

Modern Web Developer SkillJourney

Getting Started with React Essentials (TT4190)

Explore React Basics, Components, Forms, Routing & More

Course Snapshot

- **Course: Getting Started with React Essentials (TT4190)**
- **Duration:** 3 days
- **Audience & Skill-Level:** This course is for intermediate skilled web developers **new to React** who are proficient in HTML5, CSS3 and JavaScript. This course is not for beginners.
- **Format / Hands-on:** This course combines engaging instructor-led presentations and practical demonstrations with hands-on programming exercises, challenge labs, use case exploration and engaging group activities. Student machines are required.
- **Flexible Delivery Options:** This course can be delivered for your team or organization online-live (virtual), onsite in-person, self-paced or across our immersive blended learning experience platform (LXP).
- **Public Schedule:** This course is currently available on our Public Open Enrollment Schedule.
- **Customizable:** We're flexible! This course agenda, topics, labs, hours and delivery modalities can be adjusted to target your specific training skills objectives, tools and learning goals. Please ask for details.

Overview

React Essentials is an engaging, three-day course tailored for web developers who are new to React. This course is a perfect starting point for those looking to add this powerful JavaScript library to their skill set. React is renowned for its efficiency in building dynamic user interfaces, making it a valuable asset for any web project. By learning React, you'll be equipped to create more interactive, responsive websites, enhancing both user experience and organizational web strategies. During the course, you'll explore essential React topics through a mix of lectures and hands-on labs.

Throughout the course, you'll dive into the essentials of React, starting with the fundamentals of building your first React web application, where you'll learn about setting up your development environment and creating your initial application. You'll also explore the intricacies of React's component-based architecture, including functional components, and understand the role of JSX in developing intuitive user interfaces. You'll also explore creating and managing web forms, along with an understanding of routing to build multi-page applications. Complementing these core topics, the course also introduces you to advanced concepts such as the Virtual DOM, state management using Hooks, and essential tools like React Router, ensuring you have a comprehensive foundation in React.

This course prioritizes a practical approach, ensuring that 50% of your time is spent in hands-on labs, solidifying your understanding through real-world application. Guided by an industry expert, you'll acquire problem-solving skills and gain confidence in applying your new knowledge immediately in your projects. By the end of the course, you will have not only a theoretical understanding of React but also practical basic experience in its application, ready to enhance your web development projects with your newfound skills.

NOTE: For a deeper dive into React essentials with extended topics and labs, you might consider the five day React Boot Camp (TT4195) course as an alternative. The five day Boot Camp is a superset of this three day React Essentials (TT4190) course.

Learning Objectives

Our engaging instructors and mentors are highly experienced practitioners who bring years of current "on-the-job" experience into every classroom. Working in a hands-on learning environment, guided by our expert team, you'll learn how to:

- **Develop and Deploy a Basic React Application:** Gain basic skills in setting up a React development environment and deploying a basic React web application.
- **Work with React Components and JSX:** Learn to effectively use class and functional components in React, integrating JSX syntax for dynamic user interface development.
- **Implement Forms and Routing in React:** Acquire skills in creating and managing interactive web forms and implementing

seamless navigation using React Router.

- **Apply State Management and Lifecycle Methods:** Understand and apply state management using the useState Hook and lifecycle methods with the useEffect Hook in React applications.

If your team requires different topics or tools, additional skills or custom approach, this course may be further adjusted to accommodate. We offer additional full stack development, React, React Native, web development, design and security courses which may be blended with this course for a track that best suits your development objectives.

Audience & Pre-Requisites

This fast-paced course is for intermediate skilled web developers **new to React** who are proficient in HTML5, CSS3 and JavaScript. This course is not for beginners.

Take Before: Attendees should have experience with the topics in the following courses, or should have recently attended these as a pre-requisite:

- TT4003: Introduction to HTML5 / CSS3 & JavaScript Essentials – 3 days

Related Courses

The following is a small subset of related courses. We offer many additional courses and topics on modern web, mobile and full stack development. Please see the online catalog for a complete list of courses and learning paths.

- TT4002 Introduction to HTML5 / CSS3 - 2 days
- TT4003 Introduction to HTML5, CSS3 & JavaScript - 3 days
- TT4110 Introduction to Modern JavaScript – 3 days
- TT4165 Introduction to Angular Essentials - 3-day subset of this course
- TT4168 Mastering Angular Boot Camp - 5 days
- TT4190 Getting Started with React Essentials – 3 days
- TT4195 Mastering React Boot Camp | With Redux, Flux, Unit Testing, JSX & More – 5 days (TT4190 superset)
- TT4198 Introduction to React Native – 3 days
- TT4203 Introduction to GraphQL with React – 3 days
- TT4205 Advanced GraphQL in React – 3 days

Next Steps / Follow-on Courses: We offer a wide variety of follow-on courses for next-level web development, React, React Native, Full Stack and more. Please see our **Modern Web Developer / Full Stack Courses & Learning Journey Paths** for options based on your specific role and goals.

Course Topics / Agenda

Please note that this list of topics is based on our standard course offering, evolved from typical industry uses and trends. We will work with you to tune this course and level of coverage to target the skills you need most. Course agenda, topics and labs are subject to adjust during live delivery in response to student skill level, interests and participation.

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| <ol style="list-style-type: none"> Your first React Web Application <ul style="list-style-type: none"> • Setting up your development environment • JavaScript ES6 / ES7 • Next.js Introduction • Getting started Functional Components <ul style="list-style-type: none"> • What's a component? • Class components • Functional components - Motivation behind Hooks | <ul style="list-style-type: none"> • Our first component • Building the App • Props - Making the App data-driven • Events - Your app's first interaction with the useEffect() Hook • State - Updating state with the useState() Hook <ol style="list-style-type: none"> JSX and the Virtual DOM <ul style="list-style-type: none"> • React Uses a Virtual DOM • Why Not Modify the Actual | <ul style="list-style-type: none"> • DOM? • What is a Virtual DOM? • Virtual DOM Pieces • ReactDOM <ol style="list-style-type: none"> JSX <ul style="list-style-type: none"> • JSX Creates Elements • JSX Attribute Expressions • JSX Conditional Child Expressions • JSX Boolean Attributes • JSX Comments |
|---|---|---|

- JSX Spread Syntax
- JSX Gotchas

5. Forms

- Forms 101
- Text Input
- Multiple fields
- Validation

6. Routing

- What's in a URL?
- React Router's core components
- Building the components of react-router

7. Advanced Component Configuration with context

- Context - Provider/Consumer
- useContext() Hook Example

Bonus Content / Time Permitting

8. Unit Testing & Jest

- Writing tests without a framework
- What is Jest?
- Using Jest
- Testing strategies for React applications

9. Debugging React

- Using React Developer Tools
- Using Visual Studio Code
- OPTIONAL - Using the Chrome Debugger

10. REST

- REST Basics
- Using fetch
- Using axios

11. ES6 Primer

- Prefer const and let over var
- Arrow functions
- Modules
- Object.assign()
- Template literals
- The spread operator and Rest parameters
- Enhanced object literals
- Default arguments
- Destructuring assignments

Setup Made Simple! Learning Experience Platform (LXP)

All applicable course software, digital courseware files or course notes, labs, data sets and solutions, live coaching support channels, CodeCoach.AI anytime tutor access, and rich extended learning and post training resources are provided for you in our "easy access, single source, no install required" online **Learning Experience Platform (LXP)**, remote lab and content environment. Access periods vary by course. We'll collaborate with you to ensure your team is set up and ready to go well in advance of the class. Please inquire about set up details and options for your specific course of interest.

For More Information

For more information about our training services (instructor-led, self-paced or blended), collaborative coaching services, robust Learning Experience Platform (LXP), Career Experiences, public course schedule, partner programs, courseware licensing options or to see our complete list of course offerings, solutions and special offers, please visit us at www.triveratech.com, email Info@triveratech.com or call us toll free at **844-475-4559**. Our pricing and services are always satisfaction guaranteed.

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