

**UNIVERSITY OF DELTA, AGBOR, NIGERIA**  
**COMPUTING**  
**INFORMATION AND COMMUNICATION TECHNOLOGY**  
**B.Sc. Information and Communication Technology**

**UNIDEL-ICT 302: Web Content Management System (3 Units; Compulsory; LH 30; PH=45)**

**Senate-approved Relevance**

The training of high-skilled graduates who are capable to use content management systems to create and modify web pages and web sites dynamically so as to make the website engaging and informative. This is in tandem with the mission and vision of University of Delta, Agbor, of producing students with demonstrable potentials and skills in the area of web development which will benefit the immediate community of Delta state and Nigeria in general.

**Overview**

Web Content Management Systems have gained in popularity as the number of robust and complex websites continues to grow. Today, many cutting edge web publishers use content management systems (CMS) to allow them to instantly and dynamically update web pages and properties as new content becomes available so that every visit to a site is engaging, informative, and meaningful. Almost every media organization, big business, educational institution and municipality website is powered by a CMS. The functionality of the system can vary based on its primary use, but must allow users to collaborate on content, track usage/editing, format content, modify search and retrieval terms, etc This course prepares students to create, modify, maintain and publicize CMS websites, giving students studying for vocation in online communications and web development a valuable asset to them. The course has a lab component to give students the opportunity to create, modify, maintain and publicize CMS website

This course explores the use of the three most popular open source web-based content management systems such as WordPress, Joomla, and Drupal to create dynamic and flexible websites and landing pages. Students will explore the fundamentals of planning dynamic websites, CMS database management, developing CSS-controlled site templates, and creating database-driven websites through the planning and creation of their own topic-based sites.

**Objectives**

The objectives of this course are to: (i) Create, modify, maintain and publicize a CMS website. (ii) Manage an online community, media assets, and content.(iii) Compare and contrast open source content management systems. (iv) Install and track Google Analytics to measure and enhance site performance (v) Understand what makes a good web page (vi) Learn how important the structure of a site is both to the web user and search engines (vii) Understand why web content needs to differ from content in print (viii) Look at page design elements and how to use them effectively to make a web page effective (ix) Know how to create content in CMS pages (x) hosting websites and developing content for social media platforms such as wiki and blog; (xi) discuss and describe e-learning platform Moodle and CMS applications Drupal and Joomla.

## **Learning Outcomes**

Upon the completion of the course, students will be able to (i) Explain open source content management (ii) Apply systems (CMS) in use on the web today, including WordPress, Moodle, and Joomla.(iii) Explain the difference between a CMS website, a static website, and websites using other server side technologies.(iv) Identify the benefits of working with a server side database and the power it brings to creating and managing websites.(v) Compare and contrast the three most popular open source CMS.(vi) Create and deploy websites using CMS, including creating and editing content, adding functionality, and creating custom templates and themes. (vii) Describe ongoing maintenance considerations with CMS websites (viii) Describe the different tools and methods that today's web publishers are using to create highly-tailored dynamic web content.

## **Course Content**

Understanding Web Content Management Systems. Dynamic vs Static websites. Popular open source CMS. CMS usage (ecommerce, blog, photo, education, business). Planning and Developing Dynamic Web Content Sites. Primer on PHP and MySQL database. Creating a sitemap. Building and Administrating CMS powered Site. Purchasing a domain name. Purchasing Web hosting. XAMP and MAMP servers. Installing CMS, Managing Accounts, Wordpress.com vs Wordpress.org. Akismet account. Google analytics account. Admin Area and settings. Adding Content. Etiquette and best practices. Simple HTML and CSS. Visual editor vs HTML editor. Working with Media. Hotlinking and .htaccess. Measuring reader response. Driving traffic to site. Syndication & Publicizing. RSS and Atom feeds.Feedburner. Publicizing site. Customizing a Wordpress Theme. Overview of Cascading Style Sheets (CSS). Installing new themes. Using CSS to move and position web graphics. Widget and Plugins. Filtering useful from useless. Troubleshooting conflicts. Avoiding slow-loading content.

## **Minimum Academic Standard**

NUC minimum academic standard requirements for facilities.