

Google Cloud Infrastructure for AWS Professionals

Category: Cloud Platforms | **Vendor:** Amazon Web Services

Duration: 16.00 hours (2 days)

13.0 CPD Hours

Rating: ★ 4.6 (5,878 reviews)

Course Information

Delivery Format: Instructor Led - Online

Course Overview

This is a course for cloud architects and engineers with existing AWS knowledge that compares Google Cloud solutions with AWS and guides professionals on their use. In this course, you'll apply the concepts and technologies knowledge in AWS to explore the similarities and differences with concepts and technologies in Google Cloud. You'll get hands-on practice building and managing Google Cloud resources.

About This Course

This is a course for cloud architects and engineers with existing AWS knowledge that compares Google Cloud solutions with AWS and guides professionals on their use. In this course, you'll apply the concepts and technologies knowledge in AWS to explore the similarities and differences with concepts and technologies in Google Cloud. You'll get hands-on practice building and managing Google Cloud resources.

Who Should Attend

Cloud architects or cloud engineers who are experienced with AWS cloud.

Prerequisites & Entry Requirements

General Prerequisites:

Familiarity with AWS terms and concepts.

Learning Outcomes

Upon successful completion of this course, participants will be able to:

- Explain best practices for the Google Cloud solutions that incorporate resources and access management in Google Cloud.
- Implement Google Cloud networks by using best practices for Cloud virtual private network (VPN), Virtual Private Cloud (VPC), and Google Cloud Firewall.
- Create and customize virtual machine (VM) instances using Compute Engine.
- Configure load balancers and autoscaling for VM instances.
- Implement data storage services in Google Cloud.
- Design a solution using Google Kubernetes Engine (GKE) for deploying applications in Google Cloud.
- Examine best practices for the deploying and monitoring of Google Cloud infrastructure.
- Identify the purpose and use cases for Cloud Run.

Detailed Course Outline

Module 1 - Resource and Access Management in Google Cloud

Topics:

- Google Cloud Resource Hierarchy
- Identity and Access Management
- Service Accounts
- Interaction with Google Cloud

Objectives:

- Review the AWS resource hierarchy.

- Explore how IAM lets you apply policies that define who can do what on which resources in Google Cloud.
- Examine service account types and keys in Google Cloud.
- Navigate through Google Cloud console and Cloud Shell to perform basic tasks.

Activities:

- Lab: Exploring Identity and Access Management

Module 2 - Networking in Google Cloud

Topics:

- Networking Concepts in AWS and Google Cloud
- Virtual Private Cloud Networking
- Lab: VPC Networking
- Cloud Routing
- Interconnecting Networks
- Lab: Implement Private Google Access and Cloud NAT

Objectives:

- Compare networking concepts in AWS and Google Cloud.
- Understand VPC networking on Google Cloud.
- Explain how Google Virtual Private Cloud (VPC) differs from AWS VPC.
- Create and configure Private Google Access and Cloud NAT.
- Determine which Google Cloud interconnect or peering service to use in specific circumstances.

Activities:

- Lab: VPC Networking
- Lab: Implement Private Google Access and Cloud NAT

Module 3 - Virtual Machines in Google Cloud

Topics:

- Google Compute Engine
- Machine types and images
- Spot VMs

Objectives:

- List the various CPU, GPU, and memory options for virtual machines.
- Explore Google Cloud images.
- Explain where you would want to use Spot VMs in Google Cloud.

Activities:

- Lab: Getting started with Compute Engine

Module 4 - Load Balancing and Managed Instance Groups on Google Cloud

Topics:

- Load Balancing in AWS and Google Cloud
- Cloud Load Balancing Features in Google Cloud
- Managed Instance Groups

Objectives:

- Explain Cloud Load Balancing features in Google Cloud.
- Describe Managed Instance Groups and how to use them.
- Explain how to use Managed Instance Groups with Load Balancers

Activities:

- Lab: Configuring an HTTP Load Balancer with Autoscaling

Module 5 - Storage in Google Cloud

Topics:

- Overview of Storage and Database Services
- Cloud Storage
- Managed Database Services
- Data Lake Options

Objectives:

- Explore storage options and use cases.
- Explore the features of Cloud SQL and Cloud Spanner.

- Learn about using Cloud Bigtable.

Activities:

- Lab: Cloud Storage
- Lab: Implementing Cloud SQL

Module 6 - Containers in Google Cloud

Topics:

- Containers in Google Cloud
- Google Kubernetes Engine
- Kubernetes Concepts and Architecture
- Deployments and Networking
- Hybrid and Multi-Cloud Computing with GKE Enterprise

Objectives:

- Explain how containers can be utilized in Google Cloud.
- Provision a Kubernetes cluster using GKE.
- Explain how Deployments are used in Kubernetes.
- Identify the purpose of hybrid and multi-cloud computing with GKE Enterprise.

Activities:

- Lab: Getting started with Google Kubernetes Engine

- Lab: Creating Google Kubernetes Engine Deployments

Module 7 - Applications in Google Cloud

Topics:

- Developing Applications in Google Cloud
- Cloud Run Functions
- Cloud Run

Objectives:

- Describe how Cloud Run Functions can support application development.
- Deploy a containerized application on Cloud Run.

Activities:

- Lab: Hello Cloud Run

Module 8 - Monitoring in Google Cloud

Topics:

- Monitoring in the Cloud
- Cloud Operations
- Monitoring GKE Clusters

- Monitoring Tools in AWS and Google Cloud

Objectives:

- Describe Google Cloud's operations suite.
- Create charts, alerts, and uptime checks for resources with Cloud Monitoring.
- Describe system metrics collection in GKE.

Activities:

- Lab: Monitoring a Compute Engine VM using Ops Agent, Resource and Access Management in Google Cloud, Networking in Google Cloud, Virtual Machines in Google Cloud, Load Balancing and Managed Instance Groups on Google Cloud, Storage in Google Cloud, Containers in Google Cloud, Applications in Google Cloud, Monitoring in Google Cloud

Skills You Will Learn:

- Explain best practices for the Google Cloud solutions that incorporate resources and access management in Google Cloud.
- Implement Google Cloud networks by using best practices for Cloud virtual private network (VPN), Virtual Private Cloud (VPC), and Google Cloud Firewall.
- Create and customize virtual machine (VM) instances using Compute Engine.
- Configure load balancers and autoscaling for VM instances.
- Implement data storage services in Google Cloud.
- Design a solution using Google Kubernetes Engine (GKE) for deploying applications in Google Cloud.
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Frequently Asked Questions

Q: What delivery options are available for Google Cloud Infrastructure for AWS Professionals?

We offer multiple delivery formats:

- Live Instructor-Led Classroom Online (Virtual/Live Online)
 - Traditional Instructor-Led Classroom Training (ILT)
 - On-site delivery at your offices anywhere in United Kingdom
 - Private dedicated courses customized for your team
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Q: How many CPD hours does this course provide?

The 2-day Google Cloud Infrastructure for AWS Professionals course provides up to 13.0 CPD hours of structured learning. CPD certificates can be provided upon request.

Q: What is the duration of the Google Cloud Infrastructure for AWS Professionals training?

The training takes place over 2 day(s), with each day lasting approximately 16.00 hours including breaks for lunch and refreshments.

Q: Do you provide corporate training for Google Cloud Infrastructure for AWS Professionals?

Yes, we provide corporate training, dedicated training, and closed classes for Google Cloud Infrastructure for AWS Professionals. Training can take place anywhere in United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online allowing teams from across United Kingdom or internationally to attend.

Q: What related terms do people search for?

Popular related searches include: Google Cloud Infrastructure for AWS Professionals, Architecture & Engineering, GCIAWSP, Google Cloud, vILT

Q: Why choose Nexus Human for Google Cloud Infrastructure for AWS Professionals?

Nexus Human is recognized as one of the leading training providers. Our trainers have won multiple awards including:

- Small Firms Best Trainer Award
- National Training Partner of the Year (Ireland) - Multiple Years
- Global Top 30 Instructor Awards (2012, 2019, 2021)
- Tech Excellence Award Nominations
- Learning Performance Institute (LPI) External Training Provider Sponsor 2024

Q: Are there any discount codes available?

Yes! Use discount code **PENPAL5** when booking your Google Cloud Infrastructure for AWS Professionals training. Please note that only one discount code can be used per booking and cannot be combined with other special offers.

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