



# Cloud Computing Essentials



**Course Duration:** 16 hours

## Description

The **Cloud Computing Essentials** course is specially designed to help you clear the **CompTIA Cloud Essentials** certification exam. This course is designed to help you assess the business and technical benefits of cloud computing. It covers the basics of cloud computing including the concepts and terminologies. It also introduces the technical requirements and technical challenges (at a high-level related to cloud computing).

## Who should do this course?

- Professionals who want to clear the **CompTIA Cloud Essentials** certification.
- Entrepreneurs or aspiring entrepreneurs looking for a smart way to manage investment costs.
- Business leaders such as CEOs and COOs responsible for the growth of their businesses.
- SVPs, VPs and AVPs responsible for investing in infrastructure and IT.
- IT Managers and Directors responsible for assessing the feasibility of moving to a new technology.
- Software engineers who are completely new to cloud computing and who need to work on some type of cloud technology.
- Management graduates aspiring key positions in multi-national companies.
- Professionals who like to follow and experiment the latest technological trends.

## Course Objective

Provide an introduction to cloud computing  
Explain the business value of using cloud computing  
Describe the technical aspect of cloud computing  
List and discuss the steps required to adopt cloud services  
Discuss the need for applying ITIL standards for cloud computing  
Identify the business risks and its consequences in cloud computing

## Course Outline

Day 1

### **Lesson1: Introduction to Cloud Computing**

- Discuss cloud computing deployment models (Private, Public, Hybrid and Community)
- Define cloud computing
- Describe the common terms used in cloud computing
- List and discuss the characteristics of cloud computing
- Explain the evolution of cloud computing
- Describe virtualization and its uses in cloud computing
- Describe the types of cloud (SaaS (XaaS), PaaS, IaaS)

### **Lesson2: Business Value of Cloud Computing**

Discuss the business needs for cloud computing for various types of enterprises:

- Small and medium size businesses
- Start-up businesses
- Large businesses

Discuss the businesses that will benefit using cloud computing

Discuss the businesses that will not benefit using cloud computing

### **Lesson3: Technical Aspect of Cloud Computing**

Understand the difference between private cloud and public cloud from a technical point of view

Provide an overview of the following technical terms from a cloud perspective:

- Network configurations
- Cloud Storage
- Automation and self-service
- Federation Cloud Services
- Standardization

Discuss the technical challenges, risks and mitigation techniques in cloud computing:

- Data integrity in cloud
- Application performance issues
- Security in Cloud environment
- Data Encryption

## **Day 2**

### **Lesson4: Steps to successfully adopt Cloud Services**

- Discuss the generic steps required to adopt cloud services
- Discuss cloud vendor selection criteria
- Evaluate the organizational capacity to adopt cloud computing
  - Evaluate cloud readiness of the organization
  - Explain the cloud vendor roles and capabilities
- Describe application migration process

### **Lesson 5: ITIL and Cloud Computing**

Provide an overview of ITIL

Discuss the phases of service management in ITIL and its application in cloud computing

- Service strategy
- Service design
- Service transition
- Service Operation
- Continual Service Improvement plan

### **Lesson6: Identifying Risk and its Consequence in Cloud Computing**

- Discuss cloud computing risks to organizations
  - Vendor Lock-in
  - Compliance issues
  - Legal risks
- Discuss Cost evaluation for cloud computing
  - Indirect costs on total cost of ownership
  - Total cost of ownership for SaaS, PaaS and IaaS
- Describe strategic flexibility