

AWS Solution Architect Associate – Complete Program

Program Overview – AWS Solution Architect Associate

- This program is designed to prepare professionals for the AWS Certified Solution Architect – Associate certification.
- It provides in-depth knowledge of AWS architecture principles, high availability, fault tolerance, cost optimization, and secure cloud design.
- The course focuses on real-world architecture design, hands-on implementation, and exam-oriented preparation.

AWS Global Infrastructure

- AWS Regions & Availability Zones
- Edge Locations & CloudFront
- AWS Global Network Architecture
- Shared Responsibility Model

Identity & Access Management (IAM)

- IAM Users, Groups & Roles
- Policies & Permission Boundaries
- Multi-Factor Authentication (MFA)
- Federation & Cross-Account Access
- AWS Organizations & SCP

Compute Services

- EC2 Instance Types & Pricing Models
- Auto Scaling Groups
- Elastic Load Balancer (ALB, NLB, CLB)
- Launch Templates
- Elastic Beanstalk
- AWS Lambda
- ECS & EKS Overview

Networking – VPC & Hybrid Architecture

- VPC Architecture
- Subnets (Public & Private)
- Route Tables
- Internet Gateway & NAT Gateway
- Security Groups & NACL
- VPC Peering
- Transit Gateway
- Direct Connect & VPN
- PrivateLink

Storage Services

- S3 (Storage Classes, Lifecycle Policies)
- S3 Security & Encryption
- EBS & EFS
- FSx
- Storage Gateway
- Backup Strategies

Databases

- RDS (MySQL, PostgreSQL, Oracle, SQL Server)
- Multi-AZ & Read Replicas
- Aurora
- DynamoDB (Global Tables, DAX)
- ElastiCache
- Database Migration Service (DMS)

High Availability & Fault Tolerance

- Multi-AZ Deployments
- Auto Scaling Strategies
- Cross-Region Replication
- Disaster Recovery Patterns (Backup & Restore, Pilot Light, Warm Standby, Multi-Site)

Security & Compliance

- KMS & Encryption
- AWS Shield & WAF
- Security Best Practices
- AWS Config
- CloudTrail
- GuardDuty

Monitoring & Logging

- CloudWatch Metrics & Logs
- CloudWatch Alarms
- AWS X-Ray
- Trusted Advisor

Cost Optimization & Billing

- AWS Pricing Models
- Cost Explorer
- Reserved Instances
- Savings Plans
- Budget Alerts

Infrastructure as Code

- CloudFormation Basics
- Introduction to Terraform for AWS
- CI/CD Architecture Overview

Architecting Best Practices

- Well-Architected Framework
- Operational Excellence
- Reliability
- Performance Efficiency
- Security
- Cost Optimization

Hands-on Architecture Projects

- Design Highly Available Web Application
- Deploy 3-Tier Architecture
- Serverless Architecture Design
- Hybrid Cloud Connectivity Setup
- Disaster Recovery Implementation

Exam Preparation Module

- SAA-C03 Exam Pattern
- Scenario-Based Questions Practice
- Architecture Case Studies
- Mock Tests & Review Sessions

Course Duration

- Total Duration: 60–80 Hours
- Hands-on Labs & Real Architecture Design

Who Can Attend

- Cloud Engineers
- System Administrators
- DevOps Engineers
- Software Developers
- IT Professionals preparing for AWS Certification