

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

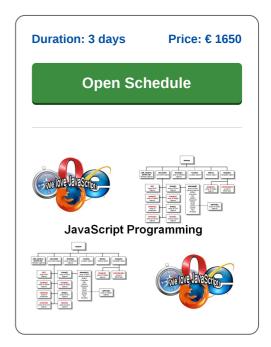
To join this course knowledge of and experience with <u>HTML</u> is required. Prior programming knowledge is not required but beneficial in understanding the concepts.

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.



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

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

Standerdmolen 10, 2e verdieping 3995 AA Houten

Locations

Houten, Amsterdam, Rotterdam, Eindhoven, Zwolle, Online