

AWS Certified Solutions Architect Associate

Course Duration: 24 Hrs

Course Code: SAA-C03

Contents

AWS Certified Solutions Architect Associate	1
Architecting on AWS Course Overview:	2
What You'll Learn.....	2
Target Audience.....	3
Pre-Requisites.....	3
Course Content.....	3
Module 1: AWS Architectural Fundamentals.....	3
Module 2: Security and Identity Management.....	4
Module 3: Networking Basics	4
Module 4: Compute Services	4
Module 5: Storage Solutions	4
Module 6: Database Management.....	4
Module 7: Monitoring and Auto Scaling.....	4
Module 8: Automation and Infrastructure as Code.....	5
Module 9: Containers and Microservices.....	5
Module 10: Advanced Networking.....	5
Module 11: Serverless Architecture.....	5
Module 12: Edge Services and Performance Optimization	5
Module 13: Backup and Disaster Recovery.....	5
Exam Preference.....	5

Architecting on AWS Course Overview:

The Architecting on AWS course is designed for solutions architects, solution design engineers, and developers who want to gain a solid understanding of AWS architecture principles. This course focuses on building secure, scalable, and highly available IT solutions using AWS services while adhering to industry's best practices.

Throughout the course, participants will explore various AWS services and learn how to design architectures tailored to different business requirements, industry needs, and application types. The course is structured around the AWS Well-Architected Framework, guiding learners through real-world scenarios to develop optimized AWS solutions.

At the end of the training, attendees will have hands-on experience with AWS networking, security, computing, storage, databases, automation, serverless computing, edge services, and disaster recovery strategies. The course concludes with a practical solution-building exercise, allowing learners to apply their knowledge effectively.

What You'll Learn

By completing this course, participants will be able to:

- ✦ Understand AWS architectural best practices.
- ✦ Strengthen account security fundamentals.
- ✦ Design secure and scalable virtual networks with public and private subnets.
- ✦ Develop multi-tier architectures on AWS.
- ✦ Choose the right compute and storage services based on business needs.
- ✦ Compare different AWS database solutions and their use cases.
- ✦ Implement monitoring, load balancing, and auto-scaling strategies.
- ✦ Use AWS automation tools to build and manage infrastructure.
- ✦ Explore hybrid networking solutions, including peering and routing options.

- ✦ Leverage AWS container services for portable application deployment
- ✦ Utilize serverless computing to optimize performance and costefficiency.
- ✦ Understanding edge services for reducing latency and enhancing security.
- ✦ Implement backup and disaster recovery strategies for business continuity.

Target Audience

- ✦ This course is ideal for:
- ✦ Solutions Architects designing cloud-based solutions.
- ✦ Solution Design Engineers involved in AWS infrastructure planning.
- ✦ Developers looking to enhance their AWS architecture skills.
- ✦ Individuals preparing for the AWS Solutions Architect – Associate certification.

Pre-Requisites

- ✦ To make the most of this course, participants should have:
- ✦ Basic understanding of cloud computing concepts.
- ✦ Familiarity with networking principles and IP addressing.
- ✦ Knowledge of multi-tier architectures.
- ✦ Prior experience with distributed systems.
- ✦ Completion of AWS Cloud Practitioner Essentials or AWS Technical Essentials.

Course Content

Module 1: AWS Architectural Fundamentals

- Overview of AWS services and infrastructure
- Introduction to the AWS Well-Architected Framework

- Hands-on: Exploring the AWS Management Console and CLI

Module 2: Security and Identity Management

- Identity and Access Management (IAM)
- Security policies and best practices
- Managing multiple AWS accounts

Module 3: Networking Basics

- IP addressing and Virtual Private Cloud (VPC) fundamentals
- Securing traffic within a VPC

Module 4: Compute Services

- Amazon EC2 instance types and pricing
- Storage options for EC2
- AWS Lambda (serverless computing)
- Hands-on: Building a VPC infrastructure

Module 5: Storage Solutions

- Amazon S3 and object storage
- Shared file systems and data migration tools

Module 6: Database Management

- AWS database services (RDS, DynamoDB, caching strategies)
- Database migration solutions
- Hands-on: Setting up a database layer in AWS

Module 7: Monitoring and Auto Scaling

- AWS monitoring tools and event-driven scaling
- Load balancing strategies

- Hands-on: Configuring high availability

Module 8: Automation and Infrastructure as Code

- AWS CloudFormation and automation tools

Module 9: Containers and Microservices

- AWS container services and deployment strategies

Module 10: Advanced Networking

- VPC peering, Transit Gateway, and hybrid networking

Module 11: Serverless Architecture

- Serverless applications with API Gateway, SQS, SNS, and Step Functions
- Hands-on: Deploying a serverless application

Module 12: Edge Services and Performance Optimization

- AWS CloudFront, Route 53, and DDoS protection
- Hands-on: Configuring a CloudFront distribution

Module 13: Backup and Disaster Recovery

- AWS Backup and recovery planning
- Hands-on: Building a fault-tolerant AWS architecture

Exam Preference

Exam Code	SAA-C03
Category	Associate
Exam Format	65 Questions (Multiple choice and Responses)
Total Score	1000
Passing Score	720
Exam Duration	130 Minutes