

# Google Cloud Platform

- 1 Google Professional Cloud Architect
- 2 Security Engineer Training

**Certification Training**

Certification Aligned with



## Course Highlights



**40-Hour**  
Instructor-led  
Training



Learn from  
Certified Industry  
Experts



Highly Interactive  
and Dynamic  
Sessions



Learn with  
Real-World  
Scenarios



Practical  
Examples from  
Real-world Case  
Studies



Access to  
Recorded  
Sessions



Extended  
Post-Training  
Support



Career  
Guidance and  
Mentorship



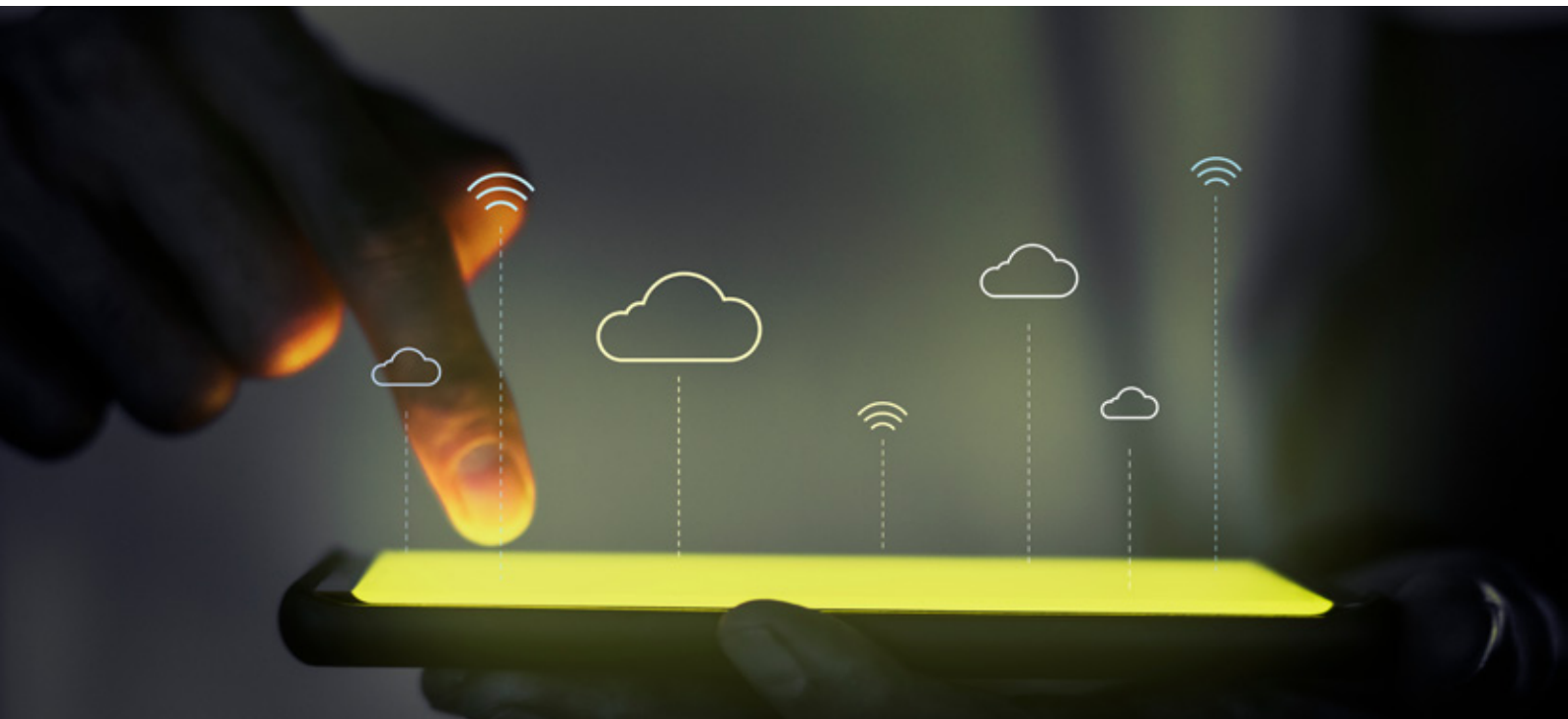
Immersive  
Learning

## About Course

The **GCP Combo Training: Architect + Security Engineer** course is crafted to provide professionals with a comprehensive understanding of both cloud architecture and security on the **Google Cloud Platform (GCP)**. This course covers key topics like designing secure, scalable architectures, managing cloud infrastructure, and implementing security best practices. Participants will explore critical areas such as identity and access management, network security, data encryption, and compliance standards. Through hands-on labs and real-world scenarios, learners gain the skills necessary to secure cloud solutions and achieve GCP certifications for Architect and Security Engineer roles.

## Course Objectives

- ✓ Master the design of scalable, secure cloud infrastructures on GCP.
- ✓ Implement cloud security controls, including encryption and identity management.
- ✓ Learn how to monitor, troubleshoot, and manage cloud networks.
- ✓ Gain hands-on experience in compliance and cloud governance.
- ✓ Prepare for both the GCP Architect and Security Engineer certifications.





## Target Audience

- ✓ Cloud Architects
- ✓ Security Engineers
- ✓ Network Administrators
- ✓ System Engineers
- ✓ IT Professionals

## Pre-requisites

There are no set prerequisites for these certifications.



## Exam Information

Certification Name	Professional Cloud Security Engineer certification	Professional Cloud Architect certification
Exam Format	Multiple-Choice Questions	Multiple-Choice Questions
Number of Questions	50-60	50-60
Exam Duration	120 minutes	120 minutes
Passing Score	70%	70%
Exam Language	English, Japanese	English, Japanese





## Our Expert Instructor

# KRISH

18+ Years of Experience

Cloud Audit | CCSP | CCSK | CCAK | AWS CS-S | AWS CAN-S | AWS CSA-P | AWS CDE-P | MCT | CCAK | Azure Adv. Architect & Security | GCP PCA | GCP PCSE | CEH | RHCE

- ✓ 18+ years of experience and proven expertise in deploying, migrating, auditing and securing various public cloud platforms including AWS, GCP, Azure etc.
- ✓ Trained over 1000+ students globally including those from fortune 500 companies and recognized as a Microsoft Certified Trainer.
- ✓ Performing as an Enterprise Cloud Security Architect, Cloud GRC Expert, Auditor & Cloud Migration Strategist for over 15 years and served over 60+ enterprises worldwide.
- ✓ Actively contributing as a Technical Writer and Subject Matter Expert for various magazines, websites & organizations worldwide.

# Course Content

## Module 1 Introduction to Cloud Computing

- ✓ Cloud Fundamentals
- ✓ Benefits & Challenges in Cloud Computing
- ✓ Cloud Service & Deployment Models
- ✓ Shared Security Responsibility Model (SSRF)
- ✓ Cloud Service Providers Comparison

## Module 2 GCP Fundamental

- ✓ GCP Global Infrastructure: Regions & Zones
- ✓ GCP Console walkthrough
- ✓ GCP Projects
- ✓ Creating a GCP Account

## Module 3 Google Compute Engine

- ✓ Compute Engine Overview
- ✓ Virtual Machines
- ✓ Compute Engine Machine Types & Use Cases
- ✓ Custom Machines
- ✓ IP Addresses: External & Internal, Static Vs. Ephemeral
- ✓ Instance Lifecycle



- ✓ Availability Policies
- ✓ Compute Engine Images
- ✓ Machine Images
- ✓ Startup & Shutdown Scripts
- ✓ GCE Live Migration
- ✓ GCE Discounts
- ✓ Instance Templates & Instance Groups
- ✓ Shielded VMs

## Module 4 Load Balancing & Auto Scaling

- ✓ Load Balancing Overview
- ✓ Types of LBs
- ✓ Vertical vs. Horizontal Scaling
- ✓ High Availability with Live Migration & Auto Restart

## Module 5 Gcloud

- ✓ Introduction to Gcloud CLI
- ✓ Cloud Shell Concepts

## Module 6 Google App Engine (GAE)

- ✓ Google Managed Services Overview
- ✓ Standard vs. Flexible Environments
- ✓ Scaling Types
- ✓ Traffic Splitting & Canary Deployment
- ✓ Services & App Versions

## Module 7 Google Kubernetes Engine (GKE)

- ✓ Kubernetes Overview
- ✓ Benefits of Managed Kubernetes Services
- ✓ Deploying Managed Kubernetes Clusters & Workloads
- ✓ Logging & Monitoring
- ✓ Google Container Registry Overview

## Module 8 Google Cloud Functions

- ✓ Serverless Concepts Overview
- ✓ Google Cloud Functions V.1 Vs. V.2
- ✓ Events & Triggers
- ✓ Scaling & Concurrency Concepts

## Module 9 Google Cloud Run

- ✓ Concepts Overview
- ✓ Cloud Run Vs. Cloud Functions
- ✓ Serverless Container Environment
- ✓ App Versioning & Canary Deployment

## Module 10 Storage Services: Cloud Storage

- ✓ Cloud-Based Storage Services & Types
- ✓ Google Cloud Storage Overview
- ✓ Buckets & Objects
- ✓ Storage Classes
- ✓ SLA Guarantees
- ✓ Object Lifecycle Management
- ✓ Object Versioning
- ✓ Cloud Storage Bucket Lock
- ✓ Utilizing Gsutil
- ✓ Metadata
- ✓ Access Control & Encryption

## Module 11 Storage Services: Block Storage

- ✓ Google Persistent Disks & Local SSDs
- ✓ Persistent Disk Types
- ✓ Snapshots
- ✓ Machine Images

## Module 12 Storage Services: Filestore

- ✓ NFS Concepts
- ✓ Performance Tiers
- ✓ Pricing & Configuration

## Module 13 GCP Cloud CDN

- ✓ Content Delivery Network Overview & Concepts
- ✓ Creating a CDN Configuration
- ✓ Benefits of Google Cloud CDN
- ✓ Caching & Cache Invalidation

## Module 14 Cloud IAM

- ✓ Identity & Access Management Concepts
- ✓ GCP Cloud IAM Overview

- ✓ Cloud Identity Types
- ✓ Cloud IAM Users & Groups
- ✓ Roles & Types of Roles
- ✓ Members, Roles & Policies
- ✓ Cloud IAM Service Accounts & Use Cases
- ✓ ACLs in Cloud Storage
- ✓ Cloud Storage: Signed URLs
- ✓ Multi-Factor Authentication (MFA)
- ✓ Federation Concepts Overview
- ✓ Privileged Access Manager (PAM) Concepts
- ✓ Organization Policies

## Module 15 Google Cloud VPC (Virtual Private Cloud)

- ✓ Private Networks Overview
- ✓ VPC Overview
- ✓ Subnets, Auto & Custom Mode
- ✓ Firewall Rules & Policies
- ✓ VPC Peering
- ✓ Shared VPC
- ✓ Internal Vs. External IP Addresses
- ✓ Hybrid Connections
- ✓ Google Cloud VPN Concepts
- ✓ Google Cloud Interconnect
- ✓ Google Cloud NAT
- ✓ Google Cloud DNS



## Module 16 **GCP Database Services: Relational Databases**

- ✓ Introduction to Managed Database Services
- ✓ Cloud SQL Overview & Use Cases
- ✓ Cloud SQL Scaling
- ✓ Backups and Exporting Databases
- ✓ High Availability Options
- ✓ Cloud Spanner Overview & Use Cases
- ✓ Cloud SQL vs. Cloud Spanner
- ✓ Scaling Options
- ✓ Backup & Restore

## Module 17 **GCP Database Services: NoSQL Databases**

- ✓ Managed NoSQL Services Overview
- ✓ Datastore & Firestore
- ✓ Bigtable Overview

## Module 18 **GCP Database Services: Cloud Memorystore**

- ✓ Concept of In-Memory Databases
- ✓ Cloud Memorystore Overview
- ✓ Configuration and Use Cases

## Module 19 Data Warehouse: BigQuery

- ✓ Bigquery Overview
- ✓ Datasets & Tables
- ✓ Bq CLI

## Module 20 Google Cloud Operations Suite & Observability

- ✓ Cloud Monitoring (Stackdriver)
- ✓ Metrics & Alerts
- ✓ Dashboards & Custom Dashboards
- ✓ Agents & Advanced Monitoring
- ✓ Cloud Logging
- ✓ Log Sources, Sinks & Exporting
- ✓ Querying Logs
- ✓ Application Performance Management
- ✓ Cloud Trace Overview
- ✓ Cloud Debugger Overview
- ✓ Cloud Profiler Overview

## Module 21 Data Protection & DLP

- ✓ Data Protection in Cloud
- ✓ Data Discovery & Classification
- ✓ PII

- ✓ Google Sensitive Data Protection
- ✓ GCP Data Protection Offerings
- ✓ Discovery Service
- ✓ Data Loss Prevention API
- ✓ Inspection & De-identification
- ✓ Risk Analysis Service

## Module 22 Identity & Context-Aware Access Control

- ✓ Fundamentals
- ✓ Zero Trust Security
- ✓ Identity-Aware Proxy (IAP)

## Module 23 Data Encryption

- ✓ Encryption Concepts Overview
- ✓ Cloud KMS
- ✓ Google Managed, Customer Managed & Customer Supplied Encryption Keys
- ✓ Object Lifecycle Rules
- ✓ GCP Secrets Manager

## Module 24 Directory Sync

- ✓ Benefits of GCP Directory Sync
- ✓ Performing a Sync & Best Practices

## Module 25 Security Management

- ✓ Cloud Armor Overview
- ✓ Standard & Plus Tiers
- ✓ Creating Security Policies & WAF rules
- ✓ Security Command Center
- ✓ Forseti-Security Overview





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