Technical Graphics

SCQF: level 7 (12 SCQF credit points)

Unit code: J1X8 77

Unit outline

The general aim of this Unit is for learners to develop their knowledge, understanding and creative skills in technical graphics set within the broad user and business sectors. It will enable learners to investigate design principles, technical graphic techniques, contemporary graphics technology, purposes and audience.

Learners who complete this Unit will be able to:

1   Explain the requirements of a technical graphics audience and evaluate the suitability of a professional technical graphic that has been created for that audience
2   Evaluate the use of technical graphic techniques and technologies to meet the requirements of a technical graphics audience
3   Plan and produce technical graphic communications that communicate relevant technical data to meet the requirements of a specific audience

This Unit is 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 *Unit Assessment Support*.

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:

♦ Higher Graphic Communication Course or relevant 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   Explain the requirements of a technical graphics audience and evaluate the suitability of a professional technical graphic that has been created for that audience by:

1.1   Explaining the requirements of a selected technical graphics audience
1.2   Evaluating the suitability of a professional technical graphic that has been created to meet the requirements of a technical graphics audience

Outcome 2

The learner will:

2   Evaluate the use of technical graphic techniques and technologies to meet the requirements of a technical graphics audience by:

2.1   Evaluating the use of a range of technical graphic techniques
2.2   Evaluating the use of a range of technical graphic technologies

Outcome 3

The learner will:

3   Plan and produce technical graphic communications that communicate relevant technical data to meet the requirements of a specific audience by:

3.1   Planning technical graphic communications that communicate relevant technical data to a specific audience
3.2   Producing technical graphic communications using recognised skills and techniques, that communicate relevant technical data to a specific audience

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.

In general, Outcomes may be met using a variety of methods and techniques — those which best support the context of the activity — and will therefore be a combination of manual and electronic methods accompanied by written and oral evidence as required.

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

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

♦ knowledge and understanding of the graphic design principles, recognised techniques, purpose and audience requirements for technical graphics
♦ skills in the evaluation of technical graphics and their use
♦ skills in the planning and production of complex technical graphics to support a technical activity and its audiences

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

Assessment standard thresholds

If a candidate successfully meets the requirements of the specified number of Assessment Standards they will be judged to have passed the Unit overall and no further re-assessment will be required.

The specific requirements for this Unit is as follows:

♦ 4 out of 6 Assessment Standards must be achieved.

It should be noted that there will still be the requirement for candidates to be given the opportunity to meet all Assessment Standards. The above threshold has been put in place to reduce the volume of re-assessment where that is required.

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

5.4   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 as 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: July 2019 (version 3.0)

Superclass: JC

History of changes to National Unit Specification

Version	Description of change	Authorised by	Date
2.0	All Outcomes and Assessment Standards amended for clarification. Removal of Skills for Learning, Life and Work 5.3.	Qualifications Development Manager	April 2015
2.1	Assessment standard thresholds added.	Qualifications Manager	September 2018
3.0	Level changed from Advanced Higher to SCQF level 7 Unit code updated	Qualifications Manager	July 2019

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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.