CVM UNIVERSITY
Aegis: Charutar Vidya Mandal (Estd.1945)

FACULTY OF ENGINEERING & TECHNOLOGY

Effective from Academic Batch: 2025-26

Programme: **Bachelor of Technology (Computer Engineering)**

Semester: **II**

Course Code: **102040201**

Course Title: **Basics of Web Designing**

Course Group: **Professional Core Course**

Course Objectives:

The objective of this course is to provide students with foundational skills in web development by introducing the core concepts of HTML, CSS, and JavaScript for designing interactive and responsive websites. Students will learn to design visually appealing and interactive web pages and understand the complete process of publishing and hosting websites online.

Teaching & Examination Scheme:

Contact hours per week			Course Credits	Examination Marks (Maximum / Passing)				
				Theory		J/V/P*		Total
Lecture	Tutorial	Practical		Internal	External	Internal	External	
3	0	2	4	50 / 18	50 / 18	25 / 9	25 / 9	150 / 54

* **J**: Jury; **V**: Viva; **P**: Practical

Detailed Syllabus:

Sr.	Contents	Hours
1	**Introduction to World Wide Web and Concepts of Web Designing:** Overview of Internet and WWW, Basic elements of the Internet, Internet services, Internet Browsers and Servers, Internet Service Provider (ISP), Introduction to Internet Protocols, Introduction to Web Page, Web Site, Web Browser, Fundamentals of Web Designing, Understanding look and feel of a website from user's perspective, Types of websites, User Interface and Experience, Standard Layouts, Navigations, Sitemaps. Introduction to Git, Creating a Git repository, Basic Git commands, Branching and merging	6
2	**Introduction to HTML:** Basics of HTML, Structure of an HTML page, HTML tags, Meta tags, HTML forms, Frames, Tables, Images, Buttons, Lists, User inputs and and Search engine. Introduction to HTML5, New features in HTML5 as compared to HTML, Audio and Video Interfaces, Iframe, Headers and Footers, Articles, HTML Semantics.	6
3	**CSS Experience:** CSS Introduction, Structure and Syntax of CSS, CSS properties: Background, Color, Fonts, Borders, Positioning, Floating, Animations, Images,Box Model, Pseudo class, Wild cards etc.	5
4	**Introduction to CSS 3.0:** New features in CSS3 compared to CSS, Variables, CSS3 Properties: Opacity, Reflections, Display, Gradients, Transitions, Transformations, Animations, Rounded Corners, CSS layout with FlexBox and Grid, Web Fonts, Responsive web design and Media Query.	6

5	**Client-Side Scriptingwith JavaScript:** Introduction to JavaScript, Architecture and Execution, Types of JavaScript, Variable, Data types, Operators, Pop-up boxes,Functions, Loops, Conditions etc., Document object Model (DoM),Basic Event Handling: Click, Mouse (onmouseover, onmouseout), and Keyboard Events (onkeydown, onkeyup)	**6**
6	**Responsive web Design using Bootstrap:** Overview of Bootstrap, Environment Setup, Bootstrap Package, Bootstrap Container Classes, Grid System, Buttons, Tables, Navbars	**6**
7	**Introduction to Web Publishing or Hosting:** Basics of Web Publishing, Introduction to Web Hosting, Web Hosting Services and Platforms, Website Deployment Process, Hands-on: Publishing a Website Online	**5**
	Total:	**40**

List of Practicals / Tutorials:

1	Demonstration of Web Browsers: Different components, Checking SSL Certificates, Inspect Elements, Browser Console, view Source etc.
2	Demonstration of Git Setup and Repository Creation
3	Basic HTML Programming 1. Creating Sample HTML pages using tags like headers, paragraphs, alignments, divisions, lists, text formatting tags, hyperlinks etc. 2. Write an HTML code to create a Timetable of your class using Table tags. 3. Displaying Images in HTML.
4	HTML Forms 1. Write an HTML code to create a form using the following tags: <form>, <input>, (text, password, checkbox, radio,select, submit, button, reset). 2. Write an HTML code to create an Advanced form using the following tags: Combo box, Date, File Upload, Search, Range, URL, Color, etc.
5	CSS Programming 1. Basics of CSS: Class, Id, changing properties like color, size, background etc. 2. Positioning in CSS: Absolute and relative positioning, Z-index.
6	Display an image overlay effect on hover using HTML and CSS.
7	Write a CSS code for applying animation, shadows, text effects, and gradients to design a web page.
8	Write a JavaScript to show alert, confirm, and prompt boxes.
9	Develop and demonstrate JavaScript for the following problems: a) Input: A number n obtained using prompt Output: Factorial of n number using alert b) Input: A number n obtained using prompt and add another number using confirm Output: Sum of the entire n numbers using alert c) JavaScript Program to Check Prime Number
10	Write a JavaScript function to find the maximum of three numbers taken from the user using if-else and print it.
11	Create responsive resume Web design using Bootstrap4 Framework.

Reference Books:

1	Developing Web Application, Moseley and Savaliya, Wiley India
2	HTML 5 Black Book 2Ed, Kogent Learning Solutions Inc, Dreamtech
3	Learning Web Design by Jennifer Niederst Robbins, 4th Edition, O'Reilly
4	The Complete Reference: HTML & CSS by Thomas A. Powell, Fifth Edition, McGraw Hill publication

Supplementary learning material:	
1	https://www.w3schools.com/
2	https://www.tutorialspoint.com/
3	https://developer.mozilla.org/en-US/docs/Web
4	Coursera course on Web Design for Everybody: Basics of Web Development & Coding Specialization offered by University of MICHIGAN.
5	Coursera course on Responsive Website Development and Design Specialization offered by University of MICHIGAN.

Pedagogy:

- Direct classroom teaching
- Audio Visual presentations/demonstrations
- Assignments/Quiz
- Continuous assessment
- Interactive methods
- Seminar/Poster Presentation
- Industrial/ Field visits
- Course Projects

Suggested Specification table with Marks (Theory) (Revised Bloom's Taxonomy):

Distribution of Theory Marks in %						**R**: Remembering; **U**: Understanding; **A**: Applying; **N**: Analyzing; **E**: Evaluating; **C**: Creating
R	**U**	**A**	**N**	**E**	**C**	
15%	20%	30%	10%	10%	10%	

Note: This specification table shall be treated as a general guideline for students and teachers. The actual distribution of marks in the question paper may vary slightly from above table.

Course Outcomes (CO):

Sr.	Course Outcome Statements	%weightage
CO-1	Understanding the basics of Internet, world wide web,Web browsers, Protocols and web Designing.	**13%**
CO-2	Developwell-structured and semantically rich web pages using appropriate themes, layouts, and functionalities.	**20%**
CO-3	Enhancing the visual appearance of web pages with modern design elements, layouts, and responsive interfaces.	**27%**
CO-4	Develop Dynamic and user-friendly websites by integrating structure, design, and interactivity effectively.	**17%**
CO-5	Develop and deploy responsive websites using basic web publishing and hosting concepts.	**23%**

Curriculum Revision:	
Version:	1.0
Drafted on (Month-Year):	April- 2025
Last Reviewed on (Month-Year):	-
Next Review on (Month-Year):	-