



Google Cloud

# Google Course Syllabus

*Certification Training*



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## Module 01

Introduction to Google Cloud

Duration: 2 hrs

- Understanding the fundamentals of Google Cloud Platform
- The Google Global infrastructure
- Products for storage, compute, networking, Machine Learning, and more
- Availability zones
- Different projects running on the GCP infrastructure, including Google projects

## Module 02

Google Cloud Services

Duration: 2 hrs

- Introduction to Google Cloud services
- Managing Google services using command-line tools, app, and console
- Installing and configuring SDK
- Deploying Cloud Shell for GCP environment management
- Deploying Gsutil

## Module 03

Google Computing Services

Duration: 2 hrs

- Understanding Google computing services
- Creating and managing virtual machines in Google Cloud
- Launching VMs on-demand using Google Compute Engine
- Choosing the right computing solutions based on the workload like memory or CPU
- Important actions with Compute Engine
- Balancing the load

## Module 04

Google Storage Services

Duration: 3 hrs

- Various storage services offered with Google Cloud
- The process of storing and retrieving data
- Rich content management
- Hosting a website
- Choosing the right storage options
- Integrating on-premises with the cloud storage environment
- Nearline and Coldline storage
- Cloud Datastore
- Managing cloud storage using Gsutil

## Module 05

Google Cloud APIs

Duration: 3 hrs

- Deploying Google Cloud for developing applications and for debugging and monitoring purposes
- Choosing the right data storage for application data
- Automating infrastructure
- Managing the API
- Cloud source
- Functions and special APIs
- Implementing and configuring Cloud Launcher and Deployment Manager
- Application deployment using Cloud Engine



## Module 06

### Google Networking Services

Duration: 3 hrs

- Introduction to Google networking
- Setting up the Google network
- Connecting various Google Cloud Platform resources
- Isolation using firewalls and network policies
- Creating and managing of Virtual Private Network
- 6.6 Working with cloud routers and interconnecting networks

## Module 07

### IAM & Security Services

Duration: 3 hrs

- Different security and identity and access management (IAM) services
- Various roles in IAM
- Creating and managing Google resources permissions
- IAM APIs
- The creation of custom roles
- Sharing resources and isolation
- Deploying penetration testing, auditing, and security controls

## Module 08

### Migrating to Google Cloud

Duration: 2 hrs

- Understanding how to migrate to Google Cloud
- Various criteria to be considered
- Choosing the right options as per the specific needs
- Managing a hybrid cloud model
- Complete migration from the on-premises model to the cloud
- Choosing an automation framework for resource provisioning

