

Google Cloud Platform

The course includes presentations, demonstrations, and hands-on labs.

Module 1: Introducing Google Cloud Platform

Explain the advantages of Google Cloud Platform. Define the components of Google's network infrastructure, including: Points of presence, data centres, regions, and zones. Understand the difference between Infrastructure as-a-Service (IaaS) and Platform-as-a-Service (PaaS).

Module 2: Getting Started with Google Cloud Platform

Identify the purpose of projects on Google Cloud Platform. Understand the purpose of and use cases for Identity and Access Management. List the methods of interacting with Google Cloud Platform. Lab: Getting Started with Google Cloud Platform.

Module 3: Google Compute Engine and Networking

Identify the purpose of and use cases for Google Compute Engine Understand the basics of networking in Google Cloud Platform. Lab: Deploying Applications Using Google Compute Engine.

Module 4: Google Cloud Platform Storage Options

Understand the purpose of and use cases for: Google Cloud Storage Google Cloud SQL, and Google Cloud Bigtable. Learn how to choose between the various storage options on Google Cloud Platform. Lab: Integrating Applications with Google Cloud Storage.

Module 5: Google Container Engine

Define the concept of a container and identify uses for containers. Identify the purpose of and use cases for Google Container Engine and Kubernetes. Introduction to Hybrid and Multi-Cloud computing (Anthos). Lab: Deploying Applications Using Google Container Engine

Module 6: Google App Engine and Google Cloud Datastore

Understand the purpose of and use cases for Google App Engine and Google Cloud Datastore. Contrast the App Engine Standard environment with the App Engine Flexible environment. Understand the purpose of and use cases for Google Cloud Endpoints. Lab: Deploying Applications Using App Engine and Cloud Datastore.

Module 7: Deployment and Monitoring

Understand the purpose of template-based creation and management of resources. Understand the purpose of integrated monitoring, alerting, and debugging. Lab: Getting Started with Stackdriver and Deployment Manager.

Module 8: Big Data and Machine Learning

Understand the purpose of and use cases for the products and services in the Google Cloud big data and machine learning platforms. Lab: Getting Started with BigQuery.

Google Cloud Platforms: Core Infrastructure

Google Cloud Platforms core infrastructure provides you an overview of Google Cloud products and services so that you can learn the value of Google Cloud and how to incorporate cloud-based solutions into your corporate strategies. Identify the purpose and value of Google Cloud products and services. Application deployment environments on Google Cloud: App Engine, Google Kubernetes Engine, and Compute Engine. Choose among and use Google Cloud storage options: Cloud Storage, Cloud SQL, Cloud Bigtable and Firestore.

Topics covered

- Infrastructure
- Application Development. Business Transformation
- Security

After Completion

- Introducing Google Cloud Platform
- Virtual Machines and Networks in the Cloud
- Storage, Containers, Applications in the Cloud
- Developing, Deploying, and Monitoring in the Cloud
- Big Data and Machine Learning in the Cloud