

Web Design and Development Certification Curriculum

The Web Design and Development Basic Certification is aimed at individuals who want to learn the basics of designing and developing websites. This program provides a solid foundation in HTML, CSS, JavaScript, basic SEO, and introductory back-end development. The program consists of lectures, hands-on projects, quizzes, and a final examination.

Duration:

12 weeks (3 months)

Modules

Week 1: Introduction to Web Development

Day 1: Course Introduction

- Overview of Web Development
- Career Paths in Web Development

Day 2-3: Internet Basics

- How the Internet Works
- What is HTTP/HTTPS?

Day 4-5: Setting up a Development Environment

- Text Editors (VS Code, Sublime Text)
- Developer Tools in Browsers

Week 2-3: HTML (HyperText Markup Language)

Day 1: Introduction to HTML

- HTML Syntax
- Elements, Attributes, and Tags

Day 2-5: Basic HTML Tags

• Headings, Paragraphs, Lists, Links

Project 1: Create a Basic HTML Page

Week 4-5: CSS (Cascading Style Sheets)

Day 1: Introduction to CSS

- Inline, Internal and External CSS
- Basic Syntax

Day 2-5: CSS Properties

• Text, Color, Borders, Margins, and Padding

Project 2: Style Your HTML Page with CSS

Week 6: Responsive Design

Day 1-2: The Box Model

• Understanding the CSS Box Model

Day 3-4: Media Queries

• Making a Website Responsive

Day 5: Flexbox and Grid

• CSS Layout Techniques

Project 3: Create a Responsive Web Page

Week 7-8: JavaScript Fundamentals

Day 1: Introduction to JavaScript

• Syntax, Variables, and Data Types

Day 2-3: Control Structures

• Loops, Conditionals, and Functions

Day 4-5: DOM Manipulation

• Selecting, Modifying and Deleting Elements

Project 4: Create an Interactive Web Page

Week 9: Basic SEO (Search Engine Optimization) Day 1: Introduction to SEO

• Importance of SEO

Day 2: On-Page SEO

• Meta Tags, Header Tags, and Alt Text

Day 3: Off-Page SEO

• Backlinks, Social Media Signals

Day 4: SEO Tools

• Google Analytics, Google Search Console

Project 5: Implement Basic SEO Strategies on a Web Page

Week 10: Introduction to Back-End Development Day 1-2: Basics of Server and Client

- Role of a Web Server
- Understanding Client-Server Architecture

Day 3-5: Introduction to Databases

• SQL, NoSQL

Week 11: Final Project

Day 1-5: Build a Complete Website

• Planning, Wireframing, Development, and Deployment

Week 12: Review and Final Examination

Day 1-3: Review of All Modules

• Q&A sessions

Day 4-5: Final Examination

- Written Test covering all modules
- Project Evaluation

Grading

- Quizzes: 30%
- Projects: 50%
- Final Exam: 20%

Prerequisites

- Basic computer literacy
- No prior coding experience is required

Materials

- Lecture Slides
- Handouts
- Sample Code
- Online Resources

Certification

Upon successful completion, students will receive a Web Design and Development Basic Certification.