

DevOps with AWS Course Content

1. DevOps Fundamentals
2. Version Control (Hands on)
3. AWS Core Services (Hands on)
4. Build and CI/CD on AWS (Hands on)
5. Containers and Orchestration (Hands on)
6. Infrastructure as Code (Hands on)
7. Configuration Management
8. Monitoring, Logging and Security
9. Serverless and Advanced Topics
10. Capstone Projects

DevOps Fundamentals

- DevOps Culture, SDLC, Agile, CI/CD Concepts
- Linux Administration, Shell Scripting, Networking Basics

Version Control (Hands on)

- Git: Branching, Merging, Rebasing, Pull Requests
- GitHub and GitLab Workflows

AWS Core Services (Hands on)

- IAM, EC2, EBS, S3, VPC, Subnets, Security Groups
- Elastic Load Balancer, Auto Scaling, Route 53
- RDS, DynamoDB, CloudFront, SNS, SQS

Build and CI/CD on AWS (Hands on)

- Jenkins Pipelines, GitHub Actions
- AWS CodeCommit, CodeBuild, CodeDeploy, CodePipeline
- Artifact Management, Maven, SonarQube

Containers and Orchestration (Hands on)

- Docker: Images, Containers, Volumes, Networks, Compose
- Amazon ECR, ECS, Fargate
- Kubernetes Architecture, Pods, Deployments, Services, Ingress
- Amazon EKS, Helm Charts

Infrastructure as Code (Hands on)

- Terraform: Providers, State, Modules, Workspaces
- AWS CloudFormation

Configuration Management

- Ansible: Inventory, Playbooks, Roles

Monitoring, Logging and Security

- CloudWatch, CloudTrail, Prometheus, Grafana
- ELK Stack Overview
- IAM Best Practices, KMS, Secrets Manager, DevSecOps Basics

Serverless and Advanced Topics

- Lambda, API Gateway, Step Functions
- GitOps with ArgoCD, Blue-Green and Canary Deployments
- Cost Optimization and Well-Architected Framework

Capstone Projects

- End-to-End CI/CD Pipeline on AWS, Portfolio
- Certification Guidance (AWS Cloud Practitioner, DevOps Engineer Professional)