

## Training: Google Cloud Getting Started with Google Kubernetes Engine



### TRAINING TERMS

2025-10-17 | 1 day | Kraków / Virtual Classroom  
2025-11-21 | 1 day | Warszawa / Virtual Classroom  
2025-12-19 | 1 day | Kraków / Virtual Classroom

### TRAINING GOALS:

This course covers an introduction to Kubernetes, a software layer that sits between your applications and your hardware infrastructure. Google Kubernetes Engine (GKE) brings you Kubernetes as a managed service on Google Cloud. This course teaches the basics of GKE and how to get applications containerized and running in Google Cloud. The course covers a basic introduction to Google Cloud, an overview of containers and Kubernetes, Kubernetes architecture, and Kubernetes operations.

### Course objectives

- Discuss the differences among Google Cloud compute platforms.
- Discuss the components and architecture of Kubernetes.
- Identify how Google manages Kubernetes orchestration.
- Create and manage Google Kubernetes Engine clusters by using the Google Cloud console and the `gcloud/kubectl` commands.

### Audience

- Application developers, cloud solutions architects, DevOps engineers, IT managers
- Individuals who use Google Cloud to create new solutions or to integrate existing systems, application environments, and infrastructure with Google Cloud.

### CONSPECT:

- Module 1 Introduction to the Course
  - Topics
    - The course introduction explains the course goals and previews each section.

- Objectives
  - Introduce the course goals and preview each section of the course.
- Module 2 Introduction to Google Cloud
  - Topics
    - Cloud computing and Google Cloud
    - Google Cloud compute offerings
    - The Google network
    - Resource management
    - Billing
    - Interacting with Google Cloud
  - Objectives
    - Identify Google Cloud services and their functions.
    - Choose the right Google Cloud services to create your own cloud solution.
    - Define the purpose of and use cases for Identity and Access Management (IAM).
    - Identify how costs can be managed in the resource hierarchy.
    - Use the Google Cloud console and Cloud Shell to create virtual machines (VMs), service accounts, and buckets.
  - Activities
    - Lab: Accessing the Google Cloud console and Cloud Shell
    - Quiz: Module quiz
- Module 3 Introduction to Containers and Kubernetes
  - Topics
    - Introduction to containers
    - Container images
    - Working with Cloud Build
    - Kubernetes
    - Google Kubernetes Engine
  - Objectives
    - Define the concept of a container and identify uses for containers.
    - Identify the purpose of and use cases for Kubernetes.
    - Outline the concept of Google Kubernetes Engine.
    - Create a container using Cloud Build.
  - Activities
    - Lab: Working with Cloud Build
    - Quiz: Module quiz
- Module 4 Kubernetes Architecture
  - Topics

- Kubernetes concepts
- The Kubernetes control plane
- Google Kubernetes Engine concepts
- Kubernetes object management
- Objectives
  - Conceptualize the Kubernetes architecture.
  - Identify how to view and manage Kubernetes objects.
  - Distinguish between Google Kubernetes Engines modes of operation.
  - Deploy a Kubernetes cluster by using GKE.
- Activities
  - Lab: Deploying GKE Autopilot clusters
  - Quiz: Module quiz
- Module 5 Kubernetes Operations
  - Topics
    - The kubectl command
    - Introspection
  - Objectives
    - Work with the kubectl command.
    - Inspect the cluster and Pods.
    - View a Pod's console output.
    - Sign in interactively to a Pod.
  - Activities
    - Lab: Deploying GKE Autopilot Clusters from Cloud Shell
    - Quiz: Module quiz
- Module 6 Course Summary
  - Topics
    - The course summary recaps the major concepts learners were introduced to during the course.
  - Objectives
    - Recap the content covered in each section of the course.

## REQUIREMENTS:

- Having completed Google Cloud Fundamentals: Core Infrastructure, or having equivalent experience
- Basic proficiency with command-line tools and Linux operating system environments

## Difficulty level



## CERTIFICATE:

The participants will obtain certificates signed by Google Cloud.

## TRAINER:

Authorized Google Cloud Trainer.