



**IDM TECHPARK**  
GUIDE'S FOR PERFECT CAREER PATHWAY



# Full Stack Develop Course Syllabus



**N.S.D.C.**  
National  
Skill Development  
Corporation



**1**

# About Us

IDMTECHPARK global retail & corporate training solutions provider in Coimbatore, Erode, Trichy & Salem that offers a comprehensive range of training and placement services for both fresher's and professionals seeking new opportunities. The company commenced its IT training business in 2016. A pioneer in IT education, over the years, we have trained over 50k students. Idmtechpark has a wide range of courses, maintains education standards & provides placement assistance.

[www.idmtechparkcoimbatore.com](http://www.idmtechparkcoimbatore.com)  
[www.idmtechparkerode.com](http://www.idmtechparkerode.com)

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**2**

# About IDMTECHpark Education Quality

IDMTECHPARK is managed and developed by industry specialists with more than 8 years of expertise in the field. IDMTECHPARK offers a staff of highly skilled professional trainers who deliver effective IT training in a friendly setting, concentrating on the needs of each individual to help them succeed in a demanding work world. In the book of career and success, our staff never leaves a page unturned.

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IDMTECHPARK's versatile instructor-led training class rooms and lower-class sizes enable people to engage more easily and absorb knowledge, resulting in remarkable results for both themselves and the organizations for which they work. Our training programmes are adaptable and customizable to ensure that each participant gets the most out of their time with us. IDMTECHPARK focuses in providing hands-on IT training in over 30 different courses.

- We teach in-demand courses
- We provide impactful learning material
- Our teachers are well-selected & trained
- We follow world-class teaching methods
- Our courses include E-Projects
- We conduct technical workshops
- Exams are held and based on Exams providing Certification
- Certificates are recognized the world over
- Our course timings are flexible



3

# Our Recent Placement

Idmtechpark assists students in getting job placements on successful completion of their courses. Idmtechpark also provides recruitment assistance to organizations. Idmtechpark students are shortlisted based on the organization's requirement. To make students job-ready, Idmtechpark conducts workshops e.g. How to do Group Discussions, how to behave in a Personal Interview. From time to time, job fairs & campus recruitments are conducted. Workplace skills such as time management, making effective presentations and communication skills are also provided. All this helps students find appropriate jobs in the IT industry while also helping save companies recruitment costs.

**Krishnaveni M**

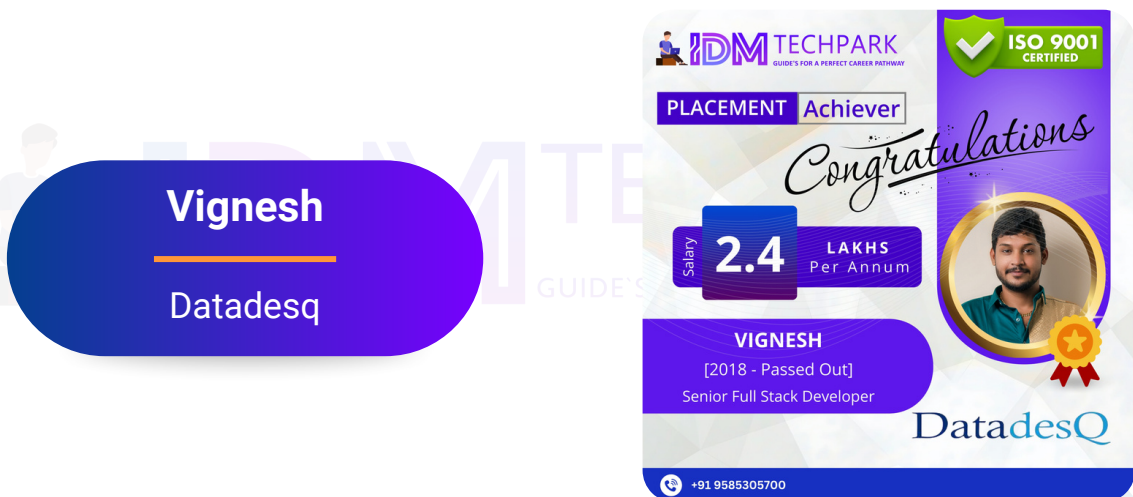
Frutterlabs





**Joshwa**

Xccessor



**Vignesh**

Datadesq



**Madhumitha**

Accenture

**Keerthana**

AJS



**Brindha Boopathi**

AJS



**Kavın Kumar**

AJS

**Ajithkumar**

AJS



**Gowthami**

Genpact



**Surya**

ZUCI

**Pavithra**

Vel Info Tech



**Poovitha**

Gray Matter



**Ramesh**

TDT

**Siva Sankar**  
ST Cloudspark tech



**Nabeel Hisham**  
VTail



**Kalayarasan**  
Violet Infotech

4

# Our Alumni Working At



## MODULE 1

# Web Development Fundamentals

- What is Full Stack Development?
- Client-side vs Server-side
- HTTP, DNS, Hosting, Browsers
- Client-server architecture

## MODULE 2

# HTML5 Essentials

- Semantic tags (header, section, article, etc.)
- Forms and inputs
- Media (video/audio/image)
- Accessibility (ARIA roles)

## MODULE 3

# CSS3 & Responsive Design

- Selectors, Box Model, Flexbox, Grid
- Media Queries
- Animations and transitions
- Responsive Design principles

## MODULE 4

# CSS Frameworks

- Bootstrap
- Tailwind CSS
- Material UI



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## MODULE 5

# JavaScript Fundamentals

- Variables (let, const), Data types
- Functions, Loops, Arrays, Objects
- Events and DOM manipulation
- ES6+ Features

## MODULE 6

# JavaScript Advanced Concepts

- Closures, Hoisting, Scope
- Callback, Promise, Async/Await
- Error Handling
- JSON and Fetch API

## MODULE 7

# Frontend Framework (React.js / Angular / Vue.js)

- Components and Props
- State Management
- Lifecycle Methods
- Routing (React Router/Vue Router)

## MODULE 8

# Frontend State Management

- Redux / Context API (React)
- Pinia / Vuex (Vue)
- Services / Observables (Angular)

## MODULE 9

# Typescript

- Static typing
- Interfaces and Types
- Classes and Enums
- Using with React or Angular

## MODULE 10

# Build Tools and Package Managers

- NPM/Yarn
- Webpack, Vite
- Babel, ESLint, Prettier

## MODULE 11

# Version Control with Git & GitHub

- Git basics (clone, push, pull, commit)
- Branching & merging
- GitHub pull requests & issues

## MODULE 12

# Backend Development Basics

- HTTP Methods
- RESTful APIs
- MVC Architecture
- Intro to Node.js / Python / PHP / Java / .NET

## MODULE 13

# Express.js / Flask / Django / Spring Boot / ASP.NET Core

- Setting up backend server
- Routing and Controllers
- Middleware
- Error handling

## MODULE 14

# Authentication & Authorization

- Sessions vs JWT
- OAuth, Passport.js
- Role-based access

## MODULE 15

# Relational Databases (SQL)

- MySQL / PostgreSQL / SQLite
- CRUD operations
- Joins, Indexes, Normalization

## MODULE 16

# NoSQL Databases

- MongoDB / Firebase / Redis
- Documents, Collections
- Aggregations & Relations



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## MODULE 17

# ORM/ODM Tools

- Sequelize (Node.js)
- Mongoose (MongoDB)
- Prisma / TypeORM / Hibernate / Entity Framework



## MODULE 18

# API Development

- REST API design
- GraphQL basics
- Status codes & best practices



## MODULE 19

# API Integration (Frontend ↔ Backend)

- Axios / Fetch
- Secure API calls
- API throttling and pagination

## MODULE 20

# Testing and Debugging

- Frontend Testing (Jest, React Testing Library)
- Backend Testing (Mocha, Supertest, PyTest)
- Debugging with DevTools & Postman

## MODULE 21

# Real-Time Communication

- WebSockets
- Socket.IO
- Chat App basics

## MODULE 22

# File Uploads & Media Handling

- Multer / Cloudinary
- Image compression
- Storage solutions

## MODULE 23

# DevOps & Deployment

- CI/CD basics (GitHub Actions, Jenkins)
- Docker fundamentals
- Deployment: Vercel, Netlify, Heroku, AWS, DigitalOcean

## MODULE 24

# SEO, Performance & Optimization

- Core Web Vitals
- Lazy Loading, Code Splitting
- SEO strategies for SPAs
- Lighthouse & GTMetrix

## MODULE 25

# Capstone Projects

- Full-stack project (blog, task manager, forum, etc.)
- GitHub versioning
- Testing + deployment



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# Thank You

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