

uCertify

Course Outline

IT 423: Computing as a Service



16 May 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
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Chapter 2: The Cloud
Chapter 3: Understanding Your AWS Account
Chapter 4: Getting Support on AWS
Chapter 5: Understanding the AWS Environment
Chapter 6: Securing Your AWS Resources
Chapter 7: Working with Your AWS Resources
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Videos and How To
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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. 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.

246
EXERCISES

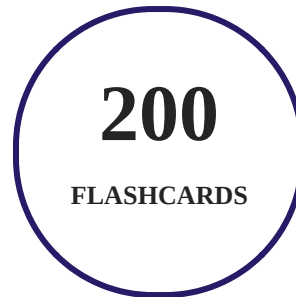
3. Quizzes

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.

219
QUIZZES

4. 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.



5. 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.



6. 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.

7. 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.

8. 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.

9. 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

10. 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?
- Exam Objectives
- Objective Map

Chapter 2: The Cloud

- What Is Cloud Computing?
- Server Virtualization: The Basics

- Cloud Platform Models
- Scalability and Elasticity
- Summary
- Exam Essentials

Chapter 3: Understanding Your AWS Account

- The Free Tier
- Product Pricing
- Service Limits
- Billing and Cost Management
- Summary
- Exam Essentials

Chapter 4: Getting Support on AWS

- Support Plans
- Documentation and Online Help
- Trusted Advisor
- Summary
- Exam Essentials

Chapter 5: Understanding the AWS Environment

- AWS Global Infrastructure: AWS Regions
- AWS Global Infrastructure: Availability Zones
- AWS Global Infrastructure: Edge Locations
- AWS Global Infrastructure: Extending the Cloud
- The AWS Shared Responsibility Model
- Summary
- Exam Essentials

Chapter 6: Securing Your AWS Resources

- AWS Identity and Access Management
- Encryption
- Regulatory Compliance (AWS Artifact)
- Other AWS Security and Compliance Tools
- Summary
- Exam Essentials

Chapter 7: Working with Your AWS Resources

- The AWS Management Console
- The AWS Command-Line Interface
- Software Development Kits
- CloudWatch
- CloudTrail
- Cost Explorer
- AWS Config
- AWS Control Tower
- AWS License Manager
- Summary
- Exam Essentials

Chapter 8: The Core Compute Services

- Deploying Amazon Elastic Compute Cloud Servers
- Simplified Deployments Through Managed Services
- Deploying Container and Serverless Workloads
- Summary
- Exam Essentials

Chapter 9: The Core Storage Services

- Simple Storage Service
- S3 Glacier
- AWS Storage Gateway
- AWS Snow Family
- Other Storage-Related Services
- Summary
- Exam Essentials

Chapter 10: The Core Database Services

- Database Models
- Amazon Relational Database Service
- DynamoDB
- Amazon Redshift
- Analytics
- Summary
- Exam Essentials

Chapter 11: The Core Networking Services

- Virtual Private Cloud
- Route 53
- CloudFront
- Summary
- Exam Essentials

Chapter 12: Automating Your AWS Workloads

- Automation
- CloudFormation
- AWS Developer Tools
- EC2 Auto Scaling
- Configuration Management
- Summary
- Exam Essentials

Chapter 13: Common Use-Case Scenarios

- The Well-Architected Framework

- A Highly Available Web Application Using Auto Scaling and Elastic Load Balancing
- Static Website Hosting Using S3
- Machine Learning
- Summary
- Exam Essentials

Chapter 14: Appendix A: Additional Services

- Activate for Startups
- Amazon EventBridge
- AppStream 2.0
- Athena
- AWS Amplify
- AWS AppSync
- AWS Batch
- AWS CloudShell
- AWS Device Farm
- AWS Step Functions
- Backup

- Cognito
- Connect
- Database Migration Service
- Elastic File System
- Elastic MapReduce
- Glue
- Inspector
- IoT Core
- IoT Greengrass
- IQ
- Kinesis
- Macie
- Managed Services (AMS)
- Neptune
- Simple Queue Service
- WorkDocs
- WorkSpaces
- X-Ray

11. Practice Test

uCertify provides full length practice tests. These tests closely follow the exam objectives and are designed to simulate real exam conditions. Each course has a number of test sets consisting of hundreds of items to ensure that learners are prepared for the certification exam.

Here's what you get

50
PRE-ASSESSMENTS
QUESTIONS

2
FULL LENGTH TESTS

50
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.

12. 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

Introduction

- Sandbox - AWS

Understanding Your AWS Account

- Using the AWS Pricing Calculator

Getting Support on AWS

- Exploring the Trusted Advisor Security

Securing Your AWS Resources

- Enabling and Disabling GuardDuty

Working with Your AWS Resources

- Creating a CloudWatch Alarm
- Creating a CloudWatch Dashboard
- Creating a Trail Using CloudTrail

The Core Compute Services

- Launching an EC2 Instance
- Creating an Encrypted EBS Volume
- Configuring an AWS Elastic Beanstalk Application
- Creating the AWS Lambda Function and Invoking It

The Core Storage Services

- Creating an S3 Bucket and Enabling Versioning On It

The Core Database Services

- Creating a DynamoDB Table and Adding an Item to It

The Core Networking Services

- Creating a VPC Peering
- Creating a VPN Connection
- Creating a Network ACL and Adding an Inbound Rule to It
- Creating a Virtual Private Gateway
- Creating a VPC and Subnets
- Creating a Security Group
- Creating CloudFront

Automating Your AWS Workloads

- Creating a CloudFormation Template

Common Use-Case Scenarios

- Creating an EC2 Auto Scaling Group
- Creating an Application Load Balancer
- Creating a Hosted Zone Using Amazon Route 53

Here's what you get

24

LIVE LABS

22

VIDEO TUTORIALS

38

MINUTES

13. 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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