

# AWS + DevSecOps

Hands-On

**100+ Hours** Job Ready Program



**A career-launching, project-based training program designed for real-world skills.**



+91 79977 77597



[www.avizacademy.com](http://www.avizacademy.com)

Join Whatsapp Community



I02, Sri Ikon Residency, Near Miyapur Metro, Mathrusree Nagar, Hyd, TC

# Why Choose This Program?

Class start with  
Interview Questions

More Practical,  
Less Theory

24x7 AI enabled  
Course Assistance

150+ AI Integrated  
Real World Tasks

Certification Exam  
Simulator

2 -Years Access to  
Recordings

5 Enterprise Grade  
Capstone Projects

Resume Building +  
Mock Interviews

Daily Support +  
24x7 Slack Support





## Meet Your Trainer – Avinash Reddy Thipparthi

---

**Avinash Reddy Thipparthi** is a passionate DevOps and Cloud expert with 14 years of experience in the IT industry and over 9 years of teaching and mentoring professionals and students. With a strong foundation in real-time projects and hands-on training, he has helped thousands of learners build successful careers in cloud computing and DevOps.

He is a **recognized AWS Community Builder** for the last three years and an official **Docker Captain**, earning global recognition for his contributions to the cloud and DevOps communities.

Avinash has impacted over 50,000 learners through various platforms including YouTube, Udemy, UrbanPro, classroom sessions, and dedicated online training programs. His YouTube channel, followed by 39,000+ subscribers, is widely appreciated for breaking down complex topics into simple, practical lessons making cloud and DevOps learning more accessible for everyone.

### HE HOLDS A WIDE RANGE OF INDUSTRY CERTIFICATIONS

- ✓ 7 AWS Certifications
- ✓ 2 X Azure | GCP | RHEL

Join Avinash and start your journey toward a successful career in DevOps and cloud computing with the right mentorship and hands-on experience.

**“My goal is to make learning cloud and DevOps simple, practical, and career-focused. Whether you're starting fresh or making a switch, I'm here to guide you every step of the way.”**

**—Avinash Reddy Thipparthi**





# AWS Course Content

## INTRODUCTION TO CLOUD COMPUTING

### INTRODUCTION TO AWS

AWS Global infrastructure  
AWS Account creation  
MFA Configuration for root user  
Free tier limitations overview

### COST MONITORING AND ALERTING

AWS Budgets  
AWS Cost Explorer  
AWS Simple Monthly calculator



### IDENTITY ACCESS MANAGEMENT

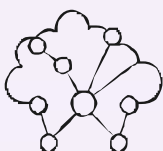
Root Account Vs IAM user  
Multi Factor Authentication for Users  
IAM Password Policies  
Creating Customer Managed Policies.  
Policy generator  
IAM Policy Simulator  
Auditing User Activity

### INTRODUCTION TO AI FOR DEVOPS

Amazon Q CLI configuration  
Copilot for Devops

### INTRODUCTION TO IaC TOOLS

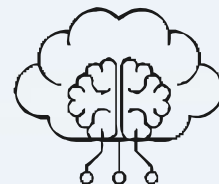
what is cloudformation  
Understanding CFT components  
Create resources using CFT



### LINUX COURSE

What is Linux OS  
Linux directory structure  
Linux basic commands  
File and Directory Management  
Data manipulation commands  
Understanding VIM Editor  
Packaging Management with YUM and DNF

Apache and nginx install & Configuration  
Process Management  
User Management  
Permissions Management  
Volume Management with EBS  
Extending existing EBS Volumes



### COMPUTE

EC2 Instance Launch Wizard with Windows and Linux OS  
EC2 Instance Types and Classes  
Security groups  
Amazon EBS Volumes and Snapshots  
Amazon Data lifecycle manager (DLM)  
Creating customized Amazon Machine Images  
User Data and Metadata  
Creating Alarm for EC2 instance.  
CloudWatch Dashboard creation  
Amazon Eventbridge  
Elastic File System  
Placement Groups  
AWS CLI and IAM Roles  
Custom EC2 Metrics with CW



### Load Balancing and Auto Scaling

Horizontal Scaling  
Vertical Scaling  
understanding Load Balancing  
Application Load Balancer  
Network Load Balancer  
Target Groups and Listeners

### Auto Scaling Group / ASG

Understanding ASG  
Manual Scaling  
Step Scaling  
Target Tracking Scaling  
Schedule Scaling



## AWS Systems Manager

Run Command

Session Manager

Resource Naming Standards in AWS

AWS Secrets Manager



## Route 53

Introduction to DNS

DNS Records overview

Routing Policies

Hosting Website with Policies.

Simple RP

Weighted RP

Failover RP

Geo Location RP

Failover RP

## STORAGE

What is Simple Storage Service (S3)

Storage Classes

Versioning

Cross-region replication

Same Region replication

Life Cycle Management

Security & Encryption

KMS (Key Management Service)

Static Web Hosting with S3 bucket

Events configuration on S3 buckets

Enabling cross account access for S3

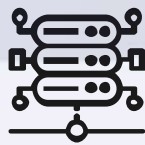
S3 Data management and backup

using 3rd Party applications.

Pre-Signed URLs

Storage Gateway

Direct Connect and AWS Snowball



## VPC (Virtual Private Cloud)

Understanding IP concept

Networking Basics

Creating custom VPCs & Subnets

Network ACL's

Route Tables & IGW

VPC Peering

Flowlog creation to S3 and CW Logs Group

VPC Endpoints

AWS Transit gateway

Site-to-Site VPN Configuration

## Databases

Launching a RDS DB Instances

Multi AZ Cluster/Instance

Read Replicas for RDS

DynamoDB

Redshift and ElastiCache overview



## AWS AI Tools

Understanding Generative AI

Understanding Agentic AI

Configuring MCP Server

Amazon Bedrock

Amazon Q Configuration

Amazon Sagemaker overview

## Security Services:

CloudTrail

AWS Config

Key Management Services

AWS Certificate Manager

AWS Trusted Advisor

Content Delivery Networks / CloudFront

AWS Shield and WAF

## AWS Multi Account Management

AWS Organizations

Amazon Single Sign-On



## Application Services

Simple Notification Service

Lambda



+91 79977 77597



www.avizacademy.com

## Migration Services

DMS - Database Migration Service

## Introduction to DevOps

Introduction to SDLC

Waterfall Model

Advantages of Waterfall Model

Dis-Advantages of Waterfall Model

Agile Methodology

DevOps History

DevOps Lifecycle



## DevOps Services:

What is DevOps in Cloud

Code Pipeline

Code Build

Code Commit

Code Deploy

## Introduction to Terraform

Getting Started with Terraform

Terraform Settings & Version Management

Providers Overview

Provider Configuration

Lock and Upgrade Provider Versions

Terraform State Purpose & Basics

Core Terraform Workflow

terraform init

terraform validate

terraform plan

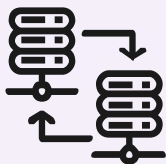
terraform apply

terraform destroy

terraform fmt

Using Modules

Input Variables & Output Values



State Management Basics

Managing Resource Drift

Debugging Terraform

Creating resources using terraform

Resources & Data Sources

Resource Dependencies

## Github:

Introduction to github

Basic Git Commands

Git status, add, commit, push

pull, clone, branch, merge

Git Webhooks

Integrating Git with AWS



## Introduction to Docker

Introduction to Containers

Network modes in Docker

Writing Dockerfile

Multi Stage Dockerfile

Building Custom Images

Volume Management in Docker

DockerHub

Push images to Dockerhub

Resource Limits on Containers

Introduction to Docker Compose

Running services with compose



## Elastic Container Registry

Create a Repo in ECR

Push image to ECR

[Push image to DockerHUB](#)



+91 79977 77597



www.avizacademy.com



## AWS Container Services (ECS)

What is Elastic Container Service  
Understanding ECS Task  
Understanding ECS service  
Integrating with Load Balancer & ASG  
Automating ECS deployments with  
CI/CD pipeline

## AWS Elastic Kubernetes Service (EKS)

What is Kubernetes?  
understanding K8s Architecture  
Node vs Pod Vs ReplicaSet  
Understanding Services in K8s  
ClusterIP Vs NodePort Vs Load Balancer  
Creating and Managing EKS cluster  
Configure **KUBECTL-AL**  
Vertical Pod AutoScaler  
Horizontal Pod Autoscaler  
Cluster AutoScaler  
Using Goldilocks for resources analysis  
Understanding HELM  
Preparing HELM chart for project  
Ingress Controller /  
Application Load Balancer Controller  
Understanding IAM Authentication and RBAC  
EKS ControlPlane Logging  
Integrating IBM Kubecost for Cost Analysis  
Understanding Prometheus Grafana  
Integrating with AWS Services i.e; ELB, CW  
Creating AWS EKS Auto Mode  
Creating EKS Fargate  
Deploying project on EKS



## Introduction to Github Actions

Variables in GH Actions  
Configuring Runners  
AWS config using GHA  
Runners in GH Actions  
Accessing AWS using GHA  
Deploy code to EC2 using GHA  
Push Image to ECR using GHA  
Perform CICD to ECS/EKS using GHA  
Integrate with AgroCD for EKS with GHA



- Capstone project on 3 Tier architecture
- Capstone project on Micro Services

## Maven

What is Maven  
Understanding maven lifecycle  
Preparing war/jar files using maven

## Gradle

What is Gradle  
Understanding Gradle lifecycle  
Preparing war/jar files using Gradle



# ADDITIONAL BENEFITS

## and Learning Opportunities



Capstone Projects Showcasing  
End-to-end Aws Services.

Discussions on Quiz and  
Scenario Based Questions.



Key Resume Tips and an  
Overview of AWS Certifications.

Discussing Interview and  
Certification Exam Questions  
Alongside Topic discussions.



Offering complimentary Ansible,  
Shell, Jenkins courses to all  
registered participants.



+91 79977 77597



[www.avizacademy.com](http://www.avizacademy.com)



## THIS ISN'T THE END OF A BROCHURE,

It's the start of your breakthrough.

To all my students, When you choose to learn with me, you're not just signing up for a course — you're beginning a career-changing journey. My commitment to you goes beyond sessions and slides. I'm here to support your growth, clear your doubts, guide your decisions, and celebrate your wins.

Whether you're a beginner stepping into IT or a working professional making the switch to cloud, you'll never walk this path alone. With every live session, every project, and every challenge — I'll be right there with you.

**This is my word to you :** I will teach you with clarity, mentor you with sincerity, and back you with everything I know. Your success is my mission. Let's not just learn DevOps and AWS — let's build a future you can be proud of.

*-Avinash Reddy Thipparthi*

