

## Core JavaScript

**Duration: 2 Days    Course Code: JSC    Delivery Method: Virtual Learning**

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### Overview:

#### Core JavaScript Course Overview

JavaScript is one of the most popular and commonly used programming languages today. Not only is it the language of the web and front-end frameworks like Angular and React, but it can now be used to build anything (front-end, back-end, or otherwise) thanks to runtimes like NodeJS. This course is designed to provide delegates with the fundamental knowledge and skills necessary to code in JavaScript, but with special attention on the front-end. Delegates will learn about variables and data types, functions, program flow, the DOM, event handling, and Web APIs. Exercises and examples are used throughout the course to give practical hands-on experience with the techniques covered.

NB: This course assumes ES6 as the baseline specification for JavaScript. This is because ES6 is now widely supported.

#### Virtual Learning

This interactive training can be taken from any location, your office or home and is delivered by a trainer. This training does not have any delegates in the class with the instructor, since all delegates are virtually connected. Virtual delegates do not travel to this course, Global Knowledge will send you all the information needed before the start of the course and you can test the logins.

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### Target Audience:

#### Who will the Course Benefit?

The course is aimed at those who are new or have had little exposure to JavaScript, and who will be responsible for building or maintaining JavaScript apps. It may also be of value to those who wish to refresh/renew their knowledge of JavaScript after some time away from it.

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### Objectives:

- Course Objectives
    - This course aims to provide delegates with the skills and knowledge necessary to write basic JavaScript code that exploits variables, functions, conditional and iterative statements, and objects. Delegates should also be able to exploit their knowledge of the DOM, event handling, and Web APIs to make web pages dynamic and interactive.
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### Prerequisites:

- Delegates should have some previous programming experience or at least be familiar with programming concepts. Delegates should also be familiar with HTML and CSS.
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### Follow-on-Courses:

#### Further Learning

- Intermediate JavaScript
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## Content:

### Core JavaScript Training Course Course Contents - DAY 1

#### Course Introduction

- Administration and Course Materials
- Course Structure and Agenda
- Delegate and Trainer Introductions

#### Session 1: INTRODUCTION

- Setting up the development environment
- What is JavaScript?
- HTML and CSS - a brief refresher
- Embedding JavaScript in HTML
- Executing JavaScript with NodeJS
- Browser JS vs. NodeJS
- A simple example
- Syntax and comments
- ECMAScript and JavaScript
- Deployment

#### Session 2: VALUES,VARIABLES AND TYPES

- Values
- Variables
- var,let,and const
- Naming conventions
- Numbers
- Strings
- Booleans
- Arrays
- Objects
- The typeof operator
- Dynamic typing
- Type conversion and coercion
- Arithmetic
- Handling text incl. template literals

#### Session 3: FUNCTIONS

- Function declarations
- Parameters
- Return statements
- Function expressions
- Arrow functions
- Declaration,expression,or arrow function?
- Calling functions
- Pass by value or reference?
- An introduction to scope
- Default parameters
- Built-in functions

#### Session 4: PROGRAM FLOW

- Relational and logical operators
- Equality comparisons and sameness
- Truthy and falsey
- Conditional statements
- Iterative statements
- Error handling
- Debugging Core JavaScript Training Course Course Contents - DAY 2

#### Session 5: OBJECTS

- Objects (again)
- Properties
- Dot notation
- Square bracket notation
- Function properties (methods)
- The this keyword
- Iterating over object properties
- The Object type
- Array objects and methods
- String objects and methods

#### Session 6: DOM REFERENCING AND MANIPULATION

- HTML elements and JavaScript objects
- The DOM
- DOM referencing
- DOM data types
- Element manipulation
- Creating,adding and removing elements

#### Session 7: EVENT HANDLING

- Events
- Event propagation
- Event listeners
- Event listener registration
- The event object

#### Session 8: WEB APIS

- What is an API?
- Browser APIs
- Accessing browser APIs
- Date
- Math
- RegExp
- JSON
- Client-side storage
- Geolocation
- Others

## Further Information:

For More information, or to book your course, please call us on Head Office 01189 123456 / Northern Office 0113 242 5931

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