



(An Autonomous Institution - AFFILIATED TO ANNA UNIVERSITY, CHENNAI)

S.P.G.Chidambara Nadar - C.Nagammal Campus

S.P.G.C.Nagar, K.Vellakulam - 625 701 (Near Virudhunagar), Madurai District.



XploCode
Infotech Pvt Ltd

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
Industry Certified Value Added Course

on
WEB DEVELOPMENT BOOTCAMP – JAVASCRIPT

05.01.2026 to 10.01.2026

Course Objectives

- To understand the fundamental structure and components of web pages using HTML and CSS.
- To apply responsive design techniques using modern CSS frameworks such as Bootstrap and Tailwind.
- To develop interactive and dynamic web pages using JavaScript and ES6 features.
- To implement effective client-side form validation and enhance user experience using JavaScript.
- To gain practical exposure to real-world web application flow through API usage and live project demonstrations.

UNIT I - HTML AND CSS BASICS

Structure of an HTML document – Basic HTML tags and Attributes – Forms and Input fields – Basic CSS selectors, properties, and values – Types of CSS – Creating a Static Webpage using HTML & CSS

UNIT II - BOOTSTRAP AND TAILWIND

Introduction to Bootstrap and Tailwind CSS – Using Built-in Bootstrap Classes – Basic Grid System using Bootstrap

UNIT III - JAVASCRIPT BASICS

Introduction to JavaScript – JavaScript Syntax and Basic Program Structure – Variables and Data Types – Operators and Expressions – Control Statements – Functions in JavaScript – Introduction to the DOM – Events and Event Handling in JavaScript – Introduction to Arrays – Basic Array Functions and Methods – Working with Forms using JavaScript – Reading Form Input Values – Displaying Output Dynamically on Web Pages – ES6 Features

UNIT IV - CLIENT-SIDE VALIDATION WITH JAVASCRIPT

Introduction to Client-Side Validation – Form Validation Concepts – Validating Input Fields – Preventing Invalid Form Submission – Enhancing User Experience with Validation - Protocol – API – Postman – CRUD using Dummy API

UNIT V - SIMPLE PROJECT DEMO

SDLC – Understanding Basic Project Structure – Brief Introduction to Backend Usage – Understanding the Overall Flow of a Web Application (Frontend and Backend) – Live Project Demonstration

Course Outcomes (COs)

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

CO No	Course Outcome	Knowledge Level
CO1	Design and develop static web pages using HTML tags, attributes, forms, and CSS styling techniques.	K3-Apply
CO2	Create responsive and mobile-friendly web layouts using Bootstrap grid systems and Tailwind utility classes.	K3-Apply
CO3	Implement dynamic behaviors in web pages using JavaScript fundamentals, DOM manipulation, events, and ES6 features.	K3-Apply
CO4	Apply client-side validation techniques, handle form inputs, and perform CRUD operations using APIs and tools like Postman.	K3-Apply
CO5	Demonstrate an understanding of the complete web application development process by developing and presenting a simple working project.	K3-Apply

PROGRAMME SPECIFIC OUTCOMES (PSOs):

PSO1:

Professional Skills: The ability to understand, analyze and develop computer programs in the areas related to algorithms, system software, multimedia, web design, big data analytics, and networking for efficient design of computer-based systems of varying complexity.

PSO2:

Problem-Solving Skills: The ability to apply standard practices and strategies in software project development using open-ended programming environments to deliver a quality product for business success.

Course Name	CO. No.	POs											PSOs	
		1	2	3	4	5	6	7	8	9	10	11	1	2
VAC - Web Development Bootcamp: JavaScript	CO1	3	2	2	2	-	2	-	2	-	-	-	3	2
	CO2	3	2	2	-	2	2	-	2	2	-	-	2	-
	CO3	3	2	2	-	2	-	2	-	2	-	-	2	-
	CO4	3	2	2	2	-	2	-	-	2	-	2	2	-
	CO5	3	2	2	2	2	2	2	2	2	2	2	2	2

1 - low, 2 - medium, 3 - high, '-' - no correlation

VAC Web Development Bootcamp: JavaScript	SDGs																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
				✓				✓	✓								

G. Mahima
Trainer

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