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## GCP Fundamentals: Core Infrastructure

Welcome

## Facilities



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Parking



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Facilities



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Food

## Course etiquette



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Please silence  
your phone and  
take calls outside.



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Recording  
this class  
is prohibited.



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Ask questions  
interactively or  
via chat (online).

# Course Objectives

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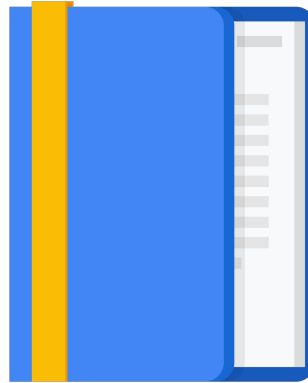
Identify the purpose and value of Google Cloud Platform products and services.

Interact with Google Cloud Platform services.

Use Google Cloud Platform application deployment environments.

Use Google Cloud Platform storage options.

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



This 1 day instructor-led class provides an overview of Google Cloud Platform. Through a combination of presentations and hands-on labs, participants learn the value of Google Cloud Platform 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 Platform. The course will also help business decision makers evaluating Google Cloud Platform.

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 Cloud Infrastructure track?



### Cloud Infrastructure

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

1

Google Cloud Platform  
Fundamentals: Core Infrastructure

2

Architecting with Google  
Cloud Platform: Infrastructure

3

Architecting with Google  
Cloud Platform: Design and  
Process



## What's next in the Application Development track?



### Application Development

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

1

Google Cloud Platform  
Fundamentals: Core Infrastructure

2

Developing Applications with  
Google Cloud Platform



# Introductions

## Your instructor

- Organization
- Background
- Course goals

## You

- Name
- Organization
- Job role
- Course goals



## Audience and prerequisites

### Target audiences

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

### Prerequisites and pre-work

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



# Agenda

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Module	Lab
1 Introducing Google Cloud Platform	
2 Getting Started with Google Cloud Platform	Getting Started with Cloud Marketplace
3 Virtual Machines in the Cloud	Create virtual machines and connect between them
4 Storage in the Cloud	Use Google Cloud Storage and Google Cloud SQL



## Notes:

½ day each

# Agenda

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Module	Lab
5 Containers in the Cloud	Launch a containerized application
6 Applications in the Cloud	Explore and launch a custom application
7 Development, Deployment, and Monitoring in the Cloud	Use Google Cloud Deployment Manager and Stackdriver
8 Big Data and Machine Learning in the Cloud	Use BigQuery
9 Summary and Review	



## Notes:

½ day each



## What you get

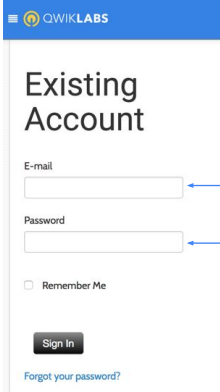
For each lab, Qwiklabs offers:

- A set of resources for a fixed amount of time at no additional charge
- 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 credentials you used to register for the course) and launch the course.









The image shows a screenshot of the Qwiklabs login page. At the top is a blue header with the Qwiklabs logo and name. Below the header, the title 'Existing Account' is displayed. There are two input fields: 'E-mail' and 'Password'. A blue arrow points from the 'Username' label to the 'E-mail' field. Another blue arrow points from the 'Password' label to the 'Password' field. Below the password field is a checkbox labeled 'Remember Me'. At the bottom of the form is a 'Sign In' button. Below the button is a link that says 'Forgot your password?'.

Username

Password

This account may be different than your Gmail/G Suite account

# View your labs

Class Details		
Class Guides	 Qwiklabs and Access to Google Cloud Platform	
	 Console and Cloud Shell	
Labs	 Projects	Currently Inactive
	 Infrastructure Preview	Currently Inactive
	 Bastion Host	Currently Inactive
	 Google App Engine Development	Currently Inactive

Completed lab

Active lab

Not yet available


## Select a lab

Class Guides

Class Details

Labs

- Qwiklabs and Access to Google Cloud-Platform
- Console and Cloud Shell
- Projects
- Infrastructure
- Bastion Host
- Google App Engine


**Console and Cloud Shell**

Select

In this lab you will become familiar with the GCP web-based interface including Console, the GUI (graphical user interface)

Duration: 30 min.

Access Time: 30 min.

**Console and Cloud Shell**

Select

In this lab you will become familiar with the GCP web-based interface including Console, the GUI (graphical user interface) environment, and Cloud Shell, the CLI (command line interface) environment.

Duration: 30 min.

Access Time: 30 min.

Setup Time: 0 min.

Level: introductory

You won't be able to pause and restart.

## Run a lab

- 1 Click Start Lab.
- 2 Note the username and password.
- 3 Click Open Google Console and sign in with these credentials.
- 4 Accept the terms and note the project ID.



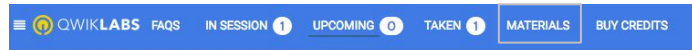
## End a lab

- 1 Sign out of the GCP console.
- 2 Close the tab.
- 3 Click End in Qwiklabs to free your resources.

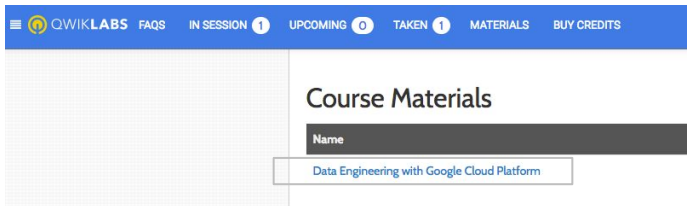
Some labs may require you to NOT end the lab

## End of class: Materials

- 1 Click **Materials** on the top navigation bar.



- 2 Select the class from the **Course Materials** list.



- (1) Available for 2 years following the completion of a course.
- (2) Labs currently available for reference. May not work outside of Qwiklabs environment. No support provided. Qwiklabs lab time not currently available for sale separate from the class.
- (3) class material will appear only at the end of class, provided the student has completed at least one lab in the course.