FULL STACK DEVELOPMENT

(MERN Stack)

CLASSROOM, LIVE ONLINE, & BLENDED LEARNING

The pioneer in Embedded Systems training now brings to you the most in-demand course.

630+ MNCs HIRED IN 2021

(Embedded Systems)

All India Educational Excellence Award Winner for 3 years in a row

100% GENUINE PLACEMENT ASSISTANCE
THE INSTITUTE

• Directors with over a decade of rich industry experience in Design Development, Training & Recruitment.
• Industry-certified and experienced faculty.
• Lab with a 1:1 Student to System ratio.
• A/C classrooms with LED projectors and equally distributed sound systems.
• A dedicated placement cell with operations in Hyderabad, Bengaluru, Pune, Noida, and Chennai.
• E-Learning classes with online video courses delivered by industry-experienced lectures.
Full Stack Development (MERN Specialization)

The student will

• Become a full stack developer with expertise in MERN Stack.

• Gain a strong knowledge of problem-solving and web development fundamentals.

• Able to build responsive web applications for societal needs.

Why Vector India

16 yrs
Experience in embedded systems training and producing industry-ready talent

50,000+
Alumni, and 650+ corporate collaborations

100%
Genuine placement assistance with quality experiential training
ADMISSION

We offer a 4-month comprehensive training program with a well-integrated approach that gives you hands-on experience in problem-solving and Full Stack Development (MERN Stack). 100% genuine placement assistance.

• No fees for Scholarship test
• Working professionals with relevant experience are eligible for direct admission

Admission Process

• The Admission into Full Stack Development (MERN Stack) course is based on our VECTOR Online Scholarship Test.
• The student can attempt the Scholarship Test at any time.
• Visit our website www.vectorindia.org to register for our scholarship test.

Test Syllabus

• Python programming
• General aptitude
• Verbal ability
## Scholarships

<table>
<thead>
<tr>
<th>Admission Test</th>
<th>Final Degree Score</th>
<th>Fee Waiver</th>
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</thead>
<tbody>
<tr>
<td>&gt; 80%</td>
<td>&gt; 60%</td>
<td>50%</td>
</tr>
<tr>
<td>70% to 79.9%</td>
<td>&gt; 60%</td>
<td>25%</td>
</tr>
<tr>
<td>50% to 69.9%</td>
<td>&gt; 70%</td>
<td>10%</td>
</tr>
</tbody>
</table>
WHAT WE OFFER

- Problem-solving
- High-quality practical/application-oriented training
- Holistic online learning program
- Genuine placement assistance
- Lateral placements for the next 6 months
- Industry accepted course content
- Lab with a 1:1 system ratio

TRAINING PROCESS

- 6-days a week, theory(1.5-2hrs) and practical (2hrs) sessions
- Daily assignments
- Weekly assessments
- Mock interviews & project guidance
- Parallel classes will be conducted when required

ELIGIBILITY FOR PLACEMENTS

Candidates must meet all the following criteria to be eligible for placement assistance.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Minimum Attendance</th>
<th>Minimum Internal Score</th>
<th>Mock &amp; Assessment Interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theory</td>
<td>75%</td>
<td>40%</td>
<td>Recommendation</td>
</tr>
<tr>
<td>Lab</td>
<td>75%</td>
<td>40%</td>
<td>Recommendation</td>
</tr>
<tr>
<td>Communication</td>
<td>75%</td>
<td>40%</td>
<td>Recommendation</td>
</tr>
<tr>
<td>Aptitude</td>
<td>75%</td>
<td>40%</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

THE RESULT

Industry-Ready Professionals
FULL STACK DEVELOPMENT
COURSE OVERVIEW

Programming for problem-solving

Database

Back End

Version Control

Front End

Low-code platform

Communication Skills

Aptitude Skills

4 MINI PROJECTS _____________ 1 MAIN PROJECT
Programming for problem-solving

**PYTHON:**

1. Introduction to Python
2. Control Statements
3. List
4. Tuple
5. Dictionary
6. Set
7. Strings
8. Searching and sorting algorithms
9. Stack
10. Queue
11. Functions
12. Recursion
13. Lambda expressions
14. Decorators and Generators
15. itertools, collections, bisect
16. Regular expressions
17. Files
18. OOPs Concepts
19. Exception handing
20. Problem-solving using online coding platforms like hacker rank.
FRONT END

HTML:
- HTML basic tags and attributes
- Hyperlinks and bookmarks
- images, favicon, emojis
- List
- Forms
- HTML5 concepts

CSS
- CSS selectors
- Inline vs Internal vs External styling
- Background, Font Styling
- Box Model
- display, positioning, z-index properties
- Styling Lists, Tables, Forms
- Gradients
- Transforms
- Transitions
- Responsive Media Queries
- Flexbox
- Grid Layout
- Font Awesome

Mini project-1
**BOOTSTRAP**
- Containers
- Grids
- Buttons
- Navbars
- Images
- Tables
- Forms
- Pagination

**JAVASCRIPT**
- Introduction to JavaScript
- Datatypes

**Mini project-2**

**Mini project-3**
- Functions
- Arrays
- Events and DOM manipulations
- Local storage
- Client-side validation
- Template strings
- Rest operator
- Spread operator
- Arrow functions
- ES6+ concepts
**REACTJS:**

- Introduction to React JS, JSX
- Rendering Elements
- Functional and class components
- Props
- State and Lifecycle
- Event handling
- Lists and Keys

- Forms
- Tables
- Routing
- Hooks
- Integration of 3rd party Modules
- Material UI

Mini project-4
# DATABASE

## MYSQL
- Introduction to DBMS
- SQL Basics
- DDL, DML statements
- Joins
- Subquery
- Aggregate Function
- HAVING Clause
- GROUP BY
- ORDER BY
- LIKE Operator,
- IN, NOT IN, and Between

## MONGO DB
- Introduction to MongoDB
- CRUD operations
- Aggregation Operations
- Data Modelling
- Numerical and Geospatial
- Transactions
- Administration
- Security
- Indexes, Storage, and replication
BACK END

NODE.JS AND EXPRESS

• Introduction to NodeJS
• Reading and Writing Files
• Blocking and Non-Blocking: Asynchronous Nature of Node.js
• Routing
• Introduction to Express Framework
• Express Routing
• Implementing MVC in Express
• Handling HTTP Request, Preparing HTTP Response
• Middleware
• Using Template Engines
• Error Handling
• API Handling
• Using Process Managers
• Integration with Database
• CRUD Operations
• Using events, listeners, timers, and callbacks in Node.JS
• Handling Data I/O
• Accessing the file system from Node.JS
• HTTP services in Node.JS

Main project
LOW-CODE PLATFORM

WORDPRESS
• Introduction to WordPress
• Creating a new blog post
• Formatting text
• Publishing blog
• Hyperlinks
• Adding images and image gallery
• Creating pages
• Menus
• Changing template layout
• WordPress plugins

VERSION CONTROL

GIT
• Introduction to Version Control System
• Git File Management
• Branching
• Pull request