

React

Duration – 16 Hours

Program Description

This program provides a comprehensive learning path for building modern web applications using React. Participants will learn the fundamentals of React, state management using Redux, and testing strategies for building reliable and maintainable applications. Hands-on exercises and projects will ensure practical experience in real-world development scenarios.

Learning Goals

- Understand the fundamentals of React and component-based architecture
- Manage application state effectively using Redux
- Build interactive and dynamic web applications
- Implement routing and navigation in React applications
- Write unit and integration tests for React components
- Gain hands-on experience through real-world projects

Course Topics

- Introduction to React and JSX
- React Components and Props
- State Management in React
- Event Handling and Forms
- Lifecycle Methods and Hooks
- · Routing with React Router
- State Management with Redux
- Asynchronous Actions and Middleware (Redux Thunk / Saga)
- Testing React Applications (Jest & React Testing Library)
- Best Practices and Performance Optimization
- Hands-on Projects and Case Studies