



# **Getting Started with Google Kubernetes Engine** Preparing for the Professional Google Cloud Architect

FUTURESKILLS

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 participants explore and deploy solution elements including infrastructure components like pods, and containers.

\* This is a streamlined version of the original 3day training course, providing you fundamental concept of Google Kubernetes Engine (GKE)

# **Objectives**

- 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.

Programme code

**Duration** and

time

Venue

Language

Course fee

**Prerequisites** 

**Bring Your** Own Device (BYOD)

10016324

1 days 9:30-17:30

hkpe) Free Webinar

Cantonese, supplemented with **English terminology** 

Free of Charge

The course is designed for participants who have completed Google Cloud Fundamentals: Core Infrastructure or have equivalent experience and have basic proficiency with command-line tools and Linux operating system environments.

Windows 7/10 / Mac OS 10.x or above with minimum 2 GB RAM and 20 GB hard disk



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## **Course Outline**

### **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.

This course will be taught by Google Cloud Authorized Trainer.

#### Who Should Attend?

- ✓ 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



# **Getting Started with Google Kubernetes Engine**

## **Google Cloud Technical Learning Path**













Google Cloud Fundamentals: Core Infrastructure

Architecting with Google Compute Engine Architecting with Google Cloud: Design and Process

Getting Started with Google Kubernetes Engine

Preparing for the Professional Cloud Engineer Certification Exam

Professional Cloud Architect













Preparing for the Associate Cloud Engineer Certification Exam

Associate Cloud Engineer



Partner

### **Enrolment Methods**

- 1. Scan the QR code to complete the enrolment and payment online OR
- 2. Mail the crossed cheque with payee name "Hong Kong Productivity Council" (in HK dollar) to HKPC Academy, Hong Kong Productivity Council, 3/F, HKPC Building, 78 Tat Chee Avenue, Kowloon (attention to Mr Desmond CHAN). Please indicate the course name and course code on the envelope.



**Enrolment Link** 

Supporting Organisations (In arbitrary order)







