# uCertify Course Outline

AWS Certified SysOps Administrator - Associate (SOA-C02)



04 Jul 2024

- 1. Course Objective
- 2. Pre-Assessment
- 3. Exercises, Quizzes, Flashcards & Glossary

Number of Questions

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

Syllabus

Chapter 1: Introduction

Chapter 2: Introduction to AWS

Chapter 3: Monitoring Services in AWS

Chapter 4: Troubleshooting and Remediation

Chapter 5: Implementing Scalability and Elasticity

Chapter 6: High Availability and Resilience

Chapter 7: Backup and Restore Strategies

Chapter 8: Provisioning Resources

Chapter 9: Application Management

Chapter 10: Security and Compliance

Chapter 11: Data Protection at Rest and in Transit

Chapter 12: Networking and Connectivity

Chapter 13: Domains, DNS, and Content Delivery

Chapter 14: Troubleshoot Network Connectivity

Chapter 15: Cost Optimization Strategies

Chapter 16: Performance Optimization

Chapter 17: Appendix: Videos

Videos and How To

#### 9. Practice Test

Here's what you get

Features

#### 10. Live labs

Lab Tasks

Here's what you get

#### 11. Post-Assessment

# 1. Course Objective

Become an AWS-certified SysOps Administrator Associate with the AWS Certified SysOps Administrator - Associate (SOA-C02) course and lab. The lab provides a hands-on learning experience for system administrators in cloud operations. The course covers SOA-C02 exam objectives and teaches the skills required for deploying, managing, and operating workloads on AWS, monitoring, logging, and troubleshooting systems, performing business continuity and disaster recovery procedures, and so on.

# 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.



# 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.



## 5. 1 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.



## 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.



# 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

- How to Prepare for the Exam?
- Taking a Certification Exam
- About This Course

#### Chapter 2: Introduction to AWS

- What is Cloud Computing?
- The AWS Cloud
- Six Benefits of the AWS Cloud
- AWS Services Overview

#### Chapter 3: Monitoring Services in AWS

- Metering, Monitoring, and Alerting
- CloudWatch
- CloudTrail

## Chapter 4: Troubleshooting and Remediation

- Responding to Alarms
- Amazon EventBridge
- AWS Config

### Chapter 5: Implementing Scalability and Elasticity

• Scaling in the Cloud

- Caching
- Read Replicas

#### Chapter 6: High Availability and Resilience

- Availability Zones in AWS
- High Availability with Elastic Load Balancers and Route 53
- Highly Available Datastores
- Highly Available Databases

#### Chapter 7: Backup and Restore Strategies

- Backup in the Cloud
- S3 as a Backup Service

#### Chapter 8: Provisioning Resources

• Deployment Tools in AWS

#### Chapter 9: Application Management

- Lifecycle Management
- Patching

#### Chapter 10: Security and Compliance

• Account Management

#### Chapter 11: Data Protection at Rest and in Transit

• Protecting Data

#### Chapter 12: Networking and Connectivity

- The VPC
- VPC Connectivity
- VPC Security
- AWS Network Firewall
- VPC Endpoints
- VPC Peering
- VPC
- Direct Connect
- AWS WAF
- AWS Shield

#### Chapter 13: Domains, DNS, and Content Delivery

- Route 53
- Route 53 Routing Policies
- S3 Static Website Hosting
- Amazon CloudFront
- S3 Origin Access Identity

#### Chapter 14: Troubleshoot Network Connectivity

- VPC Flow Logs
- ELB Access Logs
- AWS WAF ACL Logs
- CloudFront Logs
- CloudFront Caching Issues
- Troubleshooting Hybrid and Private Links

#### Chapter 15: Cost Optimization Strategies

• Operational Optimization

#### Chapter 16: Performance Optimization

• Optimizing for Performance

#### Chapter 17: Appendix: Videos

- Module 1: AWS SysOps Exam Basics
- Module 2: Monitoring, Logging and Retention
- Module 3: Reliability and Business Continuity
- Module 4: Deployment, Provisioning and Automation
- Module 5: Security and Compliance
- Module 6: Networking and Content Delivery
- Module 7: Cost and Performance Optimization

#### Videos and How To

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

113
VIDEOS

09:28
HOURS



## Here's what you get

**50** 

PRE-ASSESSMENTS
QUESTIONS

2

**FULL LENGTH TESTS** 

50

POST-ASSESSMENTS OUESTIONS

#### **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**

#### **Monitoring Services in AWS**

- Creating a CloudWatch Dashboard and Adding a Metric to it
- Creating CloudTrail

#### **Troubleshooting and Remediation**

• Creating Amazon EventBridge Rules that React to Events

#### **Implementing Scalability and Elasticity**

- Creating an Auto Scaling Group
- Using ElastiCache

#### **High Availability and Resilience**

- Assigning an Elastic IP Address to an EC2 Instance
- Creating an Elastic Load Balancer
- Creating an Amazon S3 Glacier Vault
- Enabling Versioning in the Amazon S3 Bucket
- Creating an Amazon S3 Bucket
- Creating an Amazon DynamoDB Table

#### **Backup and Restore Strategies**

- Creating an AWS Backup
- Creating a Snapshot

#### **Provisioning Resources**

- Creating and Deleting a Resource Share
- Creating an Application in Elastic Beanstalk
- Creating a CloudFormation Template
- Using the AWS Command Line Interface

#### **Security and Compliance**

- Configuring a Key
- Configuring an IAM Role
- Creating an IAM Group
- Creating an IAM User

#### **Data Protection at Rest and in Transit**

• Enabling and Disabling GuardDuty

#### **Networking and Connectivity**

- Creating an Elastic Network Interface
- Creating an Internet Gateway
- Allocating an Elastic IP Address
- Creating a VPC
- Creating a NAT Gateway
- Configuring a Route Table
- Creating a Subnet
- Creating a Security Group
- Creating a Network ACL
- Creating a Gateway Endpoint
- Creating a VPC Endpoint
- Creating a VPC Peering

#### **Domains, DNS, and Content Delivery**

- Creating a Hosted Zone Using Amazon Route 53
- Creating a Health Check
- Creating an Amazon CloudFront Web Distribution

#### **Troubleshoot Network Connectivity**

- Creating VPC Flow Logs
- Creating an AWS WAF Web ACL

#### **Performance Optimization**

- Creating a Placement Group
- Creating an Encrypted Amazon EBS Volume with a Cold HDD
- Creating a Linux Instance

## Here's what you get

LIVE LABS

VIDEO TUTORIALS

**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.

## **GET IN TOUCH:**

3187 Independence Drive Livermore, CA 94551, **United States** 





+1-415-763-6300 support@ucertify.com



www.ucertify.com