

# **SRE**

#### **Duration – 40 Hours**

#### **Program Description**

This program provides a comprehensive overview of Site Reliability Engineering (SRE) practices, combining software engineering and IT operations to build highly reliable, scalable, and maintainable systems. Participants will learn how to apply SRE principles, implement monitoring and alerting, manage incidents, and optimize system performance for modern cloud-native environments.

### **Learning Goals**

- Understand the principles and goals of Site Reliability Engineering
- Learn Service Level Objectives (SLOs), Service Level Indicators (SLIs), and Service Level Agreements (SLAs)
- Implement effective monitoring, logging, and alerting strategies
- Apply incident management and post-mortem practices
- Use automation to reduce toil and improve system reliability
- Understand performance tuning, capacity planning, and scalability best practices
- Gain hands-on experience with real-world SRE tools and workflows

## **Course Topics**

- Introduction to Site Reliability Engineering
- SRE Principles, Culture, and Mindset
- Service Level Objectives (SLOs), SLIs, and SLAs
- Monitoring, Logging, and Alerting
- Incident Response and Post-Mortem Practices
- Automation and Reducing Operational Toil
- Capacity Planning and Performance Optimization
- Reliability, Scalability, and Resiliency Best Practices
- Hands-on Projects and Case Studies