

<b>Unit Title:</b>	<b>Design software</b>
OCR unit number:	28
Level:	2
Credit value:	4
Guided learning hours:	30
Unit reference number:	T/502/4573

## Unit purpose and aim

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This is the ability to use a software application designed to create, modify and layout artwork for display in print or on a screen.

This unit is about the skills and knowledge required by an IT user to select and use a range of intermediate design software tools and techniques to produce at times non-routine or unfamiliar designs. Any aspect that is unfamiliar may require support and advice from others.

Design software tools and techniques at this level are described as ‘intermediate’ because:

- the range of entry, manipulation and outputting techniques will be at times non-routine or unfamiliar;
- the software tools and functions involved will at times be non-routine or unfamiliar; and
- the user will take some responsibility for setting up or developing the type or structure of the document.

Learning Outcomes	Assessment Criteria	Examples
<p>The learner will:</p> <p>1 Obtain, insert and combine information for designs</p>	<p>The learner can:</p> <p>1.1 Describe what <b>designs</b> are needed</p> <p>1.2 Obtain, input and <b>prepare designs</b> to meet needs</p> <p>1.3 Describe what <b>copyright and other constraints</b> apply to the use of designs</p> <p>1.4 Use appropriate techniques to organise and <b>combine information</b> of different types or from different sources</p> <p>1.5 Describe the <b>context in which the designs</b> will be used</p> <p>1.6 Describe what <b>file format</b> to use for saving designs to suit different presentation methods</p> <p>1.7 <b>Store and retrieve</b> files</p>	<p><b>Designs or images:</b> Designs or images will vary according to the task for example, photos from a digital camera, scanned images, graphic elements, drawings, clip art</p> <p><b>Prepare images:</b> Size, crop and position</p> <p><b>Copyright constraints:</b> Effect of copyright law (e.g. on use of other people’s images), acknowledgment of sources, permissions</p> <p><b>Combine information:</b> Insert, size, position, wrap, order, group</p> <p><b>Context for designs and images:</b> Contexts will vary according to</p>

Learning Outcomes	Assessment Criteria	Examples
	effectively, in line with local guidelines and conventions where available	<p>the software and task, for example: on screen display, publishing on a web site, hard copy print out, digital file</p> <p><b>File formats for designs and images:</b> Will vary according to the content, for example jpg for Internet photo display, png for Internet drawing display, svg for graphic designs (the ISO standard most likely to be fully supported by web browsers)</p> <ul style="list-style-type: none"> <li>- Digital picture format (e.g. jpeg and psd)</li> <li>- Bitmap or raster picture formats (e.g. raw bitmaps, bmp and compressed formats jpeg and png)</li> <li>- Vector graphics (e.g. svg, wmf, eps, ai)</li> <li>- Open formats (e.g. html, odf, pdf and rtf)</li> <li>- Proprietary formats (e.g. pub and qxd)</li> <li>- Method of compression (lossy, non-lossy)</li> </ul> <p><b>Store and retrieve:</b> Save, save as, find, open, close, import, export to other file formats; reduce file size</p>
2 Use design software tools to create, manipulate and edit designs	<p>2.1 Identify what <b>technical factors affecting designs</b> need to be taken into account and how to do so</p> <p>2.2 Select and use suitable techniques to <b>create designs</b></p> <p>2.3 Use guide lines and dimensioning tools appropriately to enhance precision</p> <p>2.4 Select and use appropriate tools and techniques to <b>manipulate and edit</b> for designs</p> <p>2.5 <b>Check designs</b> meet needs, using IT tools and making corrections as</p>	<p><b>Technical factors affecting designs and images:</b> Page or canvas size; colour mode; file size and format; difference between screen and print resolution</p> <p><b>Create designs and images:</b> Draw basic shapes and adjust properties (e.g. line width, fill colour, transparency); download digital photos from a camera; scan and resize images; add text and other elements such as lines, boxes and arrows; create more complicated designs using painting, drawing or image</p>

Learning Outcomes	Assessment Criteria	Examples
	<p>necessary</p> <p>2.6 Identify and respond to <b>quality problems with designs</b> to make sure that they meet needs</p>	<p>manipulation software</p> <p><b>Manipulate and editing techniques:</b> Align, rotate, flip, arrange, cut, paste, resize, change font, text and colour, group, ungroup, change templates, filters to create special effects, orders and layers</p> <p><b>Check designs and images:</b> Size, alignment and orientation, suitability of file format, appropriate choice of colour mode and use of filters, fitness for purpose of image resolution</p> <p><b>Quality problems with designs and images:</b> Will vary according to the content, for example, levels, contrast, resolution</p>

## Assessment

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All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met. Assessments must also take into account the additional information provided in the unit Purpose and Aims relating to the level of demand of:

- the activity, task, problem or question and the context in which it is set;
- the information input and output type and structure involved; and
- the IT tools, techniques or functions to be used.

See the Assessment and postal moderation section of the [ITQ Centre Handbook](#).

## Evidence requirements

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Candidates must complete the Evidence Checklist for this unit without gaps. Individual unit checklists are available to download from the qualification [webpage](#) (see forms).

## Guidance on assessment and evidence requirements

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Please refer to the ITQ centre handbook on our [webpage](#).

## Details of relationship between the unit and national occupational standards

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This unit maps fully to competences outlined in IT User National Occupational Standards version 3 (2009).