

Google Cloud Computing Foundations: Cloud Computing Fundamentals

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

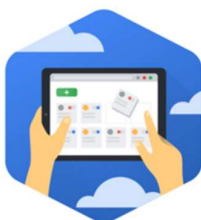
By the end of the series of courses, learners will be able to articulate these concepts and demonstrate some hands-on skills.

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 first course provides an overview of cloud computing, ways to use Google Cloud, and different compute options.

Congratulations! You finished this course.



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

Welcome to the Course

In this module, you'll learn about the upcoming lessons in this course.

DOCUMENT

[Welcome to the course!](#)

VIDEO

[Course Introduction](#)

2 minutes

VIDEO

[Course Objectives](#)

3 minutes

So, What's the Cloud Anyway?

This module explains what the cloud is and why it's a technological and business game changer.

VIDEO

[Module 1 Introduction](#)

1 minute

VIDEO

[Cloud Computing](#)

2 minutes

VIDEO

[Cloud vs. Traditional Architecture](#)

4 minutes

VIDEO

[IaaS, PaaS, and SaaS](#)

2 minutes

VIDEO
[Google Cloud Architecture](#) 8 minutes

QUIZ
[Quiz: So What's The Cloud Anyway?](#)

VIDEO
[Module 1 Summary](#) 2 minutes

Start with a Solid Platform

This module describes the different ways a user can interact with Google Cloud.

VIDEO
[Module 2 Introduction](#) 1 minute

VIDEO
[The Google Cloud Console](#) 2 minutes

VIDEO
[Understanding Projects](#) 2 minutes

VIDEO
[Billing in Google Cloud](#) 3 minutes

VIDEO
[Install and Configure Cloud SDK](#) 1 minute

VIDEO
[Use Cloud Shell](#) 2 minutes

VIDEO
[Lab Intro: A Tour of Qwiklabs](#) 1 minute

HANDS-ON LAB
[A Tour of Qwiklabs and Google Cloud](#) 30 minutes

VIDEO
[Lab Intro: Getting Started with Cloud Shell & gcloud](#) 1 minute

HANDS-ON LAB
[Getting Started with Cloud Shell and gcloud](#) 45 minutes

VIDEO
[Google Cloud APIs](#) 1 minute

VIDEO
[Cloud Console Mobile App](#) 1 minute

QUIZ
[Quiz: Start with a Solid Platform](#)

VIDEO
[Module 2 Summary](#) 1 minute

Use Google Cloud to Build Your Apps

This module explores the different compute options in Google Cloud, and provides the opportunity to earn a Google Cloud Skill Badge.

VIDEO

[Module 3 Introduction](#)

2 minutes

VIDEO

[Compute Options in the Cloud](#)

1 minute

VIDEO

[Exploring IaaS with Compute Engine](#)

10 minutes

VIDEO

[Lab Intro: Creating a Virtual Machine](#)

1 minute

HANDS-ON LAB

[Creating a Virtual Machine](#)

40 minutes

VIDEO

[Configuring Elastic Apps with Autoscaling](#)

1 minute

VIDEO

[Exploring PaaS with App Engine](#)

6 minutes

VIDEO

[Lab Intro: App Engine - Qwikstart – Python](#)

1 minute

HANDS-ON LAB

[App Engine: Qwik Start – Python](#)

20 minutes

VIDEO

[Event Driven Programs with Cloud Functions](#)

4 minutes

VIDEO

[Lab Intro: Cloud Functions - Qwikstart - Command Line](#)

5 minutes

HANDS-ON LAB

[Cloud Functions: Qwik Start - Command Line](#)

30 minutes

VIDEO

[Containerizing and Orchestrating Apps with GKE](#)

9 minutes

HANDS-ON LAB

[Kubernetes Engine: Qwik Start](#)

30 minutes

HANDS-ON LAB

[Set Up Network and HTTP Load Balancers](#)

1 hour

QUIZ

[Quiz: Use Google Cloud to Build Your Apps](#)

VIDEO

[Module 3 Summary](#)

1 minute

DOCUMENT

[Demonstrate your capabilities further!](#)