

AWS Certified DevOps Associate

About Course

Sunshine Learning & Technologies, moulded AWS DevOps Associate course for those who wants to learn how to build applications using AWS. This course is designed to pass the AWS Certified Developer – Associate exam. After completion of this course, you'll be able to identify the key features of the core AWS technologies used to build serverless applications, like S3, DynamoDB, Elastic Beanstalk, Lambda, and API Gateway. You'll learn to build, deploy and troubleshoot Serverless applications in AWS, also able to use AWS CLI, AWS service APIs, and SDKs to interact with AWS. You'll be able to create CI/CD pipeline to deploy applications in AWS. You'll learn to configure AWS services for optimal performance and implementation of AWS security best practices using IAM, KMS, MFA. You will master the implementation of cloud security best practices and understand what it takes to become an AWS Developer Associate.

AWS Certified DevOps Associate Training Curriculum

AWS Overview :-

Topics:

- Introduction
- AWS Services
- Accessing AWS Services
- Assisted Practice: Set up the AWS Command Line Interface
- AWS SDKs
- Practice of: Set Up AWS SDK

Amazon Elastic Compute Cloud

Topics:

- Introduction
- Amazon Elastic Cloud Computing
- Amazon Machine Image
- Amazon EC2 instance IP addressing
- EC2 Instance Metadata
- Assisted Practice: Create a Linux Based EC2 Instance
- Assisted Practice: Create a Windows Based EC2 Instance
- Assisted Practice: Launch an EC2 Linux Instance and install a webserver using user data
- Assisted Practice: EC2 instance Connect

- Assisted Practice: Create Custom AMI
- Assisted Practice: Launch an Instance Using a Custom AMI
- Introduction to Amazon EBS
- EBS Snapshot
- Assisted Practice: Create and Attach an EBS Volume to a Linux Instance
- Assisted Practice: Create a Snapshot of an Existing EBS Instance
- Elastic File System
- Difference between EFS and EBS
- Auto Scaling
- Amazon Elastic Load Balancer
- Types of Amazon Load Balancers
- Assisted Practice: Set Up an Autoscaled Environment
- Qn A Knowledge Checks
- Lesson End Project

Amazon Storage Services

Topics:

- Introduction
- Introduction to Amazon S3
- Assisted Practice: Creating an S3 bucket
- Version Control in Amazon S3
- Assisted Practice: Configure an S3 Bucket for versioning
- Static Web Hosting
- Amazon S3 Policies
- Assisted Practice: Configure an S3 Bucket for Static Website Hosting
- Amazon S3 Storage Classes
- Amazon S3 pricing tiers
- S3 Select and S3 Glacier Select
- Sharing an S3 bucket between multiple accounts
- Backup and DataSync
- Amazon CloudFront
- Assisted Practice: Configure a new CloudFront distribution with an S3 bucket
- QnA Knowledge Checks
- Lesson End Project

Databases on AWS

Topics:

- Introduction
- Introduction to Databases
- Amazon RDS
- Assisted Practice: Create an RDS Database Instance
- Amazon DynamoDB
- Assisted Practice: Create a Table Using the DynamoDB Console
- DynamoDB concepts
- Amazon ElastiCache
- QnA Knowledge Checks
- Lesson End Project

Amazon Virtual Private Cloud

Topics:

- Introduction
- Introduction to Amazon VPC
- Assisted Practice: Create a Custom VPC
- Amazon VPC Components
- IP Addresses
- Elastic Network Interface
- VPCs and Subnets
- Internet Gateways
- Network Address Translation (NAT) Gateway
- Controlling Traffic in Amazon VPC
- VPC Peering
- Assisted Practice: Create and Accept a VPC Peering Connection
- Virtual Private Network (VPN) Connections
- Assisted Practice: Demonstrate a VPN connection
- QnA Knowledge Checks
- Lesson End Project

Amazon Route 53

Topics:

- Introduction
- Domain Name System (DNS)
- Introduction to Amazon Route53
- Amazon Route 53 Concepts and Terminologies
- Amazon Route 53 Policies
- Assisted Practice: Register a new domain name
- Assisted Practice: Create a Public Hosted Zone
- Route53 Best Practices
- Amazon Route 53 Costs
- Limitations of Amazon Route 53
- QnA Knowledge Checks
- Lesson End Project

IAM and Security on AWS

Topics:

- Introduction
- Introduction to Identity and Access Management
- Terminologies in AWS IAM
- IAM Users
- Assisted Practice: Create an IAM user
- IAM Groups
- Assisted Practice: Creating and Adding IAM user to an IAM group
- IAM Roles
- Assisted Practice: Creating an IAM role for an IAM user
- IAM Policies
- Assigning role to AWS Services
- Assisted Practice: Use IAM roles with EC2
- AWS Cognito
- AWS Single Sign-On
- Assisted Practice: Enable AWS Single Sign-On for a user
- AWS Multi Factor Authentication
- Assisted Practice: AWS Multi Factor Authentication
- AWS Key Management Service
- QnA Knowledge Checks
- Lesson End Project

Applications & Serverless Services in AWS

Topics:

- Introduction
- Introduction to Amazon Application Services
- Amazon Simple Queue Service
- Assisted Practice: Demonstrate SQS
- Amazon SNS
- Assisted Practice: Demonstrate SNS
- Amazon SNS vs. Amazon SQS
- Amazon API Gateway
- Amazon Kinesis
- Event Processing
- Introduction to AWS Serverless Services
- Assisted Practice: Create a Serverless Webpage
- Lambda concepts
- Elastic Container Service
- QnA Knowledge Checks
- Lesson End Project

Monitoring on AWS

Topics:

- Introduction
- Types of monitoring services in AWS
- Introduction to CloudWatch
- Assisted Practice: Creating Cloud Watch Alarms
- AWS Billing Metrics
- Introduction to AWS CloudTrail
- Cloudwatch vs CloudTrail
- AWS Monitoring Best Practices
- QnA Knowledge Checks
- Lesson End Project

Development and Deployment on AWS

Topics:

- Introduction
- Introduction to CI/CD
- Assisted Practice: Develop sample java program and access AWS resources
- Assisted Practice: CodeCommit
- CodeDeploy
- Assisted Practice: CodeDeploy
- Docker and CodeBuild
- Assisted Practice: Docker and CodeBuild
- Introduction to CloudFormation
- Assisted Practice: CloudFormation
- Deploying using ElasticBeanstalk
- QnA Knowledge Checks
- Lesson End Project

Hands On:-

There will be separate Hands-On on each topic.