

Getting Started with Google Compute Engine

Course Code: GCPGSGKE

Duration: 1 day

Instructor-led Training (ILT) | Virtual Instructor-led Training (VILT)

OVERVIEW

Learn how to create and deploy containerized applications on Google Kubernetes Engine (GKE). This course features a combination of lectures, demos, and hands-on labs to help you explore and deploy solution elements —including infrastructure components like pods, and containers.

SKILLS COVERED

- This course teaches participants the following skills: Understand how software containers work.
- Understand the architecture of Kubernetes. - Understand the architecture of Google Cloud. Understand how pod networking works in Kubernetes Engine.
- Create Kubernetes Engine clusters using the Google Cloud Console and gcloud/kubectl commands.

WHO SHOULD ATTEND

- This class is intended for the following participants: - Cloud architects, administrators, and SysOps/DevOps personnel.
- Individuals using Google Cloud to create new solutions or to integrate existing systems, application environments, and infrastructure with the Google Cloud.

MODULES

Module 1: Introduction to Google Cloud

- Use the Google Cloud Console.
- Use Cloud Shell.
- Define Cloud Computing.
- Identify Google Cloud compute services.
- Understand regions and zones.
- Understand the Cloud resource hierarchy.
- Administer your Google Cloud resources.

Module 2: Containers and Kubernetes in Google Cloud

- Create a container using Cloud Build.
- Store a container in Container Registry.
- Understand the relationship between Kubernetes and Google Kubernetes Engine (GKE).
- Understand how to choose among Google Cloud Compute platforms.

Module 3: Kubernetes Architecture

- Understand the architecture of Kubernetes: pods, namespaces.
- Understand the control-plane components of Kubernetes.
- Create container images using Cloud Build.
- Store container images in Container Registry.
- Create a Kubernetes engine cluster.

Module 4: Introduction to Kubernetes Workloads

- The kubectl command.
- Introduction to deployments.
- Pod networking.
- Volumes overview.