

# JavaScript Programming: (Fourth Edition)

Course length: 1 day

## Course Description

You used XHTML to develop web pages with interactive content to attract visitors. In this course, you will develop interactive web content using JavaScript.

**Course Objective:** You will create and execute scripts using JavaScript.

**Target Student:** This course is intended for students who are familiar with developing web pages; students should be proficient in writing XHTML code and using Internet Explorer® and Mozilla Firefox®.

**Prerequisites:** Students must have some basic knowledge of programming. They should be able to create web pages using XHTML code. They should also be proficient in using web browsers such as Internet Explorer and Mozilla Firefox.

**Delivery Method:** Instructor led, group-paced, classroom-delivery learning model with structured hands-on activities.

## Performance-Based Objectives

Upon successful completion of this course, students will be able to:

- Create and execute a Javascript script. They will also identify some guidelines to be followed while writing scripts.
- Display messages on the status bar of the browser window, create a new window that helps open linked pages, and manage the window using the properties and methods of the window object.
- Add content to documents, create dynamic documents, and navigate between layers in a document.
- Create a form, store data in it, and manipulate the data.
- Validate data using control constructs.
- Manipulate numerical, string, and date values.
- Search for a pattern using a regular expression and understand Ajax.

## Course Content

### Lesson 1: Getting Started with JavaScript

Topic 1A: Create a Basic JavaScript Script

Topic 1B: Execute a Script

Topic 1C: Add Comments to a Script

### Lesson 2: Managing the Browser Window

Topic 2A: Display Messages on the Status Bar

Topic 2B: Open a Linked Page in a New Window

### Lesson 3: Managing the Document

Topic 3A: Write Content to a Document

Topic 3B: Create a Dynamic Document

### Lesson 4: Manipulating Data and Functions

Topic 4A: Create a Form

Topic 4B: Create a Function

Topic 4C: Store Data Using Variables

Topic 4D: Manipulate Data Using Operators

Topic 4E: Convert Data Types



### **Lesson 5: Validating Statements Using Control Constructs**

Topic 5A: Validate Statements

Topic 5B: Execute Statements Iteratively

### **Lesson 6: Calculating Numerical Values**

Topic 6A: Calculate Numerical Values

Topic 6B: Manipulate String Values

Topic 6C: Manipulate Date Values

### **Lesson 7: Using Regular Expressions and Understanding Ajax**

Topic 7A: Use Regular Expressions to Match Patterns in Strings

Topic 7B: Understand the Basics of Ajax

**Appendix A:** Browser-Specific Dynamic Documents

**Supplemental Lesson:** Browser-Specific Dynamic Documents

**Appendix B:** Other Form Validation Techniques

**Supplemental Lesson:** Other Form Validation Techniques

