

# Certificate Program in **AWS & DEVOPS** Class Room & Online







**5000+ Trainees | 20+ Countries**  
**200+ Batches | 500+ Success Stories**

# KEY HIGHLIGHTS



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Training by Real Time Experts



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Material, Case Studies & Assignments



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One-On-One with Industry Mentors



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Dedicated Student Manager



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100% Assured Placement Assistance



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Hands on Training



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Doubt Clarification Sessions



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Limited Strength



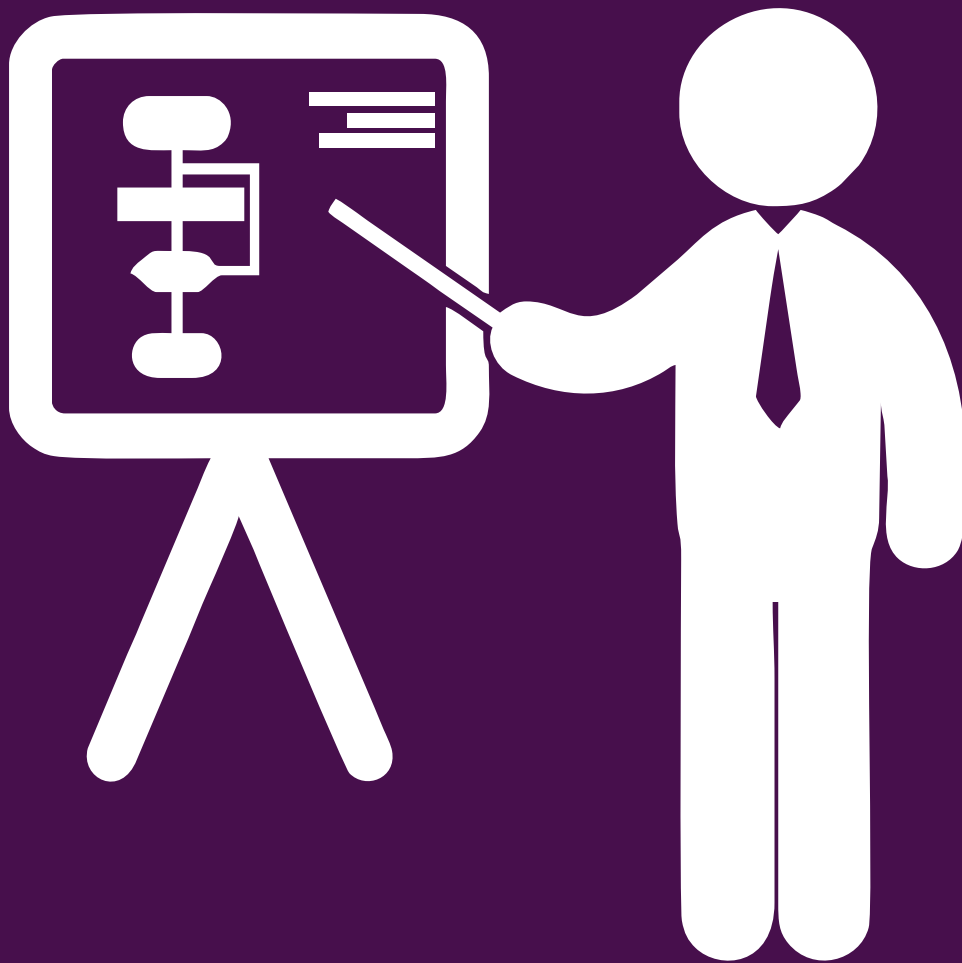
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Resume & Interview Prep Guidance



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Course is curated by subject matter experts in AWS Developer



# Program Curriculum

AWS

DevOps

## MODULE - I

# AWS

### Introduction to Cloud Computing

- Introduction cloud computing world
- History
- Cloud business models
- Public, Private and Hybrid cloud models
- Advantages of cloud computing

### AWS Overview

- AWS Regions and Availability zones.
- Tools to access services.
- Overview of the console.

### Linux

- Introduction to Virtualization
- VM vs Physical Machine
- User Management
- Introduction to BASH
- Basic Commands(ls,cd,cat,touch,mkdir)
- Text Editor(vi)
- Package Management(yum)
- Installing and Removing Software
- Configuring a Apache Web server
- Creating File System and mounting
- Volume Management

### AWS EC2(Elastic Compute Cloud)

- Introduction to EC2.
- Pricing models On-demand vs Reserved vs Spot instances.
- Using Amazon Machine Images (AMIs) to create the instances.
- Public vs Private Images.
- Sharing Images to other accounts.
- Logging into instances using key pairs.
- Converting PEM files to ppk.
- Assigning static IPs using Elastic IPs.
- Control access to instances using Security Groups.
- Backup and restore process of the EC2 instances.

## EBS

- Volumes and types.
- Creating Volumes and attaching to Instances.
- Using snapshots for backup.
- Increasing the size of the volumes.
- Backup and restore process of the EBS Volumes.

### Elastic File System

- Introduction to Network File System.
- Creating Resources for EFS.
- Managing EFS File Systems.
- Mounting EFS File Systems.
- Troubleshooting.

### Elastic Load Balancer

- Introduction to Elastic Load Balancing.
- Creating ELB from Console.
- Attaching instances to ELB.
- Configuring Ports, Protocols
- Configuring health checks.
- Enabling sticky session.
- Connection draining.
- Troubleshooting.
- Enabling SSL Certificates for https transactions.

### Cloud Watch

- Introduction to Cloudwatch monitoring service.
- Setting thresholds.
- Configuring Actions.
- Monitoring CPU, Memory and network utilization of different resources.
- Creating notifications.
- Integrating with Auto-scaling.

### Cloud Watch Logs

- Introduction
- Need of Cloud Watch Logs.
- Business Use Cases.
- Example Scenarios.



## Simple Notification Services

- Introduction to notifications
- Creating Topics
- Subscribing to Topic
- Publishing to SNS Topic
- Testing e-mail and SMS functionality.

## Relational Database Service

- Introduction to Managed database.
- Creating RDS instances using AWS console.
- Choosing an RDS engine and version.
- Public vs Private database instances.
- Multi-AZ setup.
- Backup using snapshots and point in restore.
- Parameter Group.
- Options Group.
- Control access to instances using Security Groups.

## Auto-Scaling

- Overview.
- Creating launch configuration.
- Creating auto-scaling group.
- Auto-scaling policies.

## AWS S3(Simple Storage Service)

- Introduction to Simple Storage Server (S3).
- Storage options  
(default vs reduced redundancy vs Glacier).
- Creating buckets using Console.
- Uploading and downloading data tS3.
- Building static websites using S3.
- Enable version control on S3.
- S3 access policies.

## Storage(Glacier)

- Introduction to Glacier.
- Moving data from S3 to Glacier.
- Setting archiving policies on S3.

## Cloud Front (Content Delivery Network)

- Introduction to Content Delivery Networks.
- Overview of Amazon CDN
- Origins and Edge locations
- Configure S3 backend for CloudFront.
- Configure ELB backend from CloudFront.

## Elastic BeanStlak

- Introduction to Elastic Beanstalk
- Creating Environment
- Deploying a Sample APP.

## Identity Access Management (IAM)

- Introduction to IAM.
- Access controls using IAM.
- Creating users, groups and roles.
- Assigning policies.
- Inline vs. Custom vs. Managed policies.
- Multi factor Authentication (MFA).

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- Deploying a Sample APP.

## Virtual Private Cloud (VPC)

- Introduction.
- Choosing a network design and CIDR.
- Design a simple network.
- Creating Subnets and setup routing as per the design.
- Using IGW tenable internet access.
- Access controls using Network ACLs.
- Network ACLs vs Security Groups.
- Creating Private connections from data center to AWS.
- Enabling VPC peering between VPCs.

## AWSCLI

- Installing AWSCLI
- Installing CLI tools using rpm or pip
- Configuring credentials
- AWS CLI syntax
- Creating and managing resource using CLI
- Examples

## Cloud Formation

- Introduction.
- Understanding the template format.
- CloudFormation designer.
- Create a simple CloudFormation template.
- Managing dependencies.
- Updating the existing stacks.
- Intrinsic functions.
- Pseudo parameters.
- Updating CloudFormation stacks.
- Understanding event.
- Cloudformer.

## Route 53(DNS Service)

- Creating Hosted Zones
- Hosting a Website
- Understanding Routing Policies.
- Weighted, Simple and Failover Policies.

## Lambda

- Introduction.
- Need of Lambda service.
- Business Use Cases.
- High Level Overview using Python(BOTO3).

## Cloud Trail

- Introduction.
- Cloud Trail Workflow.
- Cloud Trail Events & Logs.
- Business Use Cases.

## Best Practices

- Cost optimization.
- Cloud migration Strategy.
- Other Useful Services for Migration.

## MODULE -II

# DevOps

### Introduction

- What is DevOps?
- What is SDLC?
- Why DevOps?
- DevOps principles.
- Waterfall vs Agile vs DevOps
- Infrastructure As A Code
- DevOps Tools
- Pre-Requisites for DevOps
- Configuration Management
- Continuous Integration and Deployment

### Apache Tomcat

- Introduction to Webserver
- Installing and Configuring Apache
- Application Management
- App Deployment Methods

### GIT

- Introduction to version control systems
- Centralized vs Distributed
- GIT advantages
- Installing GIT
- Creating repository
- Adding code and creating commits
- Creating GitHub account
- Push code to GitHub
- Cloning repo from GitHub
- Forking GitHub repo and working on it.

### Maven(Build Management)

- Build Management
- Advantages of Build tool
- Build tools
- Architecture of Maven
- Maven build life-cycle
- Maven directory structure
- Maven repositories
- pom.xml
- Multi module project

### Configure Management Systems

- Introduction
- What is Idempotency
- Abstract layers
- Ansible vs Chef vs Puppet
- Push or Pull modes

### Ansible

- Installing Ansible using RPM or Python PIP
- Inventory
- Ansible Modules
- Running ansible ad-hoc commands
- Creating ansible playbooks
  - Variables
  - Loops
  - Conditional execution
- Using ansible facts for customization
- Creating ansible roles
- What is Ansible Galaxy
- How to download ansible roles from Ansible galaxy

### Jenkins

- Overview
- Installation
- Setting up authentication
- Manage plugins from console



- Installing GitHub plugin from repository
- Adding Ant/Maven support
- Configuring email notifications
- Continuous deployments using Jenkins
- Explore Jenkins system configuration
- Analyzing system logs

## Docker

- What is Docker
- Containers Vs Virtual Machines
- Docker platform overview and Terminology
- Docker engine
- Images
- Containers
- Registry
- Repositories
- Docker hub
- Docker orchestration tools

## Kubernetes

- What is kubernetes
- Installation of kubernetes
- Features of kubernetes
- Architecture of kubernetes
- Kubernetes Master
- Kubernetes Nodes
- Kubernetes Components
- Kube-api server
- etcd(cluster store)
- kube-scheduler
- kube-proxy
- kubelet
- pods
- multicontainer pod
- pod limitations
- replica sets
- Deployments

## Nagios

- Introduction
- Nagios Architecture
- Installing and Configuring Nagios
- How to Add Services to Nagios
- Monitoring with Nagios
- Using the Default Plugins
- How to configure Plugins on Remote Nodes

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		 Better sound through research.			
	 The Next Applied				 匯豐
			 Cognizant		

# Our Trainees Hail from

					
		 live your dream		 Building a better working world	
	 Accelerating Business Outcomes		 Ingenuity at work		
		 Consider IT Done	 Leading Innovation >>>	 Accelerating Scientific Discovery	 SONATA SOFTWARE

# PROGRAM FEE

## AWS | DevpOs

~~Rs. 55,000/-~~

Duration  
5 Months

**Rs. 50,000/-**

### Key Highlights :

- 100% placement assistance
- Learning modes include Classroom, Online & Self Learning
- Material, Case Studies & Assignments
- One-on-One with industry mentors
- Dedicated student manager
- Hands on training
- Resume & interview preparation guidance
- Course is curated by subject matter experts in cloud computing
- Learning using world class learning management system
- Dedicated placement manager for interview process
- Connect and network with alumni working with different organizations
- Unique job portal to access jobs and internships posted by HR's from various companies

### Terms & Conditions:

- \* Fee once paid is non-refundable
- \* Avail EMI facility from top financial institutions
- \* Accommodation charges for hostel will depend on the hostel representatives

LEARN *NOW*

PAY *LATER*

INTRODUCING

Flexible EMI Options\*

at **0**% Interest

EDUCATION LOAN PARTNERS



\*Terms and conditions apply



# FAQ'S

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**DURATION**  
5 months

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## ELIGIBILITY

Bachelor's degree (10+2+3/4) or equivalent qualification in any discipline from a recognized University with a minimum 55% score.

OR

Students who have appeared for their final year degree examination can also apply, however, their admission will be provisional and will be confirmed only after producing the results.

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## CERTIFICATIONS

Certification from **Digital Nest**

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## LAPTOP CONFIGURATION

OS: Windows X , I5 7th generation Processor, Ram: 4GB, HDD: 1 TB

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## ROLES

Operational Support Engineer, Cloud Software Engineer, System Integrator  
- Cloud, Cloud Developer, DevOps Engineer, AWS Solutions Architect,  
AWS SysOps Administrator, Senior AWS Cloud Architect, VM Engineer.

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## PACKAGES

3.5-14 Lakh p.a.

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## PRE REQUISITE

There are no pre-requisites to learn Cloud Computing

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## WHO CAN LEARN

Any Graduate

Ready to get  
incubated in

# Cloud Computing Lets Star

Reach Us:

📍 1st Floor, SNR Towers,  
Beside BVRIT  
City Center bus stop,  
**PANJAGUTTA**, Hyderabad.

📍 2nd Floor,  
Above Karnataka Bank,  
Silicon Valley Road,  
**HITECH-CITY**, Hyderabad.

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