

PART-A: Introduction				
Program: Certificate		Class: UG	Year:1 Year	Session: 2025-26
Subject: Web Designing				
1	Course Code			
2	Course Title		Web Designing (Theory)	
3	Course Type (Core Course/Elective/Generic Elective/ Vocational		Vocational	
4	Pre-Requisite (if any)		Elementary knowledge of IITML and CSS	
5	Course Learning Outcomes:		On completion of this course, learners will be able to: <ul style="list-style-type: none"><li>To create a basic website using HTML and Cascading Style Sheets.</li><li>To design and implement dynamic web page with validation using JavaScript objects</li><li>To apply different event handling mechanisms.</li><li>To design front end web page and connect to the back end databases.</li></ul>	
6	Credit Value		Theory-1 Credits	
7	Total Marks		Max.Marks:100	Min. Passing Marks:35
PART B:Content of the Course				
No. of Lectures (in hours per week):1Hrs. per week				
Total No. of Lectures: 30Hrs.				
Module		Topics		No. of Lectures
I		Introduction to Web Development Introduction to the Internet and its applications, World Wide Web (WWW), difference between static and dynamic websites, introduction to web browsers and web servers, introduction to IITML and CSS, Uniform Resource Locator (URL), software for web designing -- Notepad, WordPress, Sublime, NetBeans, web development overview, internet and web basics, types of websites static, dynamic, single-page, multi-page, client-server architecture, frontend and backend roles, IITTP and IITTPS protocols, domain names and extensions, web hosting -- shared, VPS, cloud, localhost setup, website file structure, URL anatomy, web browsers, text editors -- VS Code, Sublime, browser developer tools -- inspect, console, responsive view. Activity: Students explore 5 popular Indian websites (e.g., IRCTC, India Post) and analyze their structure. Indian Knowledge System (IKS) Link: Discuss the concept of Jnana Marg (Knowledge Path) and how		03



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	the Internet is a modern tool for "Jnana Vistar" (Knowledge Expansion).	
II	<b>HTML – The Foundation of Web Pages</b> <b>Topics:</b> HTML introduction and structure, tags and attributes, headings, paragraphs, links, images, lists – ordered, unordered, nested, tables – rows, columns, forms – input, select, checkbox, radio, submit, semantic tags – header, footer, nav, section, article, aside, multimedia – audio, video, embed, iframe, canvas, SVG, meta tags, character encoding, HTML5 updates and best practices, HTML tags – headings, paragraphs, links, images, lists, tables and forms in HTML, semantic elements in HTML5, image tag and attributes, anchor tag, email tag, tel tag, creating website homepage using basic tags, table tags in HTML, table attributes in HTML, designing a calendar using HTML table, HTML form elements, HTML input types, HTML input attributes, color coding. <b>Activity:</b> Design a static web page about any Indian heritage site (c.g., Konark Temple). <b>IKS Link:</b> Incorporate traditional Indian Vaastu principles in web page layout design (balance, symmetry, space usage).	03
III	<b>CSS – Styling Web Pages:</b> CSS introduction, syntax and selectors – element, class, ID, grouping, combinators, properties – color, font, background, text alignment, spacing, borders, box model – margin, padding, border, content, layout – Flexbox, Grid, float and clear, positioning – static, relative, absolute, fixed, sticky, z-index, transitions and animations, responsive design – media queries, units – px, %, cm, rem, vw, vh, theming and custom variables, external CSS frameworks – Bootstrap basics. <b>Activity:</b> Create a visually appealing homepage for a fictional Ayurvedic store using CSS styling. <b>IKS Link:</b> Use traditional Indian color theory (c.g., importance of saffron, green, blue in culture) in web themes.	03




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IV	<p><b>Basics of Java Script &amp; Interactivity:</b> JavaScript introduction and placement, variables – var, let, const, data types – string, number, boolean, array, object, operators – arithmetic, comparison, logical, assignment, conditional statements – if, else, else if, switch, loops – for, while, do-while, functions – declaration, expression, arrow, events – click, submit, keypress, mouseover, DOM manipulation – getElementById, querySelector, innerHTML, style changes, form validation, alerts, confirm, prompt, simple animations, introduction to JS libraries – jQuery basics.</p> <p><b>Activity:</b> Develop an interactive quiz web page on <b>Indian freedom fighters</b>.</p> <p><b>IKS Link:</b> Highlight the concept of <b>Shastra &amp; Yuktibodh</b> (logic and structured knowledge) in coding practices.</p>	03
V	<p><b>Web Development Project &amp; Hosting:</b> Project planning and idea selection, wireframing and mockups, website structure and navigation planning, designing multipage websites using HTML, CSS and JS, image optimization and accessibility, version control – Git basics, GitHub – repositories, commits, pushing code, hosting – GitHub Pages, Netlify, Firebase, custom domain setup, DNS overview, SEO basics – meta tags, keywords, mobile responsiveness, final testing and debugging, project documentation and presentation.</p> <p><b>Activity:</b> Create and publish a mini project website on "<b>Indian Traditional Art &amp; Craft</b>".</p> <p><b>IKS Link:</b> Emphasize <b>Indian storytelling tradition (Katha, Puran)</b> and structure websites as digital narratives.</p>	03

Part: C-Learning Resources	
Text Books ,Reference Books,Other Resources	
<p><b>Suggested Readings:</b></p> <p><b>Text Books:</b></p> <ol style="list-style-type: none"> <li>1. <b>Introduction to Web Technology</b> by Rachana Dubey, Blue Rose Publishers, ISBN: 9789389888966. • Edition: First, 2020.</li> <li>2. <b>Web Designing”</b> by C. Xavier, New Age International, ISBN: 9789395161268, 9395161264 • Edition: Second, 2022.</li> </ol>	

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3. **Web Programming” by Neelam Sharma**, Publisher: Kalyani Publishers, ISBN-13. 978-9327294231,2018.

### Reference Books:

1. Thomas A. Powell, “HTML & CSS: The Complete Reference”, Fifth Edition, 2010
2. Thomas A Powell, Fritz Schneider, “JavaScript: The Complete Reference”, Third Edition, Tata McGraw Hill, 2013
3. Thomas A Powell, “Ajax: The Complete Reference”, McGraw Hill, 2008

### Suggested Digital Platforms Web links:

<https://swayam.gov.in/>  
<https://learn.corel.com>  
[https://www.w3schools.com/html/html\\_links.asp](https://www.w3schools.com/html/html_links.asp)  
<https://software.sil.org/>  
[https://onlinecourses.swayam2.ac.in/ntr25\\_ed64/preview?](https://onlinecourses.swayam2.ac.in/ntr25_ed64/preview?)

### PartD: Assessment and Evaluation

#### Suggested Continuous Evaluation Methods:

Maximum Marks: **100**

Continuous Comprehensive Evaluation(CCE): NA

Exam (UE):**100**Marks

#### Internal Assessment:

Continuous Comprehensive Evaluation(CCE)

**NA**

#### External Assessment:

University Exam(UE)

**Total Marks: 100**

**Any remarks/suggestions:** Learning’s in the course should be emphasized more on practical aspects and real world problems and their solutions.

### PART A: Introduction

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Subject: Web Designing			
1	Course Code		
2	Course Title	Web Designing (Practical)	
3	Course Type (Core Course/Elective/Generic Elective/ Vocational	<b>Vocational</b>	
4	Pre-Requisite (if any)	NA	



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5	<b>Course Learning Outcomes:</b>	<b>On completion of this course, learners will be able to:</b> <ul style="list-style-type: none"> <li>Analyze a web page and identify its elements and attributes.</li> <li>Create web pages using XHTML and Cascading Style Sheets.</li> <li>Build dynamic web pages using JavaScript (Client side programming).</li> <li>Create XML documents and Schemas..</li> </ul>	
6	Credit Value	<b>Theory-2 Credits</b>	
7	Total Marks	<b>Max. Marks: 100</b>	<b>Min. Passing Marks: 35</b>

**PART -B :Content of the Course**

**No. of Lab. Practical's (in hours per week): 2 Hrs. per week**

**Total no of labs :15**

S.No.	Suggestive list of Practical's	No of Labs
1	Create a simple IITML page using headings and paragraphs.	30
2	Insert images and hyperlinks into a web page.	
3	Design a navigation bar using IITML lists.	
4	Create a registration form using IITML form elements.	
5	Style a web page using external CSS.	
6	Create a responsive layout using Flexbox.	
7	Design a photo gallery using CSS Grid.	
8	Create a landing page for an Indian handicraft business.	
9	Validate a form using basic JavaScript.	
10	Develop an FAQ section with show/hide toggle using JS.	
11	Create a digital clock using JavaScript.	
12	Build a web page that showcases Indian festivals with images and effects.	
13	Develop a multi-page website for an Indian traditional music school.	
14	Host your website on GitHub Pages.	
15	Create and submit a final project website with IKS theme.	

**Part: C- Learning Resources**

Text Books, Reference Books, Other Resources



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**Suggested Readings:****Text Books:**

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2. **Web Designing** by C. Xavier, New Age International, ISBN: 9789395161268, 9395161264 • Edition: Second, 2022.
3. **Web Programming** by Neelam Sharma, Publisher: Kalyani Publishers, ISBN-13. 978-9327294231, 2018.

**Reference Books:**

1. Thomas A. Powell, "HTML & CSS: The Complete Reference", Fifth Edition, 2010
2. Thomas A Powell, Fritz Schneider, "JavaScript: The Complete Reference", Third Edition, Tata McGraw Hill, 2013
3. Thomas A Powell, "Ajax: The Complete Reference", McGraw Hill, 2008

**Suggested Digital Platforms Web links:**

<https://swayam.gov.in/>

<https://learn.corel.com>

<https://software.sil.org/>

**Part-D: Assessment and Evaluation****Suggested Continuous Evaluation Methods:**

Maximum Marks: **100**

Continuous Comprehensive Evaluation(CCE): **2** Marks

University Exam (UE): **100** Marks

**Internal Assessment:**

Continuous Comprehensive Evaluation(CCE)

**Total Marks: —**

**External Assessment:**

University Exam(UE)

**Total Marks:**  
**100**

**Any remarks/suggestions:** Learning's in the course should be emphasized more on practical aspects and real world problems and their solutions.



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