

SVQ for IT Users (ITQ) — level 3 (SCQF level 6)

F9CL 04: Drawing and Planning Software 3

4 SCQF credit points at SCQF level 6

Description: This is the ability to use software designed for producing 2D drawings or plans, such as flowcharts, mindmaps and technical drawings.

Outcome	Skills and Techniques	Knowledge and Understanding
On completion of this Unit the candidate should be able to:		
1 Input, organise and combine information for drawings or plans.	<ol style="list-style-type: none">1 Select, adapt, create and use the appropriate shapes to meet needs, including shapes imported from other sources.2 Select, adapt, define and create appropriate templates and styles to meet needs.3 Combine information for drawings or plans including exporting Outcomes to other software.4 Store and retrieve drawing files effectively, in line with local guidelines and conventions where available.	<ol style="list-style-type: none">1 Identify what types of shapes and other elements will be needed.2 Evaluate templates and explain why and how they need to be changed to meet needs.3 Provide guidance on what copyright constraints apply to the use of own and others' shapes or other elements.
2 Use tools and techniques to edit, manipulate, format and present drawings or plans.	<ol style="list-style-type: none">1 Select and use appropriate software tools to manipulate and edit shapes and other elements with precision.2 Select and use appropriate software tools to format shapes and other elements, including applying styles and colour schemes.3 Check drawings or plans meet needs, using IT tools and making corrections as necessary.4 Identify and respond to quality problems with drawings or plans to make sure they are fit for purpose and meet needs.5 Select and use appropriate presentation methods and accepted page layouts.	<ol style="list-style-type: none">1 Explain what drafting guides to use so that the shapes and other elements are appropriately prepared.2 Explain what context the drawings and plans will be used in and how this will effect how they are presented.

Note: The **emboldened** items are exemplified in the Support Notes.

Evidence Requirements

Completion of a portfolio (manual, electronic or combination) to cover all of the Skills and Techniques and Knowledge and Understanding points stated above. The evidence generated should adhere to the Assessment Strategy for this award and encompass a range of evidence types.

NB: It is possible to achieve this Unit by Accreditation of Prior Achievement (APA), however, the relevant evidence must be referenced within the portfolio.

General information

This Unit equates to NOS (National Occupational Standards for IT Users 2009) code DPS: Drawing and Planning Software level 3. It has a stated number of SCQF credit points = 4 at SCQF level 6.

Support Notes

Summary

A SCQF level 6 (ITQ level 3) user can select and use advanced tools and techniques to produce complex and non-routine drawings and plans.

2D drawing and planning software tools and techniques will be described as 'advanced' because:

- ◆ the software tools and functions used will be complex and at times require new learning, which will involve having the idea that there may be a tool or function to do something (eg improve efficiency or create an effect), exploring technical support, self-teaching and applying
- ◆ the inputting, manipulating and outputting techniques will be complex, and will involve research, identification and application
- ◆ the user will take full responsibility for inputting, structuring, editing and presenting the information

Examples of context: A plan of the proposed new traffic layout for a town centre, a flow chart of the quality control checks to be carried out on a production line; a plan of the data relationships for a multi-table database or a system diagram for a complex IT network.

Examples of content are given separately for highlighted text, where explanatory notes are required on terminology in the Outcomes, and do not form part of the standards. Such examples are not meant to form a prescriptive list for the purposes of assessment but rather to amplify and interpret the generic terms used in the Performance Criteria in the light of current usage of ICT systems and software. These examples are subject to change as new tools and techniques become commonplace and older ones drift out of use.

The examples given below are indicative of the learning content and are not intended to form a prescriptive list for the purpose of assessment.

Outcome 1

Shapes and other elements: Shapes will vary according to the required Outcome, for example: flow chart shapes, building plan shapes, audit.

Other elements: graphic elements (eg lines, arrows, borders, backgrounds, clip art), text, numbers.

Input information: Inputting tools and techniques will vary according to the technology being used: for example, interface devices (eg keyboard, mouse, stylus, touch screen), microphone (eg headset, stand alone, built-in), camera (eg web cam, video camera, mobile phone camera).

Templates and styles: Existing templates and styles, working from an example document; adapt templates, apply styles; create new templates, define new styles and colour schemes.

Copyright constraints: Effect of copyright law (eg on music downloads or use of other people's images), acknowledgment of sources, avoiding plagiarism, permissions.

Combine information: Insert, size, position, wrap, order, group.

Store and retrieve: Save, save as, find, open, close, import, export, other file formats.

Outcome 2

Drafting guides: Grids, snap to grid, snap to shape, rulers, guidelines.

Manipulate and edit shapes and other elements: Will vary, for example:

- ◆ Edit: select, insert, delete, cut, copy, paste, drag and drop, find, replace.
- ◆ Text: font, colour, alignment.
- ◆ Shapes: size, colour, orientation, connections to other shapes and elements, add labels.

Format shapes and other elements: Will vary, for example: text (eg font, paragraphs, text block, tabs, bullets), lines (eg width, length, colour, endings, beginnings), drawing elements (eg fill, shadow, corners), connections between shapes and other elements.

Protection: length, width, axis. Behaviour: interaction, selection highlighting.

Check drawings and plans: Spell check, grammar check, accuracy of numbers, labelling and size of shapes, connections between shapes and other elements.

Presentation methods: Will vary according to the task, for example, on screen display, publishing on a website, hard copy print out, digital file; organisational housestyle, branding.

Quality problems with drawings and plans: Will vary according to the content, for example, text (eg formatting, styles, positioning), shapes (eg size, position, orientation, unwanted content), other elements (eg scale, thickness, colour, connections), page layout (proportion, balance, symmetry).

Guidance on examples of evidence

Typical examples of evidence for Outcomes 1 and 2

Carry out a project involving the selection, manipulation and editing of shapes and other elements and checking of results and responding to quality problems discovered. This could involve a plan of the proposed new traffic layout for a town centre, a flow chart of the quality control checks to be carried out on a production line; a plan of the data relationships for a multi-table database or a system diagram for a complex IT network.

This should be supplemented by screen dumps and witness testimony or personal statement.

To assess competence in the Knowledge and Understanding sections for all of the Outcomes a knowledge test in the form of multiple-choice questions (say 16–20 questions) or candidate statement or expert witness testimonial statements or a semi structured interview could be employed. Either one or a combination of these methods would be appropriate. If oral questioning techniques are employed it is essential to keep a record of the questions asked, together with a record in a suitable format of the candidate's responses to these for evidence purposes.

Disabled candidates and/or those with additional support needs

The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments, or considering whether any reasonable adjustments may be required. Further advice can be found on our website www.sqa.org.uk/assessmentarrangements