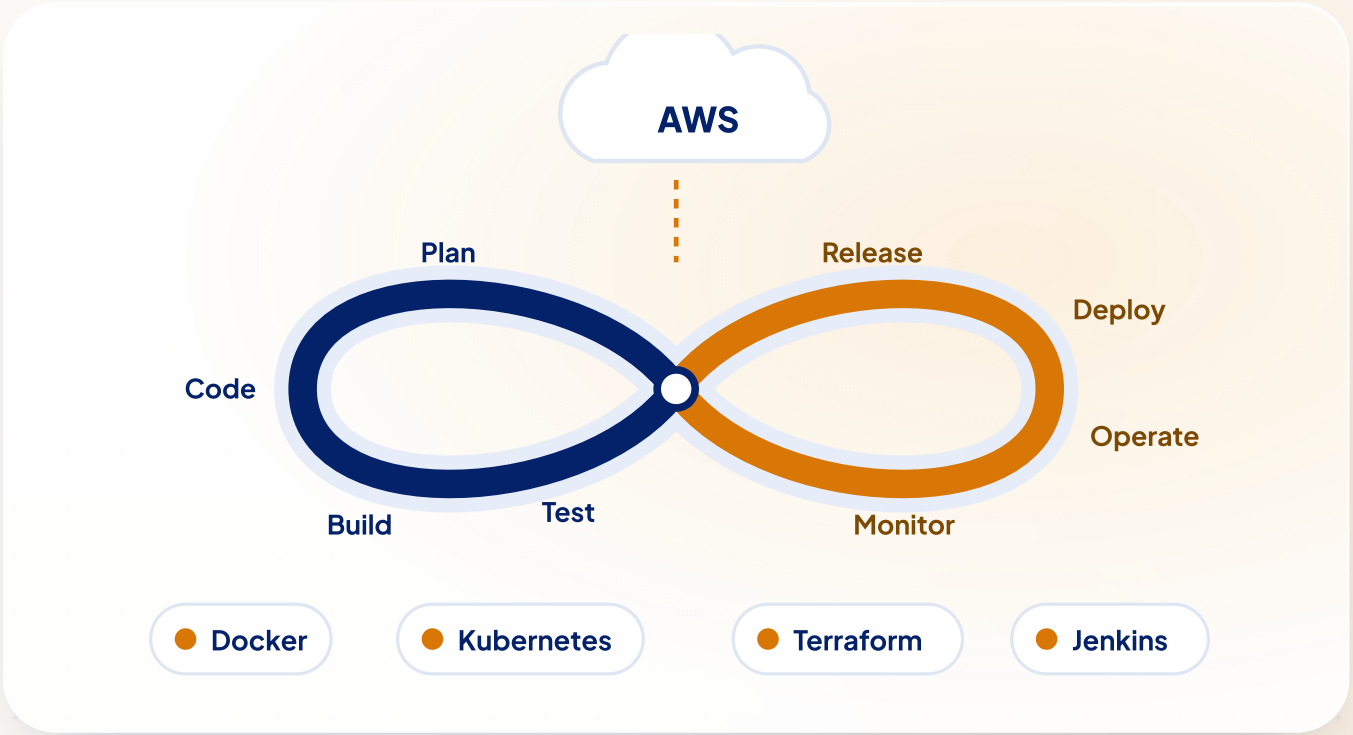
TECH DRONA
DEBUG YOUR CAREER. DEPLOY YOUR DREAMS.

Coming soon · 2026

CLOUD AND DEVOPS COURSE

AWS and DevOps

Run applications on AWS and automate everything from commit to production.



TECHNOLOGIES COVERED

AWS · Linux · Jenkins · GitHub Actions · Docker · Kubernetes · Terraform · Ansible

56 hours	11	Labs + capstone
Duration	Modules	Projects

01 ABOUT THE COURSE

Course overview

A 56-hour course that combines AWS with the DevOps toolchain, so each cloud service is learned where a real delivery pipeline needs it. Learners set up Linux servers and secure AWS infrastructure, then automate builds and releases with Jenkins and GitHub Actions. They run containers on Docker and Kubernetes (EKS), define infrastructure in Terraform and monitor everything in production.

DURATION
56 hours
Training hours, including guided labs

MODULES
11
Each module ends with hands-on practice

PROJECTS
Labs + capstone
Built, reviewed and demonstrated

LEVEL
Beginner to intermediate

What you will learn

Linux and networking
Shell · Bash scripting · SSH · DNS · HTTP

AWS
IAM · EC2 · S3 · VPC · RDS · Lambda

Delivery
Jenkins · GitHub Actions · Docker · Kubernetes · EKS

Automation and operations
Terraform · Ansible · CloudWatch · Grafana

02 WHO IT IS FOR

Goals & outcomes

Who it is for

Graduates, system administrators, support engineers and developers moving into cloud or DevOps roles.

Prerequisites

- Basic networking concepts: IP addresses, ports and DNS
- Comfort with any operating system; scripting is taught in the course

Learning objectives

- Work comfortably in Linux and write Bash scripts that automate routine tasks.
- Design and secure core AWS infrastructure: IAM, VPC, EC2, S3, RDS, load balancing and auto scaling.
- Build CI/CD pipelines with Jenkins and GitHub Actions, with tests and quality gates.
- Containerise applications with Docker and run them on Kubernetes (Amazon EKS).
- Provision infrastructure with Terraform, configure servers with Ansible, and monitor production systems.

Key highlights

- AWS and DevOps in one course, with no gap between the two.
- Every AWS service is used inside a working pipeline.
- Covers security, cost and reliability, not only setup.
- A good foundation for AWS associate-level certification study.

Expected outcomes

Run cloud infrastructure
Build secure, scalable environments on AWS.

Automate delivery
Take code from commit to production with tested pipelines.

Operate containers
Package, deploy and update applications on Kubernetes.

Keep systems healthy
Monitor, alert, secure and control cost in production.

SKILLS YOU BUILD

Linux · AWS · CI/CD · Docker · Kubernetes · Terraform · Ansible · Monitoring

03 ELEVEN MODULES, ONE AUTOMATED PLATFORM

Course curriculum

01 MODULE 1 — Linux and scripting

5 hrs

1.1 **Linux essentials**
filesystem and permissions · users and groups · processes and services (systemd) · package managers

1.2 **Working remotely**
SSH and keys · logs and troubleshooting

1.3 **Bash scripting**
variables and conditionals · loops and functions · automating routine tasks

02 MODULE 2 — Networking and Git for DevOps

3 hrs

2.1 **Networking**
TCP/IP · DNS · HTTP and HTTPS · ports and firewalls · public vs private IPs

2.2 **Git workflows**
branching strategies · pull requests and reviews · tags and releases

03 MODULE 3 — AWS core services

6 hrs

3.1 **Cloud and AWS basics**
cloud models · regions, availability zones and edge locations · free tier and billing alarms

3.2 **Identity**
IAM users, groups and roles · policies · MFA · roles for EC2

3.3 **Compute and storage**
EC2 and AMIs · EBS and EFS · S3 storage classes, versioning, lifecycle rules and pre-signed URLs

04 MODULE 4 — AWS networking and databases

6 hrs

4.1 **Networking**
VPC, subnets and route tables · internet and NAT gateways · security groups vs NACLs · VPC peering

4.2 **Scaling and delivery**
Elastic Load Balancing · Auto Scaling · Route 53 · CloudFront

4.3 **Databases**
RDS with Multi-AZ and read replicas · Aurora overview · DynamoDB basics · ElastiCache

05 MODULE 5 — Serverless and integration

3 hrs

5.1 **Serverless**
Lambda · API Gateway · Elastic Beanstalk

5.2 **Messaging**
SNS and SQS · EventBridge · the SNS-to-Lambda fan-out pattern

06 MODULE 6 — CI/CD

6 hrs

6.1 **DevOps practice**
DevOps culture · pipeline stages · artefacts and versioning

6.2 **Jenkins**
pipelines as code (Jenkinsfile) · agents · credentials

6.3 **GitHub Actions**
workflows and runners · secrets · matrix builds

6.4 **Quality gates**
automated tests · SonarQube code analysis

07 MODULE 7 Docker

5 hrs

7.1 **Containers**
images and containers · Dockerfiles · multi-stage builds

7.2 **Running applications**
volumes and networks · Docker Compose · pushing images to Amazon ECR

08 MODULE 8 Kubernetes

7 hrs

8.1 **Architecture**
control plane and nodes · pods · deployments and ReplicaSets

8.2 **Networking and config**
services · ingress · ConfigMaps and Secrets

8.3 **Operating workloads**
rolling updates and rollbacks · health checks · Helm charts · Amazon EKS

09 MODULE 9 Infrastructure as code

6 hrs

9.1 **Terraform**
providers and resources · variables and outputs · remote state · modules · workspaces

9.2 **AWS-native IaC**
CloudFormation overview

9.3 **Configuration management**
Ansible inventories · playbooks and roles

10 MODULE 10 — Monitoring, security and best practice

4 hrs

10.1	**Monitoring** CloudWatch metrics, logs and alarms · Prometheus and Grafana	
10.2	**Security** CloudTrail · KMS and Secrets Manager · image scanning with Trivy · the shared responsibility model	
10.3	**Well-Architected design** reliability · performance · cost optimisation · backup and disaster recovery	

11 MODULE 11 — Capstone project

5 hrs

11.1	**Design the platform** architecture · environments · pipeline plan	
11.2	**Build and automate** Terraform-built AWS environment · CI/CD to EKS · monitoring and alerts	
11.3	**Demo and review** live demonstration · review feedback	PROJECT

Total duration · 56 hours

Training hours across eleven modules, including guided labs and the capstone project.

04 LEARN BY BUILDING

Practical learning

Hands-on learning

- Bash scripts for log rotation and server health checks.
- A highly available web tier: a VPC, EC2 across two availability zones, a load balancer, auto scaling and RDS.
- A serverless contact-form API with Lambda and API Gateway.
- A pipeline that builds, tests, scans and pushes a Docker image, then deploys it to EKS with Helm.

Tools & technologies

Cloud

AWS · IAM · EC2 · S3 · VPC · RDS · Lambda · EKS

CI/CD

Jenkins · GitHub Actions · SonarQube

Containers and IaC

Docker · Kubernetes · Helm · Terraform · Ansible

Monitoring and security

CloudWatch · Prometheus · Grafana · Trivy

Projects

Mini project · Static site on AWS

Host a website on S3 behind CloudFront with a custom domain in Route 53.

Mini project · Infrastructure as code

Rebuild a complete VPC, EC2 and RDS environment from Terraform modules.

Capstone · commit to production

A full pipeline for a sample application: Terraform-built AWS environment, CI/CD to EKS, dashboards and alerts.

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NEXT STEP

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techdrona.in/contact

WEBSITE
techdrona.in

EMAIL
info@techdrona.com

LOCATION
Vijayawada, Andhra Pradesh, India

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Course details, schedules and fees are confirmed on enquiry and may change.