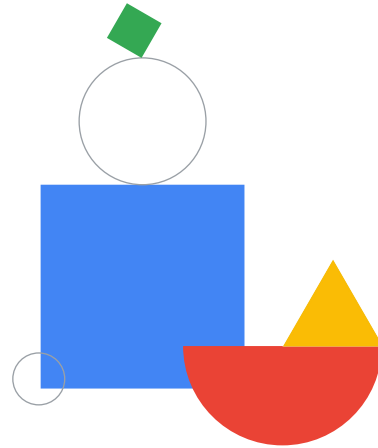


# Preparing for Your Associate Cloud Engineer Journey

Introduction



Welcome to Preparing for Your Associate Cloud Engineer Journey.

# Course agenda


- |   |   |
|---|---|
| 0 | Introduction                                      |
| 1 | Setting Up a Cloud Solution Environment           |
| 2 | Planning and Configuring a Cloud Solution         |
| 3 | Deploying and Implementing a Cloud Solution       |
| 4 | Ensuring Successful Operation of a Cloud Solution |
| 5 | Configuring Access and Security                   |
| 6 | Your Next Steps                                   |



Google Cloud

In this course, you'll learn more about the skills covered on the Associate Cloud Engineer certification exam. It's important to clarify that this course by itself will not prepare you to take the ACE certification exam. This is not a "cram session." The exam is purposefully calibrated to test your ability to apply the knowledge required of an Associate Cloud Engineer, not merely repeat it. Cram sessions have minimal impact on your ability to pass the exam.

Instead, the goal of this course is to help you better structure your preparation time for the exam. You'll learn about the scope of each exam section, assess your current knowledge and skills through diagnostic questions, and review where to find additional tools and resources to include in your study plan.



# Module agenda

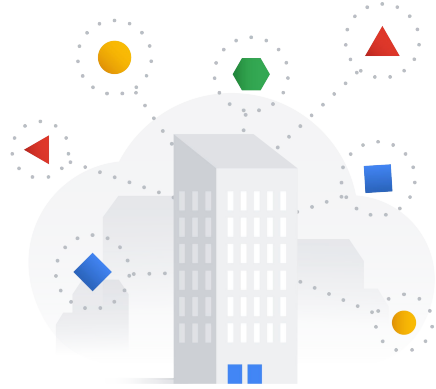
- 01 What is the role of an Associate Cloud Engineer?
- 02 Resources to support your certification journey
- 03 Creating your study plan



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In this introductory module, you'll learn about the role of an Associate Cloud Engineer, the types of resources available to support your study, and how you will use the workbook in this course to create your study plan.

## What is the role of an Associate Cloud Engineer?

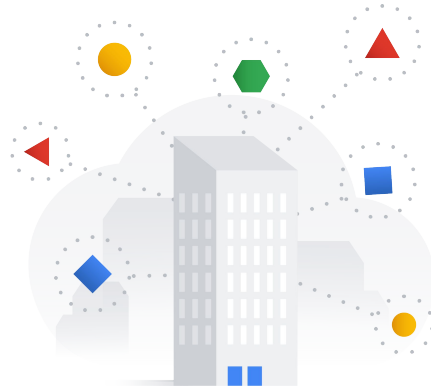


Google Cloud

So, you're preparing for the Associate Cloud Engineer certification... but what exactly is an Associate Cloud Engineer?

# What is the role of an Associate Cloud Engineer?

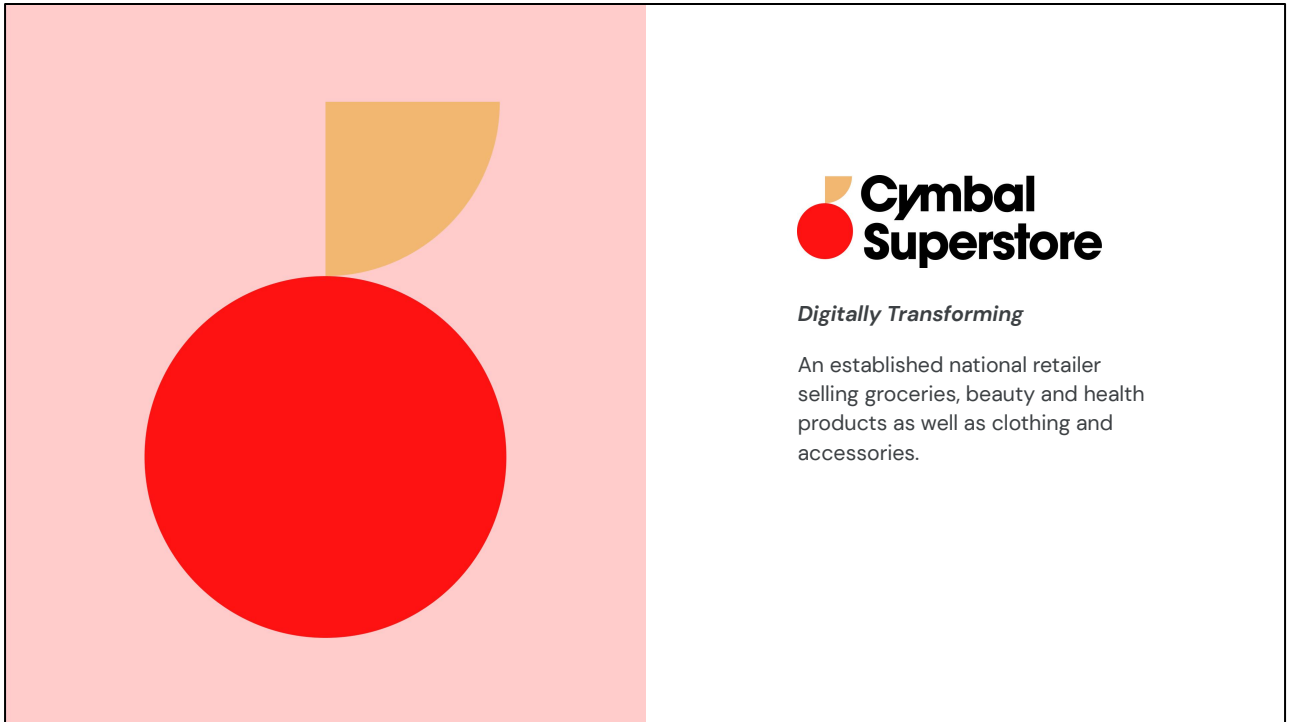
An Associate Cloud Engineer deploys and secures applications and infrastructure, monitors operations of multiple projects, and maintains enterprise solutions to ensure that they meet target performance metrics. This individual has experience working with public clouds and on-premises solutions. They are able to use Google Cloud Console and the command-line interface to perform common platform-based tasks to maintain and scale one or more deployed solutions that leverage Google-managed or self-managed services on Google Cloud.



Google Cloud

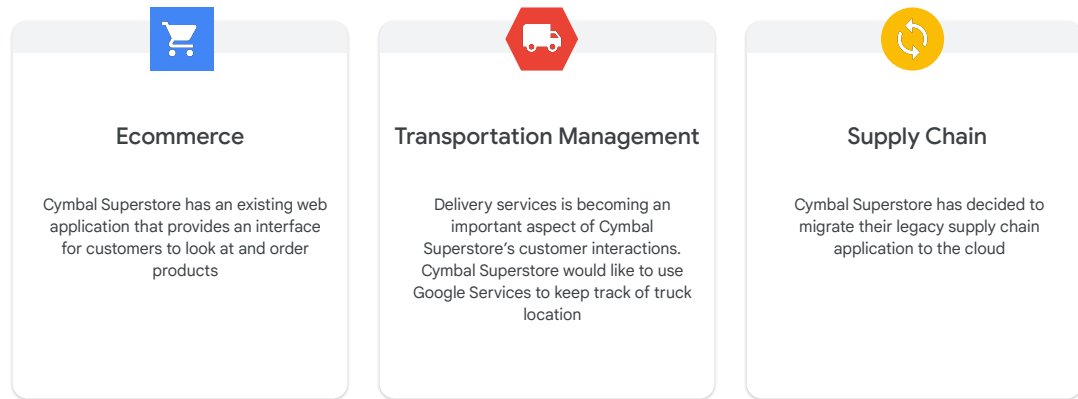
Let's review the job role description:

An Associate Cloud Engineer deploys and secures applications and infrastructure, monitors operations of multiple projects, and maintains enterprise solutions to ensure that they meet target performance metrics. This individual has experience working with public clouds and on-premises solutions. They are able to use Google Cloud Console and the command-line interface to perform common platform-based tasks to maintain and scale one or more deployed solutions that leverage Google-managed or self-managed services on Google Cloud.



In this course, you'll examine the role of an Associate Cloud Engineer by putting yourself in the shoes of an Associate Cloud Engineer at Cymbal Superstore, a fictional company that is preparing to migrate some of its on premises applications to Google Cloud.

# Migrating applications to Google Cloud



Google Cloud

Cymbal Superstore is experiencing several challenges common to legacy retailers. Customers increasingly expect a seamless online-offline experience when they shop, making the Cymbal Superstore ecommerce application vital. Cymbal Superstore Logistics wants to use data to more efficiently oversee transportation. Cymbal Superstore Operations has been grappling with how to update their supply chain strategy to meet customer demand in a timely, efficient way.

To meet these challenges, Cymbal Superstore plans to migrate their existing ecommerce, supply chain, and transportation management applications to Google Cloud.

As an Associate Cloud Engineer at Cymbal Superstore, your role involves helping set up the cloud environment. You're also involved in planning, configuring, and managing the cloud solutions. This requires you to be familiar with a variety of compute, storage, and networking resources in Google Cloud. You also need a solid understanding of Google recommended practices for configuring access to cloud resources.

As you continue through this course, you'll explore the role of an Associate Cloud Engineer as Cymbal Superstore migrates their applications to Google Cloud. We'll use this scenario to illustrate the types of considerations and tasks that correspond to each section of the exam guide. Cymbal Superstore's cloud solutions will also provide context for many of the diagnostic questions you'll encounter along the way.

## Why become Google certified?



Gain industry recognition!



Validate your technical expertise!



Take your career to the next level!

Google Cloud

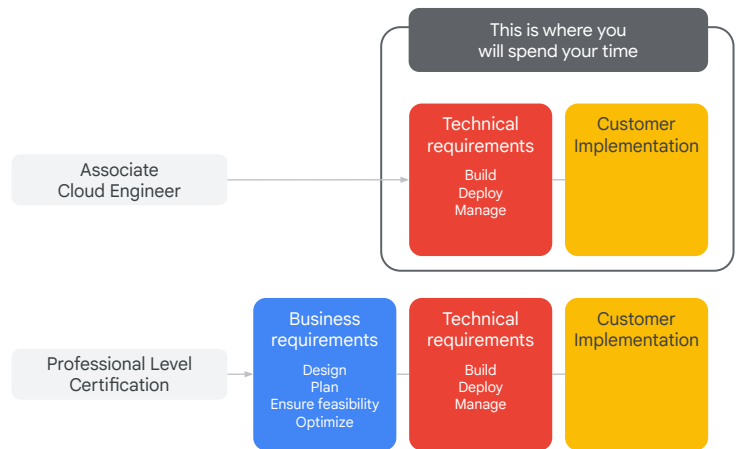
### Why become a Google Cloud Certified Associate Cloud Engineer?

Becoming Google certified gives you industry recognition. It validates your technical expertise and can be the starting point to take your career to the next level.

Certification value has skyrocketed. The Associate Cloud Engineer certification is valuable on its own and can also be used as a starting point on the path to professional certification.



# What is the difference between Associate and Professional certification?



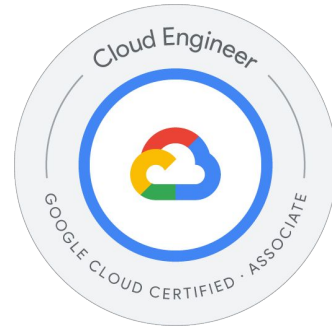
Google Cloud

You may be curious about what separates an “associate” cloud certification from a “professional” cloud certification. There is some overlap between the two levels of certification.

However, only the professional level certification expects the exam taker to know how to evaluate case studies and design solutions to meet business requirements. The associate level is mainly concerned with **technical requirements** and **customer implementation**. That is where you should concentrate your efforts.

Understand the scope of the exam based on the Associate Cloud Engineer [Exam Guide](https://cloud.google.com/certification/cloud-engineer).

<https://cloud.google.com/certification/cloud-engineer>



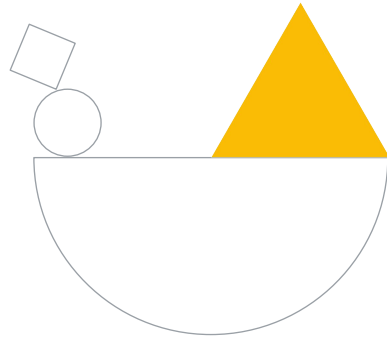
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The Associate Cloud Engineer certification exam is based on the exam guide. In the following modules, you'll take diagnostic questions to assess your knowledge of each section of the exam guide.

The exam guide is divided into 5 sections. Each section has several objectives. We'll focus on where you can find resources at the section objective level.

You can find the exam guide on the certification page  
<https://cloud.google.com/certification/cloud-engineer>

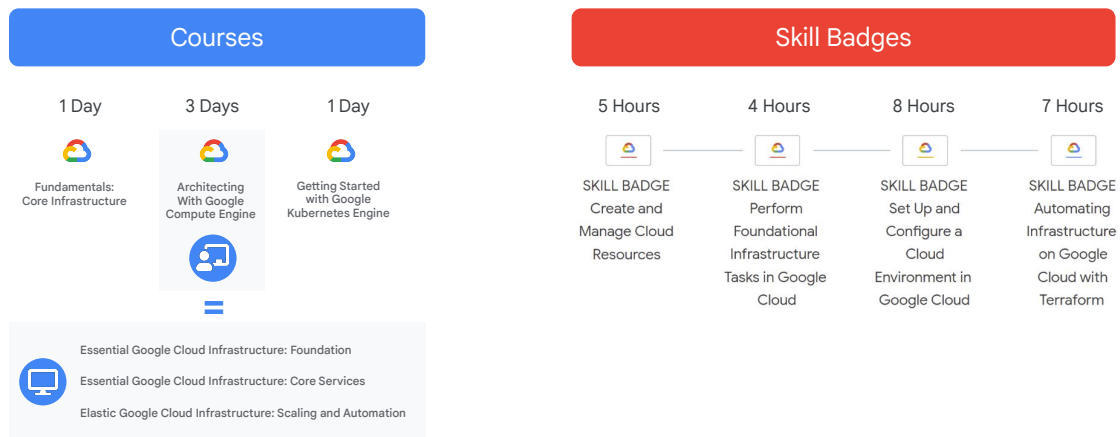
## Resources to support your certification journey



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Throughout this course, you'll be pointed to specific resources and documentation that can help you fill the gaps you identify through the diagnostic questions. Let's go over the types of resources you may want to include in your study plan.

# Courses and Skill Badges in the Learning Path



Google provides resources to help you develop your skills and experience with Google Cloud solutions. The learning path for this certification includes in-person or online courses, online practice labs and quests, and practice questions.

The courses recommended for the Associate Cloud Engineer certification include Google Cloud Fundamentals: Core Infrastructure, Architecting with Google Compute Engine, and Getting Started with Google Kubernetes Engine. You'll learn more about how these courses relate to the sections of the exam guide as you complete the modules in this course. It's important to note that you can take these as instructor-led courses, or as on-demand courses on Coursera, Pluralsight, or Google's Cloud Skills Boost. The on-demand content including in Architecting with Google Compute Engine is presented over three courses: Essential Google Cloud Infrastructure: Foundation, Essential Google Cloud Infrastructure: Core Services, and Elastic Google Cloud Infrastructure: Scaling and Automation.

The Skill Badges provide hands-on experience working in Google Cloud. They consist of a series of related labs followed by a challenge lab to complete the quest, and are available on Cloud Skills Boost. As we review the diagnostic questions in this course, you'll also get recommendations for Skill Badges to include in your study plan.

## Sample questions

You have a project using BigQuery. You want to list all BigQuery jobs for that project. You want to set this project as the default for the bq command-line tool. What should you do?

- A. Use **gcloud config set project** to set the default project.
- B. Use **bq config set project** to set the default project.
- C. Use **gcloud generate config-url** to generate a URL to the Cloud Console to set the default project.
- D. Use **bq generate config-url** to generate a URL to the Cloud Console to set the default project.



Sample questions are another resource you can use to prepare. The diagnostic questions in this course are designed to help you identify your knowledge gaps. On the certification page, Google provides a different set of sample questions that can help you familiarize yourself with the format of the exam questions. Once you complete the question set, you will receive feedback describing the rationale for the correct answers.

The sample questions provide a good opportunity to practice taking the type of scenario-based, application-level questions on the exam. The exam questions present you with a scenario, explain the goal or what you are trying to achieve, and ask you what you would do in this situation.

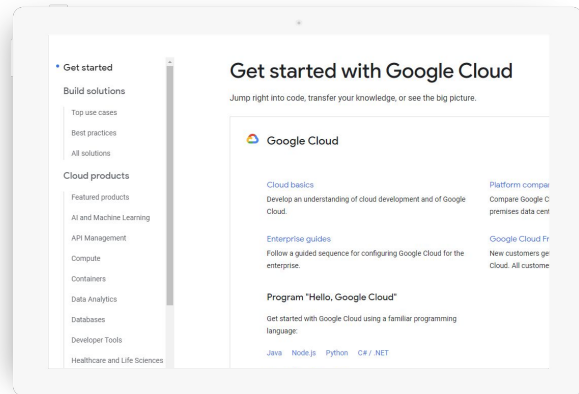
Remember these tips for multiple choice questions:

- Read the question stem carefully. Make sure you understand exactly what the question is asking.
- Try to anticipate the correct answer before looking at the options. You should be able to come up with the correct answer just from reading the question stem.
- You may find that more than one answer may be possible on multiple choice tests.
- Take questions at face value. If certain details are omitted, then they are unlikely to contribute to the selection of the best answer.
- Pay attention to qualifiers ("usually", "all", "never", "none") and key words ("the best", "the least", "except").

# Product Documentation

Google supplies official public documentation for its products and services.

<https://cloud.google.com/docs/>

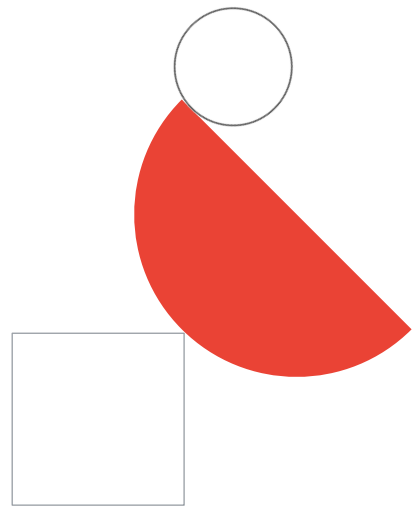


Google Cloud

Google also supplies official public documentation for its products and services. This documentation can be found at: <https://cloud.google.com/docs/>

In each of the following modules, you'll learn about specific documentation resources to help you study that section in preparation for the exam.

# Creating your study plan

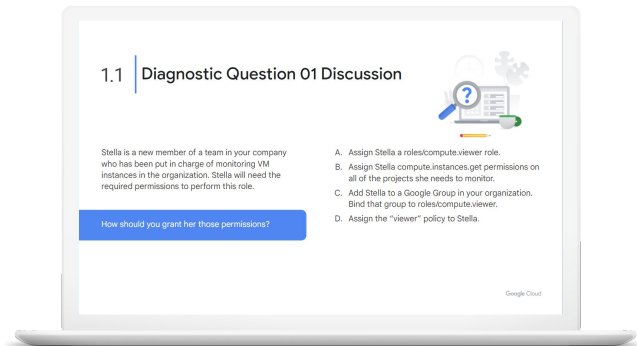


Google Cloud

One of the primary goals for this course is to help you devise a study strategy that focuses on the areas you need to work on. Let's quickly explore how the course is set up.

## Diagnostic questions:

Identify areas you need to study and resources to support you



The course - and your course workbook - focuses on each section of the exam guide in turn. To help you craft a study strategy, you'll take diagnostic questions as part of each module. Many of these questions relate to our Cymbal Superstore scenario and ask you to apply concepts you will need to be familiar with as an Associate Cloud Engineer. You can take these questions either using Google Forms or using your workbook.

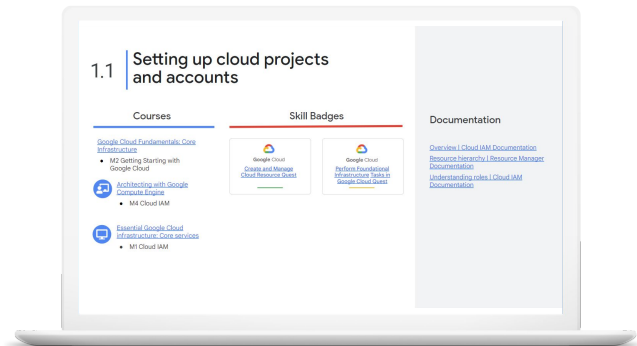
Keep in mind that these diagnostic questions are meant to help you identify gaps in your knowledge, but they don't represent all possible topics on the exam.

Remember, we don't expect that you'll answer all these questions correctly right now. This is meant to be a course that you take toward the beginning of your Associate Cloud Engineer journey, and many of you may not be Google Cloud experts yet. If there are any terms or concepts that are confusing, please ask.



## Locate resources:

Take notes in your workbook on the resources and documentation to fill your gaps

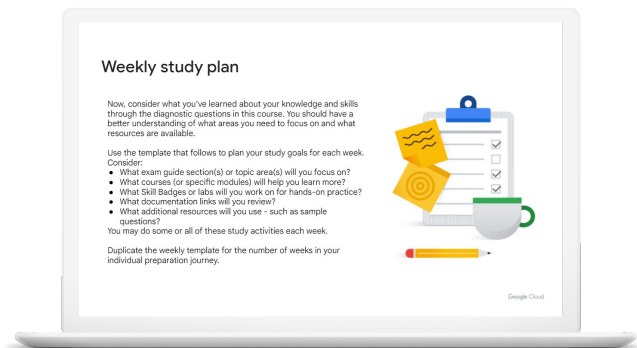


We'll review the answers to the questions related to each section objective. As we cover each objective, you'll learn more about where the key concepts appear in Google Cloud documentation, specific courses and modules, and/or specific Skill Badges.

At the end of each section objective, you'll find a list of related resources. Mark or highlight the specific resources you need to your study plan.

## Use the workbook:

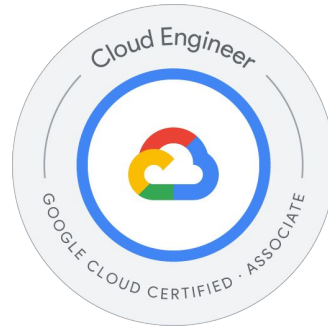
Plan your study for  
each week in the journey



Google Cloud

In the final part of your workbook, you'll find a template to help you identify weekly goals and study activities. We'll talk more about putting together weekly goals at the end of this course.

Let's start on your  
Associate Cloud  
Engineer **journey**.



Google Cloud

Now that you know about the overall setup of this course and how to use the workbook, let's get started by exploring section 1 of the exam guide.