

Draft National Unit Specification



Unit title: 3D and Pictorial Graphic Communication (Higher)

SCQF: level 6 (9 SCQF credit points)

Unit code: to be advised

Unit outline

The general aim of this Unit is to help learners to develop their creativity and presentation skills within a 3D and pictorial graphic communication context. It will enable learners to initiate, plan, develop and communicate ideas graphically, using three-dimensional graphic techniques. Learners will develop a number of skills and attributes within a 3D graphic communication context, including spatial awareness, visual literacy, and the ability to interpret given drawings, diagrams and other graphics. Learners will evaluate the effectiveness of their own and given graphic communications to meet their purpose.

Learners who complete this Unit will be able to:

- 1 Produce and interpret pictorial sketches and drawings
- 2 Produce 3D CADD production drawings
- 3 Produce pictorial and 3D illustrations of geometric forms and everyday objects
- 4 Plan and produce pictorial or 3D models for promotional purposes

This Unit is a mandatory Unit of the Higher Graphic Communication Course and is also available as a free-standing Unit. The Unit Specification should be read in conjunction with the *Unit Support Notes* which provide advice and guidance on delivery, assessment approaches and development of skills for learning, skills for life and skills for work. Exemplification of the standards in this Unit is given in the *National Assessment Resource*.

The Course Assessment Specification for the Higher Graphic Communication Course gives further mandatory information on Course coverage for learners taking this Unit as part of the Higher Graphic Communication Course.

Recommended entry

Entry to this Unit is at the discretion of the centre. However, learners would normally be expected to have attained the skills, knowledge and understanding required by one or more of the following or equivalent qualifications and/or experience:

- ◆ Graphic Communication (National 5) or relevant component Units

Equality and inclusion

This Unit Specification has been designed to ensure that there are no unnecessary barriers to learning or assessment. The individual needs of learners should be taken into account when planning learning experiences, selecting assessment methods or considering alternative evidence. For further information please refer to the *Unit Support Notes*.

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Standards

Outcomes and assessment standards

Outcome 1

The learner will:

1 Produce and interpret pictorial sketches and drawings by:

- 1.1 Applying graphic communication skills to produce pictorial line sketches and drawings of everyday objects or buildings with complex features that are accurate in proportion, line quality, style and representation
- 1.2 Applying graphic communication skills to produce pictorial line sketches and drawings of everyday objects with complex features
- 1.3 Describing and justifying the use of the main types of graphic communication employed in the design, manufacturing and marketing of a product

Outcome 2

The learner will:

2 Produce 3D CADD production drawings by:

- 2.1 Applying CADD skills accurately and effectively and using appropriate assembly techniques to create 3D models of everyday objects with complex features and technical detail
- 2.2 Applying CADD skills, knowledge and understanding accurately and effectively to generate production drawings from 3D models demonstrating appropriate projection
- 2.3 Applying CADD skills, knowledge and understanding accurately and effectively and using appropriate drawing standards to add textual and numerical information to pictorial CADD drawings

Outcome 3

The learner will:

3 Produce pictorial and 3D illustrations of geometric forms and everyday objects by:

- 3.1 Illustrating preliminary pictorial sketches or drawings of geometric forms and everyday objects, in a colour medium, to interpret the light source, surface texture and materials
- 3.2 Creating a rendered 3D model of a complex everyday object to interpret the light source, surface texture and materials
- 3.3 Using CADD software appropriately to create an environment or scene with visual impact, applying surface texture and materials, to situate and effectively enhance a pictorial illustration

Outcome 4

The learner will:

4 Plan and produce pictorial or 3D models for promotional purposes by:

- 4.1 Designing a promotional graphic to incorporate a 3D model to create visual impact in response to a brief or theme
- 4.2 Producing promotional graphics to incorporate a 3D model which communicates corporate identity
- 4.3 Evaluating the effectiveness of the format to its target audience in relation to design principles and elements
- 4.4 Describing the purpose of pictorial and 3D modelling in commercial/industrial settings, the impact on our environment and society and their likely impact in the future

Evidence Requirements for the Unit

Assessors should use their professional judgement, subject knowledge and experience, and understanding of their learners, to determine the most appropriate ways to generate evidence and the conditions and contexts in which they are used.

Evidence is required that the learner has met the Outcomes and Assessment Standards.

Evidence may be a combination of written, oral and graphical.

In general, Outcomes may be met using either manual graphics techniques or electronic techniques, or a combination of both manual and electronic. When an Outcome or Assessment Standard specifically refers to a task that can only be carried out using manual techniques or electronic techniques, then those must be used.

Evidence may be presented for individual Outcomes or it may be gathered for the Unit as a whole through combining assessment holistically in one single activity. If the latter approach is used, it must be clear how the evidence covers each Outcome.

For Outcome 3, a suitable environment might be the internal corner of a kitchen worktop. i.e a surface and two walls, enabling a light source to cast shadows and/or reflections.

For this Unit, learners will be required to provide evidence of:

- ◆ skills in interpreting and creating a range of pictorial and 3D graphics including preliminary, production and promotional graphics
- ◆ knowledge and understanding of appropriate drawing standards, conventions and practices in commercial/industrial settings
- ◆ an understanding of techniques and terminology involved in the production of 3D graphics and 3D graphic displays
- ◆ an understanding of how graphic communication technologies impact on society and the environment

Exemplification of assessment will be provided in the *National Assessment Resource*. Advice and guidance on possible approaches to assessment is provided in the *Unit Support Notes*.

Development of skills for learning, skills for life and skills for work

(Note: The information given below reflects the initial thinking on significant opportunities for development of skills for learning, skills for life and skills for work. These may be subject to change as the development process progresses.)

It is expected that learners will develop broad, generic skills through this Unit. The skills that learners will be expected to improve on and develop through the Unit are based on SQA's *Skills Framework: Skills for Learning, Skills for Life and Skills for Work* and drawn from the main skills areas listed below. These must be built into the Unit where there are appropriate opportunities.

2 Numeracy

2.2 Money, time and measurement

4 Employability, enterprise and citizenship

4.2 Information and communication technology (ICT)

5 Thinking skills

5.3 Applying

5.4 Analysing and evaluating

5.5 Creating

Amplification of these is given in SQA's *Skills Framework: Skills for Learning, Skills for Life and Skills for Work*. The level of these skills should be at the same SCQF level of the Unit and be consistent with the SCQF level descriptor. Further information on building in skills for learning, skills for life and skills for work is given in the *Unit Support Notes*.

Administrative information



Published: November 2011 (draft version 1.0)

Superclass: to be advised

History of changes

Version	Description of change	Authorised by	Date

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Note: readers are advised to check SQA's website: www.sqa.org.uk to ensure they are using the most up-to-date version of the Unit Specification.