

Course duration

- 4 days

Course Benefits

- Master the fundamentals of JavaScript.
- Understand JavaScript syntax.
- Learn about objects, methods, and properties.
- Work with JavaScript variables to store data.
- Organize code by creating your own functions.
- Write flow control logic to handle real-life decisions and complex problems.
- Use loops to save time.
- Capture and manage events such as mouse clicks and page loads.
- Modify HTML and CSS on the fly with JavaScript.
- Handle and prevent JavaScript errors.

Available Delivery Methods

Public Class

Public expert-led online training from the convenience of your home, office or anywhere with an internet connection. Guaranteed to run .

Private Class

Private classes are delivered for groups at your offices or a location of your choice.

Self-Paced

Learn at your own pace with 24/7 access to an On-Demand course.

Course Outline

1. JavaScript Basics
 1. The Name "JavaScript"
 2. What is ECMAScript?
 3. The HTML DOM
 4. JavaScript Syntax
 5. Accessing Elements
 1. Dot Notation
 2. Square Bracket Notation

6. Where Is JavaScript Code Written?
7. JavaScript Objects, Methods and Properties
2. Variables, Arrays, and Operators
 1. JavaScript Variables
 1. A Loosely-Typed Language
 2. Google Chrome DevTools
 3. Variable Naming
 4. Storing User-Entered Data
 2. Constants
 3. Arrays
 1. Associative Arrays
 2. Array Properties and Methods
 4. Playing with Array Methods
 5. JavaScript Operators
 6. The Modulus Operator
 7. The Default Operator
3. JavaScript Functions
 1. Global Objects and Functions
 1. parseFloat(object)
 2. parseInt(object)
 3. isNaN(object)
 2. User-defined Functions
 1. Function Syntax
 2. Passing Values to Functions
 3. Returning Values from Functions
4. Built-In JavaScript Objects
 1. String
 2. Math
 3. Date
 4. Helper Functions
5. Conditionals and Loops
 1. Conditionals
 2. if - else if - else Conditions
 3. Short-circuiting
 4. Switch / Case
 5. Ternary Operator
 6. Truthy and Falsy
 7. Loops
 1. while Loop Syntax
 2. do while Loop Syntax
 3. for Loop Syntax
 4. for of Loop Syntax
 5. for in Loop Syntax
 8. break and continue
 9. Array: forEach()
6. Event Handlers and Listeners
 1. On-Event Handlers

1. The getElementById() Method
 2. The addEventListener() Method
 3. Capturing Key Events
 4. Benefits of Event Listeners
 5. Timers
7. The HTML Document Object Model
 1. CSS Selectors
 1. Type Selectors
 2. Descendant Selectors
 3. Child Selectors
 4. Class Selectors
 5. ID Selectors
 6. Attribute Selectors
 2. The innerHTML Property
 3. Nodes, NodeLists, and HTMLCollections
 4. Accessing Element Nodes
 1. getElementById()
 2. getElementsByTagName()
 3. getElementsByClassName()
 4. querySelectorAll() and querySelector()
 5. Dot Notation and Square Bracket Notation
 6. Collections of Elements
 7. window is Implicit
 8. Accessing Elements Hierarchically
 9. Accessing Attributes
 10. Creating New Nodes
 11. Focusing on a Field
 12. Shopping List Application
 13. Manipulating Tables
8. CSS Object Model
 1. Changing CSS with JavaScript
 2. The style Property vs getComputedStyle()
 3. Hiding and Showing Elements
 4. Checking and Changing Other Style Properties
 5. Increasing and Decreasing Measurements
 6. Making changeFontSize() More Flexible
 7. Custom data Attributes
 8. Gotcha with fontWeight
 9. Font Awesome
 10. classList Property
9. Errors and Exceptions
 1. Runtime Errors
 2. Completely Unhandled Errors
 3. Globally Handled Errors
 4. Structured Error Handling
 5. Try/Catch

Class Materials

Each student will receive a comprehensive set of materials, including course notes and all the class examples.

Class Prerequisites

Experience in the following *is required* for this JavaScript class:

- HTML

Experience in the following *would be useful* for this JavaScript class:

- CSS
- Programming experience

Prerequisite Courses

Courses that can help you meet these prerequisites:

- [Introduction to HTML Training - old](#)

Follow-on Courses

- [Ajax Training](#)
- [Advanced JavaScript Programming](#)
- [jQuery Fundamentals Training](#)
- [Building Web Applications with TypeScript, Angular, and React](#)
- [Beginning Modern JavaScript Development with Microservices, WebRTC, and React](#)