

Add-On Course

On

WEBSITE DESIGN AND DEVELOPMENT



Department of BCA

Silda Chandrasekhar College

With effect from

Session: 2023 – 24

I. **Basic Details of the course**

1. **Course Title** : *Website Design and Development*

2. **Context** : Web development refers to the overall process of creating websites or web applications, including the project's design, layout, coding, content creation, and functionality.

3. **Prerequisite** : H.S.

4. **Course Objective:**

The main objectives of this course are are :

Students will be able to

- I. Design visually appealing and user-friendly websites
- II. Build responsive websites using HTML, CSS, and JavaScript
- III. Create dynamic web applications using server-side programme
- IV. Implement e-commerce solutions and payment gateways
- V. Optimize websites for search engines and accessibility
- VI. Manage and maintain websites using content management systems

5. **Programme Highlights and Unique Features:**

Here are some potential program highlights and unique features for a website design and development course:

Program Highlights:

- I. **Comprehensive Curriculum:** Covers HTML, CSS, JavaScript, responsive design, UI/UX, and more.
- II. **Hands-on Training:** Practical projects and exercises to build real-world websites.
- III. **Industry Expert Instructors:** Learn from experienced professionals in the field.
- IV. **Flexible Learning:** Online or offline classes, self-paced or instructor-led.
- V. **Career Support:** Resume building, interview prep, and job placement assistance.
- VI. **Real-World Projects:** Work on live projects for clients or personal portfolios.
- VII. **Collaborative Learning:** Team projects and peer feedback.
- VIII. **Continuous Updates:** Curriculum updated regularly to reflect industry trends.

Unique Features:

- I. **Personalized Mentorship:** One-on-one guidance from college teachers.

- II. Customized Learning Paths: Tailored to students' interests and career goals.
- III. Business Skills Training: Learn entrepreneurship, marketing, and project management.
- IV. Artificial Intelligence (AI) and Machine Learning (ML) Integration: Learn AI-powered web development.
- V. E-commerce Specialization: Build online stores using Shopify, or Magento.
- VI. Website Development Create Website Development using HTML,CSS,JAVA script etc..
- VII. Accessibility and Usability Focus: Learn to design inclusive and user-friendly websites.
- VIII. Portfolio Development: Build a professional portfolio showcasing projects.
- IX. Website Maintenance: Learn about how websites are Maintenance after development.

6. Career Prospect: The career prospects for website design and development

are promising, with a growing demand for skilled professionals. Web

development offers a wide range of opportunities for creativity and innovation, such as user interface design, new feature implementations, and website performance optimization. Web designers can specialize in specific areas of web design, such as user experience design or front end development, which can significantly increase earning potential. After developing the skills required to do the job, web designers can be promoted to senior designer.

Career Paths:

- I. Web Developer
- II. Front-end Developer
- III. Back-end Developer
- IV. Full-stack Developer
- V. E-commerce Specialist
- VI. Digital Marketing Specialist
- VII. Web Designer

7. Faculty Requirement: 2

8. **Course Fee:** Nil

9. **Target Students:** 50

10. **Intake Capacity:** 50

11. **Contact Hours:** 30 hours

12. **Course Outcome:** A website designing course enables students to learn how to design and develop exciting and attractive websites using computer programs, graphics, etc. As the internet has grown popular, websites have become very important for organisations. This has created a long-term demand for good web designers in the online industry. Several institutions offer a variety of courses on web designing.

13. **Course Co-ordinator:** Ashis Dey

II. **Curriculum Structure of the Add-On Course**

Unit	Title	Hours	No of lectures
1	Basics concept of Web Designing	6	6
2	Basics concept of Web Technologies	6	6
3	<i>Concept of Basic HTML and CSS and its Application</i>	6	6
4	<i>Concept of JavaScript and its application</i>	6	6
5	Concept of SQL	6	6
Total		30	30

III. **Detailed Curriculum of the Course**

Unit – 1: *Basics concept of Web Designing* [6]

In this section, students become familiar with various website designing tools, software and themes. Topics covered in this syllabus are:

- How to design a website
- Create themes for various layouts
- Create and design front end website etc.
- Learning about the tools and techniques using software applications

Unit – 2: *Basics concept of Web Technologies* [6]

In this section, students become familiar with web technology.

Topics covered:

- Functioning of a website
- Web standards and W3C elements
- Domains and hosting
- Clients and server scripting languages
- Responsive web designing

Unit – 3: *Concept of Basic HTML and CSS and its Application* [6]

HTML and CSS are an integral and key element in developing a website. This syllabus covers:

- Concept of HTML and CSS
- How HTML elaborates the general structure of a web page design
- Designing a web page and hyperlink
- Using tools used in HTML5
- Types of CSS with example

Unit – 4: *Concept of JavaScript and its application* [6]

This course covers the fundamentals of JavaScript programming.

This syllabus covers:

- History of JavaScript
- Basic syntax and data types
- Variables, operators, and control structures
- Functions and function expressions
- DOM (Document Object Model) introduction

Unit – 5: *Concept of SQL* [6]

This course covers the fundamentals of SQL programming.

This syllabus covers:

- Understand the basics of SQL and database concepts
- Write SQL queries to retrieve and manipulate data
- Use SQL to create and modify database objects
- Understand data modeling and database design principles

IV. Lesson Plan of the Course

Lectures (1 Lecture = 1 hour)	Content
2	<ul style="list-style-type: none">•How to design a website•Create themes for various layouts
4	<ul style="list-style-type: none">•Create and design front end website etc.•Learning about the tools and techniques using software applications
3	<ul style="list-style-type: none">• Functioning of a website• Web standards and W3C elements• Domains and hosting
3	<ul style="list-style-type: none">• Clients and server scripting languages• Responsive web designing
3	<ul style="list-style-type: none">•Concept of HTML and CSS•How HTML elaborates the general structure of a web page design•Designing a web page and hyperlink
3	<ul style="list-style-type: none">•Using tools used in HTML5•Types of CSS with example
3	<ul style="list-style-type: none">• History of JavaScript• Basic syntax and data types• Variables, operators, and control structures
3	<ul style="list-style-type: none">• Functions and function expressions• DOM (Document Object Model) introduction
3	<ul style="list-style-type: none">• Understand the basics of SQL and database concepts• Write SQL queries to retrieve and manipulate data
3	<ul style="list-style-type: none">• Use SQL to create and modify database objects• Understand data modeling and database design principles

V. Evaluation Policy

- Total Marks: 50
- Theory Examination (MCQ type): 30
- Practical Examination: 15
- Attendance: 5
- Pass Marks: 25

VI. Gradation System

Marks Obtained	Grade
45 – 50	A +
40 – 44	A
35 – 39	B +
30 – 34	B
25 – 29	C
Below 25	Fail

VII. Certification

Students will be awarded by a certificate after the successful completion of the course.

VII. Learning Resources

- I. "HTML and CSS: Design and Build Websites" by Jon Duckett
- II. "HTML: The Definitive Guide" by Chuck Musciano and Bill Kennedy
- III. "SQL Queries for Mere Mortals" by John D. Cook
- IV. "Learning SQL" by O'Reilly Media
- V. "SQL Fiddle" online tool
- VI. "W3Schools" SQL tutorial
- VII. "Eloquent JavaScript" by Marijn Haverbeke
- VIII. "JavaScript: The Definitive Guide" by David Flanagan
- IX. Online resources (e.g., MDN Web Docs, W3Schools)