

AWS Certified SysOps Administrator – Associate

Course Outline

Day 1

Module 1: Introduction to Cloud Operations on AWS

- Overview of Cloud Operations
- Introduction to the AWS Well-Architected Framework
- Using the AWS Well-Architected Tool

Module 2: Access Management

- Understanding AWS Identity and Access Management (IAM)
- Managing resources, accounts, and AWS Organizations

Module 3: System Discovery

- Methods to interact with AWS services
- Tools for automating resource discovery
- Inventory management with AWS Systems Manager and AWS Config
- **Hands-On Lab:** Auditing AWS Resources with AWS Systems Manager and AWS Config

Module 4: Deploy and Update Resources

- Role of Cloud Operations in deployments
- Tagging strategies for resource management
- Deploying resources using Amazon Machine Images (AMIs)
- Deployment using AWS Control Tower

Module 5: Automate Resource Deployment

- Resource deployment with AWS CloudFormation
- Using AWS Service Catalog for deployment
- **Hands-On Lab:** Infrastructure as Code

Day 2

Module 6: Manage Resources

- Managing resources with AWS Systems Manager
- **Hands-On Lab:** Operations as Code

Module 7: Configure Highly Available Systems

- Distributing traffic with Elastic Load Balancing
- Managing DNS with Amazon Route 53

Module 8: Automate Scaling

- Scaling with AWS Auto Scaling
- Using Spot Instances for cost optimization
- Managing licenses with AWS License Manager

Module 9: Monitor and Maintain System Health

- Monitoring and maintaining healthy workloads
- Monitoring AWS infrastructure and applications
- **Hands-On Lab:** Monitor Applications and Infrastructure

Module 10: Data Security and System Auditing

- Establishing a strong identity and access foundation
- Implementing detection mechanisms
- Automating incident remediation

Day 3

Module 11: Operate Secure and Resilient Networks

- Building and securing an Amazon Virtual Private Cloud (Amazon VPC)
- Networking beyond the VPC

Module 12: Mountable Storage

- Configuring Amazon Elastic Block Store (Amazon EBS)
- Sizing EBS volumes for performance
- Using Amazon EBS snapshots and Data Lifecycle Manager
- Creating backup and data recovery plans
- Configuring shared file system storage
- **Hands-On Lab:** Automating with AWS Backup for Archiving and Recovery

Module 13: Object Storage

- Deploying and managing Amazon Simple Storage Service (Amazon S3)
- Managing storage lifecycles on Amazon S3

Module 14: Cost Reporting, Alerts, and Optimization

- Gaining awareness of AWS costs
- Using control mechanisms for cost management
- Optimizing AWS spend and usage
- **Hands-On Lab:** Capstone lab for CloudOps