



# **AWS Solutions Architect-Associate**

# **Course Highlights**

Modules(Total 4)

**Required Linux** 

**Required Python Script** 

**Required Bash Script** 

AWS -SAA-C03

# Projects(Total 3)

Webhosting with AWS-(EC2, ROUTE53,IAM)

Webhostig With S3, CDN, ROUTE53

**Apache server with RDS** (DATABASES-MYSQL)

# **Duration**

**Course Duration: 3 months** 

Course Validity: 1 Year



# Python Scripting:

- Basic Scripting Concepts
- File Operations
- Data Processing and Analysis
- Web Scraping
- Api Integration
- System Administration
- Error Handling and Debuging

## **Bash Scripting:**

- Introdcution to bash
- Bash Variables
- Bash Loop-File
- Bash Comments
- Bash Arrays
- Bash Expansion
- Bash Conditional Expression
- Bash Case Statements
- Bash Special Characters
- Bash if elif else
- Bash Loops
- Bash Apends Strings
- Bash Functions

## **Linux Fundamentals:**

- The Linux Directory Structure
- The Shell
- Basic Linux Commands, Getting Help at the Command Line
- Working with Directories and Files
- Listing Files and Understanding Is Output
- File and Directory Permissions Explained
- Finding Files and Directories
- Viewing Files and the Nano Editor, Editing Files in Vim and Nano Editor
- Graphical Editors with gedit
- Deleting, Copying, Moving, and Renaming Files
- YUM/DNF package management

Introduction to Cloud Computing: In this module, you will learn what Cloud Computing is and what are the different models of Cloud Computing along with the key differentiators of different models. We will also introduce you to virtual world of AWS along with AWS key vocabulary, services and concepts.

- Introduction to Cloud Computing
- AWS Architecture
- AWS Management Console
- Setting up of the AWS Account

Amazon EC2 and Amazon EBS: In this module, you will learn about the introduction to compute offering from AWS called EC2. We will cover different instance types and Amazon AMIs. A demo on launching an AWS EC2 instance, connect with an instance and hosting a website on AWS EC2 instance. We will also cover EBS storage Architecture (AWS persistent storage) and the concepts of AMI and snapshots.

- Amazon EC2
- Amazon EBS
- Demo of AMI Creation
- Backup, Restore

Amazon Storage Services S3 (Simple Storage Services): In this module, you will learn how AWS provides various kinds of scalable storage services. In this module, we will cover different storage services like S3, Glacier, Versioning, and learn how to host a static website on AWS.

Cloud Watch & SNS: In this modules, you will learn how to monitoring AWS resources and setting up alerts and notifications for AWS resources and AWS usage billing with AWS CloudWatch and SNS.

- Amazon Cloud Watch
- SNS Simple Notification Services

Scaling and Load Distribution in AWS: In this module, you will learn about 'Scaling' and 'Load distribution techniques' in AWS. This module also includes a demo of Load distribution & Scaling your resources horizontally based on time or activity.

Amazon Auto Scaling & ELB

**AWS VPC & Route 53:** In this module, you will learn introduction to Amazon Virtual Private Cloud. We will cover how you can make public and private subnet with AWS VPC. A demo on creating VPC. We will also cover overview of AWS Route 53.

- Amazon VPC with subnets
- Gateways
- Route Tables
- Amazon Route 53 overview

**Identity and Access Management Techniques (IAM):** In this module, you will learn how to achieve distribution of access control with AWS using IAM.

Amazon IAM - add users to groups, manage passwords, log in with IAM -created users.

Amazon Relational Database Service (RDS): In this module, you will learn how to manage relational database service of AWS called RDS.

Amazon RDS

Multiple AWS Services and Managing the Resources' Lifecycle: In this module, you will get an overview of multiple AWS services. We will talk about how do you manage life cycle of AWS resources and follow the DevOps model in AWS. We will also talk about notification and email service of AWS along with Content Distribution Service in this module.

- AWS CloudFront, Cloud Trail, SQS
- Overview of AWS Products such as Elastic Beanstalk, AWS DynamoDB
- Cloud Formation, SES.

**AWS Architecture and Design:** In this module, you will cover various architecture and design aspects of AWS. We will also cover the cost planning and optimization techniques along with AWS security best practices, High Availability (HA) and Disaster Recovery (DR) in AWS.

- AWS Backup and DR Setup
- AWS High Availability Design
- AWS Best Practices (Cost +Security)
- AWS Calculator & Consolidated Billing

Migrating to Cloud & AWS: In this module, you will learn how to migrate on-premises VM to cloud.

# AWS Kinesis (Work with Real-Time Streaming Data):

- Learn how the service collects, processes and analyzes streaming data in real-time using Amazon Kinesis Analytics
- Learn how to load streaming data into AWS using Amazon Kinesis Firehose
- Learn to collect, process and analyze real-time streaming data to create valuable insights using Amazon Kinesis Streams

## AWS Lambda (Server-less code management):

- Develop and deploy AWS Lambda functions properly with the Server-less Framework.
- Deploy three real world projects that interact with S3, SES, Step Function, SNS, Event Bridge, API Gateway, Dynamo DB, and EC2 & Cloud Watch.

Partners:









Java



E-mail: info@ducatindia.com Visit us: www.ducatindia.com www.facebook.com/ducateducation

#### NOIDA

A-43 & A-52, Sector-16, Noida - 201301, (U.P.) INDIA ₹ 70-70-90-50-90 □/ŷ +91 99-9999-3213

#### SOUTH EXTENSION (DELHI)

D-27,South Extension-1 New Delhi-110049 70-70-90-50-90 +91 98-1161-2707

### 2.0 NOIDA SEC-63

H-43 Sector-63 Noida-201301 \$\frac{70-70-90-50-90}{\infty} +91 7042175774

#### GHAZIABAD

1, Anand Industrial Estate, Near ITS College, Mohan Nagar, Ghaziabad (U.P.)

70-70-90-50-90 +91 9810851363

#### GURGAON

1808/2, 2nd floor old DLF, Near Honda Showroom, Sec.-14, Gurgaon (Haryana) 70-70-90-50-90

#### PITAMPURA (DELHI)

Plot No. 366, 2nd Floor, Kohat Enclave, Pitampura, ( Near- Kohat Metro Station) Above Allahabad Bank, New Delhi- 110034. 70-70-90-50-90