

**Unit 208 Web site design - Level 2 (Optional)****Rationale**

The aim of this unit is to equip candidates with the basic principles needed to be able to create and maintain a series of web pages, which collectively form what is commonly known as a web site.

There are 6 outcomes to this unit. The candidate will be able to

1. describe and apply the basics of web page development
2. undertake user requirements analyses
3. use appropriate development tools to implement web pages
4. test web sites
5. use graphics software to create and manipulate images on web pages
6. publish and maintain web sites

**Guided learning hours**

The recommended guided learning hours for this unit are 60

**Connections with other awards****NVQ links**

Outcome	This award contributes to the knowledge and understanding of the following elements of NVQ(s)
1,2	<i>C&amp;G 4300 Using IT NVQ Level 2:</i> 201.1 Prepare For the Use of Information Technology 205.3 Access and retrieve electronically stored information 207.1 Identify and Retrieve Graphical Images 207.2 Produce the Required Graphical Images by Manipulating Image 207.3 Output the Graphical Images to the Required Destination
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6	
6	

**Key Skills links**

Application of number	
Communication	C 1.2
IT	IT 2.1, IT 2.2, IT 2.3
Working with others	
Problem solving	PS 2.1
Improving own learning	

**Assessment**

Assessment will be by means of a **set assignment** covering both practical activities and underpinning knowledge.

*Outcome 1: Describe and apply the basics of web page development*

	<b>Candidate's signature</b>	<b>Date</b>
<p><b>Practical activities</b>  <b>The candidate will be able to</b></p> <ol style="list-style-type: none"> <li>1. achieve desired effects for: <ul style="list-style-type: none"> <li>• pages (set suitable default background page and text colours, background image)</li> <li>• text (font, size, style, colour)</li> <li>• paragraphs (paragraph and line breaks, indentation) using <ol style="list-style-type: none"> <li>a a text editor to apply specific HTML tags</li> <li>b WYSIWYG HTML editing tools</li> </ol> </li> </ul> </li> <li>2. convert images into formats suitable for inclusion on web pages</li> </ol>		
<p><b>Underpinning knowledge</b>  <b>The candidate will be able to</b></p> <ol style="list-style-type: none"> <li>1 describe the effects that different screen resolutions and colour depths have on web pages</li> <li>2 explain the significance of the speed of the internet connection between the user's computer and the internet, (different file sizes and download times)</li> <li>3 describe the main features and capabilities found in web browsers</li> <li>4 state the main features of the Hypertext Markup Language (HTML) and identify its limitations</li> <li>5 describe the importance of the <b>pixel</b></li> <li>6 explain the advantages and disadvantages between different graphics file formats suitable for use in a web page</li> <li>7 explain the issues involving copyright law relevant to internet web sites</li> </ol>		

*Outcome 2: Undertake user requirements analyses*

	<b>Candidate's signature</b>	<b>Date</b>
<p><b>Practical activities</b>  <b>The candidate will be able to</b></p> <ol style="list-style-type: none"> <li>1 design web sites for target audiences using storyboarding</li> <li>2 create appropriate structure diagrams demonstrating the linking structure of web pages</li> <li>3 produce project plans for the incremental development of web sites including the gathering of suitable resources</li> </ol>		
<p><b>Underpinning knowledge</b>  <b>The candidate will be able to</b></p> <ol style="list-style-type: none"> <li>1 identify the functions of different web sites, for example: educational, governmental and commercial (reference, selling, promotion, entertainment)</li> <li>2 describe the term 'target audience'</li> <li>3 identify the importance of a 'house style'</li> <li>4 explain the relative merits of different page layout styles (standard, tables, frames)</li> <li>5 identify how maintenance and further development need to be considered during design</li> </ol>		

*Outcome 3: Use appropriate development tools to implement web pages*

	<b>Candidate's signature</b>	<b>Date</b>
<p><b>Practical activities</b>  <b>The candidate will be able to</b></p> <ol style="list-style-type: none"> <li>1. create templates for pages used within a web site based upon house styles</li> <li>2. embed images within web pages <ol style="list-style-type: none"> <li>a. set suitable alignment attributes</li> <li>b. use the Alt tag to provide the user with alternative meaningful information</li> </ol> </li> <li>3. use tables to enhance the layout of <ol style="list-style-type: none"> <li>a. text and graphics</li> <li>b. tabular information</li> </ol> </li> <li>4. use anchors (bookmarks) to establish hyperlinks within a single web page</li> <li>5. use hyperlinks to link to: <ol style="list-style-type: none"> <li>a. pages within the same web site</li> <li>b. other sites on the World Wide Web</li> <li>c. e-mail</li> <li>d. FTP</li> </ol> </li> <li>6. create image maps</li> <li>7. use meta tags to add keyword information to pages to aid search engines</li> </ol>		

*Outcome 4: Test web sites*

	<b>Candidate's signature</b>	<b>Date</b>
<b>Practical activities</b> <b>The candidate will be able to</b>  1 verify all links work as expected  2 use different browsers to preview pages and verify all components appear as expected		

*Outcome 5: Use graphics software to create and manipulate images on a web page*

	Candidate's signature	Date
<p><b>Practical activities</b>  <b>The candidate will be able to</b></p> <ol style="list-style-type: none"> <li>1 resize images within web sites:               <ol style="list-style-type: none"> <li>a. for use as background images on pages</li> <li>b. for use as a icons or thumbnails</li> <li>c. to specific dimensions</li> </ol> </li> <li>2 apply transparency to images</li> <li>3 use file compression to achieve optimal quality of images within constraints (file size, download times)</li> <li>4 apply 'web safe' palettes of colours to images</li> </ol>		
<p><b>Underpinning knowledge</b>  <b>The candidate will be able to</b></p> <ol style="list-style-type: none"> <li>1 explain the factors that affect the file size of an image:               <ol style="list-style-type: none"> <li>a. number of colours</li> <li>b. file compression</li> <li>c. physical pixel dimensions</li> <li>d. file type</li> </ol> </li> <li>2 describe the advantage of 'transparency' when applied to an image</li> <li>3 explain the purpose of using a 'web safe' palette of colours</li> </ol>		

*Outcome 6: Publish and maintain web sites*

	<b>Candidate's signature</b>	<b>Date</b>
<b>Practical activities</b> <b>The candidate will be able to</b>  1 use software to manage the development of web sites  2 publish (upload) web sites to Internet/Intranet or other web servers		
<b>Underpinning knowledge</b> <b>The candidate will be able to</b>  1. identify how the site can be promoted (register with search engine, advertise, exchange links with other sites)  2. state the need for security when sending certain types of information across the Internet		