



SAIL SMOOTH IN TECH OCEAN

A74, TechnoPark, Andheri, Mumbai. Phone: +91 80809 75897 | +91 70345 62050 Email: ask@codecruise.in

## MERN Stack

Are you in the final year or a fresher, who is looking to learn s/w projects development to land a Job in IT or S/W Company?

Learn s/w development and become job ready in 3 months with our **MERN stack development** program.

In this course you will be developing 3 different projects with increasing level of complexity which will help you in

digesting some major core concepts needed to develop a fully working s/w application.

**Objective:** Using front-end and back-end technologies along with frameworks for developing web based project.

### Eligibility

Bachelor's or Master's degree in Engineering, Technology (BE /BTech/ BS/ ME/ MTech in IT or Computer Science BSc IT/CS), BCA, MSc in Computer Science, MCA) or any graduate with basic knowledge of C/C++/Java/Python, HTML and JS or any other programming language.

## Tech Stack To Be Covered



MongoDB



Express JS



React JS



Next JS



Git



Deployment



Bootstrap



CSS



HTML

## Module Wise Syllabus and Schedule

### Highlights

Learn to create database structure of a project in No-SQL DBMS like MongoDB. This will give you an experience to work on more complicated database structure.

Learn to work on back-end programming languages Node.js with Express Node.js framework. Learn to manage your code with Unit testing and code-reusability.

Working with static files and images and manage them through database and programming languages.

Learn to design front-end/ web-UI using HTML5, CSS and JavaScript and more professional looking webpages using HTML and CSS framework like bootstrap and data-table.

Learn to create single page application using most widely used JavaScript technology React Next.js framework

Learn to work with Next.js to interact with back-end giving hands-on exposure and step towards working with API's.

Source code management using GIT and GIT-Hub

### Project you learn to develop

Website Design (html 5, JS, CSS).

Single Page application using React Next.js framework.

A CRUD application with session handling.

## **Curriculum**

Front-end: React Next.js framework.

Back-end: Node.js with Express

### **What in React Next.js?**

- Next.js introduction
- Next.js Setup
- Next.js project structure
- Next.js Pages
- Next.js Static file
- Next.js CSS and global CSS support
- Next.js Pre-Rendering
- Next.js Routing
- Next.js Dynamic Routing
- Next.js API Routing
- Next.js API Middleware
- Next.js Typescript
- Next.js Environment Variables
- Next.js Project Deployment

### **What in Node.js?**

- Introduction to Node JS
- Advantages of Node JS
- Node.js Process Model
- Setup Development Environment
- Install Node.js
- Node JS Modules
- Node Package Manager
- Creating Web Server
- File System
- Debugging Node JS Application
- Events
- Express JS

- Serving Static Resources
- Database Connectivity
- Project Development using Node JS

**Database:** Mongo DB