



DRIVES YOU TO INDUSTRY

# FULL STACK DEVELOPMENT

(MERN Stack)

India's best institute for Embedded Systems training now brings to you the most in-demand course.

**729**

MNCs Hired in 2024



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



**1611**

Students Recruited  
in 2024

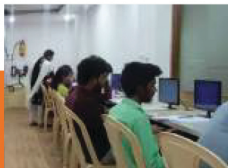
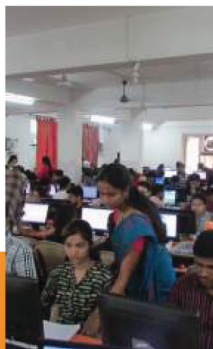


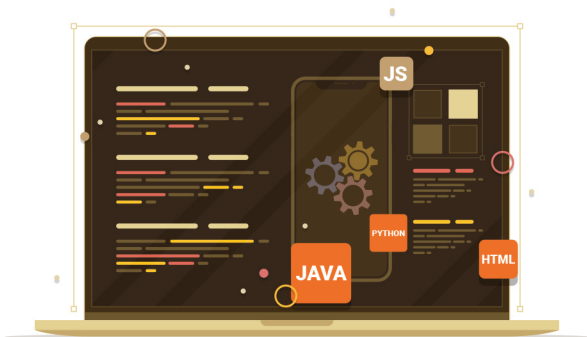
L&T Technology Services



# 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 and Chennai.





## 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

**19 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 6-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](http://www.vectorindia.org) to register for our scholarship test.

## Test Syllabus

- Python programming
- General aptitude



## Scholarships

Admission Test	Final Degree Score	Fee Waiver
> 80%	> 60%	50%
70% to 79.9%	> 60%	25%
50% to 69.9%	> 70%/GATE Score	10%

🔍 [www.vectorindia.org](http://www.vectorindia.org)

Apply online



## WHAT WE OFFER

- Problem-solving
- High-quality practical/application-oriented training
- 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.
- Students should undergo Vector Shortlisting Test(VST) for every 3 months if they have not secured a placement in any company within three months of becoming eligible for Campus Placements.

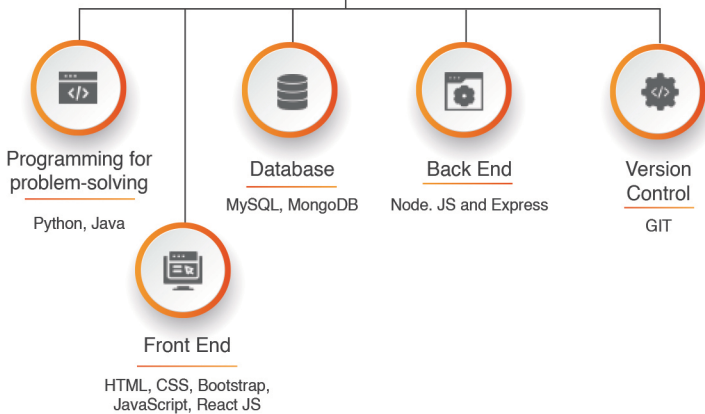
Criteria	Minimum Attendance	Minimum Internal Score	Mock & Assessment Interview
Theory	75%	40%	Recommendation
Lab	75%	40%	Recommendation
Communication	75%	40%	Recommendation
Aptitude	75%	40%	Recommendation

## THE RESULT

Industry-Ready Professionals

# FULL STACK DEVELOPMENT

COURSE  
OVERVIEW



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. Files
16. OOPs Concepts
17. Exception handling
18. Problem-solving using online coding platforms like HackerRank
19. Numpy
20. Pandas





## CORE JAVA PROGRAMMING

- Java features, simple java program
- Difference between JDK, JRE, and JVM
- Literals, variables, keywords, datatypes
- operators
- input and output statements
- if, if else, else if ladder
- nested if else
- switch
- for loop
- while loop
- do ... while loop
- nested loops
- break, continue, enhanced for, Labelled for
- single dimensional arrays, multi dimensional arrays, jagged arrays & array operations
- introduction to Strings & string operations
- string buffer and string builder
- classes and objects
- methods
- constructors, constructor overloading
- static methods, static block, this keyword
- passing arrays, objects to methods
- recursion
- inner class

- Simple, multilevel inheritance
- hierarchical, hybrid inheritance
- Super keyword, access specifiers
- polymorphism, final methods, class
- abstract class
- interfaces
- packages
- util package
- Exception handling
- wrapper classes
- Multi threading
- Generic Classes
- Collections
- IO streams
- Lambda expression

# FRONT END

## HTML:

- HTML basic tags and attributes
- Hyperlinks and bookmarks
- Images, favicon, emojis
- List
- Tables
- 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
- Animation
- Responsive Media Queries
- Flexbox
- Grid Layout
- Font Awesome

## Mini project-1



## BOOTSTRAP:

- Containers
- Grids
- Buttons
- Navbars
- Images
- Tables
- Forms
- Pagination

## Mini project-2

### JAVASCRIPT

- Introduction to JavaScript
- Datatypes

- Arrays
- Strings
- Objects
- JSON
- Functions
- Events and DOM manipulations
- Local storage
- Client-side validation
- Templet strings
- Rest operator
- Spread operator
- Arrow functions
- ES6+ concepts

## Mini project-3





## 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
- Rendering API data
- Integration of 3rd party Modules
- Material UI

## Mini project-4

# DATABASE

## MySQL

- Introduction to DBMS
- SQL Basics
- DDL, DML, DQL 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



# BACK END

## NODE.JS AND EXPRESS

- Introduction to NodeJS
- Node JS architecture
- Reading and Writing Files
- Blocking and Non-Blocking: Asynchronous Nature of Node.js
- Routing
- 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
- Introduction to Express Framework
- Express Routing
- Implementing MVC in Express
- Handling HTTP Request, Preparing HTTP Response
- Middleware
- Using Template Engines
- Error Handling
- API Handling
- Integration with Database
- CRUD Operations
- Integrating react APP with express
- Authorization and Authentication
- File uploading using multer

## Main project

# VERSION CONTROL

## **GIT**

- Introduction to Version Control System
- Git File Management
- Branching
- Pull request

Premier MNCs & R&D companies that recruited from us

**AMD**

**Apollo  
DART**

**avantel**

**FAT** Pipe

**FORVIA**  
HELLA

**HORIZON**  
Meet the Future

**LG**  
Soft India

**NCR**

**NOKI**

**PeopleTECH**

**pt** PROTECHSOFT  
Technologies

**TAL TECH**  
Accelerate Your Success

**Western Digital**

**GlobalLogic**

**ZF**

**DT** DELTA IOT  
SOLUTIONS

**securaa**

**L&T Technology Services**

And many more





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