Google Cloud Fundamentals: Core Infrastructure

Price	Duration	Delivery Methods
$595.00	1 Day	VILT, Private Group

This one-day instructor-led class provides an overview of Google Cloud Platform products and services. Through a combination of presentations, demos, and hands-on labs, participants learn the value of Google Cloud Platform and how to incorporate cloud-based solutions into business strategies.

Who Should Attend

- Individuals planning to deploy applications and create application environments on Google Cloud Platform.
- Developers, systems operations professionals, and solution architects getting started with Google Cloud Platform.
- Executives and business decision makers evaluating the potential of Google Cloud Platform to address their business needs.

Course Objectives

- Identify the purpose and value of Google Cloud Platform products and services
- Interact with Google Cloud Platform services
- Describe ways in which customers have used Google Cloud Platform
- Choose among and use application deployment environments on Google Cloud Platform: Google App Engine, Google Kubernetes Engine, and Google Compute Engine
- Choose among and use Google Cloud Platform storage options: Google Cloud Storage, Google Cloud SQL, Google Cloud Bigtable, and Google Cloud Datastore
- Make basic use of BigQuery, Google's managed data warehouse for analytics
- Make basic use of Cloud Deployment Manager, Google's tool for creating and managing cloud resources through templates
- Make basic use of Google Stackdriver, Google's monitoring, logging, and diagnostics system

Agenda

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 centers, regions, and zones.

- Understand the difference between Infrastructure-as-a- Service (IaaS) and Platform-as-a-Service (PaaS).

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.

3 - VIRTUAL MACHINES AND NETWORKS IN THE CLOUD

- Identify the purpose of and use cases for Google Compute Engine.
- Understand the various Google Cloud Platform networking and operational tools and services.
- Lab: Compute Engine

4 - STORAGE IN THE CLOUD

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

5 - CONTAINERS IN THE CLOUD

- Define the concept of a container and identify uses for containers.
- Identify the purpose of and use cases for Google Kubernetes Engine and Kubernetes.
- Lab: Kubernetes Engine

6 - APPLICATIONS IN THE CLOUD

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

7 - DEVELOPING, DEPLOYING, AND MONITORING IN THE CLOUD

- Understand options for software developers to host their source code.
- Understand the purpose of template-based creation and management of resources.
- Understand the purpose of integrated monitoring, alerting, and debugging.
- Lab: Deployment Manager and Stackdriver

8 - BIG DATA AND MACHINE LEARNING IN THE CLOUD

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