

JavaScript Programming

Audience Course JavaScript Programming

The course JavaScript Programming is intended for experienced HTML designers who want to learn how to use [JavaScript](#) to make Web pages more interactive.

Prerequisites Course JavaScript Programming

To join this course knowledge of and experience with [HTML](#) is required. Prior programming knowledge is not required but beneficial in understanding the concepts.

Realization Training JavaScript Programming

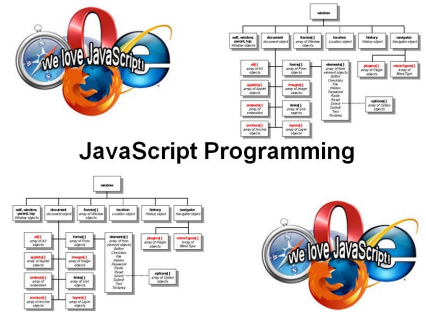
The subjects are discussed on the basis of presentation slides and demos. The theory is interspersed with exercises. The code is tested in different browsers. The course times are from 9.30 up and to 16.30.

Certification Course JavaScript Programming

Participants receive an official certificate JavaScript Programming after successful completion of the course.

Duration: 3 days

Price: € 1750

[Open Schedule](#)


Content Course JavaScript Programming

The course JavaScript Programming covers the basic principles and the use of the JavaScript language in HTML pages.

ECMA JavaScript Standard

After an introduction about the various ways in which JavaScript can be included in HTML pages and how the code is executed, the ECMA JavaScript standard is treated and the differences in handling JavaScript between browsers is discussed.

JavaScript Syntax

Next the syntax of the JavaScript language is discussed including the variables, data types, operators and control flow constructs of JavaScript. JavaScript arrays and functions are also treated.

Event Handling

An important aspect of JavaScript and a central element of the course is formed by the handling of events on the HTML page in JavaScript functions. The role of event functions for loading and submitting pages is treated and the events caused by mouse and keyboard interaction are discussed.

Document Object Model

Further attention is paid to the Document Object Model of HTML pages and the interaction with the page through JavaScript code and the DOM API. Next validating user input on forms on the client side through code is on the course schedule.

JavaScript Object Orientation

The course concludes with a discussion of object orientation in JavaScript. Follow up courses are [Advanced JavaScript Programming](#) and [TypeScript Programming](#)

Modules Course JavaScript Programming

Module 1 : JavaScript Intro	Module 2 : Variables and Data Types	Module 3 : Operators and Expressions
JavaScript Evolution JavaScript Characteristics JavaScript Usage ECMA Standard Dynamic HTML Script Tag Writing tot Document JavaScript Code Execution Script Files External Script Files Built-in Browser Objects Timers in JavaScript Debugging JavaScript JavaScript Tooling	JavaScript Data Types Variable Declaration Variable Initialization Identifiers Reserved Words Identifier Examples Numbers Special Values Number Usage Math Object Strings String Object Methods Booleans Objects	What is an Operator? JavaScript Operators Arithmetic Operators Logical Operators Comparison Operators Assignment Operators String Operators Bitwise Operators Bitwise Operator Examples Square Brackets Operator Parenthesis Operator Conditional Expression Operator Operator Precedence Expressions
Module 4 : Control Flow	Module 5 : Arrays	Module 6 : Functions
Control Structures if Statement if Examples if else Statement if else Examples Multiple Selections Nested if Statements switch case Statement Iteration Statements for Loop while Loop do..while Loop break and continue	Creating Arrays Accessing Arrays Array Indexes Array length Processing with for Processing with for each Multidimensional Arrays Array Methods Adding Elements Deleting Elements Associative Arrays Reversing Arrays Sorting Arrays	What are Functions? Defining Functions Calling Functions Function Parameters Using Parameters Variable Scope Returning from Functions Passing Parameters Data Validation Variable Argument List apply Method Function Naming Function Best Practices
Module 7 : Events	Module 8 : DOM API	Module 9 : Validation
HTML DOM Events Register Event Handlers Event Parameter Event Handlers List Mouse Events Key Events The DOM Event Model Common DOM Events Event Object Properties DOM Level2 Event Model	Document Object Model (DOM) Browser Object Model and DOM Document Object Properties and Methods DOM Navigation DOM Manipulation DOM Node Types Node Type Properties Querying the DOM Common Element Properties	Checking Form Input Regular Expressions Meta Characters Quantifiers Character Classes String RegEx Methods Replacing RexEx Flags RegExp Object Using RegExp
Module 10 : JavaScript Objects		
JavaScript Object Orientation ECMAScript 6 Standard Classes and Object Constructors Class Members Fields and Properties Functions/Methods Access Modifiers public, private, protected Safe Usage of "this" Using JSON Namespaces		