hkpc Academy 生產力學院

Google Cloud Fundamentals: Core Infrastructure

An all-round course providing an overview of Google products and services

CONNECTION TECHNOLOGY 裝備未來 FUTURESKILLS

TechEd

This course uses lectures, demos, and hands-on labs to give you an overview of Google Cloud products and services so that participants can learn the value of Google Cloud and how to incorporate cloud-based solutions into your business strategies.

Objectives

- Identify the purpose and value of Google Cloud products and services. Interact with Google Cloud services.
- Describe ways in which customers have used Google Cloud.
- Choose among and use application deployment environments on Google Cloud: App Engine, Google Kubernetes Engine, and Compute Engine.
- Choose among and use Google Cloud storage options: Cloud Storage, Cloud SQL, Cloud Bigtable, and Firestore.
- Make basic use of BigQuery, Google's managed data warehouse for analytics.

Programme code	10012208
Duration and time	1 day 9:30-17:00
Venue	Online broadcast (hkpc live)
Medium	Cantonese, supplemented with English terminology
Course fee	**FREE**
Prerequisites	Be familiar with application development, systems operations, Linux operating systems, and data analytics/ machine learning is helpful in understanding the technologies covered.

Bring Your Own Device (BYOD):
Windows 7/10 / Mac OS 10.x or above with minimum 2 GB RAM and 20 GB hard disk

Google Cloud

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Course Outline with highlights

Module 1: Introducing Google Cloud (GC)

- Define the components of Google's network infrastructure, including: Points of presence, data centers, regions, and zones.
- Understand the difference between Infrastructure-as-a-Service (IaaS) and Platform-as-a-Service (PaaS).

Module 2: Getting Started with Google Cloud

- Understand the purpose of and use cases for Identity and Access Management and
- List the methods of interacting with GC.
- Lab: Getting Started with Cloud Marketplace.

Module 3: Virtual Machines in the Cloud

- Identify the purpose of and use cases for Google Compute Engine and the basics of networking in GC.
- Lab: Getting Started with Google Compute Engine.

Module 4: Storage in the Cloud

- Understand the purpose of and use cases for: Cloud Storage, Cloud Bigtable, Cloud SQL, Cloud Spanner, and Firestore.
- Learn how to choose between the various storage options on Google Cloud.
- Lab: Getting Started with Cloud Storage and Cloud SQL.

Module 5: Containers in the Cloud

- Identify the purpose of and use cases for Google Kubernetes Engine and Kubernetes.
- Introduction to Hybrid and Multi-Cloud computing (Anthos).
- Lab: Getting Started with Kubernetes Engine.

Module 6: Applications in the Cloud

- Contrast the App Engine standard environment with the App Engine flexible environment.
- Understand the purpose of and use cases for Cloud Endpoints.
- Lab: Getting Started with App Engine.

Module 7: Containers in the Cloud (Cont')

- Understand how Cloud Source Repositories, Cloud Functions, and Deployment Manager support development in the cloud.
- Understand the purpose of integrated monitoring, alerting, and debugging.
- Lab: Getting Started with Deployment Manager and Cloud Monitoring.

Module 8: Big Data and Machine Learning in the Cloud

- Understand the purpose of and use cases for the products and services in the Google Cloud big data and machine learning platforms.
- Lab: Getting Started with BigQuery.

This course will be taught by Google Cloud Authorized Trainer.

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Who Should Attend?

- ✓ Planned to deploy applications and create application environments on Google Cloud
- ✓ Developers, systems operations professionals, and solution architects getting started with Google Cloud
- ✓ Executives and business decision makers evaluating the potential of Google Cloud to address their business needs

Google Cloud Technical Learning Path

Google Cloud 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)

GDG Cloud Hong Kong | 50th Anniversary Hong Kong Computer Society 香港電腦學會 | WTIA 香港無線科技商會 | Hong Kong Software Industry Association 香港軟件行業協會

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