

uCertify

Course Outline

CIW: Data Analyst (1D0-622)



23 Apr 2024

1. Pre-Assessment
2. Exercises, Quizzes, Flashcards & Glossary
 - Number of Questions
3. Expert Instructor-Led Training
4. ADA Compliant & JAWS Compatible Platform
5. State of the Art Educator Tools
6. Award Winning Learning Platform (LMS)
7. Chapter & Lessons
 - Syllabus
 - Chapter 1: Fundamentals of Data Analysis
 - Chapter 2: Introduction to Big Data
 - Chapter 3: Working with Data Sources
 - Chapter 4: Tools for Capturing and Analyzing Data
 - Chapter 5: Analyzing and Reporting Data
 - Chapter 6: Appendix A: Data Analyst Objectives and Locations
 - Chapter 7: Appendix B: Works Consulted
 - Videos and How To
8. Practice Test
 - Here's what you get
 - Features
9. Live labs
 - Lab Tasks
 - Here's what you get
10. Post-Assessment

1. 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.

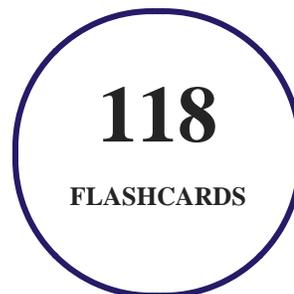
2. Quizzes

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.



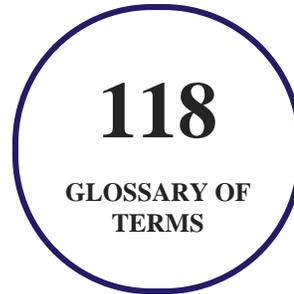
3. flashcards

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.



4. 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.



5. 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.

6. 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.

7. 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.

8. 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

9. 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: Fundamentals of Data Analysis

- The Importance of Quality Source Data
- Data Structure Types
- Centralized Data Benefits
- Structured vs. Unstructured Data
- Types of Data
- Typical Sources of Business Data
- Data Protection Policies
- Search Engine Optimization
- Data Life Cycle Management (DLM)
- Data Analysis Process
- Lesson Summary

Chapter 2: Introduction to Big Data

- Big Data
- The Importance of IT Data Management

- IT Business Environments
- Cloud-Based Data
- Cloud-Native Data
- In-House Data
- When to Migrate In-House Data to the Cloud
- Variations of Cloud-Based Systems
- Typical Databases Used for Data Analysis
- Data-Driven Business Decisions
- Impact of Data Errors
- Importance of Organizational Strategy and Data Quality in Data Analytics
- Data Modeling
- Importance of Data Maintenance and Data Backup
- Lesson Summary

Chapter 3: Working with Data Sources

- Data E-Harmony: Working with Different Departments to Bring Data Together
- The Purpose of Customer Relationship Management (CRM)
- CRM Integration: A Banking Scenario

- Obtaining Data from Email and User Forums
- Obtaining Data from Other Knowledge Bases
- Obtaining Data from CRM and Business-to-Business Frameworks
- Transaction, Payment and Inventory Data
- Using Multiple Data Sources
- Lesson Summary

Chapter 4: Tools for Capturing and Analyzing Data

- Data Analytics Tools
- Capturing Data: Tableau Public
- Capturing Data: Google BigQuery
- Capturing Data: OpenRefine
- Overview: Hadoop-Based Environments
- Capturing and Analyzing Data in Hadoop
- The R Project
- Additional Software for Data Capture
- Lesson Summary

Chapter 5: Analyzing and Reporting Data

- Network Traffic
- Data Integration
- Why Testing is Important?
- Statistical Computing and Programming
- Organizational Efforts and Business Outcomes
- Best Methods to Capture and Report Specific Data
- Data Analysis and Reporting Dashboards
- Create Reports and Charts
- Create a Presentation for Reporting Data
- Frequently Asked Questions for Presentations
- Lesson Summary

Chapter 6: Appendix A: Data Analyst Objectives and Locations

Chapter 7: Appendix B: Works Consulted

Videos and How To

uCertify course includes videos to help understand concepts. It also includes How Tos that help learners in accomplishing certain tasks.

5

VIDEOS

19

MINUTES

10. Practice Test

Here's what you get

48

PRE-ASSESSMENTS
QUESTIONS

3

FULL LENGTH TESTS

102

POST-ASSESSMENTS
QUESTIONS

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.

11. 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

Fundamentals of Data Analysis

- Learning the Data Analysis Lingo
- Learning Structured and Unstructured Data in the Real World
- Analyzing the Metadata and Understanding Search Engine Optimization
- Using the AdSense and AdWords Services

Introduction to Big Data

- Analyzing and Utilizing Big Data
- Adapting to Changing Data Requirements
- Comparing Relational Database Management Systems
- Analyzing DDDM and Data for Blanket Technology

Working with Data Sources

- Calculating the Churn Rate
- Analyzing Customer Relationship Management

- Calculating Consumer Lifetime Value in Banking
- Understanding the RFM Analysis for Customer Segmentation

Tools for Capturing and Analyzing Data

- Creating a Stacked Bar Chart
- Using RStudio

Analyzing and Reporting Data

- Creating a Gantt Chart
- Comparing Prezi and PowerPoint Presentations
- Creating a PowerPoint Presentation

Here's what you get



12. 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.

GET IN TOUCH: