

EDACY

Curriculum

**FULL STACK
ENGINEERING**

**WITH SOFT
SKILLS**



COURSE OVERVIEW

This comprehensive 12-week course is designed to equip you with both the technical and professional skills necessary to launch your career as a Full Stack Developer. The curriculum emphasizes practical learning, real-world projects, and collaboration to prepare you thoroughly for industry demands.

COURSES DESCRIPTION

You will be trained on modern web development technologies covering both front-end and back-end, including Angular, Node.js, Express, MongoDB, NestJS, and GraphQL. Alongside technical training, you'll gain critical professional skills such as Agile project management, effective communication, and teamwork.

LEARNING OBJECTIVES

TECHNICAL SKILLS:

By the end of this course, students will be able to:

- ▶ Develop dynamic web applications using Angular.
- ▶ Build robust backend services using Node.js and Express.
- ▶ Manage and utilize databases effectively with MongoDB.
- ▶ Implement CI/CD pipelines for seamless deployment.
- ▶ Conduct thorough automated testing and debugging.
- ▶ Create clear technical documentation.

LEARNING OBJECTIVES

SOFT SKILLS:

By the end of this course, students will be able to:

- ▶ Communicate technical information clearly and effectively to different audiences.
- ▶ Employ Agile and Scrum methodologies to manage projects collaboratively.
- ▶ Solve complex problems using systematic critical thinking.
- ▶ Present confidently and professionally in public speaking contexts.
- ▶ Effectively manage time and deadlines.

WEEKLY CURRICULUM BREAKDOWN



WEEK 1:

ANGULAR FUNDAMENTALS

- ▶ Setting up Angular projects
- ▶ Basic data binding
- ▶ Routing and navigation
- ▶ Enterprise work culture
- ▶ Project tools introduction (Slack, Google Drive)

WEEK 2 :

ADVANCED ANGULAR CONCEPTS

- ▶ Built-in directives and pipes
- ▶ Custom component creation
- ▶ Angular services
- ▶ Introduction to Design Thinking
- ▶ Empathy and user-centric design

WEEK 3 :

ANGULAR FORMS AND AGILE SCRUM

- ▶ Template-driven forms
- ▶ Reactive forms
- ▶ Form validation techniques
- ▶ Agile Scrum basics
- ▶ Collaborative project management

WEEK 4:

NODE.JS INTRODUCTION

- ▶ Node.js architecture
- ▶ JavaScript event loop
- ▶ Writing asynchronous code
- ▶ Emotional intelligence basics
- ▶ Professional interactions and communication

WEEK 5 :

NODE.JS PACKAGE MANAGEMENT

- ▶ Using NPM effectively
- ▶ Package.json management
- ▶ Local vs. global packages
- ▶ Critical thinking in problem-solving
- ▶ Breaking down complex coding tasks

WEEK 6 :

ADVANCED NODE.JS AND EXPRESS.JS

- ▶ Building a web server
- ▶ Express middleware
- ▶ Request handling and routing
- ▶ Time management strategies
- ▶ Meeting project deadlines effectively

WEEK 7 :

MONGODB DATABASE

- ▶ NoSQL database concepts
- ▶ MongoDB CRUD operations
- ▶ Querying databases
- ▶ Active listening skills
- ▶ Effective team communication

WEEK 8 :

ADVANCED MONGODB

- ▶ Mongoose fundamentals
- ▶ Building REST APIs
- ▶ Testing APIs with Postman
- ▶ Clear communication of technical concepts
- ▶ Professional presentations and documentation

WEEK 9 :

FRONT-END INTEGRATION WITH ANGULAR

- ▶ Developing CRUD pages
- ▶ User authentication and dashboards
- ▶ Admin modules and user roles
- ▶ Productivity techniques
- ▶ Discipline and rigor in projects

WEEK 10 :

DEPLOYMENT AND GIT WORKFLOW

- ▶ Git version control basics
- ▶ Branching and Git workflows
- ▶ CI/CD introduction
- ▶ Deploying apps on Heroku
- ▶ Effective teamwork and conflict resolution

WEEK 11:

ADVANCED BACKEND WITH NESTJS

- ▶ NestJS framework basics
- ▶ Backend API development
- ▶ Module creation and routing
- ▶ Interview skills and job search strategies
- ▶ Portfolio development

WEEK 12:

GRAPHQL AND MVP PRESENTATION

- ▶ GraphQL queries and mutations
- ▶ Integration with front-end applications
- ▶ MVP project preparation
- ▶ Public speaking techniques
- ▶ Confident project presentations



**UPON COMPLETION, YOU WILL BE READY TO CONFIDENTLY
APPROACH TECHNICAL INTERVIEWS AND LAUNCH A
SUCCESSFUL CAREER IN SOFTWARE DEVELOPMENT.**