

Module 1: Introduction to Web Development

- Overview of Web Development
- Basics of Client-Side vs Server-Side
- Introduction to Frontend and Backend

Module 2: HTML Basics

- Understanding HTML Structure
- Tags, Attributes, and Elements
- HTML Forms and Input Elements
- Semantic HTML

Module 3: CSS Fundamentals

- Styling HTML with CSS
- Selectors, Properties, and Values
- Layouts and Box Model
- Responsive Design Principles

Module 4: JavaScript Fundamentals

- Introduction to JavaScript
- Variables, Data Types, and Operators
- Control Flow and Loops
- Functions and Scope

Module 5: Advanced JavaScript

- DOM Manipulation
- Events and Event Handling
- Asynchronous JavaScript (AJAX, Promises)
- ES6+ Features

Module 6: Introduction to ReactJS

- What is ReactJS?
- Setting up a React Environment
- Components and Props
- State and Lifecycle

Module 7: ReactJS Continued

- Handling Forms in React
- React Router for Navigation
- Managing State and Props
- Hooks in React

Module 8: Building a Complete React Application

- Project Structure and Organization
- Integrating with APIs
- State Management with Context API or Redux
- Styling in React Applications

Module 9: Advanced React Concepts

- Higher-Order Components (HOCs)
- Render Props
- Error Boundaries
- Performance Optimization Techniques

Module 10: Deployment and Best Practices

- Deploying a React App
- Code Splitting
- SEO Best Practices
- Accessibility in Web Development

Module 11: Real-world Projects and Case Studies

- Building Practical Applications
- Troubleshooting and Debugging
- Version Control with Git
- Collaborative Development with GitHub

Module 12: Future Trends and Additional Resources

- Exploring Progressive Web Apps (PWAs)
- Server-Side Rendering (SSR) with React
- WebAssembly and its Role in Web Development
- Recommended Books, Blogs, and Further Learning