

B.Sc.(I.T.) (Honours) & B.Sc.(I.T.) (Honours with Research)
(Semester - 3 and Semester - 4)
Saurashtra University
To be effective from June – 2024



CS-17: Content Management System using WordPress		
Objectives: <ul style="list-style-type: none"> • Learn how to create custom themes and pages • Work with custom post types and taxonomies • In detail knowledge of the WordPress CMS backend • Working with widgets and widget areas • Working in default cms functions and extending its core 		
Prerequisites: <ul style="list-style-type: none"> • Basic knowledge of web development and CMS 		
Unit No.	Topic	Detail
1	Introduction, Installation & Configuration	<ul style="list-style-type: none"> • What is Content Management System (CMS)? <ul style="list-style-type: none"> - Introduction of Wordpress - Features of Wordpress • Advantages & Disadvantages of Wordpress <ul style="list-style-type: none"> - Installation of Wordpress. - Wordpress Directory & file structure. - Dashboard overview - How to add, edit and delete page, category, post, tag. - Add new media file (image, pdf, doc etc.) & attach to post or page. • Gutenberg Introduction <ul style="list-style-type: none"> - Gutenberg Blocks (Paragraph, Heading, Subheading, Quote, Image, Cover Image, Gallery, Video, Audio, Columns, Code, List, Button, Embeds) • User Roles and Capabilities. - Setting (General, writing, Reading, Discussion, Media, Permalinks) • Updating Wordpress <ul style="list-style-type: none"> - One-click Update - Manual Update • Database Structure
2	Theme	<ul style="list-style-type: none"> • What is Theme? • How to install & activate theme • Theme Customize Options (Site Identity, Menus, Widgets, HomePage Settings, Additional CSS)
3	Widget	<ul style="list-style-type: none"> • What is widget & widget areas? • Widget Management <ul style="list-style-type: none"> - Available Widgets (Archive, Calendar, Categories, Navigation Menu, Meta, Pages, Recent Comments, Recent Posts, RSS, Search, Tag Cloud, Text, Image Gallery, Video, Audio, Custom HTML) • Inactive Sidebar (not used)

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		<ul style="list-style-type: none"> • Inactive Widgets
	Plugin	<ul style="list-style-type: none"> • What is plugin? • How to install and activate plugin • Useful plugins for website <ul style="list-style-type: none"> - SEO Yoast - Contact Form 7 - WooCommerce - WP Super Cache - Regenerate Thumbnails - Advanced Custom Fields - All-in-One WP Migration - Custom Post Type Widgets • Inactive Sidebar (not used) Inactive Widgets
4	Theme Development	<ul style="list-style-type: none"> • Anatomy of a Theme: header.php, footer.php and sidebar.php • Template Files (style.css, index.php, page.php, home.php, archive.php, single.php, comments.php, search.php, attachment.php, 404.php, category.php, tag.php, author.php, date.php) • The Loop (have_posts (), the_post()) • Template Tags <ul style="list-style-type: none"> ○ General tags (wp_head(), get_footer(), get_header(), get_sidebar(), get_search_form(), bloginfo(), wp_title(), single_post_title(), wp_footer(), comments_template(), add_theme_support(), get_template_directory_uri(), body_class()) ○ Author tags (the_author(), get_the_author(), the_author_link(), get_the_author_link(), the_author_meta(), the_author_posts()) ○ Category tags (category_description(), single_cat_title(), the_category()) ○ Link tags (the_permalink(), get_permalink(), home_url(), get_home_url(), site_url(), get_site_url()) ○ Post tags (the_content(), the_excerpt(), the_ID(), the_tags(), the_title(), get_the_title(), the_date(), get_the_date(), the_time(), next_post_link(), previous_post_link(), posts_nav_link(),



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		<p>post_class())</p> <ul style="list-style-type: none"> ○ Post Thumbnail tags (has_post_thumbnail(), get_post_thumbnail_id(), the_post_thumbnail(), get_the_post_thumbnail()) ○ Navigation Menu tags (wp_nav_menu()) ○ Conditional Tags (is_archive(), is_category(), is_front_page(), is_home(), is_page(), is_single(), is_search(), is_attachment(), is_active_sidebar()) <ul style="list-style-type: none"> ● functions.php file
5	Advanced Development	<ul style="list-style-type: none"> ● Advanced Functions <ul style="list-style-type: none"> - add_action(), add_filter(), add_shortcode(), do_shortcode(), register_nav_menu() ● Custom Post Types <ul style="list-style-type: none"> - Register_post_type(), register_taxonomy(), Display custom post type & taxonomy ● Widget Area <ul style="list-style-type: none"> - register_sidebar(), dynamic_sidebar()

Seminar	-	5 Lectures
Expert Talk	-	5 Lectures
Test	-	5 Lectures

Total Lectures 60 + 15 = 75

Reference Books:

- Build Your Own Wordpress Website: An ultimate guide for small business owners paperback by Wordpress Genie
- Teach Yourself VISUALLY Wordpress paperback – by George Plumley 3rd Edition.
- Wordpress for Beginners: A visual step-by-step guide to Mastering Word press Paperback – by Dr. Andy Williams.
- Wordpress to Go: How to build a Wordpress website on your own domain, from scratch, Even if you are a complete beginner paperback – by Sarah Mcharry (Author)

Course outcomes:

- Work with and configure the cms backend
- Know when to use a custom post type or custom field
- Extend the Wordpress cms core to match requirements
- Create stunning dynamic themes