KOENIG
step forward

KOENIG SOLUTIONS · COURSE OUTLINE

# Full-Stack: Clojure, React Redux & Node.js

Learn to build full-stack applications using Clojure, React with Redux, and Node.js, from functional programming to deployment.

| 3 | 29 |
| --- | --- |
| MODULES | TOPICS |

## COURSE OVERVIEW

This course covers Clojure, starting with core syntax, the REPL, functions, namespaces, Java interoperability, functional programming concepts, data structures and polymorphism. It then moves into React JS, covering emerging JavaScript features, JSX, components, props and state, Redux and React Redux, React Router and rendering React on the server. The final part covers Node.js, including the Node environment, asynchronous event-driven programming, streaming data, the file system, Express, working with databases such as MySQL, connecting Node with Angular, CRUD operations over HTTP and deployment.

## WHO THIS COURSE IS FOR

**Full-Stack Developers** | **Front-End Developers** | **Back-End Developers** | **JavaScript Developers** | **Clojure Developers** | **Node.js Developers**

## LEARNING OBJECTIVES

- Explain core Clojure syntax and functional programming concepts
- Apply Clojure functions, namespaces and data structures
- Describe Java interoperability and polymorphism within Clojure
- Build user interfaces with React JS and JSX
- Implement state management using Redux and React Redux
- Configure navigation with React Router and server-side rendering
- Develop Node.js applications using Express and asynchronous programming
- Implement database operations and deployment with Node.js

COURSE SYLLABUS

# 3 Modules, 29 Topics

01

## Clojure

TOPICS

- Introduction to Clojure
- Basic Clojure Syntax and the REPL
- Clojure Functions
- Clojure Namespaces
- Working with Java Code & Clojure
- More Clojure Syntax
- Intro to Functional Programming with Clojure
- Data Structures
- Polymorphism

02

## React JS

TOPICS

- Introduction to React JS
- Emerging JavaScript
- Pure React
- React with JSX
- Props, State and the Component Tree
- Enhancing Components
- Redux
- React Redux
- React Router
- React on the Server

03

## Node JS

TOPICS

- Understanding Node Environment
- Understanding Asynchronous Event Driven Programming
- Streaming Data Across Node And Clients
- Access the File System
- Using Express
- Databases
- Working with MySQL
- Connecting Node with Angular
- CRUD Operation with HTTP
- Deployment

WHAT IS INCLUDED

## Everything You Need to Succeed

- Koenig course material for every module
- Delivery by certified instructors and subject matter experts
- Hands-on exercises throughout the course
- Course completion certificate from Koenig

ABOUT KOENIG

## Who We Are

Established in 1993, Koenig Solutions is a globally recognised training provider with 35+ technology partnerships, 5,000+ training programmes and a network of certified instructors and subject matter experts, supporting individuals and enterprise teams worldwide.

FLEXIBLE DELIVERY

## Learn the Way That Suits You

Classroom Training | Live Online Classes (ILO) | Fly-Me-A-Trainer (FMAT) | Flexi (Self-Paced) | 1-on-1 Training

### Ready to Get Started?

Talk to a learning advisor about schedules, group training and customised delivery.

Visit koenig-solutions.com | info@koenig-solutions.com