

CompTIA Cloud Essentials+

Duration: 24 Hours (3 Days)

Overview

The CompTIA Cloud Essentials+ course is an educational framework designed for learners to understand and navigate the increasingly complex cloud environment. It serves as a foundational guide to cloud principles, providing insights into various service and deployment models, virtualization, and critical design elements such as Redundancy and High availability. By exploring cloud networking and storage, learners gain essential knowledge on how to connect and utilize cloud resources effectively. Assessing cloud needs is a pivotal component, equipping individuals with the skills to conduct feasibility studies, gap analyses, and understand cloud services like Data analytics and IoT. Engaging cloud vendors covers business concepts, licensing, and vendor evaluations, crucial for informed decision-making. Management and technical operations delve into the operational aspects of the cloud, including DevOps and Resource optimization. Governance and risk, along with compliance and security, are also addressed, reinforcing the importance of managing risk and adhering to regulations and Security best practices in cloud environments. This comprehensive course is instrumental for professionals seeking to leverage cloud technology effectively, ensuring they are equipped with the knowledge to make strategic decisions and manage cloud resources efficiently.

Audience Profile

The CompTIA Cloud Essentials+ course equips professionals with foundational cloud skills crucial for business and IT roles.

- IT Specialists interested in cloud technology
- Network/System Administrators seeking cloud infrastructure knowledge
- Technical Support staff focusing on cloud service operations
- New IT Graduates aiming to specialize in cloud computing
- Project Managers overseeing cloud-based projects
- Business Analysts requiring an understanding of cloud principles
- Data Center Staff transitioning to cloud platforms
- IT Consultants designing cloud solutions for clients
- Compliance and Security Officers managing risk in cloud adoption
- Sales/Marketing professionals in cloud product companies
- IT Leadership (CIO/CTO) strategizing on cloud implementations
- Cloud Engineers beginning their career journey
- DevOps Engineers integrating cloud practices
- IT Professionals aiming for CompTIA certification
- Professionals responsible for IT procurement decisions
- Data Scientists utilizing cloud-based analytics tools
- Digital Marketers leveraging cloud platforms for campaigns
- IoT Developers working with cloud-connected devices
- Blockchain Developers looking for cloud-based solutions
- Professionals managing cloud vendor relationships and contracts
- Technical Writers creating documentation for cloud services
- Educators and Trainers teaching cloud computing fundamentals

- Government Officials involved in cloud services procurement and policy

Course Syllabus

Chapter 1 Cloud Principles and Design

- Understanding Cloud Principles
- Virtualization
- Service Models
- Deployment Models
- Cloud Characteristics
- Shared Responsibility Model
- Exploring Cloud Design
- Redundancy and High Availability
- Disaster Recovery

Chapter 2 Cloud Networking and Storage

- Understanding Cloud Networking Concepts
- Networking: A Quick Primer
- Connecting to the Cloud
- Cloud Networking Services
- Understanding Cloud Storage Technologies
- How Cloud Storage Works
- Cloud-Based Storage Providers
- Cloud Storage Terminology
- Content Delivery Networks

Chapter 3 Assessing Cloud Needs

- Using Cloud Assessments
- Gathering Current and Future Requirements
- Using Baselines
- Running a Feasibility Study
- Conducting a Gap Analysis
- Using Reporting
- Understanding Benchmarks
- Creating Documentation and Diagrams
- Understanding Cloud Services
- Identity Access Management
- Cloud-Native Applications
- Data Analytics
- Digital Marketing
- Autonomous Environments
- Internet of Things
- Blockchain
- Subscription Services
- Collaboration

Chapter 4 Engaging Cloud Vendors

- Understanding Business and Financial Concepts
- Expenditures and Costs
- Licensing Models
- Human Capital
- Professional Services
- Finding and Evaluating Cloud Vendors
- Gathering Information
- Performing Evaluations
- Negotiating Contracts and Billing
- Choosing a Migration Approach
- Migration Principles
- Lift and Shift
- Rip and Replace
- Hybrid and Phased Migrations

Chapter 5 Management and Technical Operations

- Explain Aspects of Operating within the Cloud
- Data Management
- Availability
- Disposable Resources
- Monitoring and Visibility
- Optimization
- Explain DevOps in Cloud Environments
- Provisioning
- Continuous Integration/Continuous Delivery
- Testing in QA Environments
- Configuration Management
- API Integration
- Financial Planning of Cloud Resources
- Storage
- Network
- Compute
- Chargebacks
- Maintenance
- Instances
- Licensing Types
- License Quantity

Chapter 6 Governance and Risk

- Recognize Risk Management Concepts Related to Cloud Services
- Risk Assessment
- Risk Response
- Documentation
- Vendor Lock-in
- Data Portability
- Explain Policies or Procedures
- Standard Operating Procedures

- Change Management
- Resource Management
- Security Policies
- Access and Control Policies
- Department-Specific Policies
- Communication Policies

Chapter 7 Compliance and Security in the Cloud

- Identify the Importance and Impacts of Compliance in the Cloud
- Data Sovereignty
- Regulatory Concerns
- Industry-Based Requirements
- International Standards
- Certifications
- Explain Security Concerns, Measures, or Concepts of Cloud Operations
- Threat
- Vulnerability
- Security Assessments
- Data Security
- Application and Infrastructure Security