

# **GCP Cloud Security Fundamentals**

**Modality: Self-Paced Learning**

**Duration: 4 Hours**

## **About this Course:**

Cloud Security is pretty much similar to the physical security which we require in day to day life. It works on the same principles as the data-center security does, only it needs additional facilities and hardware.

One major thing about cloud security is that it is a shared responsibility between the consumers and the providers. That is why a strong security platform should be opted for such as the Google Cloud Platform. With the Google Cloud Platform, you can maintain a 100% secure cloud atmosphere.

## **Course Objectives:**

After completing the course, students will learn about:

- Different GCP Cloud Security concepts such as IAM
- Security integration using GSUITE and Google Cloud
- Identity of GCDS and Cloud
- Service accounts
- App Engine and Compute Engine Security Scanner and their processes
- Google Cloud Compliance and Governance

## **Audience:**

The target audience for this course are:

- GCP Beginners who have some experience of working in the field, since this course does not cover many basics
- Candidates preparing for Certification of GCP cloud
- Cloud Professionals such as managers and administrators
- Existing Solutions Architects

## **Prerequisites:**

We recommend you to fulfill the following pre-requisites:

- Hands-n experience of using with Cloud Computing
- A working account on Google Cloud Platform Free Credits or Free Tier
- Process of using Code-labs which is a free platform to learn about GCP

## **Course Outline:**

## **Course Introduction**

### **IAM**

- GCP Resources and Hierarchy
- IAM Overview
- IAM Roles in GCP
- Service Accounts
- Demo Create Service Account
- Best Practices in IAM
- GSuite
- Whiteboard

### **Networking and Host Security**

- VPC
- Demo Create VPC
- Virtual Networking
- SSO and Cloud Identity
- Firewalls
- Compute Engine and GKE Container Security
- Bastion Hosts
- Access to VMS

### **Data Storage**

- Data Storage Security
- Cloud Storage Security
- Monitoring and Governance
- Stackdriver Monitoring
- Alerting
- Governance, Risk & Compliance
- App Engine and Compute Security Scanner
- Pentesting GCP

### **Resources**

- Cloud Security Whitepaper
- Google Cloud Security Features
- Codelabs
- Qwiklabsiklabs
- Free Tier
- Cloud Asset Library

### **Bonus Lectures**

- Stackdriver Monitoring Demo
- App Engine Demo Kube Engine Demo

- Compare AWS to GCP Certifications