**Training – The road to react**

**Overview:** React is a JavaScript Framework that makes it easy to build applications with the web and allows you to create a reactive Single-Page-Application (SPAs). It gives you full control over markup, supports TDD-friendly development and uses the latest web standards. If you want to get employed as a web developer at a company that utilizes Frontend technologies, you need to master React.

**Course Objectives:** This course will allow learners to Develop modern, complex, responsive and scalable web applications with React. Fully understand the architecture behind an React application and how to use it. Use their gained, deep understanding of the React fundamentals to quickly establish themselves as frontend developers. Create single-page applications with one of the most modern JavaScript frameworks out there.

**Target Audience:** These Syllabus is designed for beginners and professionals who want to learn React step by step with hand on practical.

**Pre-requisite:** Basic HTML and CSS knowledge helps but isn’t a must-have. Prior JavaScript and TypeScript knowledge also helps but isn’t necessary to benefit from this course.

**Course Outline:** Don’t lose any time, gain an edge and start developing now!

**Day 1: Getting Started**

1. Introduction
2. Why React?
3. Tooling and Editor Setup
4. Your First React Hook
5. Reacts Basic Concepts
6. Tree Reconciliation in Action
7. Components Reusability
8. Your First React Component
9. Your First One-way Data Flow

**Day 2: JSX & React Components**

1. What is JSX?
2. Adding Attributes to JSX
3. Nested Elements in JSX
4. JSX Restrictions
5. React Components
6. Setting Up React Locally
7. Writing Your First Components
8. Rendering Lists in React with map()

**Day 3: Props & State**

1. Introduction to Props
2. Default Props
3. Typechecking Props
4. Introduction to State
5. Click Counter Project
6. Advanced State
7. Handling Events with Methods
8. Stateless vs Stateful Components

**Day 4: React Forms**

1. Creating React Forms
2. React Forms Applications

**Day 5: Introduction to React Lifecycle Functions**

1. constructor()
2. getDerivedStateFromProps()
3. render(), componentDidMount()
4. getSnapShotBeforeUpdate(), componentDidUpdate(), componentWillUnmount()

**Day 6: React Router**

1. Introduction to React Router
2. Switch
3. Passing Parameters
4. Links

**Day 7: Working with Lists and Conditionals**

1. Rendering Content Conditionally
2. Handling Dynamic Content "The JavaScript Way"
3. Outputting Lists (Intro)
4. Outputting Lists
5. Lists & State
6. Updating State Immutably
7. Lists & Keys
8. Flexible Lists

**Day 8: Debugging React Apps**

1. Understanding Error Messages
2. Finding Logical Errors by using Dev Tools & Sourcemaps
3. Working with the React Developer Tools
4. Using Error Boundaries

**Day 9, 10: Reaching out to the Web (Http / Ajax)**

1. Understanding Http Requests in React
2. Understanding our Project and Introducing Axios
3. Creating a Http Request to GET Data
4. Rendering Fetched Data to the Screen
5. Transforming Data
6. Making a Post Selectable
7. Fetching Data on Update (without Creating Infinite Loops)
8. POSTing Data to the Server
9. Sending a DELETE Request
10. Fixing a Bug
11. Handling Errors Locally
12. Adding Interceptors to Execute Code Globally
13. Removing Interceptors
14. Setting a Default Global Configuration for Axios
15. Creating and Using Axios Instances

**By the end of this course…**

You’ll be able to:

Build and deploy fast and interactive React apps with confidence

Get ready to learn React Native (for building mobile apps)

Use cutting-edge E8 JavaScript

Distinguish between "good" and "bad" code

**What You'l Learn...**

Modern JavaScript features

Build reusable components

Build tables and lists with pagination, sorting and searching

Build forms with validation

Implement routing with React Router

Call HTTP services with Axios

Implement authentication and authorization

Handle and log errors effectively

All about Function Components and Hooks

Share data using React Context

Deploy your React apps to Heroku

Write clean, maintainable code like a pro

Shortcuts to write more code in less time

And much, much more!

**Reference**

https://reactforbeginners.com/