

# Web Design Essentials v3



## Certification Exam: ICT Communications Essentials Certificate Test

### Exam Objectives

The ICT Web Design Essentials courseware is written to the following Exam Objectives:

#### **Domain 3.1: Demonstrate understanding of webpage design principles, including domains, webpage components, aesthetic design, color use, functional design, usability and accessibility, and multimedia and interactivity.**

- 3.1.1: Identify website domains and relate a site's domain to its purpose.
- 3.1.2: Define the elements of a webpage and what makes a good webpage.
- 3.1.3: Define aesthetic design and explain how aesthetics can affect a visitor's perception of a website's information.
- 3.1.4: Demonstrate knowledge of color wheel concepts and effective use of color on a website.
- 3.1.5: Compare functional and usable design principles and explain how usability can affect a website's success.
- 3.1.6: Critique the aesthetic design, usability, and accessibility of sample websites.
- 3.1.7: Define multimedia and identify its role in webpage interactivity.

#### **Domain 3.2: Plan the design and development of an effective website, including website planning process, site navigation, HTML text and graphical editors, online and offline site builders, content management systems, and webpage templates.**

- 3.2.1: Explain the primary steps of the website planning process.
- 3.2.2: Apply the website planning process to plan the design for a basic website.
- 3.2.3: Build the site navigation scheme for a website.
- 3.2.4: Compare webpage creation using an HTML text editor to using a graphical user interface (GUI) editor.
- 3.2.5: Compare website creation using an online site builder, an offline site builder, and a content management system (CMS).
- 3.2.6: Modify an existing webpage template to create an effective look and feel for a website.
- 3.2.7: Create a website using a template.

#### **Domain 3.3: Create webpages using basic HTML code and authoring tools, including HTML tags and terminology, HTML page structure elements, hyperlinks and images, Cascading Style Sheets (CSS) technology, animation and video files, and Dynamic HTML (DHTML). Use collaborative web technologies in a web development or research project, including wikis, blogs, social media sites and collaboration techniques.**

- 3.3.1: Define "HTML (Hypertext Markup Language)" and related terms, including tag vs. element, block-level vs. inline element, attribute, value, and semantic tag.
- 3.3.2: Identify HTML elements required to create webpage structure.
- 3.3.3: Create webpages using basic HTML tags (e.g., headings, lists, character styles, text alignment, tables, comments).
- 3.3.4: Use HTML to create hyperlinks to external sites.
- 3.3.5: Use HTML to insert common image file formats into webpages and use an image as a hyperlink.
- 3.3.6: Explain Cascading Style Sheet (CSS) technology.
- 3.3.7: Apply CSS styles to an HTML page.
- 3.3.8: Create and/or edit animation files and integrate them into a webpage.
- 3.3.9: Create and/or edit video files and integrate them into a webpage.
- 3.3.10: Use Dynamic HTML (DHTML) to enhance webpage interactivity.
- 3.3.11: Create and use collaboration tools with project team members.
- 3.3.12: Create and use web collaboration tools to share information or collaborate with others on projects, i.e., social media, chatting/messaging services, online blogs, vlogs, and feedback forms.

#### **Domain 3.4: Prepare webpages for publication (including webpage content review, copyright restrictions, metadata, webpage testing, HTML code validation), and publish a website to the Internet using appropriate tools (including network issues, site publishing with File Transfer Protocol [FTP], website security methods).**

- 3.4.1: Review webpage content, verify copyright restrictions, and create meta-data before publishing a site to the Internet.
- 3.4.2: Test webpages for display, functionality, and accessibility before publishing a site to the Internet.
- 3.4.3: Validate webpage code using W3C validation tools before publishing a site to the Internet.
- 3.4.4: Describe network issues relating to websites, including bandwidth, compression, streaming, and web hosting.
- 3.4.5: Explain the purpose of Secure File Transfer Protocol (SFTP) in accessing information on the Internet.
- 3.4.6: Publish a website using SFTP.
- 3.4.7: Describe website security methods, including TLS and encryption.