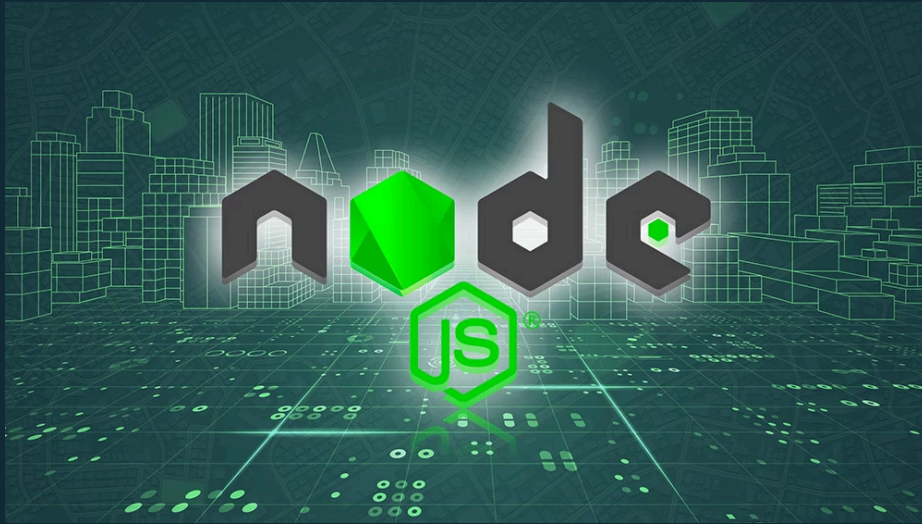


Node.js Certification Training



About Ecorporate Trainings

Ecorporate Trainings is designed to empower professionals with flexible, engaging, and personalised training solutions that drive career growth and organisational success.

We offer a learner-centric experience that allows employees to access a rich repository of courses and resources anytime, anywhere, on any device. Our platform features intuitive navigation, clear progress tracking, and interactive content tailored to diverse learning styles and proficiency levels.

About the Course

Ecorporate Trainings' Node.js Certification Training aligns with industry standards, and approved by the Government of India. This Node.js Certification course helps you to learn how to develop scalable web applications using Express Framework and deploy them using Nginx. In this Node.js course, you will learn how to build applications backed by MongoDB and gain in-depth knowledge of REST APIs, implement testing, build applications using micro services architecture and write a real-time chat application using Socket IO.

Introduction to Node.js

Learning Objective: In this best Node JS certification module, you will learn what is Node.js and what makes Node.js so popular. You will also learn how to use Node Package Manager (NPM) and Nodemon.

Topics:

- What is Node.js?
- Why Node.js?
- Installing NodeJS
- Node in-built packages (buffer, fs, http, os, path, util, url)
- Node.js Modules
- Import your own Package
- Node Package Manager (NPM)
- Local and Global Packages
- Push code to GitHub

Hands On:

- Installation of Node.js and Visual Studio Code
- Installation of GIT and push codes to GIT repository



File System Module and Express.js

Learning Objective: In this Node JS online course module, you will learn how to get user inputs via Command Line Arguments and store data using File system. You will also learn how to create the applications using Express Framework, whereas manage and deploy them using PM2 and Nginx.

Topics:

- Get Input from Users
- Pass Multiple Arguments with Yargs
- File System Module
- Operations associated with File System Module
- JSON Data
- Http Server and Client
- Sending and receiving events with EventEmitters
- Express Framework
- Run a Web Server using Express Framework
- Routes
- Deploy application using PM2 and Nginx

Hands On:

- Build an API using express, read file with FS module, and deploy application using PM2 and
- Nginx



Asynchronous Programming

Learning Objective: In this Node JS certification module, you will learn how to develop asynchronous Node.js applications using Call stack, Callback queue and Event Loop mechanism. You will also gain knowledge on how to work with HTTP request, Promises and EJS templates.

Topics:

- Call Stack
- Callbacks, Callback Queue and Event Loop
- Callback Abstraction
- Callback Chaining
- Promises
- Promise Chaining
- Request Package
- Customizing HTTP Requests
- Error handling with appropriate HTTP codes
- Introduction to template engine (EJS)

Hands On:

- Create A HTML Page Using EJS Template
- Create A Weather Application



Integration with MongoDB and Email Servers

Learning Objective: In this module, you will learn how to work with NoSQL Database – MongoDB. Also, you will learn how to send emails via Node.js application.

Topics:

- Introduction to NoSQL Databases and MongoDB
- Installation of MongoDB on Windows
- Installation of Database GUI Viewer
- Inserting Documents
- Querying, Updating and Deleting Documents
- Connect MongoDB and Node.js Application
- Exploring SendGrid
- Sending emails through Node.js application using SendGrid

Hands On:

- Installation of MongoDB and MongoDB Compass
- Connecting MongoDB And Node.js
- Sending Email Via Node.js Application Using SendGrid



REST APIs and GraphQL

Learning Objective: In this module, you will learn how to run queries via Node.js application along with some important aspects of Node.js like REST APIs, setting up Mongoose, Postman Installation and GraphQL.

Topics:

- REST API
- REST API in Express
- Postman
- MongoDB Driver API
- Express Router
- Mongoose API
- GraphQL
- GraphQL Playground

Hands On:

- Working Of mongodb API
- Working With Mongoose API
- Working With GraphQL API

User Authentication and Application Security

Learning Objective: In this module, you will learn how to secure your application by implementing API Authentication and User authentication using JSON Web Tokens (JWT).

Topics:

- Authentication
- Types of Authentication
- Session Vs Tokens
- JSON Web Tokens
- Bcrypt
- Node-localstorage

Hands On:

- Build a Login Application



Building Node.js Applications using ES6

Learning Objective: In this module, you will learn how to write your application using ES6. Also, you will learn how to Design Dashboard and perform CRUD operations.

Topics:

- ES6 variables
- Functions with ES6
- Import and Export with ES6
- Async/Await
- Introduction to Babel
- Rest API with ES6
- Browsing HTTP Requests with Fetch
- Processing Query String
- Creating API using ES6
- Transpilation
- Building Dashboard API
- Creating dashboard UI with EJS
- ES6 Aside: Default Function Parameters
- Data Validation and Sanitization

Hands On:

- Build a Dashboard Application Using ES6 concepts



Dynamic Client-Server Interaction using Socket.IO

Learning Objective: In this module, you will learn how Build Realtime Chat Application using Socket.IO.

Topics:

- Web Sockets
- Web Sockets
- Socket.io
- Broadcasting Events
- Sharing Your Location
- Event Acknowledgements
- Form and Button States
- Rendering Messages
- Working with Time and Timestamps for determining Location of Messages
- Storing Users, Rendering User List, Tracking Users Joining and Leaving
- Deploying the Chat Application
- Redis - Building API with Redis

Hands On:

- Creating a Realtime Chat Application using Socket.io
- Build an API using Redis



Testing Node.js Applications

Learning Objective: In this module, you will learn how to test your Node.js applications using Mocha and Chai, along with some important testing concepts related to Node.js Application.

Topics:

- Writing Tests and Assertions
- Testing Asynchronous Code
- Testing an Express Application
- Setup and Teardown
- Testing with Authentication
- Advanced Assertions
- Mocking Libraries
- Wrapping up User Tests
- Setup Task Test Suite
- Testing with Task Data

Hands On:

- Perform Testing with Mocha and Chai



Microservices Application

Learning Objective: In this module, you will learn how to build a Node.js application based on Microservices architecture and also how to deploy them to Docker containers.

Topics:

- Why Microservices?
- What is Microservices?
- Why Docker?
- What is Docker?
- Terminologies in Docker
- Child Processes
- Types of child process

Hands On:

- Microservices with Docker
- Working of Child Processes



Node.js Certification Project

What are the system requirements for this Node JS course?

Any computer system with 4GB of RAM and a decent HDD with the latest Windows, Linux or Mac OS is compatible to run Node.js applications. Ecorporate Trainings will help you set up the required software. You should download Node.js, MongoDB and Visual Studio Code. All these required software's are open source. The detailed step by step installation guides are available on LMS.

How will I execute the practicals during this Node JS certification course?

To execute the practical's, you will require an environment for Node.js and MongoDB. All Node.js applications will be built and debugged using IDE Visual Studio Code. The detailed step by step installation guides is available on LMS. In case you come across any doubt, the 24*7 support team will promptly assist you.



Industry-recognized Certificate

Upon successful completion of the course, you will receive an industry-recognised certificate of completion from Ecorporate Trainings



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Transforming learners into leaders.

Completion Certificate



Node.js Course



This certificate is awarded to an individual or team that
has demonstrated exceptional work quality or results
in the relevant project.



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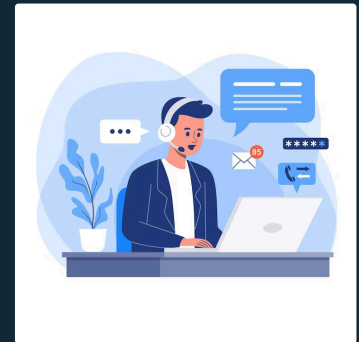
Ask your queries to our experts!

Ecorporate Trainings course counsellors and learner support advisors are available 24x7 to help you with your learning needs.

Call us on 9663241204!

or

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