

# CompTIA Cloud Essentials

**Course Objective:** You will weigh the pros and cons of cloud computing to make effective decisions and meet IT challenges.

**Prerequisites:** This course is the first step on a training path that can lead to a technical career dealing with cloud computing. CompTIA recommends that a candidate have at least six months of experience in an IT environment, with direct involvement in IT-related tasks, responsibilities and/or decision-making.

Upon successful completion of this course, students will be able to:

- Learn the fundamental concepts of cloud computing.
- Learn the business aspects and impact of cloud computing.
- Differentiate the types of cloud solutions and the adoption measures needed for each.
- Identify the technical challenges and the mitigation measures involved in cloud computing.
- Identify the steps to successfully adopt cloud services.
- Identify the basic concepts of ITIL and describe how the ITIL framework is useful in the implementation of cloud computing in an organization.
- Identify the possible risks involved in cloud computing and the risk mitigation measures, and you will also identify the potential cost considerations for the implementation of cloud and its strategic benefits.

## Course Content

### **Lesson 1: Introduction to Cloud Computing**

**Topic 1A:** Overview of Cloud Computing

**Topic 1B:** Evolution of the Cloud

**Topic 1C:** Specialized Cloud Services

### **Lesson 2: Business Value of Cloud Computing**

**Topic 2A:** Business Need for Cloud Computing

**Topic 2B:** Cloud Scalability

**Topic 2C:** Cloud Security

**Topic 2D:** Impact of Cloud Computing on Business

### **Lesson 3: Technical Perspectives of Cloud Computing**

**Topic 3A:** The Cloud Deployment Models

**Topic 3B:** Network Requirements for Cloud Deployment

**Topic 3C:** Automation and Self-Service in Cloud Computing

**Topic 3D:** Federated Cloud Services

**Topic 3E:** Standardization

#### **Lesson 4: Technical Challenges of Cloud Computing**

**Topic 4A:** Cloud Storage

**Topic 4B:** Application Performance

**Topic 4C:** Data Integration

**Topic 4D:** Security Risks and Mitigation

**Topic 4E:** Application Architecture and the Development Process

#### **Lesson 5: Steps to Successful Adoption of Cloud Services**

**Topic 5A:** Steps to Adopting Cloud Services

**Topic 5B:** Organizational Capability to Adopt Cloud Services

**Topic 5C:** Cloud Vendor Roles and Capabilities

**Topic 5D:** Migrating Applications to the Cloud

#### **Lesson 6: ITIL and Cloud Computing**

**Topic 6A:** Overview of ITIL

**Topic 6B:** Planning Service Strategy

**Topic 6C:** Designing Cloud Service

**Topic 6D:** Transitioning to Live Environment

**Topic 6E:** Running a Cloud Service Operation

**Topic 6F:** Continual Service Improvement with Cloud

#### **Lesson 7: Identifying Risks and Consequences**

**Topic 7A:** Organizational Risks

**Topic 7B:** Technical Risks

**Topic 7C:** Legal Risks

**Topic 7D:** Cost Evaluation for Cloud Computing

**Topic 7E:** Identify Maintenance Aspects of Strategic Flexibility