



GCP Course Curriculum

1. Introduction to Google Cloud Platform

- Introduction to Cloud Computing
- Overview of Google Cloud Platform
- Useful Links and Documentation
- Google Cloud Platform Resource Overview : Compute
- Google Cloud Platform Resource Overview : Networking
- Google Cloud Platform Resource Overview : Storage
- Google Cloud Platform Resource Overview : Big Data and Artificial Intelligence
- Google Cloud Platform Resource Overview: Tools and Operation

2. Managing GCP

- Managing Google Cloud Platform with Console
- Managing Google Cloud Platform with Command Line
- Google Cloud SDK Installation
- Understand gcloud, gsutil, and other Command-Line Tools
- Google Cloud Platform Projects and Billings
- Understand GCP Projects
- Project User Roles

3. Google Cloud Platform: Virtual Networks

- Global Footprint: Regions, Zones, and Edge Locations
- Virtual Private Cloud
- Cloud Load Balancing
- Virtual Private Network

4. Security & Identity Fundamentals

- Overview of IAM
- IAM Service Account
- Identity Aware Proxy (IAP)
- Cloud KMS



5. Compute Services

- Compute Engine and Virtual Machines
- Machine types in Compute Engines
- compute options
- Disk options
- Advanced options in compute engine

6. Data Storage Services

- Data Service Options
- GCP Storage
- Cloud SQL
- Cloud Spanner
- Cloud Datastore and Cloud Firestore
- Cloud Bigtable

7. Architecting with Google Kubernetes Engine

- Monolithic and Microservice Architecture
- Containers
- Docker
- Kubernetes
- Google Kubernetes Engine
- Helm Package Manager

8. Application Development

- Compute Service and App Engine
- Cloud Function
- Cloud Run
- Cloud VMware Engine

9. DevOps

- DevOps
- Cloud Source Repository



- Jenkins with Google Cloud
- Cloud Logging Services
- Cloud Monitoring Service

10. Automation

- Cloud Resources
- Configuration
- Template
- Deployment Manager

11. Big Data and AI Services

- Managed Services
- Dataflow
- Pub/Sub
- BigQuery
- Datalab

12. Real world implementations of GCP in various Case Studies.

13. Projects & Resume Preparation