

**Testing React Applications**

**Course Number:** RCT-132
**Duration:** 2 days

**Overview**

This Testing React Applications training course teaches developers how to write tests using Jest and the React Testing Library. In addition, attendees learn current best practices for testing React applications.

**Prerequisites**

Students should have taken Accelebrate's [Introduction to React course](file:////training/react) or have equivalent experience. Attendees must have experience with Modern JavaScript concepts, including arrow functions, modules, and destructuring.

**Materials**

All React Testing training attendees receive comprehensive courseware.

**Software Needed on Each Student PC**

* Google Chrome and/or Firefox
* Other modern browsers as desired
* IDE/development environment of your choice
* Other free software and lab files as specified, including Node.js

**Objectives**

* Write JavaScript unit tests using Jest
* Mock JavaScript Modules and Functions using Jest
* Perform Debugging Tests
* Test components using React Testing Library
* Test components using Enzyme (shallow, snapshot)
* Test Components making HTTP calls
* Test Applications using Redux (if applicable)

**Outline**

* Introduction
* Tools Overview
	+ Jest
	+ React Testing Library
	+ Enzyme
* Jest Syntax
* Testing Vanilla JavaScript with Jest
* Mocking
	+ Mocking Modules
	+ Mocking Functions
* Debugging Tests
	+ In Chrome
	+ In Visual Studio Code
	+ Running One Test
	+ Excluding Tests
* Component Tests with React Testing Library
	+ Using screen.debug()
	+ Queries
	+ Understanding async await with React Testing Library
* Component Tests with Enzyme
	+ Shallow
	+ Full
	+ Snapshot
* Testing Components making HTTP calls
	+ Introduction to Mock Service Worker (msw)
	+ Using msw
* Testing Applications using Redux
	+ Testing Actions
	+ Testing Thunks
	+ Testing Reducers
* Conclusion