



## Getting Started with Kubernetes and Google Container Engine

**Duration: 1 Day**    **Course Code: GO6591**

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### Overview:

This five-hour Google Cloud Platform class equips you to contain workloads in Docker containers, deploy them in Kubernetes clusters provided by Google Kubernetes Engine, and scale those workloads to handle increased traffic. Students also learn how to continually implement new code into a Kubernetes cluster to provide application updates. 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.

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### Target Audience:

This class is intended for the following participants: Application developers, cloud solutions architects, DevOps engineers, IT managers. People who use the Google Cloud to create new solutions or to integrate existing systems, application environments and infrastructure with the Google Cloud.

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### Objectives:

- At the end of the course, you'll be able to do it:
  - Understand the basics of the container.
  - Containerize an existing application.
  - Understand the concepts and principles of Kubernetes.
  - Deploy applications to Kubernetes using the CLI.
  - Establishing a continuous delivery pipeline using Jenkins
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### Prerequisites:

To get the most out of this course, participants should have

- Basic command of command line tools and Linux operating system environments, as well as web servers
  - Experience in systems operations, including application deployment and management, either on-premise or in a public cloud environment
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## Content:

Module 1: Introduction to Containers and Dockers

- Familiarize yourself with containers, the Docker and the Google Container Registry.

Create a container.

Pack a container with a Docker.

Store an image of a container in the Google Container Registry.

Launch a Docker container.

Module 2: Kubernetes Basics

- Deploy an application with microservices in a Kubernetes cluster.

Provision of a complete cluster of Kubernetes using the Kubernetes Engine

Deploy and manage Docker containers using Kubectl.

Divide an application into microservices using Kubernetes Deployments and Services.

Module 3: Kubernetes Deployment

- Create and manage Kubernetes deployments.

Create a Kubernetes deployment.

Activate, pause, resume and roll back updates.

Understand and build canary deployments.

Module 4: Continuous Deployment with Jenkins

Build a continuous delivery pipe. Jenkins' supply in your Kubernetes group.

Create a Jenkins pipeline.

Implement a canary deployment using Jenkins.

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## Further Information:

For More information, or to book your course, please call us on 0800/84.009

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[www.globalknowledge.com/en-be/](http://www.globalknowledge.com/en-be/)