



## Preparing for the Associate Cloud Engineer (ACE) Exam:

### About the Associate Cloud Engineer Certification

In this course, we will cover how to prepare to take the Associate Cloud Engineer certification exam.

This course by itself will not prepare you to take the ACE certification exam. This is not a “cram session.”

It will, however, introduce you to many useful tools you can utilize to devise your own custom study plan for preparing to take the exam, and we will cover a few of the concepts listed in the official Study Guide.

**1** About GCP certification

**2** Devising a study strategy

**3** Are you ready?

**4** Taking the exam

In this module, we will discuss GCP certification and why it can be a good career move, how to

put together a study plan for preparing to take the ACE exam, how to determine if you are ready to test, where and how to register, and then give some testing tips for taking the certification exam.

**1** About GCP certification

**2** Devising a study strategy

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Let's first familiarize ourselves with GCP certification, and why we here at Google believe it is a great way to help advance your career.

## Why become Google certified?



**Gain industry recognition!**



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**Validate your technical expertise!**



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**Take your career to the next level!**



## Gain industry recognition & validate your expertise

**“GCP certification proves that an engineer not only has real-world experience, but also has the technical knowledge to operate at the level required.”**

– Welby McRoberts  
Customer Reliability Engineer for Managed GCP, Rackspace Ltd.

## 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.



Most organizations are still in the early phases of their cloud journey. Only **28% of enterprises** consider themselves past the exploration phase of cloud adoption.

Source: [RightScale – 2017 State of the Cloud Report](#).



Lack of resources and expertise was still the #1 cloud challenge in 2017, with **25%** of enterprises citing it as a major concern.

Source: [RightScale – 2017 State of the Cloud Report](#).

## What is ACE certification?

Associate level Cloud Engineering (ACE) certification is a job-task based certification focused on core Google Cloud Platform technology.

It is a good starting point for those new to cloud or new to GCP and can be used as first step towards any of the professional level certifications.

**Recommended experience:** 6 months+ hands-on experience with GCP



- 1** About the ACE exam
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# Building an Exam Study Plan in Four Easy Steps

**First, understand the scope of the exam you plan to take...**



We recommend building a customized study plan to assist you in managing the process of preparing to take your ACE certification exam.

If you have never created a study plan before, don't worry! We will show you how to put one together in four easy steps.

First, in order to make your study experience as effective and as efficient as possible, you need to know what to study, and how deeply to dive into each topic.

## What does an Associate Cloud Engineer (ACE) do?

This is a role-based certification, so it helps to know more about the responsibilities expected of someone in that role.

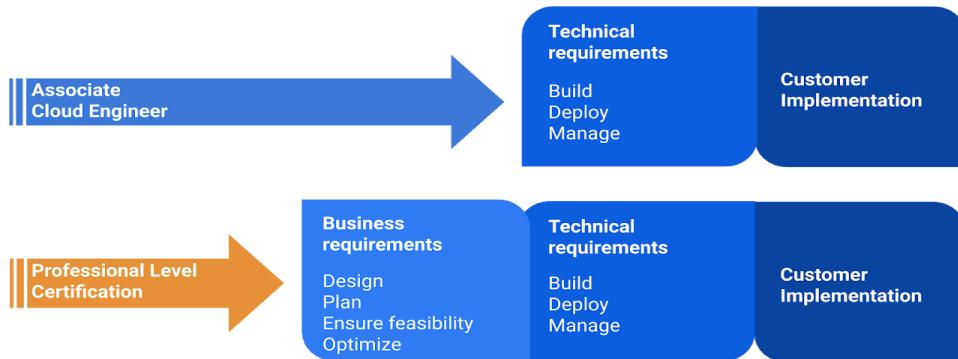
Associate Cloud Engineers:

- Set up and deploy cloud applications
- Monitor cloud operations, and
- Manage enterprise cloud solutions



To help us understand the scope of the exam, let's first discuss what a typical "Associate Cloud Engineer" is expected to be able to do.

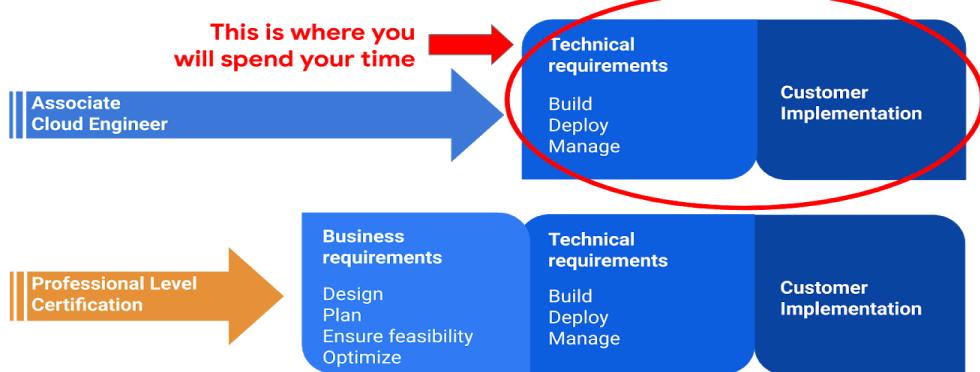
## What is the difference between Associate and Professional certification?



You may be curious about what separates an “associate” cloud certification from a “professional” cloud certification. Since this helps define the “scope” of the study plan you will be creating, let’s go over that a bit.

As you can see, there is some overlap between the two levels of certification.

## What is the difference between Associate and Professional 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.

Concentrating your efforts on these two areas will help you to maximize your return on the time you will spend in study for the ACE exam.

## What does the ACE exam cover?

The ACE exam tests knowledge of the following skills:

- Setting up a cloud solution environment
- Planning and configuring a cloud solution
- Deploying and implementing a cloud solution
- Ensuring successful operation of a cloud solution
- Configuring access and security

Specific resources for each of these topics will be covered in more depth later in this course.



Google offers an ACE Exam Guide, which is organized into five main topics, as shown in this slide.

We will use this general outline as our frame of reference in the study plan example we will be creating during this course.

You may also have noticed that we used the same general outline for the course itself!

# Building an Exam Study Plan in Four Easy Steps

**Second, gather your list of study resources...**



The second step, once you understand the general scope of the exam, is to look for resources that will help you gain the knowledge you need.

We will briefly cover in this section some of the types of resources you may choose to use for your studies.

## What types of resources are available for learners?

### **Google provides:**

- Exam outlines and practice tests
- Product documentation
- In-person and online courses
- Online practice labs and quests
- “Free” Google Cloud accounts

### **Additional resources:**

- In some cases, you can also purchase third-party exam preparation books



This is not an exhaustive list of resources available, but it is a very good overview of what you can expect to find from Google to help you prepare for the exam.

The ACE certification is one of the certifications that also has a preparation book available.

The publisher is Wiley & Sons and the book will officially make its debut in April, at NEXT '19.

## Study Resources: Exam Guide and Practice Exam

The exam guide for the ACE certification can be found at:

[https://cloud.google.com/certification/guides/  
cloud-engineer/](https://cloud.google.com/certification/guides/cloud-engineer/)

The online practice exam for the ACE certification exam can be found at:

[https://cloud.google.com/certification/practice  
-exam/cloud-engineer](https://cloud.google.com/certification/practice-exam/cloud-engineer)

The practice exam is free, and you can take it as many times as you like.



Here are the official Exam Guide and Practice Exam URLs.

These resources are not an exact list of what you will encounter in the official certification exam, but a list of topics and examples of the types of questions that you may find in the exam.

They are, however, very useful for guiding your studies and assessing your readiness to test.

## Study Resources: Product Documentation

Google supplies official public documentation for its products and services. This documentation can be found at:

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

The documentation site is organized into several sections: quick starts, solutions, and product manuals (which are further organized into categories like Compute, Storage, Databases, and Networking...)



In each of the following modules, we will call out specific documentation resources to help you study that section in preparation for the exam.

## Study Resources: Instructor-Led Courses

Google and its training partners offer a wide variety of instructor-led courses.

The ILT courses suggested for preparing for this certification are:

- **Architecting with Google Cloud Platform: Infrastructure**  
<https://cloud.google.com/training/courses/architecting-infrastructure>
- **Google Cloud Fundamentals: Core Infrastructure**  
<https://cloud.google.com/training/courses/core-fundamentals>



## Study Resources: On-Demand Courses

The corresponding online courses are the first five courses of the **Architecting with Google Cloud Platform specialization** on Coursera:

<https://www.coursera.org/specializations/gcp-architecture>

- Google Cloud Platform Fundamentals: Core Infrastructure
- Essential Cloud Infrastructure: Foundation
- Essential Cloud Infrastructure: Core Services
- Elastic Cloud Infrastructure: Scaling and Automation
- Elastic Cloud Infrastructure: Containers and Services



## Study Resources: Online Labs and Quests

Qwiklabs give you the chance to get hands-on practice with Google Cloud technologies, at your own pace.

Quests are sets of Qwiklabs centered around a specific set of skills. The Quests recommended for this exam are (in suggested order):

### GCP Essentials

<https://google.qwiklabs.com/quests/23>



### GCP Architecture

<https://google.qwiklabs.com/quests/24>

## Study Resources: Free (up to \$300) GCP Access

Learn and Build on GCP for free!

Go to <http://cloud.google.com> and sign up for an account that allows you to explore Google's products, up to \$300 worth, over the next year **at no cost to you.**

This is a great way to get the hands-on experience that will help you pass the certification exams.





As mentioned, there is also a preparation book for this certification!

The Official Google Cloud Certified Associate Cloud Engineer Study Guide will be available for purchase in various book stores.

## Building an Exam Study Plan in Four Easy Steps

**Third, find out what you know and make note of what you don't...**



Now that you have some idea of the types of resources available to you, it is time to find out what you do - and do not - already know.

Having this information at hand will help you devise a study strategy that will serve to prepare you to take the certification exam.

The rest of the modules in this course will help you to fill in this part of your study plan.

## Devising a study strategy for the exam

Use the exam guide to broadly gauge what you know - and what you don't.  
When you find something you already know you need to work on, make notes.  
Be specific where possible so you can better target your study time.



## Devising a study strategy for the exam

Next, use the practice exam to gain a finer understanding of the specific areas you need to concentrate on for the exam.

Make note of which questions you missed and, using the practice exam's feedback on those questions, try to determine why you missed them and where these weaker areas fit into your overall study plan.



## Devising a study strategy for the exam

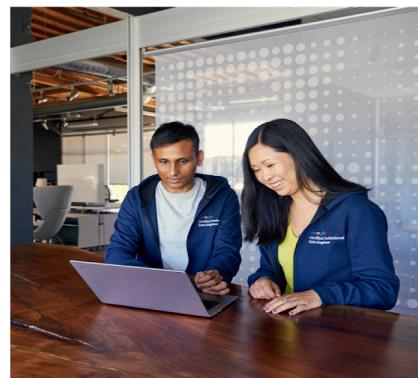
Note in each section resources that will address the areas you need to work on.

We have already covered an overview of the resources that are available, but we will cover additional specific resources in more depth later in this course as we move through the general outline of the exam.



## Building an Exam Study Plan in Four Easy Steps

**Fourth, put it all together into a plan you can commit to!**



## General “best practices” for effective study

- Hours of concentrated, effective study help to carefully place facts into your memory. This is the best way to prepare for any test.
- Keep a daily and weekly study schedule.
- Study in 1-hour blocks of time, with breaks of about 5-10 minutes in between.
- Study actively, move around, stretch, read out loud. If you can, mix reading with audio or video to keep your mind engaged.
- Study with purpose. Have a goal for each session.

## Set a schedule for your study strategy

Estimate the time required to prepare, given what you've learned about the scope of the exam and the areas you need to study, the number of hours you can commit to study each week, and account for any deadline you may have to complete your certification.

Be sure to also take into consideration how you learn best and use that insight to customize your study plan for optimal results!



## Create your personal study plan

Put all of your notes together into a completed study plan.

A complete plan will have an outline of topics to cover, notes on resources to use for study, and the number of weeks you believe you will require to cover everything.

Leave enough time at the end of your plan to re-take the practice exam and fill in any gaps in your knowledge that may remain.



## Sample Study Plan Schedule

Please assign your own weights to each section, these are just an example

- |    |   |           |
|----|---|-----------|
| 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                   | ■ ■ ■     |

S	M	T	W	T	F	S
	■		■	■	■	■
	■	■		■	■	
	■		■		■	■
	■			■	■	■
				■		■

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## How do you know when you are ready to test?

- Follow through with your personal study plan, then retake the practice exam at least once afterwards to catch any weak areas you may have missed.
- Keep in mind that the Cloud Engineer practice exam will only familiarize you with the types of questions you may encounter on the certification exam and **successful completion of the practice exam does not guarantee you will pass the certification exam.**
- A good informal rule of thumb is being able to complete the practice exam in 45 minutes or less, with at least 80% of the answers marked as correct.
- If you have a book containing practice exams, you can use those as well to gauge your readiness.

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## Registering for the ACE exam

Use the link at the bottom of the ACE certification information site to (see screenshot below the URL at the bottom of this slide):

- Create or log into a Webassessor account, then
- Find a Kryterion testing center near you,
- Schedule a testing date and time,
- Pay for your exam using an exam voucher or a credit card.

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



Schedule your exam  
Register and find a location near you

## General test-taking tips

- **Get a good night's sleep before the test.**
- Review your notes, but do not cram.
- About 30 minutes before the test, eat an apple or have a powerbar. Be well-hydrated. Take a walk to help calm pre-test jitters.
- Always arrive early and take a moment to relax and reduce your anxiety. This brief quiet period will boost your confidence.
- Use the restroom before the test begins.
- Read the test directions very carefully and watch for details.
- Maintain a positive attitude.
- Don't let more difficult questions raise your anxiety and steal your valuable time. Move on and find success with other questions.
- Plan to finish early and have time for review.

## Tips for multiple-choice exams

- 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 may find that more than one answer may be *possible* on multiple choice tests.
- When you have multiple valid answers: the best answer uses common sense; it is the choice of knowledgeable and experienced individuals; and, it best fits the question.
- 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").

## Tips for multiple-choice exams, continued...

- There is no penalty for guessing, so try not to leave questions unanswered.
- If you have to guess, eliminate the obviously false choices first.
- The first answer that pops in your mind is usually the correct answer.
- Do not change an answer unless...
  - there is clear evidence that your answer is incorrect
  - you misread or misunderstood the question, or
  - you recall more information or found the correct answer elsewhere in the test.