Google Cloud

GCP Fundamentals: Core Infrastructure

Welcome

Facilities

Parking

Facilities

Food

Course etiquette

Please silence
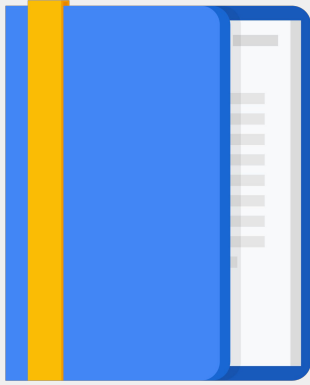your phone and
take calls outside.

Recording
this class
is prohibited.

Ask questions
interactively or
via chat (online).

Course objectives

- 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

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

Module		Lab
1	Introducing Google Cloud Platform	
2	Getting Started with Google Cloud Platform	Launch an app with Cloud Launcher
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, continued

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

Introductions

Your instructor

- Organization
- Background
- Course goals

You

- Name
- Organization
- Job role
- Course goals

Welcome to your lab environment

QWIKLABS

For each lab, Qwiklabs offers:

- A set of resources for a fixed amount of time at no additional charge

- A clean environment with permissions
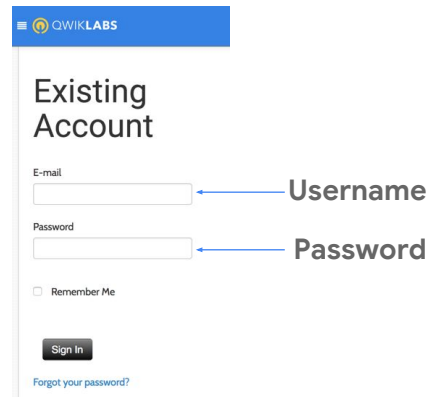
For each lab, Qwiklabs provides a temporary set of credentials and resources for a fixed amount of time at no cost.

It sets up a project in a clean state with an empty project or preconfigured resources.

Open Qwiklabs

(1) **Open an incognito window**
(or private/anonymous window)

(2) **Go** to Qwiklabs URL your instructor
provides

(3) **Sign in** and launch the course
(with credentials you used to register
for the course)

≡ **⦿ QWIKLABS**

Existing
Account

E-mail

[   ] ←——— **Username**

Password

[   ] ←——— **Password**

☐ Remember Me

[Sign In]

Forgot your password?

Open an incognito window (or a private/anonymous window) so you know you haven't
signed in with any Google or Gmail account.

If not available, make sure you're logged out of all Google and Gmail accounts.
Otherwise, you may incur charges.

View your labs

When you click on the **Labs** tab you'll see class labs and their status.

In the example above, the first lab has been completed, as indicated by the filled green circle. The second lab has been made active by the instructor and is available for your use. And the remaining labs are not yet available.

Note the lab's access time on the right and click **Select** to open the lab instructions.

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.

Run a lab

1. Click **Start Lab**

Google Console Details

GCP Project ID : qwiklabs-gcp-6d778cbeb42cdbda

Username : gcpstaging1406-student@qwiklabs.net

Password: yZ5ZP9WrH

2. Note the following

3. Click **Open Google Console** and sign in

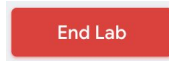4. Accept terms and note the following   qwiklabs-gcp-6d778cbeb4...

When ready to begin:
1.   Click **Start Lab**
2.   Note the lab's username, password, and project ID
3.   Click **Open Google Console** and sign in to Cloud Console with these credentials
4.   Accept the terms and note the project set for you.

End a lab

When done, click [End Lab] to free your resources

Some labs may require you to NOT end the lab; the instructor will tell you.

When done, click End. The account will be wiped out and removed. You'll lose all work you have in the project.
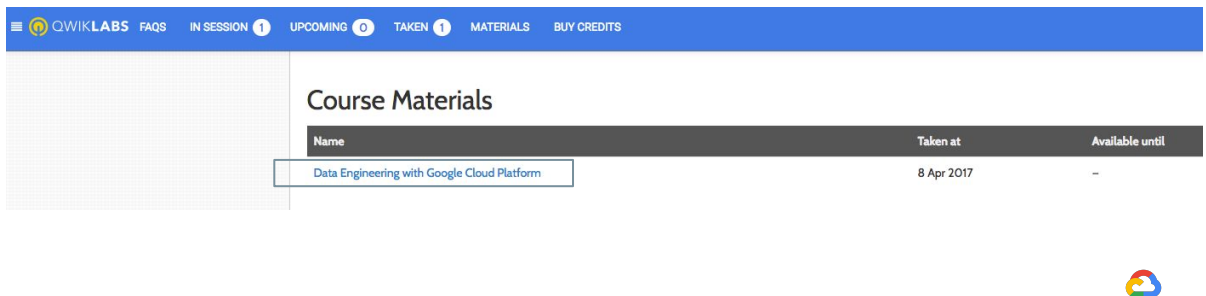
Most labs are designed to be standalone, that is, you need to end lab when you finish each lab. Some labs may require you to NOT End lab, and the instructor will inform you.

End of class: Materials

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

≡ ⓜ QWIK**LABS** FAQS   IN SESSION ❶   UPCOMING ⓪   TAKEN ❶   MATERIALS   BUY CREDITS

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

≡ ⓜ QWIK**LABS** FAQS   IN SESSION ❶   UPCOMING ⓪   TAKEN ❶   MATERIALS   BUY CREDITS

Course Materials

Name	Taken at	Available until
Data Engineering with Google Cloud Platform	8 Apr 2017	–

(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.