

Introduction to Node.js (TT4153)

Category: Software Development & Programming | **Vendor:** Trivera Tech

Duration: 24.00 hours (3 days)

19.5 CPD Hours

Rating: ★ 4.6 (5,878 reviews)

Course Information

Delivery Format: Instructor Led - Online

Course Overview

Node.js is a server-side JavaScript platform using an event-driven, non-blocking I/O model allowing users to build fast and scalable data-intensive applications running in real time. This fast-paced hands-on course provides the core skills required to develop web applications with Node.js. You will progress from a rudimentary knowledge of JavaScript and server-side development to being able to create, maintain and test your own Node.js applications. You will explore the importance of transitioning to functions that return Promise objects, and the difference between fs, fs/promises and fs-extra, as well as how to use the HTTP Server and Client objects, and data storage with both SQL and MongoDB databases.

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Who Should Attend

Incoming attendees are required to have current, hands-on experience in developing basic web applications. Student should have some experience with HTML and CSS and be well versed in JavaScript. Experience with coding for the server side would be helpful.

Prerequisites & Entry Requirements

General Prerequisites:

Incoming attendees are required to have current, hands-on experience in developing basic web applications. Student should have some experience with HTML and CSS and be well versed in JavaScript. Experience with coding for the server side would be helpful.

Some general database knowledge would also be helpful.

Learning Outcomes

Upon successful completion of this course, participants will be able to:

This skills-focused course is approximately 50% hands-on. Our engaging instructors and mentors are highly experienced practitioners who bring years of current 'on-the-job' experience into every classroom.

Working in a hands-on learning environment, guided by our expert team, attendees will learn to:

Learn server-side JavaScript coding through Node.js

Explore the latest JavaScript features, and ECMAScript modules

Walk through different stages of developing robust applications using Node.js

Install and use Node.js for development

Use the Express application framework

Work with REST service development using the Restify framework

Use data storage engines such as MySQL, SQLITE3, and MongoDB

Detailed Course Outline

Overview of Node.js

- The capabilities of Node.js
- Why should you use Node.js
- The Node.js event-driven architecture
- Embracing advances in the JavaScript language
- Developing microservices or maxiservices with Node.js

Setting Up Node.js

- System requirements
- Installing Node.js using package managers
- Installing from the source on POSIX-like systems
- Installing multiple Node.js instances with nvm
- Requirements for installing native code modules
- Choosing Node.js versions to use and the version policy
- Choosing editors and debuggers for Node.js
- Running and testing commands
- Advancing Node.js with ECMAScript 2015, 2016, 2017, and beyond
- Using Babel to use experimental JavaScript features

Exploring Node.js Modules

- Defining a Node.js module
- Finding and loading modules using require and import
- Using npm the Node.js package management system
- The Yarn package management system

HTTP Servers and Clients

- Sending and receiving events with EventEmitter
- Understanding HTTP server applications
- HTTP Sniffer listening to the HTTP conversation
- Web application frameworks
- Getting started with Express
- Creating an Express application to compute
- Fibonacci numbers
- Making HTTPClient requests
- Calling a REST backend service from an Express application

Your First Express Application

- Exploring Promises and async functions in Express router functions
- Architecting an Express application in the MVC paradigm
- Creating the Notes application
- Theming your Express application
- Scaling up running multiple Notes instances

Implementing the Mobile-First Paradigm

- Understanding the problem the Notes app isn't mobile friendly
- Learning the mobile-first paradigm theory
- Using Twitter Bootstrap on the Notes application
- Flexbox and CSS Grids
- Mobile-first design for the Notes application
- Using third-party custom Bootstrap themes

Data Storage and Retrieval

- Remembering that data storage requires asynchronous code
- Logging and capturing uncaught errors
- Storing notes in a filesystem
- Storing notes with the LevelDB datastore
- Storing notes in SQL with SQLite3
- Storing notes the ORM way with Sequelize
- Storing notes in MongoDB

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Additional Course Details

Nexus Humans Introduction to Node.js (TT4153) training program is a workshop that presents an invigorating mix of sessions, lessons, and masterclasses meticulously crafted to propel your learning expedition forward.

This immersive bootcamp-style experience boasts interactive lectures, hands-on labs, and collaborative hackathons, all strategically designed to fortify fundamental concepts.

Guided by seasoned coaches, each session offers priceless insights and practical skills crucial for honing your expertise. Whether you're stepping into the realm of professional skills or a seasoned professional, this comprehensive course ensures you're equipped with the knowledge and prowess necessary for success.

While we feel this is the best course for the Introduction to Node.js (TT4153) course and one of our Top 10 we encourage you to read the course outline to make sure it is the right content for you.

Additionally, private sessions, closed classes or dedicated events are available both live online and at our training centres in Dublin and London, as well as at your offices anywhere in the UK, Ireland or across EMEA.

Frequently Asked Questions

Q: What delivery options are available for Introduction to Node.js (TT4153)?

We offer multiple delivery formats:

- Live Instructor-Led Classroom Online (Virtual/Live Online)
 - Traditional Instructor-Led Classroom Training (ILT)
 - On-site delivery at your offices anywhere in United Kingdom
 - Private dedicated courses customized for your team
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Q: How many CPD hours does this course provide?

The 3-day Introduction to Node.js (TT4153) course provides up to 19.5 CPD hours of structured learning. CPD certificates can be provided upon request.

Q: What is the duration of the Introduction to Node.js (TT4153) training?

The training takes place over 3 day(s), with each day lasting approximately 24.00 hours including breaks for lunch and refreshments.

Q: Do you provide corporate training for Introduction to Node.js (TT4153)?

Yes, we provide corporate training, dedicated training, and closed classes for Introduction to Node.js (TT4153). Training can take place anywhere in United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online allowing teams from across United Kingdom or internationally to attend.

Q: What related terms do people search for?

Popular related searches include: JavaScript; Node.js

Q: Why choose Nexus Human for Introduction to Node.js (TT4153)?

Nexus Human is recognized as one of the leading training providers. Our trainers have won multiple awards including:

- Small Firms Best Trainer Award
- National Training Partner of the Year (Ireland) - Multiple Years
- Global Top 30 Instructor Awards (2012, 2019, 2021)
- Tech Excellence Award Nominations
- Learning Performance Institute (LPI) External Training Provider Sponsor 2024

Q: Are there any discount codes available?

Yes! Use discount code **PENPAL5** when booking your Introduction to Node.js (TT4153) training. Please note that only one discount code can be used per booking and cannot be combined with other special offers.

Nexus Human

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