

## Name of the Course: Web Design & Development

Sr. No.	Heading	Particulars
1	Description the course:	<p><b>Introduction:</b></p> <p>In the digital age, websites form the core of personal, professional, and organizational presence. This course provides a hands-on introduction to web technologies—from static design using HTML and CSS to dynamic behavior using JavaScript and PHP. Even students without a computer science background can comfortably follow and build basic working websites by the end of this course.</p> <p><b>Relevance:</b></p> <p>The ability to create and manage a simple website is a valuable skill across all disciplines—be it arts, commerce, science, or business. Students can apply their learning to create portfolios, event pages, small business websites, or academic project displays. The course strikes a balance between creativity (design) and logic (functionality).</p> <p><b>Usefulness:</b></p> <p>This course builds self-reliant skills that enable students to independently launch and maintain a basic web presence. It helps them understand how modern websites are created, updated, and made interactive. Students gain practical knowledge of both frontend and backend components of a website.</p> <p><b>Application:</b></p> <p>The course equips students with practical skills to create personal portfolios, blogs, or small business websites. They can build forms to collect user feedback, manage event registrations, or create login and contact pages. These real-world applications give students a strong foundation to apply web development concepts in academic, professional, or entrepreneurial projects.</p> <p><b>Interest:</b></p> <p>Web design is inherently visual and creative, which makes it engaging for learners from non-technical backgrounds. The satisfaction of seeing one's own website running live provides motivation and a sense of accomplishment. The variety of tools and languages also</p>

		<p>keeps the learning process dynamic and fun.</p> <p><b>Connection with Other Courses:</b></p> <p>This course complements various disciplines such as Digital Marketing, Media &amp; Communication, Entrepreneurship, and even Data Analytics. It enhances understanding of how websites function, supporting students in presenting content creatively and efficiently. It also sets the stage for learning content management systems like WordPress or integrating web skills with digital tools used in other fields.</p> <p><b>Demand in the Industry:</b></p> <p>Web development remains one of the most in-demand skills globally. Every small business, freelancer, influencer, or organization needs a digital presence. Knowledge of web technologies like HTML, CSS, JavaScript, and PHP can lead to freelance work, internships, or entry-level tech roles.</p> <p><b>Job Prospects:</b></p> <p>Basic web design and development skills are highly valued across industries, offering roles like Web Designer (Entry Level), Content Editor, Junior PHP Developer, or Freelance Web Creator. These skills also provide a strong foundation for internships, remote work, and freelance opportunities. Even non-IT professionals can leverage this knowledge to maintain their digital presence or assist in web-related tasks within their organizations.</p>
2	<b>Vertical:</b>	Minor
3	<b>Type:</b>	Theory
4	<b>Credits:</b>	2 credits
5	<b>Hours Allotted:</b>	30 hours
6	<b>Marks Allotted:</b>	50 Marks
7	<p><b>Course Objectives (CO):</b></p> <p><b>CO 1.</b> To introduce students to the foundational concepts of web design using HTML5 and CSS3.</p> <p><b>CO 2.</b> To build interactive and dynamic web pages using JavaScript and PHP.</p> <p><b>CO 3.</b> To familiarize students with creating and accessing databases using MySQL.</p> <p><b>CO 4.</b> To develop hands-on skills to design user-friendly and responsive web interfaces.</p> <p><b>CO 5.</b> To equip students with the ability to build basic client-server applications.</p>	

8	<p><b>Course Outcomes (OC):</b>  After successful completion of this course, students would be able to -</p> <p><b>OC 1.</b> Design and structure professional-looking websites using HTML and CSS.  <b>OC 2.</b> Add interactive elements to websites using JavaScript.  <b>OC 3.</b> Write simple PHP scripts for form handling and server-side logic.  <b>OC 4.</b> Connect and interact with a MySQL database using PHP.  <b>OC 5.</b> Build a basic full-stack application such as a contact form or login system.</p>
9	<p><b>Modules:</b>  <b>Module 1:</b>  <b>Introduction to Web Design:</b> What is a Website? Types of Websites, Client-Server Model, Structure of a Web Page</p> <p><b>HTML5 Essentials:</b> Basic Tags and Page Structure (&lt;!DOCTYPE&gt;, &lt;html&gt;, &lt;head&gt;, &lt;body&gt;), Formatting and Organizing Text (&lt;h1&gt; to &lt;h6&gt;, &lt;p&gt;, &lt;br&gt;, &lt;strong&gt;, &lt;em&gt;), Creating Lists and Links (&lt;ul&gt;, &lt;ol&gt;, &lt;a href&gt;), Adding Tables (&lt;table&gt;, &lt;tr&gt;, &lt;td&gt;, &lt;th&gt;), Inserting Images (&lt;img&gt; tag, alt text, image formats)</p> <p><b>Working with Forms:</b> Input Elements (&lt;input&gt;, &lt;textarea&gt;, &lt;select&gt;, &lt;button&gt;), Basic Form Validation using HTML attributes</p> <p><b>Multimedia Elements:</b> Adding Audio and Video to a Web Page, Supported File Formats, &lt;audio&gt; and &lt;video&gt; tags with controls</p> <p><b>CSS for Styling Web Pages:</b> Introduction to CSS, Using Inline, Internal, and External CSS, Selectors and Syntax, Styling Text, Fonts, Colors, and Backgrounds, Basic Layout Techniques: Box Model, Margins, Padding</p> <p><b>Module 2: Advanced Python Concepts (30 hours):</b>  <b>Getting Started with JavaScript:</b> Embedding JavaScript in HTML, Variables, operators, and conditional statements, Functions and event handling (onclick, onchange), Basic form validation using JavaScript</p> <p><b>The Document Object Model (DOM):</b> Accessing and modifying HTML elements dynamically, Changing text, styles, and attributes using JS, Simple interactivity like toggle menus, show/hide sections</p> <p><b>Introduction to PHP:</b> What is PHP? Why use it?, Running PHP on localhost (XAMPP or similar setup), PHP syntax, variables, operators, data types, echo, conditional statements (if, else), loops (for, while), Working with HTML forms using \$_GET and \$_POST, Simple form processing example: Contact Form, Sessions and Cookies</p> <p><b>PHP with MySQL Database:</b> Introduction to databases and MySQL, Creating a database and table using phpMyAdmin, Connecting to MySQL from PHP using mysqli_connect(), Inserting data into the database from an HTML form, Displaying data from the database using SELECT queries</p>
10	<p><b>Text Books</b>  1. HTML 5 Black Book, Covers CSS 3, JavaScript, XML, XHTML, AJAX, PHP and</p>

	jQuery, 2ed, Dreamtech Press, 2016 2. Web Programming and Interactive Technologies, scriptDemics, StarEdu Solutions India, 2018 3. PHP: A Beginners Guide, Vikram Vaswani, TMH	
<b>11</b>	<b>Reference Books</b> 1. HTML, XHTML, and CSS Bible Fifth Edition, Steven M. Schafer, WILEY, 2011 2. Learning PHP, MySQL, JavaScript, CSS & HTML5, Robin Nixon, O'Reilly, 2018 3. PHP, MySQL, JavaScript & HTML5 All-in-one for Dummies, Steve Suehring, Janet Valade Wiley, 2018	
<b>12</b>	<b>Internal Continuous Assessment: 40%</b>	<b>Semester End Examination: 60%</b>