

Training Course Brochure

MERN STACK

(MONGODB, EXPRESSJS, REACTJS &
NODEJS)



Codex Future
- IT Training & Placement -

Week 1: Introduction to Web Development and JavaScript

- Module 1: Overview of Web Development
 - Basics of web development
 - Understanding the MERN stack
- Module 2: JavaScript Fundamentals
 - Variables, data types, functions, loops, and conditionals
 - ES6 features (let, const, arrow functions, template literals)

Week 2: Introduction to React

- Module 3: React Basics
 - What is React?
 - Setting up a React environment
 - Creating and rendering components
- Module 4: State and Props
 - Understanding state and props
 - Passing data between components
 - Component lifecycle methods

Week 3: Advanced React Concepts

- Module 5: Hooks
 - Introduction to hooks (useState, useEffect)
 - Using hooks for state and lifecycle management
- Module 6: React Router
 - Setting up React Router
 - Creating dynamic routes
 - Navigating between pages

Week 4: Project Work and Assessment

- Module 7: Building a Simple React Application
 - Planning the project
 - Implementing components and routing
- Module 8: Project Presentation and Assessment
 - Presenting the project
 - Reviewing and providing feedback
 - Mid-course assessment

Week 5: Introduction to Node.js

- Module 9: Node.js Basics
 - What is Node.js?
 - Setting up a Node.js environment
 - Understanding the Node.js runtime
- Module 10: Asynchronous Programming
 - Callbacks, Promises, and Async/Await
 - Handling asynchronous operations

Week 6: Introduction to Express.js

- Module 11: Express.js Basics
 - Setting up an Express server
 - Creating routes and handling requests
- Module 12: Middleware and REST APIs
 - Understanding middleware
 - Creating a RESTful API with Express

Week 7: Working with Databases

- Module 13: Introduction to MongoDB
 - Setting up a MongoDB database
 - CRUD operations (Create, Read, Update, Delete)
- Module 14: Integrating MongoDB with Express
 - Connecting to MongoDB from Express
 - Performing database operations through Express routes

Week 8: Project Work and Assessment

- Module 15: Building a Simple Backend Application
 - Planning the project
 - Implementing the backend logic and API endpoints
- Module 16: Project Presentation and Assessment
 - Presenting the project
 - Reviewing and providing feedback
 - Mid-course assessment

Week 9: Connecting Frontend and Backend

- Module 17: Integrating React with Express
 - Setting up communication between frontend and backend
 - Making API calls from React
- Module 18: State Management with Redux
 - Introduction to Redux
 - Setting up Redux in a React application
 - Managing state with Redux

Week 10: Authentication and Security

- Module 19: User Authentication
 - Implementing authentication with JWT
 - Securing routes and managing user sessions
- Module 20: Security Best Practices
 - Securing Express applications
 - Protecting against common vulnerabilities (XSS, CSRF, etc.)

Week 11 & 12: Final Project and Presentation

- Module 21: Building a Full-Stack MERN Application
 - Planning and implementing a comprehensive project
 - Integrating all learned concepts
- Module 22: Final Project Presentation and Assessment
 - Presenting the final project
 - Reviewing and providing feedback
 - Course review and certification ceremony

Evaluation and Certification

- Regular quizzes and practical assignments
- Mid-course and final assessments
- Final project evaluation
- Certification based on performance and completion of the course

This course provides a comprehensive understanding of the MERN stack, combining theoretical knowledge with practical application to build full-stack web applications.

TECHNOLOGIES WE OFFERED



Data Analytics



Python Django



Data Science



Web Designing



MERNSTACK



AWS Certification



Digital Marketing



Flutter (App)

Interview Process :



Resume/CV Building



Personal Interview Preparation



100% Job Assistance



Technical Round Preparation



+91 6360174732
+91 9303715744



contact@codexfuture.in
www.codexfuture.in



#314, Shagun Arcade, Vijay Nagar Square,
Indore, 452010



Codex Future
- IT Training & Placement -