

# **AWS DEVOPS**

#### MASTERCLASS || JOB ORIENTED || REAL-TIME PROJECT



# Welcome to the Future of Data Management!

| 0  | OUR SERVICES                                    |
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| 01 | Tailored Solutions,<br>Every Time               |
| 02 | Continuous Learning,<br>Continuous Improvement  |
| 03 | Hands-on Learning with<br>Industry Tools        |
| 04 | Real-world Project<br>Simulations               |
| 05 | Career Guidance and<br>Networking Opportunities |
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|    | WHAT YOU<br>CAN EXPECT                |
|----|---------------------------------------|
| 01 | Cutting-edge Curriculum               |
| 02 | Flexible Learning<br>Options          |
| 03 | Collaborative Learning<br>Environment |
| 04 | Ongoing Career<br>Assistance          |
| 05 | Certification and<br>Recognition      |
|    |                                       |

#### BOOK A Seat

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# Elevate Your Skills, Ignite Your Career

Are you ready to embark on a journey of knowledge and innovation? Welcome to our **AWS DevOps** Training Program, where learning meets limitless possibilities.





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About the Program

Key Features

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<u>Course Cirriculum &</u> <u>Capstone Projects</u>

Eligibility Criteria

**Certification** 

Free Learning Modules





### About the Program

An AWS DevOps program focuses on leveraging Amazon Web Services (AWS) to streamline and automate the software development and deployment process.

It entails employing Infrastructure as Code (IaC) principles, often with tools like AWS CloudFormation or AWS CDK, to define and provision resources in a repeatable and automated manner.

The program also involves continuous integration and continuous deployment (CI/CD) pipelines using services such as AWS CodePipeline, CodeBuild, and CodeDeploy. These pipelines enable automated testing, building, and deployment of applications, ensuring rapid and reliable delivery.

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Industry Relevant Curriculum



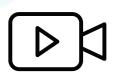
Limited class size for an optimal experience



Constantly Updated According to Industry Trends



50+ hands-on assignments and 2 capstone



Life-time Access to the recorded sessions



1:1 mock interview Sessions



Career Guidance & Placement Support

Get in Touch With Us







#### **Tools Covered**





Codepipeline



AWS CodeBuild



AWS CodeDeploy





AWS

**Elastic Beanstalk** 



AWS CloudWatch

CodeCommit



AWS



many more..

AWSAWS ElasticAWS ElasticLambdaContainer Service (ECS)Kubernetes Service (EKS)







#### MODULE 1: INTRODUCTION TO AWS AND AWS BASIC SERVICES

Overview of AWS Services
 AWS Global Infrastructure and Regions
 AWS Account Setup and Management
 AWS Free Tier and Pricing
 AWS Management Console Walkthrough
 AWS Command Line Interface (CLI) Basics
 AWS Well-Architected Framework
 AWS Trusted Advisor

#### MODULE 2: CLOUD COMPUTING BASICS

- 1. Fundamentals of Cloud Computing
- 2. Advantages and Disadvantages of Cloud Computing
- 3. Cloud Deployment Models (Public, Private, Hybrid)
- 4.Cloud Service Models (IaaS, PaaS, SaaS)
- 5. Elasticity and Scalability in the Cloud
- 6. High Availability and Fault Tolerance
- 7.AWS Global Accelerator and Content Delivery Network (CDN)
- 8.AWS Organizations and Consolidated Billing





# MODULE 3: AWS SERVICES FOR DEVOPS

- 1.AWS Compute Services (EC2, Lambda)
- 2.AWS Storage Services (S3, EBS)
- 3. Database Services (RDS, DynamoDB)
- 4. Networking Services (VPC, Route 53, CloudFront)
- 5. Identity and Access Management (IAM)
- 6.AWS Secrets Manager and Systems Manager (SSM)
- 7.AWS CloudTrail for Auditing and Compliance
- 8.AWS Service Health Dashboard and Personal Health Dashboard

#### MODULE 4: IAM AND SECURITY IN AWS

- 1. IAM Users, Groups, Roles, and Policies
- 2. Multi-Factor Authentication (MFA) and Access Keys
- **3.IAM Best Practices and Security Policies**
- 4.AWS Web Application Firewall (WAF)
- 5.AWS Shield for DDoS Protection
- 6.AWS Key Management Service (KMS) and Encryption
- 7.AWS Certificate Manager (ACM) for SSL/TLS Certificates
- 8. AWS Organizations for Policy Management





#### MODULE 5: SOURCE CODE MANAGEMENT AND VERSION CONTROL

Introduction to Git and Version Control
 Git Repositories, Branches, and Commits
 Collaborative Development with Git and GitHub
 Cloning Repositories and Basic Git Commands
 Git Workflows (Feature Branch, Forking Workflow)
 AWS CodeCommit Repositories and Integrations
 Git Branching Strategies and Code Reviews
 Managing Pull Requests and Code Merges

#### MODULE 6: INFRASTRUCTURE AS CODE (IAC) WITH AWS CLOUDFORMATION

- 1. Principles of IaC and AWS CloudFormation
- 2. CloudFormation Templates: Structure and Syntax
- 3. AWS Cloud Development Kit (CDK) Basics
- 4.AWS CloudFormation Stack Operations (Create, Update, Delete)
- 5.AWS CloudFormation Best Practices and Testing
- 6. Continuous Deployment with CloudFormation
- 7. Infrastructure Drift Detection and Remediation
- 8.AWS Serverless Application Model (SAM) for Serverless IaC





#### MODULE 7: CONTINUOUS INTEGRATION (CI) WITH AWS

- 1. Introduction to Continuous Integration (CI)
- 2. Building and Testing Code with AWS CodeBuild
- 3. Integrating CodeBuild with Source Code Repositories
- 4. Artifact Management with AWS CodeBuild
- 5.AWS CodeBuild for Multi-Language and Multi-Platform Builds
- 6. CodeBuild Notifications and Logs
- 7.Scalability and Customization of CodeBuild Environments
- 8. Secure CodeBuild Configurations and Best Practices

#### MODULE 8: CONTINUOUS DEPLOYMENT (CD) WITH AWS

Introduction to Continuous Deployment (CD)
 AWS CodePipeline: Workflow and Integrations
 CodePipeline Stages, Actions, and Transitions
 Deployment Strategies with AWS CodeDeploy
 AWS CodeDeploy Blue/Green Deployments
 AWS CodeDeploy for Serverless Applications
 Testing and Rollback Strategies in AWS CD
 CodePipeline Notifications and Monitoring





#### **MODULE 9: MONITORING AND LOGGING** WITH AWS

- 1. Introduction to Monitoring and Logging
- 2. Metrics, Alarms, and Dashboards with Amazon CloudWatch
- 3. CloudWatch Logs and Log Metric Filters
- 4.AWS CloudTrail for Audit and Compliance
- 5.AWS Config for Resource Inventory and Compliance Checks
- 6.AWS X-Ray for Tracing and Debugging
- 7.AWS ServiceLens for End-to-End Visibility
- 8.AWS CloudWatch Synthetics for Automated Testing

#### MODULE 10: SECURITY AND COMPLIANCE IN AWS

- 1. AWS Security Best Practices and Compliance Frameworks
- 2. Security Assessment and Vulnerability Scanning
- 3.AWS Security Hub and GuardDuty
- 4.AWS Config Rules for Compliance Checks
- 5.AWS Secrets Manager and Parameter Store
- 6.AWS Identity and Access Management (IAM) Policies for Security
- 7.AWS Certificate Manager (ACM) for SSL/TLS Certificates
- 8.AWS Web Application Firewall (WAF) and AWS Shield for Application Security





#### MODULE 11: ADVANCED AWS SERVICES FOR DEVOPS

- 1.AWS Elastic Beanstalk for Application Deployment
- 2.AWS OpsWorks for Configuration Management
- 3.AWS ECS and EKS for Container Orchestration
- 4.AWS Fargate for Serverless Container Deployment
- 5.AWS App Runner for Containerized Application Deployment
- 6.AWS Step Functions for Serverless Orchestration
- 7.AWS EventBridge for Event-Driven Architectures
- 8.AWS Batch for Batch Processing Workloads

#### MODULE 12: HIGH AVAILABILITY AND DISASTER RECOVERY

- 1.AWS Elastic Load Balancing (ELB) for Traffic Distribution
- 2. Amazon Route 53 for DNS Management and Failover
- 3.AWS Auto Scaling for Scalability and Availability
- 4. AWS Global Accelerator for Global Traffic Management
- 5.AWS Database Backup and Replication Strategies
- 6.AWS Backup and AWS Storage Gateway for Data Protection
- 7.AWS Disaster Recovery Strategies and Services
- 8. AWS Fault Tolerance and High Availability Architectures





#### MODULE 13: DEVOPS BEST PRACTICES AND CASE STUDIES

DevOps Culture and Organizational Transformation
 Agile Development and DevOps Integration
 Continuous Improvement with DevOps
 DevOps Metrics and Key Performance Indicators (KPIs)
 Real-world DevOps Case Studies and Use Cases
 DevOps Toolchain and Tool Integration Strategies
 DevOps in Multi-Cloud and Hybrid Environments
 Building a DevOps Center of Excellence (CoE)

#### **MODULE 14: CAPSTONE PROJECTS**



CAPSTONE PROJECTS

#### **AUTOMATED DEPLOYMENT PIPELINE**

Build an end-to-end automated deployment pipeline using AWS DevOps services. This project involves setting up a CI/CD pipeline that integrates with version control (e.g., Git), automates testing, builds the application, and deploys it to AWS infrastructure. It should include monitoring and logging for real-time insights into the application's performance.

#### **SKILLS DEMONSTRATED:**

- Version control (Git)
- Continuous Integration/Continuous Deployment (CI/CD)
- Infrastructure as Code (IaC) with AWS CloudFormation or AWS CDK
- Monitoring and Logging with Amazon CloudWatch
- Security and compliance best practices in AWS

#### **INDUSTRY RELEVANCE**

This project showcases proficiency in automating software development and deployment processes, a critical skill for modern DevOps roles in any industry.



CAPSTONE PROJECTS

#### SERVERLESS APPLICATION AND EVENT-DRIVEN ARCHITECTURE

Develop a serverless application using AWS Lambda, API Gateway, and other AWS services like DynamoDB, S3, and SNS. Implement an event-driven architecture where different components of the application respond to events generated by AWS services or external triggers. This project should demonstrate scalability, costeffectiveness, and high availability.

#### **SKILLS DEMONSTRATED:**

- Serverless application development with AWS Lambda
- Event-driven architecture using AWS EventBridge
- Data storage with DynamoDB and S3
- API creation and management with API Gateway
- Serverless security and best practices

#### **INDUSTRY RELEVANCE**

Serverless architectures are increasingly popular for building scalable and cost-efficient applications, making this project highly relevant across various industries.



CAPSTONE PROJECTS

#### MULTI-CLOUD DEPLOYMENT AND DISASTER RECOVERY

Design and implement a DevOps pipeline that deploys an application across multiple cloud providers (e.g., AWS, Azure, GCP). Include automated disaster recovery strategies and practices to ensure high availability and data redundancy. This project should demonstrate the ability to work in complex, multi-cloud environments.

#### **SKILLS DEMONSTRATED:**

- Multi-cloud deployment strategies and practices
- Disaster recovery planning and implementation
- Infrastructure as Code (IaC) for multi-cloud environments
- Security and compliance in multi-cloud setups
- Monitoring and logging across multiple cloud providers

#### **INDUSTRY RELEVANCE**

As many organizations use a multi-cloud approach for redundancy and cost optimization, this project showcases expertise in managing applications in such complex environments.



# **SELF LEARNING MODULES**

Linux Course
 AWS Solutions
 Architect Associate
 Course.

# WORTH RUPEES 27000/- FREE



### CERTIFICATIONS YOU CAN PURSUE AFTER COMPLETING THE COURSE

1. AWS Solutions

Architect Associate
Certification / AWS
Admin Certification

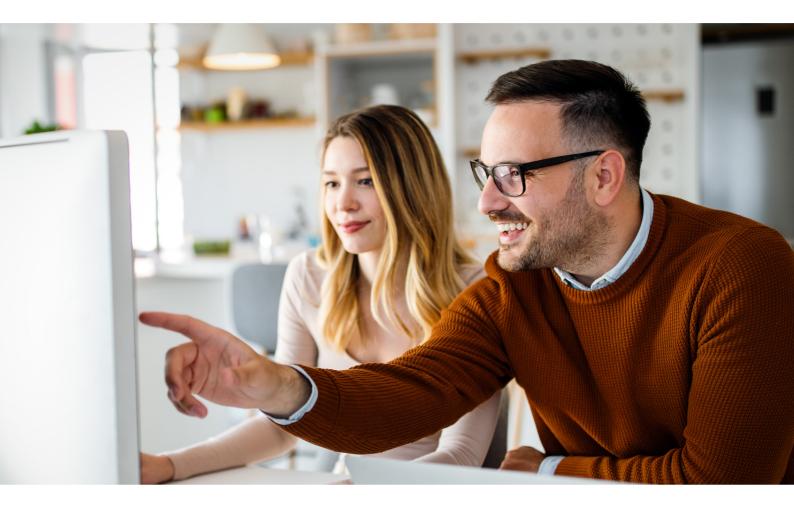
2. Linux Certificaton
3. AWS DevOps

Engineer
Certification

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## **Eligibility Criteria**



- Bachelor's degree in any field
- Familiarity with database concepts and SQL.
- Basic understanding of data concepts.
- Working Professionals >1yrs
- Optional: Prior experience in DevOps Engineering or related fields.
- Basic computer literacy and operating system knowledge.



# Certification



This Certificate is proudly awarded to

We are confident that he/her has acquired the skills and knowledge needed to succeed as a \_\_\_\_\_\_. We wish him/her all the best in their future endeavours.

year

SATEESH PABBATHI Founder

### **Industry Recognised Certification**

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# **Trainer Profile**

### Sateesh Pabbathi

**Author & Cloud Expert** 

in Linkedin Profile



With over two decades of industry experience, he stands as a seasoned expert in the realm of cloud computing. Holding certifications as a Microsoft Certified Trainer, AWS Certified Data and DevOps Engineer, GCP Certified Architect, Kubernetes Certified Administrator and more, his expertise is both broad and deep.

Among his notable achievements is the curation and design of courses for prominent Ed–Tech platforms like Upgrad,Simplilearn and more. Through these endeavors, he has successfully trained a substantial cohort of over 4000 students in the dynamic domain of Cloud Computing, arming them with the skills and knowledge necessary for thriving in this rapidly evolving landscape.

# **Trainer Profile - Certifications**





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23,000/-

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