

## Google Cloud Platform Course

### GCP Course Objectives

- ❖ Consider the entire range of Google Cloud Platform technologies in their plans Learn methods to develop, implement, and deploy solutions
- ❖ Distinguish between features of similar or related products and technologies
- ❖ Recognize a wide variety of solution domains, use cases, and applications
- ❖ Develop essential skills for managing and administering solutions
- ❖ Develop knowledge of solution patterns methods, technologies, and designs that are used to implement security, scalability, high availability, and other desired qualities.

### Google Cloud Platform Course Syllabus

#### 1: Introduction to Google Cloud Platform

- Google Cloud Platform (GCP) Infrastructure
- Using GCP
- Introduction cloud and cloud based Infra

#### 2: Virtual Networks

- Virtual Private Cloud (VPC)
- GCP Network Component
- GCP Network Design

#### 3: Virtual Machines

- Compute Engine
- Creating Virtual Machines
- Compute options (vCPU and Memory)
- Images
- Common Compute Engine actions
- Working with Virtual Machines

#### 4: Cloud IAM

- Roles, Members, Service accounts, Cloud IAM best practices
- Creating Cloud IAM Policies

#### 5: Data Storage Services

- Cloud Storage
- Managing GCP Cloud Storage
- Cloud SQL
- Managing Cloud SQL
- Cloud Spanner, Cloud Datastore

#### 6: Resource Management

- Cloud Resource Manager, Quotas, Labels, Names, Billing
- Examining Billing Data

#### 7: Resource Monitoring

- Stackdriver, Monitoring
- Resource Monitoring
- Logging, Error Reporting, Tracing, Debugging
- Error Reporting and Debugging

#### 8: Interconnecting Networks

- Cloud Virtual Private Network (VPN)
- Cloud Router, Cloud Interconnect, External Peering, Cloud DNS

#### 9: Load Balancing

- Managed Instance Groups, HTTPS load balancing, Cross-region and content-based load balancing, SSL proxy/TCP
- Network load balancing
- VM Automation and Load Balancing



## 10: Auto scaling

- Auto scaling, Policies, Configuration
- Lab: Auto scaling

✓ Exam Preparation for GCP Associate Exam

