

CompTIA Cloud Essentials+ Certification (CLO-002)

Credits: 0.5

Course Overview and Goals

CompTIA Cloud Essentials+ Certification (CLO-002) is a one-semester course that covers the objectives of the CompTIA Cloud Essentials+ certification exam (CLO-002).

This course begins by identifying cloud service models and deployment models. You will learn about cloud networking concepts, cloud storage technologies, and cloud design. You will also learn about cloud assessment methods, vendor relations in cloud adoptions, and cloud migration approaches. You will identify the benefits of using cloud services. Finally, you will learn about data management, DevOps, and financial expenditures in a cloud environment.

This course consists of 14 lessons organized into four units, four Unit Activities, and four Discussions. Additionally, there is one Course Activity and one Course Project that you will complete at the end of the course. Each lesson contains one or more Lesson Activities. You will grade your work in the Lesson Activities by comparing it to sample responses. You will submit the Unit Activities, Course Activity, and Course Project to your teacher for grading.

By the end of this course, you will be able to do the following:

- ❖ Evaluate the use of cloud services for organizations, including deployment models, vendor use, and cloud migration approaches.
- ❖ Use appropriate industry vocabulary to describe and communicate cloud-specific tasks, applications, and usage.
- ❖ Assess business needs to suggest the best cloud solutions.
- ❖ Compose a presentation that summarizes cloud recommendations for a business.
- ❖ Collect information on data management, financial expenditures, and licensing potential for cloud services.
- ❖ Predict possible security issues related to cloud use and identify solutions.
- ❖ Prepare to take the CompTIA Cloud Essentials+ certification exam

UNIT 1: CLOUD CONCEPTS (DAYS 1 – 22)

In this unit, you will identify cloud service models and deployment models. You will learn about remote access types, such as Remote Desktop Protocol (RDP), Secure Shell (SSH), and Hypertext Transfer Protocol Secure (HTTPS), and network connectivity types such as direct connections and virtual private networks (VPNs). You will also identify cloud storage types and their features. Additionally, you will learn important aspects of cloud design, such as redundancy, high availability, and disaster recovery.

Lesson	Lesson Objective
Syllabus and Orientation	Review the Student Orientation and Course Syllabus at the beginning of this course.
Cloud Models	Identify cloud service models and deployment models.
Cloud Networking Concepts	Recognize the types of cloud remote access and network connectivity.
Cloud Storage Technologies	Identify cloud storage features and types.
Cloud Design	Discover important aspects of cloud design, such as redundancy, high availability, and disaster recovery.

UNIT 2: BUSINESS PRINCIPLES (DAYS 23 – 43)

In this unit, you will learn about various cloud assessment methods. You will also learn about capital and operating expenditures, licensing models, and human capital required when engaging with a cloud provider. You will learn about professional services, open source and proprietary cloud services, and cloud migration approaches. Additionally, you will identify the benefits of using cloud services.

Lesson	Lesson Objective
Cloud Assessments	Recognize various cloud assessment methods.
Financial Aspects	Identify the expenditures, licensing models, and human capital required when engaging with a cloud provider.
Vendor Relations and Cloud Migration	Review vendor relations in cloud adoptions and cloud migration approaches.
Benefits of Using Cloud Services	Identify the benefits of using cloud services.

UNIT 3: CLOUD OPERATIONS AND FINANCIAL EXPENDITURES (DAYS 44–60)

In this unit, you will learn about data management methods, availability zones, cloud monitoring, and optimization methods in the cloud. You will learn about DevOps and its usage in a cloud environment. You will also identify various financial expenditures related to cloud resources.

Lesson	Lesson Objective
Cloud Operations	Recognize data management, availability, monitoring, and optimization in the cloud.
DevOps in Cloud Environments	Discover how DevOps can be used in a cloud environment.
Financial Expenditures	Identify financial expenditures related to cloud resources.

UNIT 4: RISKS AND SECURITY OF THE CLOUD (DAYS 61 – 90)

In this unit, you will learn about risk assessment, risk responses, and risk registers. You will also learn about policies related to security, incident response, access control, communication, and specific departments. You will learn about the importance of compliance in the cloud. Additionally, you will learn about security assessment methods, categories of data, encryption, and data breaches.

Lesson	Lesson Objective
Risk Management	Review the concepts of risk management related to cloud services.
Policies and Compliance	Recognize policies and the importance of compliance in the cloud.
Security Concerns	Identify security concerns and measures related to cloud operations.
Course Activity	Cloud Migration
Course Project	Cloud Computing for a Small Business