I. MAJOR INSTRUCTIONAL OBJECTIVES:

Objective 1: General Cloud concepts.

- A-1: Define terms, concepts, and processes associated with Cloud Architecture.
- A-2: Describe the major differences between Azure, AWS, and Google Cloud Platforms.
- A-3: Identify and design the difference between on premises and cloud computing and the business requirements for implementation and migration.

Objective 2: Secure Cloud Environment Design

- B-1: Describe basic internetworking fundamentals of Cloud Architecture.
- B-2: Create and navigate the directory structure.
- B-3: Create, manipulate and delete data, files and directories.
- B-4: Determine and modify permission settings.
- B-5: Manage processes.
- B-6: Write simple shell scripts.
- B-7: Perform basic system administration functions within Cloud Vendor Platforms.
- B-8: Apply cloud application security principles with the three major cloud vendors.

Objective 3: Variety of Cloud Environments.

- C-1: Compare and contrast SaaS, PaaS and IaaS environments.
- C-2: Create designs and concepts within best practices of the different types of Cloud environments.
- C-3: Identify the legal requirements to use Software as a Service in a cloud environment.
- C-4: Summarize the principles of information technology as an operational expenditure versus a capital expenditure.

Objective 4: Cloud Environment Compliance.

- D-1: Explain issues surrounding data protection, privacy, risk and compliance in a cloud environment.
- D-2: Design protections and policy around the nuances of privacy and security in the cloud.
- D-3: Describe the industry security standards, regulatory mandates, audit policies and compliance requirements for cloud-based infrastructures.
- D-4: Demonstrate proficiency in data classification and securing data in the cloud.

Objective 5: Threats, Risks, Vulnerabilities and Privacy Issues Associated with Cloud Based IT services

- E-1: Identify the known threats, risks, vulnerabilities and privacy issues associated with Cloud based IT services.
- E-2:

II.