

- **Fundamental Cloud Computing Terminology and Concepts**
- **Virtualization Essentials**
- **Containerization Essentials**
- **Specific Characteristics that Define a Cloud, Types of Cloud computing and discuss the challenges associated with them**
- **Understanding Elasticity, Resiliency, Availability On-Demand and Measured Usage**
- **Benefits, Challenges and Risks of Contemporary Cloud Computing Platforms and Cloud Services**
- **Cloud Resource Administrator and Cloud Service Owner Roles**
- **Cloud Computing for System Administrators - Discussin about Migration, Hybrid Environments, Provisioning, Uptime, Disaster Recovery and Security**
- **Cloud Computing for Developers - Discussion about Performance, Security, Availability, Deployment and Ecosystem**
- **Cloud Computing for the IT Consultant - Discussion about Software-as-a-Service, Infrastructure-as-a-Service, Benefits over Traditional Environment**
- **Cloud Computing for CTOs and CIOs - Discussion about Finding Talent, Improved Speed of Innovation, Lower Cost, Availability, A Boost to Productivity, Better Analytics, Security and Data Protection**

- **Cloud Service and Cloud Service Consumer Roles**
- **Describe the different types of cloud services - Software as a Service (SaaS), Platform as a Service (PaaS) and Infrastructure as a Service (IaaS) Cloud Delivery Models**
- **Cloud Service Models**
- **Cloud Deployment Models - Public Cloud, Private Cloud, Hybrid Cloud and Community Cloud Deployment Models**
- **Cloud Computing and Storage**
- **Business Cost Metrics and Formulas for Comparing and Calculating Cloud and On-Premise Solution Costs**
- **Describe cloud security requirements and policies - Describe how cloud services manage privacy, how compliance goals are met, how data is secured at rest or on-the-wire, and how data and operations transparency requirements are met**
- **Service Level Agreements (SLAs) for Cloud-based IT Resources**
- **Formulas for Calculating and Rating SLA Quality of Service Characteristics**
- **Cloud Automation, Provisioning, and Management**

- **Understand the Computing services, including**

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- **Understand the Networking services, including**

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- **Understand the Storage services, including**

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- **Understand the security services, including**

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- **Understand AWS management tools, including**

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- **AWS Best Practices**

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- **Lab with Hands-on experience**

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- **Understand the Computing services, including**
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- **Understand the Networking services, including**
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- **Understand the security services, including**
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- **Understand the Database services, including**
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- **Understand AWS management tools, including**
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- **AWS Best Practices**
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- **Lab with Hands-on experience**
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- **AWS Integration with**
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- **AWS Best Security Practices**
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- **Module 1: Introducing Google Cloud Platform**
- **Module 2: Getting Started with Google Cloud Platform**
- **Module 3: Google App Engine and Google Cloud Datastore**
- **Module 4: Google Cloud Platform Storage Options**
- **Module 5: Google Container Engine**
- **Module 6: Google Compute Engine and Networking**
- **Module 7: Big Data and Machine Learning**
- **Module 8: Google Cloud Platform Projects**
- **Module 9: Instances**
- **Module 10: Networks**
- **Module 11: Disks and Images**
- **Module 12: Authorization**
- **Module 13: Snapshots**

- **Module 14: Google Cloud Storage**
- **Module 15: Instance Groups**
- **Module 16: Google Container Registry**
- **Module 17: Google Cloud SQL**
- **Module 18: Metadata**
- **Module 19: Google API Client Library**
- **Module 20: Autoscaling**
- **Module 21: Load Balancing**
- **Module 22: Deleting Cloud Platform Projects and Resources**
- **Module 23: Google Cloud Deployment Manager**
- **Module 24: HTTP/HTTPS Load Balancing**
- **Module 25: Startup and Shutdown Scripts**

- **The Rise of the Virtual Machine**

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- **Installing and Updating Docker - Latest Stable Version Docker 1.12**

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- **Major Docker Components**

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- **Container Management**

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- **Building from a Dockerfile**

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