

DEVOPS FUNDAMENTALS

Course Overview

This DevOps Fundamentals course provides hands-on knowledge to bridge the gap between development and operations, using modern DevOps tools and workflows.

Target Audience

- 1 • IT & Software Development beginners
- 2 • System & Network Administrators
- 3 • Junior DevOps Engineers
- 4 • Cloud & Automation enthusiasts

Course Index

Module 1 – Linux Fundamentals for DevOps

Module 2 – Git & Version Control

Module 3 – CI/CD Pipelines

Module 4 – Docker & Containerization

Module 5 – Kubernetes Basics

Module 6 – Cloud & Infrastructure Basics

Module 7 – Monitoring & Final Project



Module 1 – Linux Fundamentals for DevOps

- 1 • Linux architecture & distributions
- 2 • Command line essentials
- 3 • Users, permissions & processes
- 4 • Bash scripting basics

Module 2 – Git & Version Control

- 1 • Git concepts & workflows

- 2 • GitHub / GitLab usage
- 3 • Branching & merging strategies

Module 3 – CI/CD Pipelines

- 1 • DevOps lifecycle & CI/CD concepts
- 2 • Jenkins / GitHub Actions overview
- 3 • Build, test & deployment automation

Module 4 – Docker & Containerization

- 1 • Docker architecture
- 2 • Images, containers & volumes
- 3 • Docker Compose

Module 5 – Kubernetes Basics

- 1 • Kubernetes architecture
- 2 • Pods, services & deployments
- 3 • Scaling & rolling updates

Module 6 – Cloud & Infrastructure Basics

- 1 • Cloud computing fundamentals
- 2 • AWS / Azure / GCP overview
- 3 • Infrastructure as Code (IaC)

Module 7 – Monitoring & Final Project

- 1 • Monitoring & logging concepts
- 2 • Prometheus & Grafana basics
- 3 • End-to-end DevOps project

Learning Outcomes

- 1 • Strong DevOps foundation
- 2 • CI/CD pipeline implementation skills
- 3 • Docker & Kubernetes hands-on skills
- 4 • Cloud & automation readiness