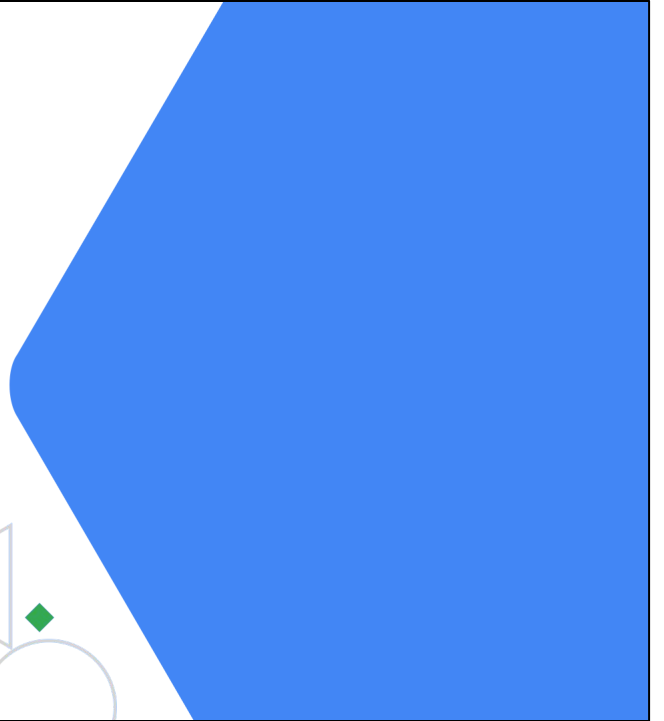




# Google Cloud Fundamentals: Core Infrastructure

Welcome



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## Facilities



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Parking



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Facilities



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Food

## Course etiquette



Please silence your phone and take calls outside.



Recording this class is prohibited.



Ask questions interactively or via chat (online).

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## Learn how to ...

Identify the purpose and value of Google Cloud products and services.

Do automated deployment, monitoring, and data analysis on Google Cloud.

Interact with Google Cloud services.

Use Google Cloud application deployment environments.

Use Google Cloud storage options.



This 1 day instructor-led class provides an overview of Google Cloud. Through a combination of presentations and hands-on labs, participants learn the value of Google Cloud and how cloud solutions factor into business strategies.

The intended target audience consists of solutions developers, systems operations professionals, and solution architects planning to deploy applications and create application environments on Google Cloud. The course will also help business decision makers evaluating Google Cloud.

The course has no prerequisites, although familiarity with application development, Linux operating systems, systems operations, and data analytics/machine learning is helpful in understanding the technologies covered.

## What's next in the Infrastructure modernization track for Cloud Engineers?



### Infrastructure modernization

This track is designed for IT professionals who are responsible for implementing, deploying, migrating, and maintaining applications in the cloud.

1

Google Cloud Fundamentals:  
Core Infrastructure

2

Architecting with Google  
Compute Engine

3

Getting Started with Google  
Kubernetes Engine



## What's next in the Infrastructure modernization track for Cloud Architects?



### Infrastructure modernization

This track is designed for IT professionals who are responsible for implementing, deploying, migrating, and maintaining applications in the cloud.

1

Google Cloud Fundamentals: Core Infrastructure

2

Architecting with Google Compute Engine

3

Architecting with Google Cloud: Design and Process

4

Getting Started with Google Kubernetes Engine



## What's next in the Application modernization track for Cloud Developers?



### Application modernization

This track is designed for application programmers and software engineers who develop software programs in the cloud.

1

Google Cloud Fundamentals: Core Infrastructure

2

Developing Applications with Google Cloud

3

Getting Started with Google Kubernetes Engine



## What's next in the Application modernization track for Cloud DevOps Engineers?



### Application modernization

This track is designed for application programmers and software engineers who develop software programs in the cloud.

1

Google Cloud Fundamentals: Core Infrastructure

2

Architecting with Google Cloud: Design and Process

3

Logging, Monitoring, and Observability in Google Cloud





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# Introductions

## Your instructor

- Organization
- Background
- Course goals

## You

- Name
- Organization
- Job role
- Course goals



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# Audience and prerequisites

## Target audiences

- Developers, DevOps and SysOps professionals, and solution architects planning to deploy applications and environments on Google Cloud.
- Decision-makers evaluating Google Cloud.

## Prerequisites and pre-work

None (although familiarity with Linux is helpful, as well as with the technologies covered).

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# Agenda

Module	Lab
1 Introducing Google Cloud	
2 Getting Started with Google Cloud	Getting Started with Cloud Marketplace
3 Virtual Machines in the Cloud	Getting Started with Compute Engine
4 Storage in the Cloud	Getting Started with Cloud Storage and Cloud SQL
5 Containers in the Cloud	Getting Started with Google Kubernetes Engine

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## Agenda

Module	Lab
6 Applications in the Cloud	Getting Started with App Engine
7 Developing, Deploying, and Monitoring in the Cloud	Getting Started with Deployment Manager and Cloud Monitoring
8 Big Data and Machine Learning in the Cloud	Getting Started with BigQuery
9 Summary and Review	

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## Lab environment

For each lab, Qwiklabs offers:

- A free set of resources for a fixed amount of time
- A clean environment with permissions



Qwiklabs provisions you with Google account credentials, so you can access the Google Cloud Console for each lab at no cost. Specifically, for each lab, Qwiklabs offers:

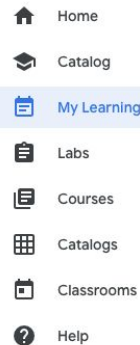
- A free set of resources for a fixed amount of time
- A clean environment with permissions

## Open Qwiklabs

- 1 **Open an incognito window** (or private/anonymous window).
- 2 **Go** to the Qwiklabs URL your instructor provides.
- 3 **Sign In** with existing account or **Join** with new account (with email you used to register for the course).



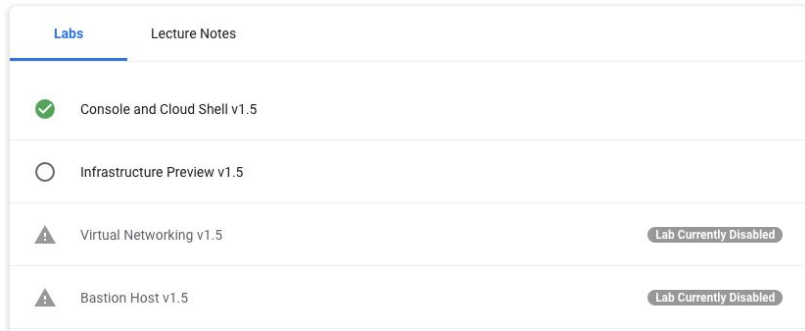
- 4 Launch the course from **My Learning**.



Go ahead and open Qwiklabs:

1. **Open an incognito window** (or private/anonymous window). Use of an incognito browser window reduces the risk that you will accidentally do the labs using your own Google Cloud account instead of Qwiklabs.
2. **Go** to the Qwiklabs URL your instructor provides.
3. **Sign in** with an existing account or **Join** with a new account (with email you used to register for the course).
4. Launch the course from **My Learning**.

## View your labs



The screenshot shows the 'Labs' tab in the Google Cloud console. It lists four labs: 'Console and Cloud Shell v1.5' (completed), 'Infrastructure Preview v1.5' (active), 'Virtual Networking v1.5' (disabled), and 'Bastion Host v1.5' (disabled). Blue arrows point from the status labels on the right to the corresponding lab entries.

Lab	Status
Console and Cloud Shell v1.5	Lab Completed
Infrastructure Preview v1.5	Active Lab
Virtual Networking v1.5	Not yet available
Bastion Host v1.5	Not yet available

Do NOT launch a lab until instructed to do so!



After you launch the course, you can view your labs. The lab list will indicate whether a lab is:

- Completed (by you)
- Active
- Not yet available

Your instructor will let you know when it's time to launch a lab. Once you start a lab, you won't be able to pause and restart it, so you'll need a continuous block of time to complete the work.

## View lecture notes

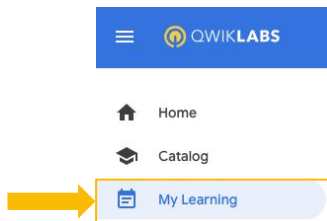
Labs	Lecture Notes
00 Course Intro	
01 Introduction to GCP	
02 Virtual Networks	
03 Virtual Machines	
04 Cloud IAM	



## End of class: Materials

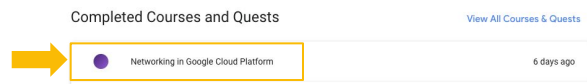
1

Click on **My Learning** in the left navigation pane.



2

Select the class from the **Completed Courses** list.



Materials are available for 2 years

