Information Technology

Programming in HTML5 with JavaScript and CSS3

Course Introduction

This training course provides an introduction to HTML5, CSS3, and JavaScript. This is designed to help participants gain the fundamental HTML5/CSS3/JavaScript programming skills. This course is an entry point into both the Web application and Windows Store apps training paths. This will focus on using HTML5/CSS3/JavaScript to implement programming logic, define and use variables, perform looping and branching, develop user interfaces, capture and validate user input, store data, and create well-structured application. This course uses Visual Studio 2017, running on Windows 10.

Target Audience

- Cloud Computing Engineer
- Computer Network Specialist
- Computer Support Specialist
- Database Administrator
- Information Technology Analyst
- Information Technology Leadership
- Information Security Specialist
- Software/Application Developer
- Web Developer
- Technology sales consultant

Learning Objectives

- Gain a comprehensive understanding of the how to use Visual Studio 2017.
- Learn the new features of HTML5, create and style HTML5 pages by using CSS3 and run web applications.
- Add interactivity to an HTML5 page by using JavaScript.

- Create HTML5 forms by using different input types, and validate user input by using HTML5 attributes and JavaScript code.
- Send and receive data to and from a remote data source by using XMLHTTPRequest objects and Fetch API.
- Create well-structured and easily-maintainable JavaScript code.
- Write modern JavaScript code and use babel to make it compatible to all browsers.
- Use common HTML5 APIs in interactive Web applications.
- Create Web applications that support offline operations.
- Create HTML5 Web pages that can adapt to different devices and form factors.
- Add advanced graphics to an HTML5 page by using Canvas elements, and by using and Scalable Vector Graphics.
- Enhance the user experience by adding animations to an HTML5 page.
- Use Web Sockets to send and receive data between a Web application and a server.
- Improve the responsiveness of a Web application that performs long-running operations by using Web Worker processes.
- Use WebPack to package web applications for production.

Course Outline

- **Day 01**

  Module 1: Overview of HTML and CSS

  - Module 2: Creating and Styling HTML Pages
  - Module 3: Introduction to JavaScript
- **Day 02**

  Module 4: Creating Forms to Collect and Validate User Input

  - Module 5: Communicating with a Remote Server
  - Module 6: Styling HTML5 by Using CSS3
- **Day 03**

  Module 7: Creating Objects and Methods by Using JavaScript

  - Module 8: Creating Interactive Pages by Using HTML5 APIs
  - Module 9: Adding Offline Support to Web Applications
- **Day 04**

Module 10: Implementing an Adaptive User Interface

  ◦ Module 11: Creating Advanced Graphics
  ◦ Module 12: Animating the User Interface
- **Day 05**

Module 13: Implementing Real-time Communication by Using Web Sockets

  ◦ Module 14: Performing Background Processing by Using Web Workers
  ◦ Module 15: Packaging JavaScript for Production Deployment

Confirmed Sessions

FROM	TO	DURATION	FEES	LOCATION
June 30, 2025	July 4, 2025	5 days	4250.00 $	UAE - Abu Dhabi
Aug. 18, 2025	Aug. 22, 2025	5 days	5950.00 $	USA - Los Angeles
Dec. 29, 2025	Jan. 2, 2026	5 days	4250.00 $	UAE - Dubai