Programme Name/s	**: Electronics & Computer Engg.**
Programme Code	**: TE**
Semester	**: Second**
Course Title	**: WEB PAGE DESIGN**
Course Code	**: 312013**

I. RATIONALE

Web Page Design is used to develop online applications for various organizations such as Organizational and Educational websites, Virtual Learning environments, Business Applications in various fields such as Products, Sales, Banking, Railways Reservation, Services etc. Web pages are categorized into two namely, Static and Dynamic Web Pages. This course introduces Web Page Design using HTML5 and also give emphasis on learning Cascading Stylesheets (CSS) which is a stylesheet language used for describing the presentation of a document written in a markup language for formatting and styling of content.

II. INDUSTRY / EMPLOYER EXPECTED OUTCOME

The aim of this course is to help the students to attain the following Industry identified outcomes through various Teaching Learning experiences:
• Develop and Host Website.

III. COURSE LEVEL LEARNING OUTCOMES (COS)

Students will be able to achieve & demonstrate the following COs on completion of course based learning

- CO1 - Use HTML formatting tags to present content on Web Page.
- CO2 - Develop Web Page using List and Hyperlinks.
- CO3 - Develop Web Pages using Images, Colors and Backgrounds.
- CO4 - Design HTML forms using Table and Frames.
- CO5 - Apply presentation schemes on content using Cascading Stylesheet(CSS).
- CO6 - Publish Website on Internet or Intranet.

IV. TEACHING-LEARNING & ASSESSMENT SCHEME

Course Code	Course Title	Abbr	Course Category/s	Learning Scheme					Credits	Assessment Scheme											Total Marks
				Actual Contact Hrs./Week			SLH	NLH		Paper Duration	Theory				Based on LL & TL				Based on SL		
															Practical						
				CL	TL	LL					FA-TH	SA-TH	Total		FA-PR		SA-PR		SLA		
											Max	Max	Max	Min	Max	Min	Max	Min	Max	Min	
312013	WEB PAGE DESIGN	WET	SEC	-	-	4	2	6	3	-	-	-	-	-	25	10	50@	20	25	10	100

Total IKS Hrs for Sem. : 0 Hrs

Abbreviations: CL- ClassRoom Learning , TL- Tutorial Learning, LL-Laboratory Learning, SLH-Self Learning Hours, NLH-Notional Learning Hours, FA - Formative Assessment, SA -Summative assessment, IKS - Indian Knowledge System, SLA - Self Learning Assessment

Legends: @ Internal Assessment, # External Assessment, *# On Line Examination , @$ Internal Online Examination

Note :

1. FA-TH represents average of two class tests of 30 marks each conducted during the semester.
2. If candidate is not securing minimum passing marks in FA-PR of any course then the candidate shall be declared as "Detained" in that semester.
3. If candidate is not securing minimum passing marks in SLA of any course then the candidate shall be declared as fail and will have to repeat and resubmit SLA work.
4. Notional Learning hours for the semester are (CL+LL+TL+SL)hrs.* 15 Weeks
5. 1 credit is equivalent to 30 Notional hrs.
6. * Self learning hours shall not be reflected in the Time Table.
7. * Self learning includes micro project / assignment / other activities.

V. THEORY LEARNING OUTCOMES AND ALIGNED COURSE CONTENT

Sr.No	Theory Learning Outcomes (TLO's)aligned to CO's.	Learning content mapped with Theory Learning Outcomes (TLO's) and CO's.	Suggested Learning Pedagogies.
1	TLO 1.1 Differentiate characteristics of the given type of website. TLO 1.2 Describe structure of the given HTML page. TLO 1.3 Explain use of Head tag and Body tag in the given Web Page. TLO 1.4 Describe the procedure of using the given Block level tag on a Web Page. TLO 1.5 Describe the procedure of using the given Text level tag and use of Special characters in Web Page.	**Unit - I Introduction to HTML** 1.1 Introduction of HTML. 1.2 Terminologies used in Web Design: World Wide Web (www), Web Pages, Website, Web Browsers, Web Servers and types of sites. Static vs. Dynamic website, Search Engine. 1.3 Web page structure: DOCTYPE, HTML, TITLE, HEAD, BODY and other meta tags with attributes. 1.4 Block Level Elements: Headings, Paragraphs, Breaks, Divisions, Centered Text, Block Quotes, Preformatted text, types of Address, HR tag. Horizontal Rule. 1.5 Text Level Elements: Bold, Italic, Teletype, Underline, Strikethrough, Superscript, Subscript, DIV tag, displaying special characters, Comments.	Demonstration Presentations Hands-on
2	TLO 2.1 Explain use of the given type of list in Web Pages. TLO 2.2 Describe different types of Links.	**Unit - II Lists and Links** 2.1 Lists: Ordered Lists, Unordered Lists, Definition Lists, Nested Lists. 2.2 Links: Absolute, Relative and Inline links, Use image as link, Link to an E-mail address, Button as link, Types of Links, Linking various documents for Internal and external links, To link different web page of same site, link different location on the same web page, A Specific location on different web page of same site. To specific section within the Document, Inserting E-mail link.	Demonstration Presentations Hands-on

Sr.No	Theory Learning Outcomes (TLO's)aligned to CO's.	Learning content mapped with Theory Learning Outcomes (TLO's) and CO's.	Suggested Learning Pedagogies.
3	TLO 3.1 Describe the given Image attribute on a Web Page with HSPACE & VSPACE. TLO 3.2 Describe the use of colors / images as page background on a Web Page.	**Unit - III Images, Colors and Background** 3.1 Image: Types of image format, jpg, bmp, png, gif etc. IMG tag, alternate text, image alignment, HSPACE, VSPACE, wrapping text, height and width of images, Image as a link, Inserting Images, formatting image for sizing, alignment, Border and other attributes with IMG tag. 3.2 Colors and Backgrounds: The text color, color attribute of FONT tag, text attribute of BODY tag. bgcolor attribute of BODY tag, Changing link colors: link, alink, vlink, attributes of BODY tag, Backgrounds: Inserting image as page background, Background attributes of BODY tag, Creating solid color page background.	Demonstration Presentations Hands-on
4	TLO 4.1 Explain the given table attributes to organize data on a Web Page and Table setting. TLO 4.2 Describe the table formatting in Web Pages. TLO 4.3 Describe the given type of frame with examples and procedure to display given screen layout using frames. TLO 4.4 Create basic form using different form fields and Button tags.	**Unit - IV Table, Frames and Forms** 4.1 Table: Table tag with attributes. TABLE, <tr>, <th>, <td> tags. Border, cell spacing, cell padding, width, align, bgcolor attributes. Adding captions: CAPTION tag 4.2 Formatting contents in the table cells: align, valign, bgcolor, height, width, nowrap attributes. Spanning rows and columns: rowspan and colspan attributes. 4.3 Frames: Types of Frames with their attributes, Creating frames: FRAMESET tag – rows, cols attributes, FRAME tag – name, frame border, margin height, margin width, src, resize, scrolling Attributes, Use of NOFRAMES tag, Frame targeting. 4.4 Forms: Creating basic form: FORM tag, action and method attributes, Form fields: Single line Text Field, Password field, multiple line Text Area, Radio Buttons, and Check Boxes. Pull down menus: SELECT and OPTION tags. Buttons: submit, reset and generalized buttons. Formatting technique: Using table to layout form.	Demonstration Presentations Hands-on
5	TLO 5.1 Describe CSS code for the given type of formatting on a Web Page with different CSS properties. TLO 5.2 Describe the procedure to create CSS for applying the given presentation scheme on a Web Page.	**Unit - V Cascading Stylesheets** 5.1 Cascading Stylesheets: Different types of Stylesheets, Benefits of CSS. Adding style to the document: Linking to Stylesheets, Embedding stylesheets, Using inline style, Selectors: CLASS rules, ID rules. 5.2 Style sheet properties: Font, Text, Box, Color and Background properties; Creating and Using a simple external CSS file; Using the internal and inline CSS; background and color gradients in CSS Setting font and text in style sheet using Table layout.	Demonstration Presentations Hands-on
6	TLO 6.1 Describe the procedure to configure a web server and host the given website.	**Unit - VI Website Hosting** 6.1 Website Hosting: Concept of Internet and Intranet. Publishing website on Intranet, Installing and configuring web server, uploading files on Intranet site, access Intranet-based website; Publishing website on Internet, hiring Web space, uploading files using FTP, Virtual Hosting, access internet-based website.	Demonstration Presentations Hands-on

VI.   LABORATORY LEARNING OUTCOME AND ALIGNED PRACTICAL / TUTORIAL EXPERIENCES.

Practical / Tutorial / Laboratory Learning Outcome (LLO)	Sr No	Laboratory Experiment / Practical Titles / Tutorial Titles	Number of hrs.	Relevant COs
LLO 1.1 Create Web Page using structure tags to display sample message.	1	* Create a Simple Web Page	2	CO1
LLO 2.1 Create a Web Page which display a string "Maharashtra State Board of Technical Education, Mumbai" in all <h1> to <h6> header tags.	2	* Use of Heading tags in Web Page	2	CO1
LLO 3.1 Design a Web Page with two paragraphs each of 8-10 lines. Assign title to web page. Practice formatting tags for bold, italics, underline, center, break, space, horizontal lines, span tag, pre tag etc	3	* Working of Paragraphs in Web Page	2	CO1
LLO 4.1 Create a Web Page for displaying a paragraph using block level tags, HR tags	4	* Working with block level tags in Web Page	2	CO1
LLO 5.1 Create a Web Page using Text level tags.	5	* Working with Text level tag in Web Page	2	CO1
LLO 6.1 Create a Web Page to insert a border property in html statements.	6	* Implement the border properties in Web Page	2	CO1
LLO 7.1 Create a Web Page using Special Characters.	7	Use of Special Characters in Web Page	2	CO1
LLO 8.1 Design a Web Page for implementing Ordered List and Unordered List.	8	* Working with Ordered and Unordered List	2	CO2
LLO 9.1 Design a Web Page for implementing a) Ordered list within unordered list b) Unordered list within ordered list c) Ordered list within Ordered list d) Unordered list within Unordered list	9	Use of different types of Nested List in Web Page	4	CO2
LLO 10.1 Create a Web Page to link: a) A different web page of same site. b) A different location on the same web page. c) A Specific location on different web page of same site	10	* Create a Web Page link	2	CO2
LLO 11.1 Create Web Page to link: a) An external page of different web site. b) To an e-mail ID.	11	Use of links in Web Page	2	CO2
LLO 12.1 Create a webpage with photos and align them with the ALT property on the left, right, and center. LLO 12.2 Create a webpage where Set one picture in left, right, and middle alignment.	12	Create a Web Page to display images	2	CO2
LLO 13.1 Demonstrate to change the color of links on Web Page.	13	* Use of the color for links in Web Page	2	CO2
LLO 14.1 Insert images on Web Page using various attributes and set image as background.	14	* Insert an image as the foreground and background of a web page with various properties	2	CO3
LLO 15.1 Create a webpage, add an image with the correct dimensions (Height and Width), and include a hyperlink to another webpage.	15	* Insert images with hyperlink and set image width and height property of image	2	CO3

Practical / Tutorial / Laboratory Learning Outcome (LLO)	Sr No	Laboratory Experiment / Practical Titles / Tutorial Titles	Number of hrs.	Relevant COs
LLO 16.1 Create a web page and apply following background properties with an image a) Set the background color of the page to line n. b) Set border to h1 tag. c) Set background image to a page. LLO 16.2 Create a web page and apply following background properties with an image: a) Repeat the image vertically only. b) Repeat the image horizontally only. c) Show the background image at top	16	Working with different background properties in Web Page	4	CO3
LLO 17.1 Create a Web Page to implement Table.	17	* Create table in Web Page	2	CO4
LLO 18.1 Create table within table and also insert an image within the data elements of the table.	18	* Create table within table and Insert images in table	2	CO4
LLO 19.1 Create a Web Page that displays first year timetable. Make effective use of rowspan and colspan attributes. Make use of <th> tag.	19	Working with row and column attributes of table	2	CO4
LLO 20.1 Create a Web Page to implement frame tags.	20	* Create a frame in Web Page	2	CO4
LLO 21.1 Create a webpage that provides a form for filling information. The webpage must contain following elements: a) Textbox b) Text area c) Textbox for password LLO 21.2 Create a webpage that provides a form for filling information. The webpage must contain following elements: a) Radio button b) Checkbox c) Buttons (Submit / RESET)	21	* Creates different elements in Web Page	4	CO4
LLO 22.1 Demonstrate the use of style sheets in HTML.	22	Use of CSS in Web Page	2	CO5
LLO 23.1 Create a Web Page for demonstration of CSS by applying Internal style.	23	* Create CSS by applying Internal style	2	CO5
LLO 24.1 Create a Web Page for demonstration of CSS by applying External style.	24	* Create CSS by applying external style	2	CO5
LLO 25.1 Create a Web Page for demonstration of CSS by applying Inline style.	25	Create CSS by applying inline style	2	CO5
LLO 26.1 Create a website and host on open source platform.	26	* Host web pages on open source platform	4	CO6

Note : Out of above suggestive LLOs -

- '*' Marked Practicals (LLOs) Are mandatory.
- Minimum 80% of above list of lab experiment are to be performed.
- Judicial mix of LLOs are to be performed to achieve desired outcomes.

VII. SUGGESTED MICRO PROJECT / ASSIGNMENT/ ACTIVITIES FOR SPECIFIC LEARNING / SKILLS DEVELOPMENT (SELF LEARNING)

Self-Learning

• Following are some suggestive self-learning topics or any relevant topics suggested by the Teacher:
1) Insert Video in an HTML page.
2) Create an animation using various HTML tags.
3) Create an E-mail Newsletter.
4) Contribute to an open-source project.

Micro project

• The microproject has to be industry application based, internet-based, workshop-based, laboratory-based or field-based as suggested by Teacher.
1) Make a music page on your website, starting with a suitable background image and a succinct explanation of the contents. This is the first stage in creating a music store website. The top section of the page contains many menus and a list of songs sorted by attributes such as artist, album, genre, year, etc. Include the registration form link as well.
2) Create a static webpage with details about a webinar event. The event website will have a header area with links, a list of speakers, an image of the event site, and photographs. Separate the page into manageable chunks. Use the right font, style, and background color for the given web page.
3) Develop any sample website suggested Teacher's or Student interest.

Note :

- Above is just a suggestive list of microprojects and assignments; faculty must prepare their own bank of microprojects, assignments, and activities in a similar way.
- The faculty must allocate judicial mix of tasks, considering the weaknesses and / strengths of the student in acquiring the desired skills.
- If a microproject is assigned, it is expected to be completed as a group activity.
- SLA marks shall be awarded as per the continuous assessment record.
- If the course does not have associated SLA component, above suggestive listings is applicable to Tutorials and maybe considered for FA-PR evaluations.

VIII. LABORATORY EQUIPMENT / INSTRUMENTS / TOOLS / SOFTWARE REQUIRED

Sr.No	Equipment Name with Broad Specifications	Relevant LLO Number
1	1) Computer System with all necessary Peripherals and Internet connectivity. 2) Any Office Software 3) Any Browser	All

IX. SUGGESTED WEIGHTAGE TO LEARNING EFFORTS & ASSESSMENT PURPOSE (Specification Table) : NOT APPLICABLE

X. ASSESSMENT METHODOLOGIES/TOOLS

Formative assessment (Assessment for Learning)

• Continuous assessment based on process and product related performance indicators. Each practical will be assessed considering
1) 60% weightage is to process
2) 40% weightage to product

Summative Assessment (Assessment of Learning)

• End Semester Examination, Lab Performance, Viva-voce.

XI. SUGGESTED COS - POS MATRIX FORM

Course Outcomes (COs)	Programme Outcomes (POs)							Programme Specific Outcomes* (PSOs)		
	PO-1 Basic and Discipline Specific Knowledge	PO-2 Problem Analysis	PO-3 Design/ Development of Solutions	PO-4 Engineering Tools	PO-5 Engineering Practices for Society, Sustainability and Environment	PO-6 Project Management	PO-7 Life Long Learning	PSO-1	PSO-2	PSO-3
CO1	2	-	-	1	-	-	1			
CO2	1	-	1	1	1	-	2			
CO3	1	-	2	1	1	-	2			
CO4	1	1	2	1	1	-	2			
CO5	2	2	3	2	2	2	2			
CO6	3	3	3	3	2	2	2			

Legends :- High:03, Medium:02,Low:01, No Mapping: -
*PSOs are to be formulated at institute level

XII. SUGGESTED LEARNING MATERIALS / BOOKS

Sr.No	Author	Title	Publisher with ISBN Number
1	Thomos Powell	HTML and CSS Complete Reference	Tata McGraw Hill ISBN: 978-0-07-174170-5
2	Lemay Colburn	Web Publishing with HTML and CSS	Pearson ISBN: 978-0672330964
3	Ivan Bayross	HTML 5 and CSS 3	BPB Publications ISBN: 978-8183334419
4	Jennifer Robbins	Learning Web Design	O'Reilly ISBN: 978-1491960202
5	Julie C. Meloni, Michael Morrison	Teach Yourself HTML & CSS in 24 Hours	Sams, ISBN:978-0672336140

XIII . LEARNING WEBSITES & PORTALS

Sr.No	Link / Portal	Description
1	https://www.geeksforgeeks.org/	HTML Basics, list, links, Images, Table, Frames and CSS
2	https://www.w3schools.com/html/	HTML Basics, list, links, Images, Table, Frames and CSS
3	https://www.tutorialspoint.com/html/	HTML Basics, list, links, Images, Table, Frames and CSS
4	https://www.javatpoint.com/	HTML Basics, list, links, Images, Table, Frames and CSS
5	https://www.programiz.com/html/	HTML Basics, list, links, Images, Table, Frames and CSS
6	https://www.shiksha.com/online-courses/	HTML Basics, list, links, Images, Table, Frames and CSS

Sr.No	Link / Portal	Description

Note :

- Teachers are requested to check the creative common license status/financial implications of the suggested online educational resources before use by the students