

# JavaScript, HTML and CSS Web Fundamentals

**Course Duration: 16 Hours**

**Course code: JS-HTML-CSSWF**

## 1. Course Overview

The 40410-A: JavaScript, HTML, and CSS Web Development course provides a complete foundation for building modern and interactive web pages. Starting with HTML basics, learners progress to document structures, formatting, and advanced HTML features. The course also covers CSS for styling and responsiveness, along with JavaScript for adding interactivity and programmatic functionality. Participants gain hands-on skills with external libraries like jQuery, AngularJS, and Bootstrap to enhance and modernize web applications. By the end, learners will be equipped to design, develop, and implement dynamic, responsive, and professional-quality websites.

## 2. What you'll learn?

**This course equips learners with foundational web development skills in HTML, CSS, and JavaScript.**

- Beginners in web development seeking to learn core technologies.
- Front-end developers looking to strengthen their HTML, CSS, and JavaScript skills.
- Designers transitioning into front-end development roles.
- Computer science students seeking practical web programming experience.
- Hobbyists and personal bloggers aiming to customize their websites.
- Webmasters responsible for managing and improving websites.
- IT professionals looking to expand their knowledge in web development for career growth.
- Entrepreneurs planning to launch their own web-based startups.
- Marketing professionals collaborating with development teams.

- Content creators and digital media specialists looking to enhance their technical skills.
- Educators and instructors teaching web development fundamentals.

### 3. Target Audience

- Beginners with no prior programming experience.
- Students, professionals, and career changers wanting to start in frontend web development.
- Designers who want to enhance their skills with coding knowledge.
- Anyone curious about building interactive websites.

### 4. Pre-Requisites

- No prior coding experience required.
- Basic computer literacy and web browsing skills recommended.

### 5. Course content

#### **Module 1: Creating Web Pages using Hypertext Markup Language (HTML)**

- Introduction to HTML
- Understanding document structure and layout
- Working with basic HTML elements
- Formatting HTML elements
- Introduction to hyperlinks
- Configuring the development environment
- Using various HTML elements on a web page
- Creating a basic HTML document using core elements

#### **Module 2: Creating Sophisticated Document Structures using HTML**

- Capturing user input with HTML forms
- Introduction to HTML5 semantic elements

- Working with Scalable Vector Graphics (SVG)
- Implementing media controls
- Adding additional features to web pages
- Using advanced HTML features such as forms

### **Module 3: Designing Web Page Elements using Cascading Style Sheets (CSS)**

- Introduction to CSS
- Working with style definitions
- Understanding style inheritance
- Applying the box model
- Using web fonts
- Styling web pages with CSS

### **Module 4: Implementing Program Flow using JavaScript (JS)**

- Introduction to JavaScript
- Working with JavaScript data types
- Understanding JavaScript callbacks
- Exploring advanced JavaScript concepts
- Utilizing HTML5 APIs
- Implementing an image carousel in HTML5
- Adding logical flow to web pages with JavaScript

### **Module 5: Adding External Libraries to Enhance HTML Applications**

- Introduction to jQuery
- Introduction to AngularJS
- Introduction to Bootstrap
- Introduction to TypeScript
- Introduction to Sass (Syntactically Awesome Stylesheets)
- Modernizing web pages with external libraries

- Utilizing various libraries to enhance HTML, CSS, and JavaScript functionality

