

# Mastering Linux Engineering with DevOps

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

Specifically designed for **B.Tech, BCA, MCA, and Diploma students**, this program provides hands-on experience with **LIVE INDUSTRIAL PROJECTS**, ensuring learners acquire practical skills required to manage enterprise-grade **IT infrastructure, automation pipelines, and cloud-native deployments**.

Whether you are starting your IT career or aiming to upskill as a **Linux & DevOps** professional, this program equips you with job-ready capabilities for real-world environments, bridging the gap between theoretical knowledge and industry demands.

Whether you're a beginner or an aspiring **Linux professional**, **Mastering Linux** equips you with the expertise to deploy, manage, and secure enterprise-grade Linux servers confidently.

## Key Highlights

- Comprehensive coverage of Linux system administration and server deployment**
- Hands-on experience with 20+ enterprise-grade services (DNS, Apache, MySQL, Samba, Firewall, etc.)**
- Industry-oriented projects and real-time practical labs**
- Job-ready training for roles such as Linux Engineer, System Administrator, and DevOps Professional**
- Mentorship by industry expert Mr. Vikas Debnath – Founder & Director, KV IT-Solutions Pvt. Ltd. and OpenPath**

## Prerequisites

- Basic networking knowledge is recommended to ensure a smooth learning curve.
- *A complimentary patch-up course is available for beginners*
- New to IT? No problem — we include a free foundational networking course to help you start confidently and bridge any knowledge gaps.

## Program Details

<b>Duration</b>	6 Months
<b>Course Fee</b>	₹45,000 (All-Inclusive)
<b>Mode</b>	Hybrid (Online + Practical Labs)
<b>Certification</b>	"Mastering Linux – Industry Ready Certification" by <b>OpenPath</b>
<b>Includes</b>	Hands-on labs, live industrial projects, and dedicated job support

# Comprehensive Course Curriculum

Our "Mastering Linux Engineering with DevOps" program is meticulously structured to provide a deep dive into essential Linux administration, advanced server management, and cutting-edge DevOps practices. The curriculum is divided into three core modules, each building upon the last to ensure a holistic understanding and practical proficiency.

## Foundational Linux & System Administration



### MODULE 1

This module establishes a strong understanding of Linux operating systems, from basic concepts and command-line mastery to critical system operations and user management. You'll learn the core principles that underpin all Linux environments.

- Linux Concepts & Editors (VI/VIM, Virtualization)
- Directory Structure & Remote Connectivity (PuTTY, MobaXterm)
- Linux Boot Process & Recovery (BIOS/UEFI, GRUB, systemd)
- Mounting File Systems (ext4, xfs, LVM)
- Linux Networking (IP, DNS, Routing, Diagnostic Tools)
- User Essentials & Permissions (chown, chmod, SUID/SGID)
- Job Scheduling (at, cron, systemd-timers)
- Essential Linux Commands (package managers, process management)



## MODULE 2

Delve into the deployment and management of critical enterprise-grade services. This module covers networking infrastructure, web services, database management, and advanced security configurations, equipping you to build and maintain robust server environments.

- NFS Server (Centralized Storage)
- Telnet & FTP Server (vsftpd, Security)
- Proxy Server (ACLs, Content Filtering)
- DHCP Server (DORA process, IP Reservations)
- DNS Server (Record Types, Master-Slave, SPF/DKIM)
- Apache Web Server (Virtual Hosting, SSL, .htaccess)
- MySQL/MariaDB Server (Replication, Optimization)
- Samba Server (File Sharing, Active Directory Integration)
- Mail Server Essentials (MTA/MDA, Anti-spam, DNS Records)
- Linux Security (IPTables, Firewalld, SELinux, SSH Hardening)
- WHM & cPanel Administration (Account Management, Performance)
- Centralized Log Server (ELK Stack, Graylog)
- pfSense Firewall (NAT, VPN, Rules)
- Zimbra / Carbonio Mail Server (Architecture, Configuration)
- Samba 4 Domain Controller (AD Implementation, Replication)
- Single Sign-On (SSO) (Kerberos, LDAP, AD Integration)



## MODULE 3

Master the tools and methodologies that define modern software development and operations. This module focuses on cloud computing, infrastructure as code, containerization, orchestration, continuous integration/delivery, and advanced automation.

- Advanced Shell Scripting (Automation, Debugging)
- Amazon Web Services (AWS Fundamentals, EC2, S3, IAM)
- Ansible - Configuration Management (IaC, Playbooks, Roles)
- Terraform - Infrastructure Provisioning (Multi-cloud, State Management)
- Docker - Containerization (Images, Containers, Docker Compose)
- Kubernetes - Container Orchestration (Pods, Deployments, Scaling)
- Nagios - Monitoring & Alerts (Installation, Custom Alerts)
- ELK Stack (Elastic, Logstash, Kibana - Centralized Logging)
- Git - Version Control Essentials (Branching, Repositories, CI/CD)
- Jenkins - CI/CD Automation (Pipelines, Plugins, Deployments)

# Why Choose OpenPath for Your Linux Journey?

Choosing the right program is a pivotal decision for your career trajectory in the ever-evolving IT landscape. OpenPath's Mastering Linux program is meticulously designed to offer more than just technical training; it provides a holistic ecosystem of support, expertise, and real-world relevance to ensure your success.

## Industry-Driven Training

Our curriculum is not just theoretical; it's forged in the crucible of real-world enterprise system environments. You'll gain practical skills directly applicable to the challenges and demands of modern IT infrastructure.

## Mentorship by Senior Professionals

Benefit from direct guidance and insights from senior Linux and DevOps professionals who are actively shaping the industry. Their experience provides invaluable context and advanced problem-solving techniques.

## Affordable & Accessible Learning

We are committed to making high-quality, career-defining education accessible. Our learning plans are structured to be both cost-effective and flexible, removing barriers to entry for aspiring IT professionals.

## Comprehensive Career Support

Our commitment extends beyond the classroom. We offer dedicated career services, including expert resume building, targeted interview preparation, and active placement assistance to help you seamlessly transition into a rewarding role.

## Meet Our Visionary Founder

OpenPath is guided by the profound vision of **Mr. Vikas Debnath**, the esteemed Founder Director of **KV IT-Solutions Pvt. Ltd.** and the driving force behind **OpenPath**. His extensive experience and dedication to fostering talent underpin the philosophy of our programs.

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

Mr. Debnath's unwavering dedication to making Linux knowledge accessible to all is not just a principle, but the very heartbeat of OpenPath's curriculum, ensuring every student, regardless of their background, is empowered with unparalleled mentorship and resources to truly excel.

### ADDRESS:

205, 2ND FLOOR,  
RED ROSE BUILDING,  
NEAR EROS CORPORATE TOWER,  
49-50, NEHRU PLACE,  
NEW DELHI - 110019



[www.kvit.in](http://www.kvit.in)



9810028374  
9971233065



[info@kvit.in](mailto:info@kvit.in)  
[ashwin@kvit.in](mailto:ashwin@kvit.in)