

# **Google Cloud Associate Engineer course 2026**



**GCP ACE - Google Cloud Associate Cloud Engineer certification.  
Begin your Google Cloud Platform - GCP journey!**

## **Introduction Let's Start**

- What is Cloud Computing?
- Google Cloud Computing Services
- GCP Storage and Database Services
- Networking with Google Cloud
- Additional Services in Google Cloud

## **Getting Start With Cloud console & cloud Console**

- Introduction to the Google Cloud Console
- Starting Cloud Shell
- Launch a Code Editor
- Introduction to Cloud SDK Commands
- Exercise: Enter Linux Commands and Gcloud Commands

## **Enabling API & Resource Hierarchy**

- Create a Billing Account
- Enable GCP Service APIs
- Introduction to the Resource Hierarchy
- Setting up Billing

## **Identity & Access Management (IAM)**

- Introduction to Identity Access Management (IAM) in Google Cloud
- Viewing IAM Assignments
- Overview of IAM Roles
- Creating Custom Roles
- Assigning IAM Roles
- IAM Best Practices

## **Starting a Virtual Machine**

- Create a Virtual Machine using Cloud Console
- Create a Virtual Machine using Cloud Shell
- Installing the Cloud SDK locally
- Create a Virtual Machine using Cloud SDK
- Accessing a Virtual Machine
- Exercise: Create a Virtual Machine

## **Advanced Virtual Machine Configuration**

- View Virtual Machine Inventory
- Machine Configurations and Machine Types
- Attaching Additional Disks
- Virtual Machines with GPUs
- Custom Machine Type
- Creating Snapshots
- Using Spot Instances

## **Compute Engine Instance Group**

- Introduction to Managed Instance Groups
- Creating a Managed Instance Group
- Autoscaling with Managed Instance Group
- Exercise: Creating an Instance Group

## **Introduction to Kubernetes Engines**

- Getting Started with Google Kubernetes Engine
- Kubernetes Architecture
- Introduction to Anthos
- Creating an AutoPilot Mode Cluster
- Creating a Standard Mode Cluster
- Deploying a Cluster in Kubernetes Engine using Cloud Shell
- Deploying Applications in Kubernetes Engine

## **Managing Clusters in Kubernetes Clusters**

- Introduction to Kubectl
- GKE Utilization, Observability, and Cost Optimizations
- Viewing Logs in a Kubernetes Cluster

## **Introduction to App Engine**

- Overview of App Engine
- App Engine Standard vs App Engine Flexible
- Deploying an Application to App Engine using the Cloud Shell
- Scaling App Engine Applications
- Splitting Traffic between Application Versions

## **Introduction To Cloud Functions**

- Overview of Cloud Functions
- Creating Cloud Functions using the Cloud Console
- Cloud Functions Receiving Events from Cloud Pub/Sub using Cloud Console
- Cloud Functions Triggered by Storage Events using Cloud Shell

## **Cloud Run**

- Introduction to Cloud Run
- Creating a Service in Cloud Run
- Creating a Job in Cloud Run

## **Review Of Cloud Compute Options**

- How to Choose Between Compute Engine, Kubernetes Engine, App Engine and Cloud Functions
- How to Read Exam Questions for Computing Requirements

## **Planning & Configuration Storage**

- Types of Storage Systems
- Introduction to Cloud Storage
- Versioning and Object Lifecycle Management
- Cloud SQL for Regional Relational Storage
- Cloud Spanner for Global Relational Storage
- AlloyDB
- Cloud Datastore
- Cloud Datastore 2
- Cloud Firestore and Document Databases
- Flexible Schemas in Cloud Firestore
- Cloud Bigtable

## **Review Of GCP Storage Options**

- Choosing a Storage Solution
- Storage System Exam Tips

## **Overview Of Big Data Services**

- Introduction to Cloud Pub/Sub - Part 1
- Introduction to Cloud Pub/Sub - Part 2
- Introduction to Cloud Dataproc
- Introduction to Cloud Dataflow
- Introduction to Cloud Transfer
- Introduction to BigQuery
- Introduction to BigQuery ML
- BigQuery and IAM
- Introduction to Cloud Composer
- Cloud Composer Architecture
- Cloud Memorystore
- Introduction to Cloud Data Fusion

## **Networking In The Cloud VPCs & VPNs**

- Introduction to Networking in the Cloud
- Overview of Virtual Private Clouds
- Creating a Virtual Private Cloud
- Overview of Virtual Private Networks
- Implementing a Virtual Private Network

- Cloud and On Premises Network Integration

### **Networking In The Cloud:IP Addressing & Firewalls,Subnets,Load Balancing & DNS**

- IP Addressing and CIDR Blocks
- Implementing Firewall Rules
- Overview of Load Balancing
- Implementing Load Balancing
- Implementing DNS in Google Cloud

### **Review Of GCP Networking Services**

- Review of Key Network Concepts
- Networking Exam Tips

### **Deployment Manager**

Deploying applications using Deployment Manager

### **Observability:Monitoring ,Logging & Tracing With Cloud Operations Suites**

- Cloud Operations Suite
- Metrics Explorer
- Installing Cloud Monitoring Agent
- Cloud Logging
- Logs Explorer
- Cloud Trace
- Four Golden Signals

**THANK YOU  
Congratulation**