

NodeJS Programming

Audience NodeJS Programming Course

The course NodeJS Programming is intended for Web developers that want to learn how JavaScript and the NodeJS library can be used on the server-side of Web applications.

Prerequisites Course NodeJS Programming

Experience with JavaScript programming for the Front-End of Web Applications and a good knowledge of JavaScript is required to participate in this course.

Realization Training NodeJS Programming

The theory is treated on the basis of presentation slides. The concepts are illustrated with demos. The theory is interspersed with exercises. The course times are from 9.30 to 16.30.

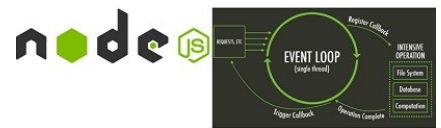
Certification NodeJS Programming

The participants receive an official certificate NodeJS Programming after successful completion of the course.

Duration: 2 days

Price: € 1499

[Open Schedule](#)



NodeJS Programming



Content NodeJS Programming

In the course NodeJS Programming participants learn how the NodeJS JavaScript library can be used on the server side of Web Applications. NodeJS originated in 2009 and has since then become a powerful asynchronous development framework for creating scalable web applications.

Node.js Library

The Node.js library, the popularity of which is still increasing, it is also part of the MEAN stack (MongoDB, ECMAScript, Angular and Node) which is aimed at the development of high-speed I/O-centric applications.

Node en NPM

The course starts by discussing the architecture of the Node.js library with runtime modules as filesystem, events and process. Also the NPM package manager that allows community modules to be included is treated.

Asynchronous Event Handling

Next the asynchronous event handling model of NodeJS is on the course schedule and the use of promises and futures of ECMAScript 6 and 7 for the handling of callbacks is explained.

Streaming Data en Express.js

Also attention is paid to the processing of streaming data and File I/O in NodeJS. Also the handling of multiple concurrent client requests in NodeJS is discussed as well as the Express.js Framework that deals with templating, routing and middleware services.

Database Access

The Database Access module will show you how to integrate NodeJS capabilities in the backend with databases like MongoDB, MySQL and SQLite.

Rest API

Finally attention is paid to the creation of a Rest API and using AngularJS for Frontend.

Modules NodeJS Programming

Module 1 : Intro NodeJS	Module 2 : Event Handling	Module 3 : Streaming Data
What is Node.js? Node.js Components Node.js Applications Node.js Programming Model Important Parts of Node.js Global Objects Hello Node.js Hello Node Server Node.js Module System Finding Modules Node Package Manager Installing Modules using NPM package.json Creating a Module	Node's Event Loop Interleaving Events Timers Synchronous versus Asynchronous Blocking versus Non Blocking Using Callbacks Synchronous Mode Asynchrony with Callbacks Node Events Callback versus Events EventEmitter Class Emitting Once Nesting too Much Asynchrony with Promises	What are Streams Streams in Node.js Methods and Events Reading from a Stream Writing to a Stream Piping the Streams Chaining the Streams Piping Methods and Events What are Buffers? Creating Buffers Writing to Buffers Reading from Buffers Buffer Operations Copy and Other Methods
Module 4 : File I/O	Module 5 : Express Framework	Module 6 : Rest Services
Interacting with File System Async and Sync Async Open File Information Reading and Writing Files Closing Files Truncating and Deleting Files Creating Directories Removing Directories Reading Directories Global Objects Process Object Actions and Streams os Module	Node Web Server Node Web Client What is Express? Important Modules Hello Express Request Properties Request Methods Response Properties Response Methods Basic Routing Serving Static Files Get and Post Method File Upload Cookies Management	What is REST? REST Web Services Simple REST Examples REST Web Service Principles ID and Links Multiple Representations Common REST Patterns Resource URI Access Patterns JSON JSON versus XML List Users API Add User API Path Parameters Delete API
Module 7 : Database Access SQL	Module 8 : Database Access NoSQL	
MySQL Connections MySQL Queries Create Database Create and Alter Table Primary Keys Insert Multiple Get Inserted ID Select from Table Select with Filter PlaceHolders	Create Database in MongoDB Create Collection Insert into Collection Insert Multiple Documents Id Field Find One Find All Find Some Query Filter Regex	