Gujarat University
K. S. School of Business Management and Information Technology
[Five Years' (Full – Time) M.Sc. (CA&IT) Integrated Degree Course]
Second Year M.Sc. (CA&IT) (Semester - III)

Course Name: Dynamic Website Development

Course Code: SEC-DWD-236

Course Credit: 2

Objective:

The objective of this course is to provide students with comprehensive knowledge and practical skills in developing dynamic websites using content management systems (CMS). Students will learn to effectively install, configure, and customize CMS platforms to create fully functional and visually appealing websites. The course will cover essential topics such as theme customization, plugin management, content organization, website security, performance optimization, and the basics of e-commerce site development. Through hands-on exercises and projects, students will gain the expertise needed to build, manage, and optimize dynamic websites, preparing them for real-world web development scenarios.

Course Outcomes:

By the end of this course, students will be able to:
- Grasp the core principles of website development using a content management system (CMS).
- Install and configure a CMS to set up a functional website.
- Customize themes and templates to tailor website appearance.
- Install and manage essential plugins to enhance website functionality.
- Effectively create, organize, and manage website content.
- Implement best practices for website security and performance optimization.
- Develop a basic e-commerce site using appropriate tools and plugins (optional).

Contents:

Unit No.	Course Content	Hours	Credits
1	**Introduction to CMS, Themes, and Plugins** • Overview of a CMS and its benefits • Installing a CMS locally and on a web server • Understanding the CMS dashboard and settings • Choosing and installing themes • Customizing themes using built-in customization tools • Working with child themes • Introduction to plugins and their functions • Installing and configuring essential plugins (e.g., SEO, contact forms, caching)	30	1

2	**Website Content Management, Customization, Security, and E-commerce** • Creating and managing posts and pages • Organizing content with categories and tags • Understanding the media library • Introduction to page builder plugins • Building and designing pages with page builders • Responsive design and mobile optimization • Implementing security measures (e.g., strong passwords, security plugins) • Optimizing website performance (caching, image compression) • Backing up and restoring sites • Introduction to creating online stores using e-commerce plugins • Setting up and configuring a basic e-commerce website • Managing products and orders	**30**	**1**

Reference Books:

1. "Beginning WordPress 5: An Introduction to the World's Most Popular Content Management System" by Chris Reynolds
2. "Professional WordPress: Design and Development" by Brad Williams, David Damstra, and Hal Stern
3. "Web Development with WordPress" by Mark Polino

Accomplishments of the student after completing the Course:-
Upon completing the course, students will be able to:

➢ Develop and launch a website using a CMS.
➢ Customize and manage website themes and plugins.
➢ Organize and manage website content efficiently.
➢ Apply customization techniques using page builders for responsive design.
➢ Implement security measures and performance optimization strategies.
➢ Create a basic e-commerce application.