uCertify

Course Outline

Data Analytics with Google Cloud Platform

04 Aug 2025

1. Exercises, Quizzes, Flashcards & Glossary

   Number of Questions
2. Expert Instructor-Led Training
3. ADA Compliant & JAWS Compatible Platform
4. State of the Art Educator Tools
5. Award Winning Learning Platform (LMS)
6. Chapter & Lessons

   Syllabus

   Chapter 1: Preface

   Chapter 2: GCP Overview and Architecture

   Chapter 3: Google Cloud Platform Storage

   Chapter 4: Data Processing and Message with Dataflow and Pub/Sub

   Chapter 5: Data Processing with Dataproc and Dataprep

   Chapter 6: BigQuery and Data Studio

   Chapter 7: Machine Learning with GCP

   Chapter 8: Sample Use Cases and Example

   Videos and How To

1. 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.

2. 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.

3. 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.

4. 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

5. 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: Preface

Chapter 2: GCP Overview and Architecture

- Introduction
- Cloud computing history
- Infrastructure as a Service (IaaS)
- Platform as a Service (PaaS)
- Software as a Service (SaaS)
- The cloud computing architecture
- Google Cloud Platform
- Google Cloud Platform Console
- Security via IAM

- Conclusion
- Questions

Chapter 3: Google Cloud Platform Storage

- Cloud Storage
- Cloud Datastore
- Cloud Firestore
- Cloud SQL
- Cloud Spanner
- Cloud Bigtable
- Cloud BigQuery
- Conclusion
- Questions

Chapter 4: Data Processing and Message with Dataflow and Pub/Sub

- Introduction
- Cloud Dataflow
- Cloud Pub/Sub
- Conclusion

- Questions

Chapter 5: Data Processing with Dataproc and Dataprep

- Introduction
- Cloud Dataproc
- Cloud Dataprep
- Conclusion
- Questions

Chapter 6: BigQuery and Data Studio

- Introduction
- BigQuery
- Getting started with Google BigQuery
- Introduction to partitioned tables
- Introduction to external data sources
- Google Data Studio
- Conclusion
- Questions

Chapter 7: Machine Learning with GCP

- Machine learning and types of machine learning
- TensorFlow and machine learning
- Linear regression with TensorFlow
- The Estimator API
- Unsupervised machine learning
- Cloud ML API (vision, translate, speech)
- Conclusion
- Questions

Chapter 8: Sample Use Cases and Example

- Introduction
- Setting up a mobile gaming analytics platform - a reference architecture
- Bulk process using batch pattern
- Managing and processing logs at scale by leveraging the Cloud Dataflow
- Product recommendations using machine learning on Compute Engine
- Conclusion
- Questions

You can’t stay away! Get