

DevOps and Cloud Engineering

A structured six-month path from fundamentals to deployment

Learn Linux administration, cloud infrastructure, containers, CI/CD, Kubernetes, monitoring, and reliable deployment practices.

Months 1 to 3

MONTH 1

Linux and Networking Foundations

- Linux commands, file systems, users, permissions, and processes
- Shell scripting, package management, and service basics
- Networking concepts, DNS, HTTP, SSH, and troubleshooting

MONTH 2

Git and Automation

- Git workflows, branching strategies, pull requests, and release tagging
- Bash scripting and automation for repeatable operations
- Infrastructure concepts, YAML, configuration, and security basics

MONTH 3

Cloud and Infrastructure

- AWS core services: IAM, EC2, S3, VPC, and CloudWatch
- Cloud networking, storage, load balancing, and access controls
- Infrastructure as Code concepts with Terraform fundamentals

How you will learn

A practical delivery model that connects lessons, lab work, and career readiness.



LEARN

Instructor-led concepts and guided demonstrations.



BUILD

Hands-on lab work and portfolio-ready assignments.



PREPARE

GitHub projects, mock interviews, and placement support.

Months 4 to 6

Build, integrate, deploy, and present your work with confidence.

MONTH 4

Containers and Kubernetes

- Docker images, containers, volumes, networks, and registries
- Docker Compose for local multi-service environments
- Kubernetes workloads, services, configuration, and scaling

MONTH 5

CI/CD and Observability

- Build, test, and deployment pipelines with GitHub Actions
- Deployment strategies, secrets, approvals, and rollback planning
- Logs, metrics, alerts, and monitoring with practical dashboards

MONTH 6

Production Delivery and Capstone

- Secure production environments and incident-response basics
- Deploy a containerized application to cloud infrastructure
- Complete a DevOps capstone and placement preparation

Applied learning and career preparation

Projects are designed to turn each monthly module into a practical portfolio outcome.

PROJECT PORTFOLIO

- Automated CI/CD pipeline
- Dockerized web application
- Kubernetes deployment
- Cloud infrastructure capstone

TOOLS YOU WILL USE

Linux, Git, AWS, Docker, Kubernetes, Terraform, GitHub Actions

Outcome

Complete the course with a practical capstone, version-controlled projects, and the skills to discuss your work confidently in interviews.