

About Mastering DevOps

Mastering DevOps is a flagship initiative by **OpenPath**, powered by **KV IT-Solutions Pvt. Ltd.**, offering comprehensive and career-focused online training in **Linux, DevOps, and modern open-source technologies**.

This program is specifically designed for **B.Tech, BCA, MCA, and Diploma students**, providing **affordable, industry-aligned training** that bridges the gap between classroom learning and real-world IT infrastructure environments.

At the heart of the program is **hands-on exposure to LIVE INDUSTRIAL PROJECTS**, preparing learners to tackle real-world challenges in **cloud-native infrastructure, automation, continuous integration, and deployment pipelines** — a critical skill set for today's DevOps-driven ecosystem.

Whether you are a beginner or an aspiring DevOps professional, *Mastering DevOps* equips you with **practical, job-ready skills** to confidently manage enterprise-grade infrastructure and automation workflows.

Pre-requisites

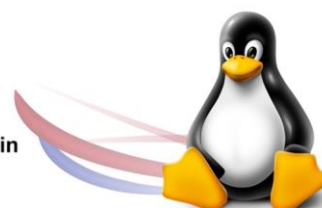
- ⑩ Basic understanding of computer networking
- ⑩ Complimentary patch-up course available for beginners

Program Details

- ⑩ **Duration:** 3 Months
- ⑩ **Course Fee:** ₹30,000 (After Discount: ₹25,000)
- ⑩ **Mode:** Hybrid (Online + Practical Labs)
- ⑩ **Certification:** “*Mastering DevOps – Industry Ready Certification*” by **OpenPath**

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DevOps Engineer

📖 Course Curriculum

Amazon Web Services (AWS)

Build a rock-solid foundation in the most in-demand cloud platform.

- 🕒 AWS Fundamentals & Core Services
- 🕒 EC2, S3, IAM, RDS, Route 53, VPC
- 🕒 Monitoring & Logging (CloudWatch, CloudTrail)
- 🕒 DevOps & Automation Tools (CodeDeploy, CodePipeline)
- 🕒 Serverless with Lambda & API Gateway
- 🕒 Cost Optimization & Billing Insights
- 🕒 AWS Security, Compliance, and Best Practices

Ansible - Configuration Management

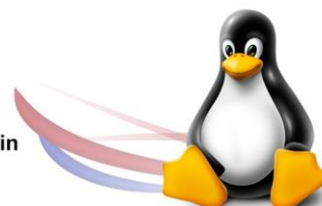
Master Infrastructure as Code (IaC) with simplicity and power.

- 🕒 What is Configuration Management?
- 🕒 Ansible Architecture & Inventory Management
- 🕒 Modules, AD-HOC Commands, and Playbooks
- 🕒 Role-Based Automation
- 🕒 Real-world use cases in enterprise deployments

Terraform - Infrastructure Provisioning

Learn how to **automate and scale infrastructure** across cloud providers.

- 🕒 Terraform vs Ansible (Declarative vs Procedural)
- 🕒 Terraform Workflow & Architecture
- 🕒 Configuration Files, Variables, and State Management



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- ⑩ Managing Resources Across AWS, Azure, GCP
- ⑩ Hands-on Project: Multi-tier Application Deployment

Docker - Containerization

Package your applications like a pro.

- ⑩ Containers vs Virtual Machines
- ⑩ Docker CLI, Images, and Containers
- ⑩ Dockerfiles & Building Custom Images
- ⑩ Volumes, Storage Drivers, Port Binding
- ⑩ Docker Compose for Multi-Container Apps
- ⑩ Real-world Lab: Deploy and Scale Apps with Docker

Kubernetes - Container Orchestration

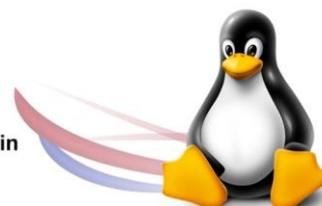
Orchestrate your containers like the big leagues.

- ⑩ Kubernetes Architecture & Cluster Components
- ⑩ Pods, ReplicaSets, Deployments, DaemonSets
- ⑩ Services, Ingress, ConfigMaps, and Secrets
- ⑩ Persistent Volumes & Stateful Applications
- ⑩ Scaling & Rolling Updates
- ⑩ Use Case: High-Availability App Deployment

Nagios - Monitoring & Alerts

Stay on top of your infrastructure.

- ⑩ Importance of Continuous Monitoring



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- 10 Nagios Architecture & Key Components
- 10 Installation & Configuration
- 10 NRPE Plugins and Notifications
- 10 Creating Custom Alerts for Critical Events

ELK Stack (Elastic, Logstash, Kibana)

Unlock insights from your logs.

- 10 ELK Overview & Real-world Use Cases
- 10 Installing and Configuring Elasticsearch, Logstash, and Kibana
- 10 Centralized Logging with Filebeat & Rsyslog
- 10 Visualizing Server Metrics in Kibana
- 10 Integration with Mail Servers (Zimbra)
- 10 Custom Dashboards for Performance Analysis

Git - Version Control Essentials

Track, manage, and collaborate on code efficiently.

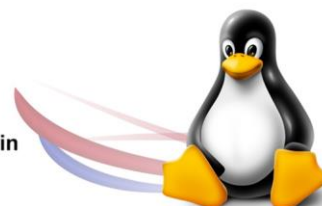
- 10 Understanding Version Control
- 10 Git Workflow, Commits, and Branching
- 10 Working with Local & Remote Repositories (GitHub/GitLab)
- 10 Webhook Management & Token Authentication
- 10 Collaboration in a Team Environment
- 10 Hands-on: Git in CI/CD Pipelines

Jenkins - CI/CD Automation

Automate your build and deployment workflows.

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- ⑩ Jenkins Overview & Architecture
- ⑩ CI vs CD – Understanding the DevOps Lifecycle
- ⑩ Jenkins with Docker – Scalable Deployments
- ⑩ Installing and Managing Plugins
- ⑩ Declarative Pipelines & Delivery Pipelines
- ⑩ Hands-on Lab: Build → Test → Deploy with Git & Jenkins

📖 What You Will Achieve

By the end of this course, you will:

- ✓ Understand core DevOps concepts and tools
- ✓ Build and manage cloud-native infrastructure
- ✓ Automate deployments using modern CI/CD tools
- ✓ Monitor and secure your infrastructure proactively
- ✓ Be job-ready for roles like **DevOps Engineer**, **Cloud Automation Specialist**, or **Infrastructure Engineer**

📖 Includes

- ⑩ Live industrial projects
- ⑩ Practical labs and real-time use cases
- ⑩ Dedicated job assistance and interview prep

Mr. Vikas Debnath

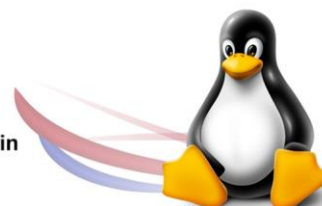
Founder Director, KV IT-Solutions Pvt. Ltd.

Founder, OPEN PATH

**He
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that

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"Linux is for everyone" — and with the right guidance, anyone can master it.

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