



3D and Pictorial Graphic Communication (National 5)

SCQF: level 5 (9 SCQF credit points)

Unit code: H27W 75

Unit outline

The general aim of this Unit is to develop the learner's skills and creativity in producing and interpreting pictorial and 3D graphics. It will enable the learner to initiate, develop and communicate ideas and solutions, using graphic techniques in simple and familiar contexts with some complex features.

Learners will develop skills in both manual and electronic graphic communication techniques. They will acquire knowledge of terms and techniques in computer-aided design. The Unit also develops transferable skills in creativity and problem solving in a graphic communication context.

Learners who complete this Unit will be able to:

1. Produce and interpret pictorial sketches¹, pictorial drawings and 3D models
2. Produce pictorial and 3D illustrations
3. Create pictorial or 3D promotional displays

This Unit is a mandatory Unit of the National 5 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 *Unit Assessment Support*.

The *Course Assessment Specification* for the National 5 Graphic Communication Course gives further information on Course coverage for learners taking this Unit and part of the National 5 Graphic Communication Course.

¹ Drawing and sketching refers to manual and/or electronic methods unless otherwise stated.

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:

- ◆ National 4 Graphic Communication Course 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*.

Standards

Outcomes and assessment standards

Outcome 1

The learner will:

- 1 Produce and interpret pictorial sketches, pictorial drawings and 3D models by:**
 - 1.1 Using graphic communication equipment to create pictorial sketches of everyday objects and/or geometric forms in common pictorial formats that are accurate, well-proportioned and with very good line quality
 - 1.2 Using graphic communication equipment to produce pictorial drawings and 3D computer-aided design models of everyday objects and/or geometric forms to within an accuracy of 1 mm
 - 1.3 Using drawing standards, protocols and conventions which are appropriate to the purpose, including correct projection methods and use of scale
 - 1.4 Describing a range of computer-aided design commands, techniques and practices employed in the production of 3D graphics and models, using appropriate terminology
 - 1.5 Identifying and describing types of pictorial graphic communication used in the design, manufacturing and marketing of a product

Everyday objects will generally consist of combinations of geometric shapes and forms covered in the Unit.

Outcome 2

The learner will:

- 2 Produce pictorial and 3D colour illustrations by:**
 - 2.1 Illustrating pictorial sketches or drawings of everyday objects to convey surface texture, tonal change and colour
 - 2.2 Creating rendered 3D computer-aided design models of everyday objects to interpret the light source, surface texture and materials
 - 2.3 Using computer-aided design or illustration software to create shadows or reflections of the 3D model on a surface
 - 2.4 Describing using appropriate terminology, basic computer-aided design commands, techniques and practice employed in the production of 3D illustrations, using appropriate terminology

Everyday objects will generally consist of combinations of geometric shapes and forms covered in the Unit.

Outcome 3

The learner will:

3 Create pictorial or 3D promotional displays by:

- 3.1 Creating, in response to a brief or theme, preliminary designs for a single-page promotional layout to display a rendered pictorial or 3D graphic and extended textual information with relevant visual impact
- 3.2 Using graphic communication equipment to produce a single-page promotional document incorporating a rendered pictorial or 3D graphic and extended textual information

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.

In this Unit, Evidence Requirements are as follows.

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. Of course, 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 this Unit, learners will be required to provide evidence of:

- ◆ skills in pictorial and 3D graphics, including drawing, sketching, and illustration
- ◆ skills in creating pictorial and 3D promotional graphics
- ◆ knowledge and understanding of appropriate drawing standards, protocols and conventions
- ◆ knowledge and understanding of techniques and terminology involved in the production of 3D graphics and 3D graphic displays
- ◆ knowledge and understanding of 3D computer-aided design /DTP techniques and terminology
- ◆ knowledge and understanding of how graphic communication technologies impact on our society and the environment

Exemplification of assessment is provided in the *Unit Assessment Support*. 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

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

5.2 Understanding

5.3 Applying

5.4 Analysing and evaluating

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: April 2015 (version 1.1)

Superclass: CE

History of changes to National Unit Specification

Version	Description of change	Authorised by	Date
1.1	Reference to draughting removed throughout.	Qualifications Manager	April 2015

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