





NODE JS

Get the skills to get ahead, stay relevant and earn more

Book your seat now













About INCAPP

INCAPP Coding Institute, established in 2011, was founded with the goal of addressing the global tech skills shortage. Our commitment lies in offering high-quality training programs to students, professionals, and organizations. We strive to empower individuals with coding skills, facilitating personal and professional growth, and assisting organizations in enhancing their workforce's productivity and effectiveness.

Our company boasts a team of seasoned instructors, experts in their fields. We employ the latest teaching methodologies and technologies to provide engaging and interactive training programs.

We foster innovation and empower aspiring coders. As founders, we are excited to welcome you aboard. Whether you're new to coding or already experienced, our hands-on curriculum and expert instructors will guide you. Coding is more than just writing lines; it involves creativity and problem-solving. Embrace challenges and celebrate your successes, knowing that coding is a journey of continuous growth. Let's get started!





How We Help You To Learn









Expert Instructors

Top-class instructors, experts in their fields, teach through practical training.



Assignments

Understand all concepts through well-structured assignments.



Doubt Resolutions

Dedicated assistance provided to clarify doubts, featuring two types of instructors: Class Instructor and Lab Instructor.



Projects

Gain a comprehensive understanding of the technology through project work, guided by your instructor.





Why INCAPP Coding Institute

Outstanding students deserve the finest learning environment. At INCAPP, we guarantee a superior learning experience and personalized support to ensure your success.





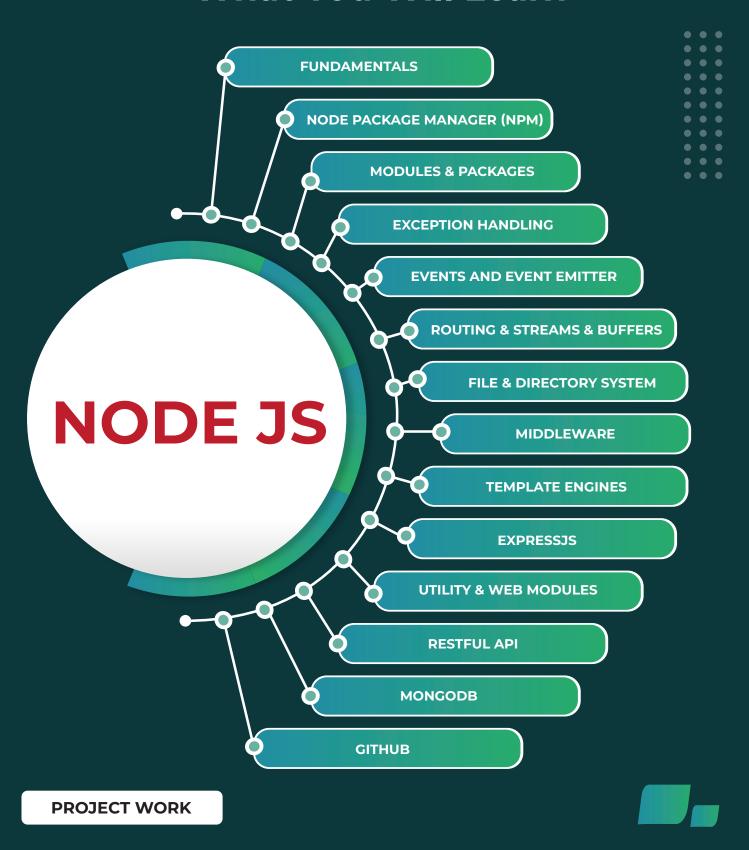








What You Will Learn







5 Reasons To Learn Node JS





Efficient Performance: Utilizes non-blocking I/O model, ensuring fast and efficient performance, especially for data-intensive applications.



JavaScript on Server-Side: Enables using JavaScript for both client and server-side, simplifying development and reducing context-switching.



Strong Community Support: Benefiting from a vast and active community, offering a wealth of libraries and tools.



Suitable for Building Scalable Applications: Ideal for developing scalable network applications due to its event-driven architecture.



Versatility in Web Development: Facilitates the development of various types of web applications, from APIs to full-fledged web servers.





Course Overview:

Node.js is an open-source, cross-platform JavaScript runtime environment that enables the execution of JavaScript code server-side. It's designed for building scalable network applications, particularly web servers. Node.js uses an event-driven, non-blocking I/O model, making it lightweight and efficient for data-intensive real-time applications that run across distributed devices. Its ability to handle numerous simultaneous connections with high throughput makes it ideal for developing applications like chat applications, online gaming, and real-time data processing systems.

NODE JS



Introduction to NodeJS

- NodeJS Introduction
- History of NodeJS
- Features of NodeJS
- Scope of NodeJS
- NodeJS Applications
- Advantages of NodeJS
- NodeJS Versions
- What is V8 JavaScript Engine?
- Why Server-side JavaScript?
- NodeJS Vs Other server-side technologies

Getting Started with NodeJS

- NodeJS Architecture
- NodeJS Installation
- Creating Web Server in NodeJS
- Creating First NodeJS Application
- Debugging First NodeJS Application
- Event Loop
- Event Driven Architecture
- Node REPL
- Writing Asynchronous Code
- Blocking vs Non-Blocking Code

Modules and Packages in NodeJS

- Understanding Modules
- Understanding require and exports
- Creating Modules
- Importing Modules
- Exporting Modules
- Built-in Modules
- Process ModuleHTTP Module
- URL Module
- Creating a Node Package
- Publishing the Package
- Using published package

Node Package Manager (NPM)

- Introduction to NPM Package
- Understanding CLI
- Understanding NPM
- Installing Modules using NPM
- Local and Global Packages
- Installing a Module
- Updating a Module
- Uninstalling a Module
- Working with Node's Package Manager (NPM)
- Understanding package.json
- Using package.json
- Attributes of package.json

NodeJS Built-in Packages

- NPM Package
- Express NPM Package
- Multer NPM Package
- Node Mail NPM Package
- Boot Strip NPM Package Integration
- JSONWEBTOKEN NPM Integration
- Introduction of Crypto-JS

Callback

- What is Callback?
- Blocking Code Example
- Non-Blocking Code Example

Code Debugging

- Built-in Debugger
- IDE Debugger
- Node Inspector

Exception Handling

- Try-Catch
- Call Back





Events and Event Emitter

- **Understanding Events**
- **Event-Driven Programming**
- How do Node Applications work?
- **Event Emitter Class**

Methods

- Class Methods
- **Emitting Events**
- Listening to Events

HTTP

- Building a Web Server
- HTTP Request Methods
- HTTP Request Headers
- HTTP Response Codes
- HTTP Response Headers

ExpressJS

- Introduction to ExpressJS Framework
- Installing ExpressJS Framework
- Building a Web Server
- Creating Hello World Application using ExpressJS
- Debugging and Executing Hello World Application
- Request and Response
- Request Object
- Response Object
- **Basic Routing**
- Serving Static Files
- **GET Method**
- **POST Method**
- FILE Upload
- Cookies Management
- Sending Emails

Routing

- Understanding Routing
- Router Object
- Route Methods
- Route Paths
- Parameterized Routes
- **Route Handlers**
- **Express Router**

Streams

- **Understanding Streams**
- Types of Stream
- Creating Streams
- Readable Streams
- Writable Streams Piping the Streams
- Chaining the Streams

Buffers

- Creating Buffers
- Writing to Buffers
- Reading from Buffers
- Convert Buffer to JSON
- Compare Buffers
- Copy Buffer
- Slice Buffer
- **Buffer Length**
- Method Reference
- Class Methods

File and Directory System

- Synchronous Vs Asynchronous
- Introduction to fs Module
- File operations
- Creating a File
- Opening a File
- Writing to a File
- Reading from a File
- Closing a File
- Deleting a File
- Creating a Directory
- Reading a Directory
- Removing a Directory

Middleware

- Middleware Introduction
- Middleware Types
- Express Middleware
- Error Middleware
- **Body Parser**
- Cors
- Cookie Parser
- Session Management

Template Engines

- Introduction to Template Engines
- EJS
- Jade
- Vash
- GruntJS
- Handlebars

ExpressJS Security

- Authentication
- JWT
- **Securing Routes**
- Debugging in ExpressJS

Global Objects

- __filename
- _dirname
- setTimeout(cb, ms)
- clearTimeout(t)





- setInterval(cb, ms)
- Global Objects
- Console Object
- Process Object

Utility Modules

- OS Module
- Path Module
- Net Module
- DNS Module
- Domain Module

Web Modules

- What is a Web Server?
- Web Application Architecture
- Creating a Web Server using Node
- Making a Request to Node Server
- Creating a Web Client using Node

RESTful API

- What is REST Architecture?
- Http Methods
- RESTful Web Services
- Creating RESTful for a Library
- List Users
- Add Users
- Show Detail
- Delete a User

Introduction to MongoDB

- Understanding NoSQL DB
- NoSQL Vs SQL DB
- Understanding MongoDB
- Document-oriented Vs Other kind of storages
- Installing MongoDB
- MongoDB Data Types
- MongoDB Shell Commands
- Understanding DB, collection and document
- Understanding Embedded documents
- Querying Database Tools and API
- MongoDB Tools

CRUD Operations on MongoDB

- Creating Database
- Creating Collections
- Creating Documents
- Inserting DataQuerying Data
- · Querying Data
- Updating Data
- Deleting Data
 Lingiting Data
- Limiting DataSorting Data
- Dropping Collection
- Dropping Database

MongoDB Indexing and Relationships

- Types of Indexes
- Creating an Index
- Defining Relationships between Documents
- Dropping an Index

MongoDB Mongoose

- Introduction to Mongoose
- Mongoose Schemas
- Mongoose Data Types
- Mongoose Models
- Mongoose Relationships
- Mongoose CRUD Operations

MongoDB ODM Mongoose

- Introduction to ORM
- Introduction to ODM
- MongoDB ODM Mongoose

GitHub

• Real-time Environment setup with GitHub

REST API with Mongoose

- REST API with Mongoose, MongoDB and Postman
- Creating REST API using Express and Mongoose

Project Work

- Developing the Project
- Deploying the Project





Our Impact

12800+

Students Successfully Trained

13+

Years of Experience

99%

Students Recommend Us to Their People

100%

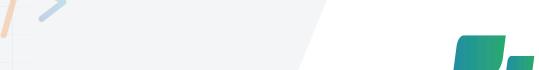
Course Completion Rate

100+

Projects Developed

4.9/5

Google Rating





What our students say about us



I had learned core java, web developement, advance java from the Rahul sir and i am very grateful to him for giving us the best knowledge.

Isha



I did web designing course by Incapp and this is the best institute in G.Noida. It has really helped me understand and feel more confident in what I am doing. Thanks Rahul sir.

J

Vishal Kumar



The class is well maintained and i like what mam teaches us. We have learned programming language. Thankyou INCAPP for best coding experience.

"

Pratyush Mishra



The environment of coaching is very good. Notes, PDFs, & books everything is provided. Notes are really very nice. Overall, coaching is very good.

Khushi Mundra



Incapp is a best institute for coding, here staff is very supportive and our Praveen Chauhan Sir explain every topic very well.

Anand Kumar

"



I had a fantastic learning experience at Incapp! The instructors were highly knowledgeable and skilled in their respective fields. I would highly recommend Incapp to others.

Kartik Chauhan









Our Students Are Place In





































Everyone should learn how to program a computer, because it teaches you how to think.

Steve Jobs

All of my friends who have younger siblings who are going to college or high school - my number one piece of advice is: You should learn how to program.









No criteria, anybody who has an interest in coding can join.

Do you Provide Study material?

Yes, Immerse yourself in a superior learning experience with study materials meticulously crafted by our expert instructors.

Do I need to be good at maths to complete this program?

No, Only your dedication and ambition about learning is needed.

Do I get a certificate after course completion?

Yes. Upon successful completion of the course, you will be awarded a prestigious certificate that validates your achievement.

Is coding difficult?

No, it is not difficult. Coding is fun and challenging as you learn to create apps, games, websites, and lots more out of your creativity.

Are there tests/exams in the program?

Yes, In between the course, your instructor conducts the test to monitor your performance.







Courses we offer



Java Language



Oracle Certified Foundation Associate



Data Structure & Algorithms



Spring Boot Framework



Website Development



Python Language



Data Science



Django Framework



C Language



C++ Language



Coding Foundation Program



Full-Stack Software Development



React JS



Node JS



MERN





Are you ready to transform your career?

Our course may be demanding, but the incredible transformation you can experience will make it all worthwhile!



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