

# **Angular**

#### **Duration – 40 Hours**

#### **Program Description**

This program provides an end-to-end learning path for building modern, scalable, and responsive web applications using Angular. Participants will learn component-based architecture, data binding, routing, state management, and testing techniques to develop robust front-end applications. The program emphasizes hands-on projects to ensure practical experience in real-world scenarios.

### **Learning Goals**

- Understand the fundamentals of Angular and component-based architecture
- Build interactive and dynamic web applications using Angular
- Implement routing and navigation for single-page applications
- Manage application state effectively
- Apply forms, validations, and HTTP services
- Write unit and integration tests for Angular components
- Gain practical experience through real-world projects

## **Course Topics**

- Introduction to Angular and TypeScript
- Components, Templates, and Data Binding
- Directives and Pipes
- Services and Dependency Injection
- Routing and Navigation
- Forms and Validation
- State Management (NgRx or Services)
- HTTP Client and REST API Integration
- Testing Angular Applications (Jasmine & Karma)
- Performance Optimization and Best Practices
- Hands-on Projects and Case Studies