

# Introduction to JavaScript – Writing Your First Script

Course Length: 8 hrs

## Overview

The course is designed to give you a fundamental knowledge of JavaScript. It covers the structural building blocks of writing JavaScript code as well as best practices for scripting. After completing this course, you will be able to read JavaScript files, understand their layout, identify components, and know where to adjust or input your own code.

## Audience

This course is designed for GIS professionals who want to understand the basics of the JavaScript language, which is used to add functionality to websites and web applications.

## Topics Covered

- Introduction to JavaScript – Understanding what JavaScript is used for, where it is written, and how it works in conjunction with HTML and CSS. (What is JavaScript?; Things You Can Do With JavaScript; JavaScript Code Locations; Scripts vs Programs; Writing Code in An Integrated Development Environment; Visual Studio Code Basics)
- JavaScript Syntax – Getting familiar with basic JavaScript syntax. (JavaScript Statements; Values; Operators; Keywords; Comments; Variable Declarations and Scope; Variable Naming Conventions; Object-Oriented Scripting; Properties and Methods; Working on HTML Elements with JavaScript Statements; Changing a Style; Opening a Splash Screen)
- Controlling Web Page Behavior – Learning the HTML Document Object Model details. (Understanding the Interactive Behavior of a Web Page; Events; Listening for an Event; Accessing the HTML DOM with JavaScript; JavaScript Functions)
- Managing Flow – Controlling the flow of a script using conditional statements and looping methods. (Decision Making; IF Statement; Comparison and Logical Operators; Nested Conditionals; The Switch Statement; Looping Syntax)

## Format

In-person instruction with hands-on practice and course materials you can keep.

## Prerequisites and Recommendations

Attendees should know Microsoft Windows® and be knowledgeable in the topics covered in the **HTML and CSS - Building and Styling Web Pages** course.