

uCertify

Course Outline

AWS All-in-one Security Guide



24 May 2025

1. Exercises, Quizzes, Flashcards & Glossary
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: Introduction to Security in AWS

Chapter 3: Identity and Access Management

Chapter 4: Infrastructure Security

Chapter 5: Data Security

Chapter 6: Application Security

Chapter 7: Logging, Monitoring, and Auditing

Chapter 8: Security Best Practices

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: Introduction to Security in AWS

- Introduction
- Shared responsibility model
- Important AWS security service offerings
- Security Guidance
- Quick Note on AWS Management Console
- Conclusion

Chapter 3: Identity and Access Management

- Introduction
- Fundamentals of IAM

- Identity
- Access Management
- AWS tools for IAM
- Conclusion

Chapter 4: Infrastructure Security

- Introduction
- AWS Global Infrastructure
- Securing networks with Virtual Private Cloud
- Patch management
- Secure SSH and RDP session management
- IP filtering
- Vulnerability assessment
- Distributed Denial of Service and AWS Shield
- Conclusion

Chapter 5: Data Security

- Introduction
- Fundamental concepts of securing data

- AWS Key Management Service (KMS)
- AWS CloudHSM
- Amazon S3
- Amazon EBS
- Amazon DynamoDB
- Amazon RDS
- Amazon Macie for data loss prevention
- Conclusion

Chapter 6: Application Security

- Introduction
- Securing APIs
- AuthN/AuthZ with Amazon Cognito
- Securing web applications hosted on Amazon S3 and CloudFront
- Externalizing the secrets and configuration parameters
- Web Application Firewall
- Securing applications with load balancer
- Conclusion

Chapter 7: Logging, Monitoring, and Auditing

- Introduction
- Amazon CloudWatch
- AWS CloudTrail
- Important logs managed by AWS
- AWS config
- Amazon GuardDuty
- AWS Security Hub
- Amazon Detective
- AWS Artifact
- AWS Service Catalog
- Conclusion

Chapter 8: Security Best Practices

- Introduction
- Shared responsibility model
- IAM best practices
- Infrastructure security best practices

- Data security best practices
- Application security best practices
- Logging and monitoring best practices
- Conclusion

You can't stay away! Get

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