



Codevensiva Academy

HTML, CSS, JavaScript + AI Web Development Program

(HTML + CSS + JavaScript Program)

Duration: 2 Months (8 Weeks)

Mode: Online Live Training

Level: Beginner → Advanced → Industry Ready

1. Course Overview

This course is designed to transform beginners into industry-ready frontend developers using HTML5, CSS3, JavaScript (ES6+) and AI-assisted development. The curriculum starts with strong fundamentals and gradually progresses toward modern frontend concepts, responsive design, dynamic UI development, API integration, AI tools, deployment, and career preparation.

2. Learning Objectives

- Understand how modern websites work
- Build strong HTML, CSS and JavaScript fundamentals
- Develop responsive and visually appealing websites
- Create dynamic and interactive user interfaces
- Learn modern JavaScript (ES6+) and DOM manipulation
- Consume APIs and handle real-world frontend logic
- Use AI tools to improve coding productivity
- Deploy projects professionally
- Build portfolio-ready applications
- Prepare for frontend interviews

3. Who Should Join?

- Beginners starting web development
- Students preparing for software development careers
- Frontend development aspirants
- Working professionals transitioning to software development
- Developers interested in AI-assisted coding

4. Prerequisites

No prior programming knowledge is required. Basic computer usage and internet browsing knowledge are sufficient.

5. Detailed Weekly Curriculum

Week 1 — Internet, Browsers & HTML Foundations

Objective: Understand how the web works and build a strong HTML foundation.

Topics Covered:

- What is Web Development?
- Frontend vs Backend Development
- How websites work
- Client-Server Architecture
- Domain, Hosting & Browser basics
- VS Code installation and setup
- Developer productivity extensions
- HTML introduction and structure
- DOCTYPE, head, body
- Headings, paragraphs, formatting tags
- Links, images, lists
- Tables basics
- Semantic HTML (header, footer, nav, section, article)
- Best practices for clean HTML

Practical Project: Personal Portfolio Website

Week 2 — Advanced HTML, Forms & Accessibility

Objective: Learn advanced HTML concepts and real-world form creation.

Topics Covered:

- HTML Forms in depth
- Input types
- Validation techniques
- Checkboxes, radio buttons
- Dropdowns and textarea
- Audio & Video embedding
- iFrames
- SEO basics with meta tags
- Accessibility (A11Y)

- ARIA basics
- Local Storage & Session Storage introduction

Practical Project: Student Registration Form

Week 3 — CSS Fundamentals

Objective: Master website styling and visual presentation.

Topics Covered:

- What is CSS?
- CSS Syntax
- Selectors
- Colors, fonts and typography
- Margin, padding, border
- CSS Box Model
- Width, height
- Display properties
- Positioning (relative, absolute, fixed, sticky)
- Backgrounds and gradients

Practical Project: Landing Page UI

Week 4 — Modern CSS & Responsive Design

Objective: Build modern responsive websites.

Topics Covered:

- Flexbox in depth
- CSS Grid
- Media Queries
- Responsive Design
- Mobile-first approach
- Animations & transitions
- Hover effects
- Modern UI design practices
- Glassmorphism basics
- Reusable CSS architecture

Practical Project: Responsive Business Website

Week 5 — JavaScript Fundamentals

Objective: Build strong JavaScript programming skills.

Topics Covered:

- Variables & data types
- Operators
- Conditions (if, else, switch)
- Loops (for, while, do while)
- Functions
- Function scope
- Arrays
- Objects
- String methods
- Math functions
- Error handling basics

Practical Project: Calculator Application

Week 6 — Advanced JavaScript & DOM Manipulation

Objective: Create dynamic and interactive applications.

Topics Covered:

- Modern JavaScript (ES6+)
- let, const
- Arrow functions
- Template literals
- Destructuring
- Spread & Rest operators
- DOM manipulation
- Events & Event Handling
- Promises
- Async/Await
- Fetch API
- Browser Storage

Practical Project: Todo App + Expense Tracker

Week 7 — AI-Assisted Development & Real Projects

Objective: Learn modern AI-assisted development workflows.

Topics Covered:

- Introduction to AI in software development
- Prompt engineering basics
- Using ChatGPT for frontend development
- Cursor AI
- GitHub Copilot

- AI-assisted debugging
- Generating UI using AI
- Converting screenshots to HTML/CSS
- Weather API integration
- JSON handling

Practical Project: Weather App + Quiz App + Notes App

Week 8 — Git, Deployment & Career Preparation

Objective: Become job-ready and deploy projects.

Topics Covered:

- Git basics
- GitHub workflow
- Repositories, commits, branches
- Hosting using Netlify
- Hosting using Vercel
- Browser debugging
- Performance optimization basics
- Interview preparation
- Resume building
- Portfolio guidance
- LinkedIn optimization

Practical Project: Final Capstone Project

6. Real-World Projects

- Personal Portfolio Website
- Landing Page UI
- Student Registration Form
- Responsive Business Website
- Calculator Application
- Expense Tracker
- Weather Application
- Quiz Application
- Notes Application

7. Industry Tools Covered

- VS Code
- Chrome DevTools

- Git & GitHub
- Netlify
- Vercel
- ChatGPT
- Cursor AI
- GitHub Copilot

8. Why Learn at Codevensiva Academy?

- Strong Beginner Fundamentals
- Industry-Oriented Curriculum
- AI-Assisted Learning
- Real-World Projects
- Hands-On Practical Sessions
- Portfolio Building
- Interview Preparation
- Live Mentor-Led Sessions

9. Certification

Students who successfully complete the program will receive an official Codevensiva Academy Course Completion Certificate.