

St. Xavier's College (Autonomous), Ahmedabad
Syllabus of Semester – II of the following departments under Faculty of
Data Science based on Undergraduate Curriculum Framework to be
implemented from the Academic Year 2025-26.

DEPARTMENT OF DATA SCIENCE

BSc. Artificial Intelligence and Machine Learning (Hons.)

Skill Enhancement Course: Web Designing using HTML and CSS

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title & Code	Credit Distribution of The Course			Eligibility Criteria	Prerequisite(s) of the Course (if any)
	Lecture	Tutorial	Practical / Practice		
Calculus-1	1	0	2	10 + 2 from a recognized board in any stream	--

Course Outcomes (COs)

After successful completion of the course, students will be able to

- CO-1: Understand the fundamentals of Internet technologies and the structure of web pages using HTML and HTML5 elements.
- CO-2: Design and develop web pages using text formatting, lists, links, tables, images, forms, multimedia, canvas, and SVG graphics.
- CO-3: Apply CSS concepts and stylesheets to control the presentation, layout, positioning, and appearance of web pages.
- CO-4: Develop visually appealing and responsive web interfaces using advanced CSS features such as transitions, animations, gradients, transforms, and shadows.
- CO-5: Create simple interactive and structured websites by integrating HTML5 and CSS concepts effectively.

Learning Outcomes (LOs)

At the end of the course, learners will be able to:

1. Explain the basic concepts of Internet and web technologies.
2. Create structured web pages using HTML elements.
3. Design web forms, tables, lists, hyperlinks, and multimedia components.
4. Apply CSS styles for formatting, layout, positioning, and presentation of web pages.
5. Develop visually appealing and user-friendly static websites using HTML5 and CSS.

UNIT	Topics / Subtopics	Hours
1	HTML Basics: Introduction, document structure, adding text in newline (
), headings (<h1>–<h6>), paragraphs (<p>), horizontal ruler (<hr>), subscript/superscript, text alignment (<align>), text formatting (, <u>, <i>), font tag with attributes, grouping (<div>,), scrolling text (<marquee> with attributes), character entities/special codes, comments, ordered/unordered/definition lists, links (<a> with all attributes including target), and tables (creation, captions, headings, attributes like rowspan, colspan).	29
2	Introduction to CSS: Concepts, advantages & disadvantages, syntax, grouping selectors/rules, class selectors, ID selectors, comparison of ID vs class, and CSS comments. Types of Stylesheets: External, Internal, Inline. CSS Properties & Text Attributes: Color, alignment, decoration, transformation, indent, letter/word spacing, white-space, line-height, direction, Unicode-bidi. CSS Padding & Lists: Padding (all sides & individual sides), list properties (list-style-image, list-style-position, list-style-type, list-style). CSS Positioning & Tables: Positioning (relative, absolute, fixed, z-index), CSS table properties. Textbooks: 1. ISRD Group, Internet Technology and Web Design, Tata Mc Graw Hill, (2011) 2. Kogent Learning Solutions Inc, HTML 5 in SIMPLE STEPS, Dreamtech Press, 3. Krishnamoorthy, R., & Prabhu, S., Internet and HTML, Computer World Publications 4. Deven N. Shah, A complete Guide to Internet and Web Programming DreamTech Press (2011) [ch-3 & 4] Reference Books: 1. Xavier, C. Internet and HTML, Computer World Publication, Worldwide web design with HTML (2010). 2. Ivan Bayross., Web Enabled commercial application development using HTML, Javascript, DHTML and php, BPB Publication	16