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| **WEB DESIGNING** | | | | |
| **Course Code: 10ABTEC22215** | | | | |
| **Course Frame Work** | | | | |
| **Credits: L-T-P: 2 -0 -1** | | | **Total Credits: 3** | |
| **Contact Hours/Week: 4** | | **Direct Teaching Hours: 30** | **Total Contact Hours: 60** | |
| **Course Learning Objectives:** This course will enable the students to   * Design and develop websites using fundamental web languages, technologies, and tools. * Distinguish between server-side and client-side web technologies. | | | | |
| **Course Outcomes:** On completion of the course, student would be able to: | | | | |
| |  |  |  | | --- | --- | --- | | Course Outcomes | Description | RBT | | CO1 | Show various elements of html and css in a web page.(why, what, how, how to assess) | L1 | | CO2 | Write Java script code to add functionality to the website | L2 | | CO3 | Apply the knowledge of servers while installing and running various web services. | L3 | | CO4 | Simulate a website using database connectivity in sql. | L3 | | CO5 | Define various components and functionalities of Go Lang for web development. | L1 | | | | | |
| **Syllabus** | | | | **Hours** |
| **MODULE 1** | **HTML & CSS** | | | **9** |
| HTML- List, Tables, Images, Forms, Frames, Cascading Style sheets. XML- DTD,Shemas, Document Object model | | | | |
| **MODULE 2** | **JAVA SCRIPT** | | | **9** |
| Java Script -Control statements, Functions, Arrays, Objects, Events, Dynamic HTML with Java Script, Ajax | | | | |
| **MODULE 3** | **WEB SERVERS** | | | **9** |
| Web servers – IIS (XAMPP, LAMPP) and Tomcat Servers. Java Web Technologies- Servlets, Java Server Pages, PHP (back end scripting) Web Technologies in VS Code, Building a Web Application in VS Code, JSF Components, Session Tracking, Cookies. | | | | |
| **MODULE 4** | **DATABASE CONNECTIVITY** | | | **9** |
| Introduction to Sql : Installation ,Databases , syntax, data types, operators, expressions, comments.  SQL Commands – DDL,DML and DCL.  Database Connectivity with MySQL - Servlets, Build responsive websites with Bootstrap. | | | | |
| **MODULE 5** | **Go Lang (Self Learn)** | | | **9** |
| Basics of Go and web applications, Handling and Processing requests: using forms, cookies and JSON post requests.Displaying content using various Templates and template enginesStoring data : | | | | |
| **Scheme of Evaluation:**   1. **Continuous Internal Assessment(CIa) Scheme: Theory (L-2 Credits)**  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | **Components** | **Technical Aptitude**  **Quiz** | **App Development** | **LAB**  **Assignments** | **IAT** | **Preparatory** | **Theory Total** | | Max. Marks | 10 | 10 | 10 | 10 | 10 | 50 |   **Scheme of Evaluation:**  **B.Continuous Internal Assessment(CIa) Scheme: LAB (P-1 Credits)**   |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Components** | **Submission** | **Execution** | **Record** | **Lab Total** | | Max. Marks | In time  3M  Up to 2 days late  1M  Beyond 2 days late  0M | 4 | 3 | 10 |   **Note:** A student has to obtain a minimum of 40% in theory as well as lab to appear for ESE.   1. **End Semester Exam (ESE) Scheme: 50 marks** Question paper pattern: 2. Question paper shall have 5 main questions corresponding to 5 modules. 3. Each main question will have two full questions carrying 10 marks each. 4. A full question may have a maximum of four sub questions, covering the topics under a module.   The students will have to answer all 5 main questions, selecting one full question from each module. TEXT BOOKS  1. “Learning Web Design: A Beginner’s Guide to HTML, CSS, Javascript, and Web Graphics”, Jennifer Niederst Robbins, O’Reilly Media, 2001 2. Robin Nixon, “Learning PHP, MySQL &JavaScript with jQuery, CSS and HTML5”, 4th Edition, O‟Reilly Publications, 2015. (ISBN:978-9352130153) 3. Alan A. A. Donovan,‎ Brian W. Kernighan: The Go Programming Language  |  | | --- | | 1. [Balbaert](https://zlib.pub/author/balbaert) [Ivo](https://zlib.pub/author/ivo) , “The Way to Go: A Thorough Introduction to the Go Programming Language” | |  |  |   REFERENCE   * Robert W. Sebesta, “Programming with World Wide Web”, Pearson, 4th edition, 2008 * David William Barron, “The World of Scripting Languages”, Wiley Publications, 2000 * Recommended general learning resources: * <https://www.w3schools.com> * https://developer.mozilla.org * <http://html.net> * [Go Resources (golang-book.com)](https://www.golang-book.com/) * [Learn Go with Tests - Learn Go with tests (gitbook.io)](https://quii.gitbook.io/learn-go-with-tests/)   E-MATERIAL   * [Create a Simple Website with HTML, CSS, JavaScript (freecodecamp.org)](https://www.freecodecamp.org/news/create-a-simple-website-with-html-css-javascript/) * [HTML Examples (w3schools.com)](https://www.w3schools.com/html/html_examples.asp) * [Free CSS Tutorial - HTML5 and CSS3 Fundamentals | Udemy](https://www.udemy.com/course/html5-fundamentals-for-beginners/)   BEYOND SYLLABUS   * Deploy a website in Server using AWS, Go daddy or any other hosting service * Create a website using any web building tools like wix , word press etc. * Converting any website to Mobile app using online tools.   LIST OF LAB PROGRAMS:   |  |  |  | | --- | --- | --- | | 1 | HTML Basic Structure: Create a profile page using basic HTML tags like heading, paragraph, list, table, image and links. |  | | 2 | HTML Advanced: Create a contact form using HTML form tags- text, label, radio, checkbox, select and text area etc. |  | | 3 | CSS Styling: Apply CSS styles to format text, change colors, and add borders to HTML elements. |  | | 4 | CSS Transitions and Animations: Add transitions and animations to HTML elements using CSS properties |  | | 5 | Creation and Parsing of XML Data: Create an XML data .Read and parse an XML document using JavaScript to extract and display its data. |  | | 6 | JavaScript Form Validation: Validate form input using JavaScript to ensure correct data is submitted. |  | | 7 | JavaScript : Simple calculator |  | | 8 | Install Apache web server. While installation assign port number 8080. Access the pages by using the urls : http://localhost:8080/html/books.html |  | | 9 | Building a Web Application- Digital Library in VS Code and running with live server. |  | | 10 | Write a sample program using Java servlet code for user authentication using session tracking, cookies, and a login form. |  | | 11 | SQL Database Creation: Create a simple SQL database using appropriate statements to store and retrieve data. |  | | 12 | Build responsive websites with Bootstrap. |  | | 13 | Create a small web application that can store and fetch data from sql using Php (server side scripting) |  | | 14 | Write a small program in Go to creates a basic web server that listens on port 8080 |  | | 15 | Write a To-do List Web Application that creates a simple to-do list. |  | | | | | |
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