

Tribhuvan University
Institute of Science & Technology

Chitwan College of Technology

Bharatpur 12 , Chitwan

Bachelor of Science in Computer Science

& Information Technology

(Bsc.csit)

2025

Extra Class

Subject : Web Coding Essentials

Introduction:

The **Web Coding Essentials** course is designed to provide a comprehensive foundation in web development technologies, focusing on HTML, CSS, and JavaScript. This course aligns with the standards practiced in globally recognized web development programs and is suitable for students who have completed twelve years of schooling or equivalent. It covers the fundamental building blocks of creating modern, responsive, and interactive websites. Students will learn to structure web content using HTML, style it with CSS, and add dynamic behavior through JavaScript. The curriculum balances theoretical understanding with practical implementation to prepare students for further studies or careers in web development and related fields.

Objective:

The main objective of the Web Coding Essentials course is to equip students with the essential knowledge and skills required to design and develop functional, visually appealing, and user-friendly web pages. Students will gain hands-on experience in coding with HTML for content structure, CSS for presentation and layout, and JavaScript for interactivity and client-side logic. Upon completion, students will be able to build responsive websites, understand web standards, and apply best practices in web design and development.

Attendance Requirement:

Students are required to regularly attend all classes and should maintain 80 percent attendance.

Web Coding Essentials

Course Title : Web Coding Essentials

Nature of the Course : Practical Approach

Semester : II

Course Description:

This course covers the fundamental concepts and techniques of web development including the basics of HTML for structuring web content, CSS for styling and layout, and JavaScript for adding interactivity.

Course Objectives:

The main objective of this course is to provide students with a solid understanding of essential web coding technologies and the ability to create functional and visually appealing web pages using HTML, CSS, and JavaScript.

Course Contents:

Section I : Introduction to Web Technology (1 Hrs .)

- 1.1. Introduction to HyperText Markup Language (HTML)
- 1.2. Introduction to Cascading Style Sheets (CSS)
- 1.3 Introduction to Java Script (JS)

Section II : A Deeper Dive into HTML (7 Hrs.)

- 2.1. HTML Heading and Paragraph Tags
- 2.2. Hyperlinking Web Pages
- 2.3 Inserting Images into Web Pages
- 2.4 Embedding External Sites into Web Pages
- 2.5. Lists & Nested Lists
- 2.6. Tables
- 2.7. Input Tags, Buttons & HTML Forms

Section III : Introduction to Cascading Style Sheets (CSS) (12 Hrs.)

- 3.1. CSS Syntax
- 3.2. Inline, Internal & External CSS
- 3.3. Class & ID Selectors
- 3.4. CSS Box Models
- 3.5 CSS Flex Properties
- 3.6. Login & Signup Page Project
- 3.6 Google Fonts & Importing Icons
- 3.7. Positions in CSS
- 3.8. Media Screen & Responsiveness
- 3.9. Project

Section IV : Introduction to Scripting Language (8 Hrs.)

- 4.1. Become Familiar with Javascript (JS)
- 4.2. Variables & Constants
- 4.3. Data Types & their Basic Operations
- 4.4. Loops

Section V : Working With Javascript (17 Hrs.)

- 5.1. Working with JS Functions
- 5.2. Document Object Model (DOM) Manipulation
- 5.3. Event Handling
- 5.4. Brief Introduction to Arrays & Objects
- 5.5. Introduction to JSON
- 5.6. Async & Await Keywords
- 5.7. Data Fetching From API
- 5.8. Weather App Project