Google Cloud Computing Foundations: Networking and Security in Google Cloud

The Google Cloud Computing Foundations courses are for individuals with little to no background or experience in cloud computing. They provide a detailed overview of concepts covering cloud basics, big data, and machine learning, and where and how Google Cloud fits in.

By the end of the course, learners will be able to articulate concepts around cloud computing, big data, and machine learning, and demonstrate some hands-on skills.

This course is part of a series of courses called Google Cloud Computing Foundations. The courses should be completed in the following order:

1. Google Cloud Computing Foundations: Cloud Computing Fundamentals
2. Google Cloud Computing Foundations: Infrastructure in Google Cloud
3. Google Cloud Computing Foundations: Networking and Security in Google Cloud
4. Google Cloud Computing Foundations: Data, ML, and AI in Google Cloud

This third course covers how to build secure networks, and cloud automation and management tools.

Congratulations! You finished this course.

You've earned a badge. Share this badge on your profile page.

It Helps to Network

This module demonstrates how to build secure networks in the cloud.

DOCUMENT
Welcome to the course!

VIDEO Module 7 Introduction	2 minutes
VIDEO Introduction to Networking in the Cloud	1 minute
VIDEO Defining a Virtual Private Cloud	5 minutes
VIDEO Public and Private IP Address Basics	2 minutes
VIDEO Google's Network Architecture	2 minutes
VIDEO Routes and Firewall Rules in the Cloud	6 minutes

VIDEO
Multiple VPC Networks   **5 minutes**

VIDEO
Lab Intro Multiple VPC Networks   **1 minute**

HANDS-ON LAB
Multiple VPC Networks   **1 hour 11 minutes**

VIDEO
Lab Solution: Multiple VPC Networks   **28 minutes**

VIDEO
Lab Intro: VPC Networks - Controlling Access   **1 minute**

HANDS-ON LAB
VPC Networks - Controlling Access   **1 hour**

VIDEO
Lab Solution: VPC Networks - Controlling Access   **22 minutes**

VIDEO
Building Hybrid Clouds using VPNs, Interconnecting, and Direct Peering   **6 minutes**

VIDEO
Different Options for Load Balancing   **1 minute**

VIDEO
Lab Intro: HTTP Load Balancer with Cloud Armor   **1 minute**

HANDS-ON LAB
HTTP Load Balancer with Cloud Armor   **1 hour**

VIDEO
Lab Solution: HTTP Load Balancer with Cloud Armor   **30 minutes**

VIDEO
Lab Intro: Create an Internal Load Balancer   **1 minute**

HANDS-ON LAB
Create an Internal Load Balancer   **51 minutes**

VIDEO
Lab Solution: Create an Internal Load Balancer   **13 minutes**

QUIZ
Quiz: It Helps to Network

VIDEO
Module 7 Summary   **1 minute**

Let Google Keep an Eye on Things

This module identifies cloud automation and management tools, and provides the opportunity to earn a Google Cloud Skill Badge.

VIDEO
Module 8 Introduction   **1 minute**

VIDEO
Introduction to Infrastructure as Code (IaC)   **1 minute**

VIDEO
Cloud Deployment Manager   **2 minutes**

VIDEO
Monitoring and Managing Your Services, Applications, and Infrastructure **1 minute**

VIDEO
Cloud Monitoring (formerly known as Stackdriver)   **8 minutes**

HANDS-ON LAB
Cloud Monitoring: Qwik Start   **50 minutes**

QUIZ
Quiz: Let Google Keep an Eye on Things

VIDEO
Module 8 Summary   **1 minute**

DOCUMENT
Demonstrate your capabilities further!