

# AWS Developer Course

quickxpert

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Best institute for IT training and placements for classroom and online training for students and corporates. We are an ISO certified institute and in the industry since 2014. Our strong training and placement team have helped thousands of students build their career.

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**Live Projects** - MarriageKing, theVibrantBirdie, CRM etc

**Corporate Trainings** - GeBBS Healthcare, NVest Solutions, Infogix, PDG Software, GMV India etc.

**Syllabus mentioned below.**

# AWS Syllabus

## Introduction to Cloud and AWS

- What is Cloud
- What is AWS
- History of AWS.
- Features of AWS.
- AWS comparison with other clouds platforms.
- AWS Console overview.
- How to create the account in AWS
- What is Regions in AWS
- What Availability zones in AWS

## EC2 (Elastic Compute Cloud)

- Introduction to EC2 (Elastic Compute Cloud).
- How to create EC2 instance.
- Stages of instance (Stop, Running, Start, Terminate)
- Types of instances
- Introduction to AMI (Amazon Machine Images)
- What is .Pem and .PPK files
- Launching and connecting Windows server
- Launching and connecting Linux server
- Launching and connecting Ubuntu server
- Private IP VS Public IP

- Elastic IP in AWS
- Apache test using Linux OS
- Creating AMI images (Snapshot)
- Launching new instance with AMI images

## **IAM (Identity Access Management)**

- What is IAM
- Benefits of IAM in AWS
- Root User vs IAM Users
- What are roles users, groups and policies in IAM
- Creating user using IAM
- Creating Groups in IAM
- Attaching Policies to Resources in IAM
- Login of IAM user in AWS

## **EBS (Elastic Block Storage)**

- What is EBS
- How EBS Works with EC2
- EBS volume types
- Creating an EBS Volume
- Attaching EBS to an EC2 Instance
- Expanding EBS Volume Size
- What is Snapshot
- Data Recovery Planning with EBS Snapshots

## ❖ Networking Basics

- Introduction to network
- Networking components
- Network topology
- OSI Model (7 Layers)
- TCP/IP model (4 Layers)
- IP Addressing
- HTTP vs HTTPS
- DNS (Domain Name System)
- Ports and Protocols
- CIDR
- Firewalls and Network Security
- VPN (Virtual Private Network)
- Network Troubleshooting Tools (ping, telnet, netstat)

## VPC (Virtual Private Cloud)

- Introduction to VPC (Virtual Private Cloud)
- Benefits of using VPC
- Introduction to key component of VPC
- Subnets, Internet gateway, Route tables, NAT Gateway.
- Creating VPC (Virtual Private Cloud)
- Accessing internet inside private instance using NAT Gateway
- How to establish VPC to VPC peering connection and test the connectivity between

- the two VPC
- How to establish VPC to VPC peering connection and test the connectivity between
- the two VPC
- What is VPN
- Creating VPN site to site connection

## **S3 (Simple Storage Services)**

- Introduction to S3 (Simple Storage Service)
- What is Buckets and Objects
- Naming Rules for Buckets
- Creating S3 buckets
- Storing objects in S3 buckets
- Making Bucket Public vs Private
- S3 bucket Lifecycle

## **CLI**

- Introduction tAWS CLI
- Why AWS CLI?
- Accessing AWS through CLI
- AWS CLI Package Installation
- Access Keys & Secret Keys
- Launching EC2 instance through CLI
- Creating S3 buckets through CLI
- Managing IAM users through CLI

- Managing IAM groups through CLI
- Managing IAM roles through CLI

## Route 53

- What is AWS Route 53
- What is DNS
- Key Features of Route 53
- Routing Policies
- DNS management using Route53
- Creating hosted zone and records using route53
- Traffic policies in Route53

## ECR (Elastic Container Registry)

- What is AWS ECR
- Key Features of AWS ECR
- How AWS ECR works
- ECR Components
- Storing Docker images into AWS ECR
- Deleting the Images from ECR

## SNS (Simple Notification Service)

- What is SNS
- Key Features of AWS SNS
- How AWS SNS Works
- Components of SNS

- Use cases
- Sending Notifications using SNS
- Integration with other AWS services

## **EKS (Elastic Kubernetes Service)**

- What is AWS EKS
- Key Features of AWS EKS
- EKS Architecture
- How EKS Works
- Core Components in EKS
- Security in EKS
- Creating Cluster with the help of EKS
- Creating Control plane and nodes in EKS
- Deleting the cluster in EKS

## **RDS (Relational Database Service)**

- What is AWS RDS
- Key Features of RDS
- Working with different RDS engines
- Deployment Options in RDS (Single-AZ, Multi-AZ)
- RDS Storage Types
- Connecting with databases using RDS instances
- Taking database backup (Snapshot) in RDS
- Exporting Backup to the S3 buckets in RDS

## Autoscaling

- What is AWS Auto Scaling
- Why Use Auto Scaling
- How Auto Scaling works
- Creating Autoscaling groups
- Implementing Auto scaling on servers

## Load Balancer

- What is an AWS Load Balancer
- Types of AWS Load Balancers
- Load Balancer Components
- How Load Balancers Work
- Working with the application and network load balancer

## Lambda

- What is AWS Lambda
- Key Features of AWS Lambda
- How Lambda Works
- Common Use Cases
- Creating functions using AWS Lambda
- Creating triggers using AWS Lambda
- Costing in Lambda

## **Dynamo DB**

- Introduction to DynamoDB
- What is NoSQL?
- Connect Webserver & DB Server
- Using IAM role in DynamDB
- Injecting Data in DynamDB

## **Redshift**

- Introduction to Redshift
- Data Warehousing
- OLTP
- OLAP
- Redshift Configuration
- MP

## **Elasticache**

- Introduction to Elasticache
- Types of Elasticache
- Mem Cached
- Redis
- Database Summary

## **EFS (Elastic File System)**

- What is AWS EFS
- Use Cases of AWS EFS

- Creating common Storage Between two instances using EFS
- DynamoDB
- Introduction to AWS DynamoDB
- Core Concepts of DynamoDB
- DynamoDB Data Models
- Creating tables with DynamoDB
- Importing and exporting DynamoDB data from S3 Bucket

## **SQS (Simple Queue Service)**

- Introduction to SQS
- Why SQS?
- SQS Workflow
- Queue types
- Standard Queue
- FIFO Queue
- Decoupling mechanism
- Visibility Timeout
- SQS Long Polling

## **SES**

- Introduction to SES
- Why SES?
- SNS Vs SES
- Summary

## Cloud Formation

- Introduction to Cloud Formation
- What is IAC?
- Cloud Formation Template
- Cloud Formation Stack
- Sample Cloud Formation stack
- Supported languages
- Clean-up

## Elastic Beanstalk

- Introduction to Elastic Beanstalk
- Why Elastic Beanstalk?
- Supported Languages
- Clean-up

## Snow Family

- Introduction to Snow Family
- Why Snow Family?
- Data Migration Service
- Snow Ball
- Snow Ball Edge
- Snow Mobile

## Trusted Advisor

- Introduction to Trusted Advisor
- Why Trusted Advisor?
- Cost Optimization
- Performance
- Security
- Fault Tolerance
- Service limits

## Cloud Front

- What is AWS Cloud Front
- What is CDN (Content Delivery Network)
- Key Components of CloudFront
- Achieving low latency rate using CloudFront.

## Cloud Trail

- What is AWS CloudTrail
- Why Use AWS CloudTrail
- CloudTrail Concepts
- Checking logs with the CloudTrail

## Cloud Watch

- What is AWS CloudWatch
- Why use AWS CloudWatch
- Monitoring servers with AWS CloudWatch

- Creating alarms using AWS CloudWatch
- Creating different dashboards with AWS CloudWatch
- Sharing of dashboards privately and publicly with AWS CloudWatch

## Elastic Transcoder

- What is Elastic Transcoder?
- Why Elastic Transcoder?
- Summary

## White Papers

- What is White Papers?
- IAAS
- PAAS
- SAAS
- AWS Responsibility
- User Responsibility
- Scale-up & Scale-down
- Scale-in & Scale-out

## Project

- Creating entire VPC infrastructure
- from scratch
- Using SNS
- Using S3
- Using EFS

- Creating Launch Templates
- Creating Autoscaling groups
- Creating Webservers
- Creating Database Servers
- Attaching Load Balancers
- Creating DNS through Route 53
- Creating Route 53 with Failover Policy
- Attaching Route 53 to Autoscaling

## **Miscellaneous**

- Cost management
- Free Tier Overview
- Budgets and Alerts
- Creating billing alarms
- How to Get AWS Support
- CloudShell
- Best Practices

## **Final Module**

- AWS Summary
- Daily Activities
- Errors & Troubleshooting
- Interview FAQ's
- Resume Preparation
- Certifications

## Duration

- 2 to 2.5 months

more info - <https://quickxpertinfotech.com/AWS-course>

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## Contact Us

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