AWS Certified Security – Specialty (SCS-C02)

Level: Specialty

Duration: 50–60 Hours

Course Overview

The AWS Certified Security – Specialty course is designed for individuals who perform security roles and want to demonstrate expertise in securing AWS environments. This course covers topics such as data protection, incident response, identity and access management, logging and monitoring, and infrastructure security, preparing learners for the SCS-C02 certification.

Course Objectives

- Design and implement security controls in AWS
- Manage identity and access using IAM and AWS SSO
- Monitor, log, and respond to security incidents
- Protect data in transit and at rest
- Prepare for the AWS Security Specialty certification exam

Course Outline

Module 1: Introduction and Certification Overview

- Overview of the SCS-C02 exam structure and domains
- Key AWS security services
- Shared Responsibility Model
- Compliance and governance in AWS

Module 2: Incident Response

- Preparing for incident response
- Using AWS CloudTrail and Amazon GuardDuty

- Responding to security breaches and alerts
- Automating incident responses with AWS Lambda

Module 3: Logging and Monitoring

- Monitoring AWS environments with CloudWatch
- Analyzing activity with AWS CloudTrail and AWS Config
- Centralizing logs with Amazon S3 and Amazon Athena
- AWS Security Hub and Amazon Detective for investigation

Module 4: Identity and Access Management

- Managing permissions with IAM users, groups, roles, and policies
- AWS Organizations and Service Control Policies (SCPs)
- Using AWS SSO and federated access
- Fine-grained access with resource-based and identity-based policies

Module 5: Infrastructure Security

- Network segmentation and isolation with VPC
- Security groups and Network ACLs
- Protecting endpoints using AWS WAF, AWS Shield, and AWS Firewall Manager
- Patch management and security baselines with Systems Manager

Module 6: Data Protection and Encryption

- Encryption at rest using AWS KMS and CloudHSM
- Encryption in transit using TLS and AWS Certificate Manager
- S3 bucket policies and block public access settings
- Managing keys, rotation, and access control

Module 7: Security Automation and Best Practices

- Automating compliance checks with AWS Config rules
- Detecting misconfigurations using AWS Trusted Advisor
- Security automation with CloudFormation and Lambda

• Security architecture best practices and design

Module 8: Exam Preparation and Practice

- Practice questions by domain
- Scenario-based hands-on exercises
- Real-world use cases and case studies
- Final mock test and review session

Target Audience

- Security engineers, architects, and analysts
- IT professionals responsible for securing AWS environments
- Candidates preparing for the AWS Security Specialty certification exam

Prerequisites

- Minimum of 2 years of hands-on AWS experience (recommended)
- Strong understanding of security concepts, protocols, and AWS services