

Kubernetes Fundamentals (LFS258)

Course Duration : 16 Hours

Course code : LFS258

1. Course Overview

The **Kubernetes Fundamentals (LFS258)** course provides a strong foundation in Kubernetes concepts and architecture. This course helps learners understand how Kubernetes works, how containers are managed, and how applications are deployed and scaled in a Kubernetes environment.

2. What you'll learn?

- Basics of Kubernetes and container orchestration
- Kubernetes architecture and components
- Pods, services, and deployments
- Scaling and managing applications
- Basic troubleshooting and monitoring

3. Target Audience

- IT professionals
- System administrators
- Cloud engineers
- DevOps beginners
- Software developers

4. Pre-Requisites

- Basic knowledge of Linux
- Understanding of containers (Docker basics helpful)
- Basic networking concepts

5. Course Content (Modules)

Module 1: Introduction to Kubernetes

- Kubernetes overview
- Container orchestration concepts

Module 2: Kubernetes Architecture

- Control plane components
- Worker nodes and services

Module 3: Core Kubernetes Objects

- Pods, ReplicaSets, and Deployments
- Services and namespaces

Module 4: Application Management

- Scaling applications
- Rolling updates and rollbacks

Module 5: Basic Monitoring and Troubleshooting

- Logs and metrics
- Common issues and solutions