

Google Kubernetes Engine Administrator

Course Overview

In this course you get a review of the layout and principles of Google Cloud, followed by an introduction to creating and managing software containers and an introduction to the architecture of Kubernetes and cloud-native application development. Throughout the learning experience, you'll explore Kubernetes operations, deployment management, GKE networking, and persistent storage, security, logging and monitoring. This learning path guides you through a curated collection of concepts and labs that provide you with real-world, hands-on experience using Google Cloud technologies essential to the Google Kubernetes Engine Administrator role.

Duration: 04 days / 32 hours

Level: Associate

Prerequisites: There is no prerequisite for this learning path. Basic knowledge of Linux and Network administration is helpful but not mandatory.

Course Outcome: Learner will be prepared to work as a Google Kubernetes Engine Administrator on Google Cloud Platform

Table of Content

Google Cloud Fundamentals: Core Infrastructure

- Introducing Google Cloud
- Resources and Access in the Cloud
- Virtual Machines and Networks in the Cloud
- Storage in the Cloud
- Containers in the Cloud
- Applications in the Cloud
- Prompt Engineering

Architecting with Google Kubernetes Engine: Foundations

- Introduction to Containers and Kubernetes
- Kubernetes Architecture
- Kubernetes Operations

Architecting with Google Kubernetes Engine: Workloads

- Workloads: Deployments and Jobs
- Google Kubernetes Engine Networking
- Persistent Data and Storage

Architecting with Google Kubernetes Engine: Production

- Access Control and Security in Kubernetes and Google Kubernetes Engine
- Google Kubernetes Engine Logging and Monitoring
- Using Google Cloud Managed Storage Services with Google Kubernetes Engine
- Using CI/CD with Google Kubernetes Engine