

React

Course Duration: 6 months

Qualification: Basic knowledge of HTML, CSS, JS

Eligibility:

Basic knowledge of HTML, CSS, JS. open to all individuals interested in learning React.

Medium of Instruction:

English

Duration:

Minimum 6 months and Maximum 7 months

Programming Details:

The programming has been divided into 4 modules. Consequently, there will be examinations at every end of module. For beginners it is first important to build command over programming concepts. In this course our goal is to help you to be confident with the coding fundamentals.

Curriculum: View Specialization:

Module 1: Introduction to React (Beginner-Friendly)

- What is React? Why React?
- Setting Up Environment (Node.js, npm, Vite / CRA)
- React Folder Structure
- JSX Basics
- Components (Functional components)
- Props (passing data between components)
- State (useState basic usage)
- Handling Events (onClick, onChange)
- Rendering Lists (map)
- Conditional Rendering

Project 1:

- Simple React UI (Counter App / Todo App)

Module 2: Core React Concepts

- useState (deep practice)
- use Effect (basic introduction)
- Running code on load
- Simple side effects
- React Component Tree
- Lifting State Up
- Passing Data Child → Parent (basic)

Introduction to React Router (only simple routing)

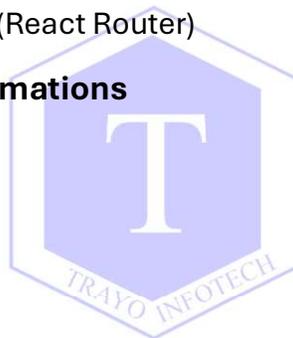
- Home, About, Contact pages

Project 2:

- Small Multi-Page Website (React Router)

Module 3: Styling & Basic Animations

- **CSS in React**
 - Inline styles
 - CSS Modules
 - External CSS files
- Responsive basics (Flexbox, Grid)
- **Basic Animation**
 - CSS transitions
 - Simple animations using Framer Motion (optional)
- **Using basic UI libraries**
 - Material UI (simple components only)
- **Project 3:**
 - Styled React App (Portfolio or Product Listing UI)



Module 4: Beginner React Ecosystem + Final Project

- What are APIs?

- Fetching Data in React (using fetch / axios)
- Displaying API Data
- Basic Error Handling
- Basic Form Handling
- Folder Structure for real projects
- Best Practices for Beginners
 - Component reuse
 - Clean code
 - Organizing files
- **Final Project:**
 - Fully Working React ApplicationExamples:
 - Weather App using API
 - Movie Search App
 - Small E-commerce Product Listing App
 - Notes/Tasks App with CRUD

