

Course Durations: 30 Hours

Course Mode: Online/Offline

About Company:

EduNextgen extended arm of Product Innovation Academy is a growing entity in education and career transformation, specializing in today's most in-demand skills. A platform with blended learning programs supported by in-trend technology platforms for learning. Engaging organizations for learning development objectives.

Training courses are designed and updated by renowned industry experts. Our blended learning approach combines online classes, instructor-led live virtual classrooms and virtual teaching assistance.

About The Course:

AWS is leading Cloud Computing platform among other public clouds. It has numerous managed resources to build different type of applications on cloud in less time. Many of the fortune 500 companies use AWS cloud platform to host the applications. This course is designed for anyone seeking to learn how to deploy, manage, and operate scalable, highly available, and fault tolerant systems on Amazon Web Services. By the end of the course, you'll be prepared to pass the associate level AWS Certified SysOps Administrator exam.

*The course curriculum and contents are made by industries expert.

Why This Course:

- We will cover fundamentals as well as deep dive into AWS services, deployment and provisioning, data management, AWS OpsWorks, security, and networking.
- This training is completely aligned to AWS Certified SysOps Administrator - Associate exam.
- Real-life case studies.
- Live Support (24x7)

Participants will get the Access to:

- LMS Access
- Assignments
- Quizzes
- Industry Grade Projects
- Live Support via Mail, Call & Screen Sharing
- Course Completion Certificate from EduNextgen

Batch Schedule:

Weekend: 3 Hours per day (Online), 4 Hours per day (Offline)

Weekday: 2 Hours per day (Online), 2 Hours per day (Offline)

Course Curriculum

Module 1: User Sign Up (X hour)

This module will help you to understand how to create an account for AWS. Overview of its Management Console, Billing and Pricing. Below topics are covered in this module:

- User Sign Up
 - Overview Amazon Management Console
 - Management Activity and Billing overview
 - Amazon Pricing
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Module 2: AWS Big Picture (X hours)

This module will help you to understand the Services Provided by AWS like EC2, EBS and other Services. Below topics are covered in this module:

- An overview of AWS
 - EC2 - An overview
 - EBS - An Overview
 - ELB - An overview
 - Route 53 - An overview
 - S3 - An overview
 - Glacier - An overview
 - RDS - AN overview
 - VPC - An overview
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Module 3: Amazon EC2 - Window Server 2012 (X hours)

This module will help you to understand to create an AWS EC2 instance- Windows Server. Below topics are covered in this module:

- Launch Windows server 2012 Instance
 - Decrypt Password and download RDP shortcut client
 - Connect to the EC2 Windows 2012 Instance
 - Terminate the Windows Server 2012 Instance
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Module 4: Amazon EC2 - Security Groups (X hours)

This module will help you to understand Security Groups and its functionality. Below topics are covered in this module:

- Creating Security Groups
 - Modify Security Groups
 - Delete Security Groups
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Module 5: Amazon Elastic Block Store (X hours)

This module will you to understand how to create Standard Volume and Assigning it to the Sever. Below topics are covered in this module:

- Create Standard Volume
 - Assign volumes to Windows Server 2012 and Ubuntu 14.04 server
 - Format EBS volume from Window 2016
 - Disassociate and Delete volumes
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Module 6: Amazon Elastic Load Balancing (ELB) (X hours)

This module will help you to understand about Load Balancing and how to do it. Below topics are covered in this module:

Lab 1:

- Launch Two Ubuntu EC2 Instances- apache web servers with user data
- Edit HTML files to both the servers
- Test your web Servers through internet

Lab 2:

- Create Elastic Load Balancer
 - Add both the Ubuntu servers to ELB
 - Test your Elastic Load Balancer
 - Delete your Elastic Load Balancer
 - Pre warming of ELB
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Module 7: AWS Route 53 (X hours)

This module will help you to understand about Route 53 and its functionalities. Below topics are covered in this module:

- What is Route 53
 - Route 53 demo integration with ELB (Performed by Instructor only)
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Module 8: Amazon EC2 - Ubuntu 14.04 with User Data and Metadata (X hours)

This module will help you to understand Amazon EC2 Metadata to configure or manage running Instance. Below topics are covered in this module:

- Launch the EC2 Ubuntu cloud server
 - Using User-data of web-server
 - Validate user data is executed successfully
 - Fetch information about VM from metadata URL
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Module 9: Amazon EC2 and EBS System operations (Hands on lab by students) (X hours)

This module will help you to understand EC2 and EBS System Operations for example creating AMI and Volume using Snapshot. Below topics are covered in this module:

- EC2- Advanced theory ec2 EBS vs instance store
 - EC2- Operations (Status checks)
 - EC2 – Creating your own AMI
 - EC2 – Launching instance using own AMI
 - EC2 – copy snapshot across region and share across accounts
 - EBS – Snapshot
 - EBS- creating volume using snapshot
 - EBS – copy EBS snapshot across region and share across accounts
 - EBS - upgrade volume types
 - Security groups - create, edit and modify rules
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Module 10: Disaster recovery and Backup (X hours)

This module will help you to understand about Disaster recovery and Backup for Critical Systems in AWS. Below topics are covered in this module:

- Disaster recovery in AWS
 - Backup in AWS
 - Recovery in AWS
 - AWS services and automated backups
 - Storing log files and other backups
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Module 11: Amazon Opsworks (X hours)

This module will help you to understand about AWS Opsworks that helps you configure and operate applications. Below topics are covered in this module:

- AWS Opsworks overview and pricing
 - Setup Opsworks
 - Getting started with sample stack
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Module 12: AWS S3 (X hours)

This module will help you to understand AWS S3 and its features like to store and retrieve any amount of data, at any time, from anywhere on the web. Below topics are covered in this module:

- AWS S3 - Overview and pricing
 - Create Bucket and Folder
 - Upload, download, share and delete object
 - Delete Bucket
 - File Versioning
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Module 13: Amazon Glacier (X hours)

This module will to understand about Amazon Glacier and its Services. Below topics are covered in this module:

- AWS Glacier overview and pricing
 - Create life cycle policies for your bucket
 - Access data from Glacier
 - Setting auto delete to your data from S3 based on rules
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Module 14: Auto Scaling and Bootstrapping (X Hours)

This module will to understand about Auto Scaling and Bootstrapping to handle and Load Balancing your EC2 Instances. Below topics are covered in this module:

- Overview Of Autoscaling
 - ELB: Configuring The Elastic Load Balancer for Autoscaling group
 - Configuring The AMI For Our Web Application
 - Auto Scaling And Bootstrapping
 - Scale out VM's though stress test
 - Scaling VM 's based on low utilization
 - Troubleshooting autoscaling issues
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Module 15: AWS - IAM (Identity and Access Management) (X Hours)

This module will to understand about AWS - IAM and its features. Below topics are covered in this module:

- What is IAM? – A comprehensive introduction
 - AWS federation with Active directory- Theory only
 - Web Identity Federation - Theory Only
 - Security Token Service – Theory only
 - Getting started with IAMs
 - IAM user- groups (Hands on lab by students)
 - Creating a user and group
 - Adding a user to the group
 - Password policy setup for users
 - Attaching policy to users
 - Enabling dual /Multi factor authentication to the users
 - IAM roles (Hands on lab by students)
 - Creating a role
 - Launching a EC2 instance using a S3 full access role
 - Deleting a role
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Module 16: AWS CLI (X Hours)

This module will to understand about AWS CLI (Command Line Interface) to manage your AWS services with one tool. Below topics are covered in this module:

- Working with the AWS CLI
 - Launch instance with S3 and EC2 full access
 - Configure aws CLI Client
 - Create a security group using CLI
 - Create a key pair using CLI
 - Launch a EC2 instance using CLI
 - Stop an EC2 instance using CLI
 - Terminate an EC2 instance using CLI
 - Create an S3 bucket using CLI
 - Upload and download an object from your local machine to S3 through CLI
 - List buckets through CLI
 - Delete buckets through CLI
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Module 17: AWS - Webapp and RDS (X Hours)

This module will to understand about AWS RDS(Relational Database Service) and deploying a Webapp in EC2 Instance. Below topics are covered in this module:

- RDS- An overview
 - RDS –read replica
 - RDS- Multi AZ failover
 - RDS snapshots
 - Lab 1 : Create a RDS instance
 - Lab 2 : connecting to an RDS instance
 - Lab 3 : creating a RDS snapshots and restoring snapshot
 - Lab 4: Deleting RDS snapshots
 - Lab 5: Deleting RDS instance
 - Deploy Web application in Amazon Ec2 (media wiki)
 - Connect your Media wiki web application with RDS instances securely
 - Make media wiki available on public url for user sign up and write knowledge wiki
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Module 18: AWS Route 53 (X Hours)

This module will help you to understand about Route 53 and its functionalities. Below topics are covered in this module:

- Route 53 - Routing options
 - Simple routing - Hands-on lab
 - Weighted Routing Policy Lab
 - Latency Based Routing Lab
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- Geolocation Based Routing Lab
 - Failover Routing Lab
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Module 19: AWS - Virtual Private Cloud (VPC) (X Hours)

This module will to understand about AWS - Virtual Private Cloud and its features. Below topics are covered in this module:

- What is VPC? – A comprehensive introduction
 - Networking bottlenecks
 - Understanding VPC configurations
 - VPC with single public subnet
 - VPC with public and private subnet
 - VPC Peering
 - Access control List
 - Configuring VPC Instances (Hands on lab by students)
 - Creating a VPC
 - Subnets
 - Internet Gateway
 - Routing
 - Configuring a NAT Gateway
 - Creating security groups
 - Launching instances in public and private subnets
 - NAT vs Bastions
 - VPC Flow Logs
 - VPC clean up
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Module 20: AWS Cloud Formation (X Hours)

This module will to understand about AWS Cloud Formation and its functionalities. Below topics are covered in this module:

- Infrastructure as Code using Cloud Formation
 - Cloud formation – Create a new stack
 - Create and deploy sample template in JSON format
 - Use existing templates and deploy
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Module 21: Monitoring in the Cloud (X Hours)

This module will to understand about AWS CloudWatch and its services for monitoring. Below topics are covered in this module:

- CloudWatch Introduction
 - EC2 Status Troubleshooting
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- Create A Cloud Watch Role
- Monitoring EC2 With Custom Metrics
- Monitoring EBS
- Monitoring RDS
- Monitoring ELB
- Monitoring Elasticache
- Centralized Monitoring Servers
- Consolidated Billing
- Billing & Alerts
- Cost optimization