

uCertify

Course Outline

Google Cloud Certified Professional Cloud Architect



20 May 2024

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4. Expert Instructor-Led Training
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Chapter 8: Designing for Security and Legal Compliance

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Here's what you get

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Here's what you get

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1. Course Objective

The course Google Cloud Certified Professional Cloud Architect covers the topics outlined in the Professional Cloud Architect exam, such as designing solutions to meet business and technical requirements, designing compute systems, storage systems, and networks, migration planning, and so on. This course contains Professional Cloud Architect exam objective-based interactive lessons with knowledge checks, quizzes, and key terms. It also contains assessment questions, practice tests, and live labs to provide a hands-on experience with the Google cloud platform and help you prepare for the Google Cloud Certified Professional Cloud Architect exam.

2. Pre-Assessment

Pre-Assessment lets you identify the areas for improvement before you start your prep. It determines what students know about a topic before it is taught and identifies areas for improvement with question assessment before beginning the course.

3. Exercises

There is no limit to the number of times learners can attempt these. Exercises come with detailed remediation, which ensures that learners are confident on the topic before proceeding.

255
EXERCISES

4. Quiz

Quizzes test your knowledge on the topics of the exam when you go through the course material. There is no limit to the number of times you can attempt it.

193

QUIZ

5. flashcards

Flashcards are effective memory-aiding tools that help you learn complex topics easily. The flashcard will help you in memorizing definitions, terminologies, key concepts, and more. There is no limit to the number of times learners can attempt these. Flashcards help master the key concepts.

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FLASHCARDS

6. Glossary of terms

uCertify provides detailed explanations of concepts relevant to the course through Glossary. It contains a list of frequently used terminologies along with its detailed explanation. Glossary defines the key terms.

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**GLOSSARY OF
TERMS**

7. Expert Instructor-Led Training

uCertify uses the content from the finest publishers and only the IT industry's finest instructors. They have a minimum of 15 years real-world experience and are subject matter experts in their fields. Unlike a live class, you can study at your own pace. This creates a personal learning experience and gives you all the benefit of hands-on training with the flexibility of doing it around your schedule 24/7.

8. ADA Compliant & JAWS Compatible Platform

uCertify course and labs are ADA (Americans with Disability Act) compliant. It is now more accessible to students with features such as:

- Change the font, size, and color of the content of the course
- Text-to-speech, reads the text into spoken words
- Interactive videos, how-tos videos come with transcripts and voice-over
- Interactive transcripts, each word is clickable. Students can clip a specific part of the video by clicking on a word or a portion of the text.

JAWS (Job Access with Speech) is a computer screen reader program for Microsoft Windows that reads the screen either with a text-to-speech output or by a Refreshable Braille display. Student can easily navigate uCertify course using JAWS shortcut keys.

9. State of the Art Educator Tools

uCertify knows the importance of instructors and provide tools to help them do their job effectively. Instructors are able to clone and customize course. Do ability grouping. Create sections. Design grade scale and grade formula. Create and schedule assessments. Educators can also move a student from self-paced to mentor-guided to instructor-led mode in three clicks.

10. Award Winning Learning Platform (LMS)

uCertify has developed an award winning, highly interactive yet simple to use platform. The SIIA CODiE Awards is the only peer-reviewed program to showcase business and education technology's finest products and services. Since 1986, thousands of products, services and solutions have been

recognized for achieving excellence. uCertify has won CODiE awards consecutively for last 7 years:

- **2014**

1. Best Postsecondary Learning Solution

- **2015**

1. Best Education Solution
2. Best Virtual Learning Solution
3. Best Student Assessment Solution
4. Best Postsecondary Learning Solution
5. Best Career and Workforce Readiness Solution
6. Best Instructional Solution in Other Curriculum Areas
7. Best Corporate Learning/Workforce Development Solution

- **2016**

1. Best Virtual Learning Solution
2. Best Education Cloud-based Solution
3. Best College and Career Readiness Solution
4. Best Corporate / Workforce Learning Solution
5. Best Postsecondary Learning Content Solution
6. Best Postsecondary LMS or Learning Platform
7. Best Learning Relationship Management Solution

- **2017**

1. Best Overall Education Solution
2. Best Student Assessment Solution
3. Best Corporate/Workforce Learning Solution
4. Best Higher Education LMS or Learning Platform

- **2018**

1. Best Higher Education LMS or Learning Platform

2. Best Instructional Solution in Other Curriculum Areas
3. Best Learning Relationship Management Solution

- **2019**

1. Best Virtual Learning Solution
2. Best Content Authoring Development or Curation Solution
3. Best Higher Education Learning Management Solution (LMS)

- **2020**

1. Best College and Career Readiness Solution
2. Best Cross-Curricular Solution
3. Best Virtual Learning Solution

11. Chapter & Lessons

uCertify brings these textbooks to life. It is full of interactive activities that keeps the learner engaged. uCertify brings all available learning resources for a topic in one place so that the learner can efficiently learn without going to multiple places. Challenge questions are also embedded in the chapters so learners can attempt those while they are learning about that particular topic. This helps them grasp the concepts better because they can go over it again right away which improves learning.

Learners can do Flashcards, Exercises, Quizzes and Labs related to each chapter. At the end of every lesson, uCertify courses guide the learners on the path they should follow.

Syllabus

Chapter 1: Introduction

- What Does This Course Cover?
- Objective Map

Chapter 2: Introduction to the Google Professional Cloud Architect Exam

- Exam Objectives
- Analyzing Business Requirements
- Analyzing Technical Requirements
- Exam Case Studies
- Summary
- Exam Essentials

Chapter 3: Designing Solutions to Meet Business Requirements

- Business Use Cases and Product Strategy
- Application Design and Cost Considerations
- Systems Integration and Data Management
- Compliance and Regulation
- Security
- Success Measures
- Summary
- Exam Essentials

Chapter 4: Designing Solutions to Meet Technical Requirements

- High Availability
- Scalability
- Reliability
- Summary
- Exam Essentials

Chapter 5: Designing Compute Systems

- Compute Services and Use Cases
- Anthos
- AI and Machine Learning Services
- Data Flows and Pipelines
- Compute System Provisioning
- Additional Design Issues
- Summary
- Exam Essentials

Chapter 6: Designing Storage Systems

- Overview of Storage Services

- Object Storage with Google Cloud Storage
- Network-Attached Storage with Google Cloud Filestore
- Databases
- Data Retention and Lifecycle Management
- Networking and Latency
- Summary
- Exam Essentials

Chapter 7: Designing Networks

- IP Addressing, Firewall Rules, and Routers
- Virtual Private Clouds
- Hybrid-Cloud Networking
- Service-Centric Networking
- Load Balancing
- Additional Network Services
- Summary
- Exam Essentials

Chapter 8: Designing for Security and Legal Compliance

- Identity and Access Management and Related Access Control Services
- Organization Constraints
- Data Security
- Security Evaluation
- Security Design Principles
- Major Regulations
- ITIL Framework
- Summary
- Exam Essentials

Chapter 9: Designing for Reliability

- Improving Reliability with Cloud Operations Suite
- Release Management
- Systems Reliability Engineering
- Summary
- Exam Essentials

Chapter 10: Analyzing and Defining Technical Processes

- Software Development Lifecycle Plan
- Continuous Integration/Continuous Delivery
- Troubleshooting and Post-Mortem Analysis Culture
- IT Enterprise Processes
- Business Continuity Planning and Disaster Recovery
- Summary
- Exam Essentials

Chapter 11: Analyzing and Defining Business Processes

- Stakeholder Management
- Change Management
- Team Skill Management
- Customer Success Management
- Cost Optimization/Resource Optimization
- Summary
- Exam Essentials

Chapter 12: Development and Operations

- Application Development Methodologies

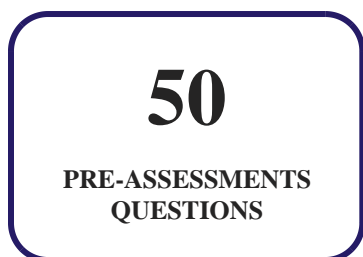
- Technical Debt
- API Best Practices
- Testing Frameworks
- Data and System Migration Tooling
- Interacting with Google Cloud Programmatically
- Summary
- Exam Essentials

Chapter 13: Migration Planning

- Integrating Cloud Services with Existing Systems
- Migrating Systems and Data to Support a Solution
- Software Licensing Mapping
- Network Planning
- Summary
- Exam Essentials

12. Practice Test

Here's what you get



Features

Each question comes with detailed remediation explaining not only why an answer option is correct but also why it is incorrect.

Unlimited Practice

Each test can be taken unlimited number of times until the learner feels they are prepared. Learner can review the test and read detailed remediation. Detailed test history is also available.

Each test set comes with learn, test and review modes. In learn mode, learners will attempt a question and will get immediate feedback and complete remediation as they move on to the next question. In test mode, learners can take a timed test simulating the actual exam conditions. In review mode, learners can read through one item at a time without attempting it.

13. Live Labs

The benefits of live-labs are:

- Exam based practical tasks
- Real equipment, absolutely no simulations
- Access to the latest industry technologies
- Available anytime, anywhere on any device
- Break and Reset functionality

- No hardware costs

Lab Tasks

Designing Solutions to Meet Technical Requirements

- Creating a Disk

Designing Compute Systems

- Creating a Cloud Run
- Creating an Instance
- Creating an Instance Group
- Creating a Workflow Template in Dataproc
- Creating a Deployment using the Deployment Manager

Designing Storage Systems

- Creating a Bucket
- Creating a Filestore Instance
- Initializing Data Systems with Cloud Storage
- Creating an Instance in Bigtable
- Initializing Data Systems with Cloud Spanner
- Creating a Cloud Bigtable

Designing Networks

- Creating a Cloud Router
- Creating a VPC Network Peering Connection
- Creating a VPC Network with a Custom Subnet
- Creating a Load Balancer

Development and Operations

- Accessing the Cloud Shell
- Creating an Auto Mode VPC Network Using CLI

Migration Planning

- Creating a VPN Connection

Here's what you get

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LIVE LABS

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VIDEO TUTORIALS

01:03

HOURS

14. Post-Assessment

After completion of the uCertify course Post-Assessments are given to students and often used in conjunction with a Pre-Assessment to measure their achievement and the effectiveness of the exam.

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