

SQA Advanced Unit Specification

General information for centres

Unit title: Drawing for 3D Design

Unit code: HT48 47

Unit purpose: This Unit is intended to allow candidates to build skills and gain confidence in expressing ideas and concepts through the use of drawing. The work undertaken may take the form of either freehand, technical or computer generated drawing. The main aim is to encourage the understanding of the use of drawing in realising a three-dimensional piece of design by investigating the principals of space, scale, volume and perspective.

This Unit may be delivered in isolation, as a series of preparatory exercises to introduce learning skills or it may be integrated with a project-based unit, to enforce the relevance of expressive visualisation.

On completion of the Unit the candidate should be able to:

- 1 Explore a range of drawing media.
- 2 Investigate three-dimensional form, through developmental drawing.
- 3 Demonstrate application and use of drawing for three-dimensional design.

Credit points and level: 1 SQA Credit at SCQF level 7 (8 SCQF credit points at SCQF level 7*).

**SCQF credit points are used to allocate credit to qualifications in the Scottish Credit and Qualifications Framework (SCQF). Each qualification in the Framework is allocated a number of SCQF credit points at an SCQF level. There are 12 SCQF levels, ranging from National 1 to Doctorates.*

Recommended prior knowledge and skills: Access to this Unit is at the discretion of the centre. However, it would be beneficial if candidates have competence in drawing, ie the ability/skills to produce two-dimensional drawing for the purpose of sketch proposals.

Core Skills: There are opportunities to develop the Core Skill of Problem Solving at SCQF level 6 in this Unit, although there is no automatic certification of Core Skills or Core Skills components.

Context for delivery: If this Unit is delivered as part of a Group Award, it is recommended that it should be taught and assessed within the subject area of the Group Award to which it contributes.

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Assessment: This Unit could be assessed by a single instrument of assessment, requiring candidates to produce a sketchbook or workbook addressing the issues highlighted in the Outcomes. If the work of the Unit is to be integrated into other project-based Units, the assessment of each Outcome can be broken down into separate events.

It is suggested that the Outcomes for this Unit be delivered in sequential order, as the Unit has been designed to follow a logical learning process, which is:

Outcome 1 — investigation and experimentation of drawing techniques

Outcome 2 — development of drawing skills

Outcome 3 — application of drawing skills

If it is intended to integrate this Unit with a project-based Unit, then it is advised that Outcome 1 remain a standalone component, prior to the delivery of any other subsequent Outcome.

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SQA Advanced Unit specification: statement of standards

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The sections of the Unit stating the Outcomes, knowledge and/or skills, and evidence requirements are mandatory.

Where evidence for Outcomes is assessed on a sample basis, the whole of the content listed in the knowledge and/or skills section must be taught and available for assessment. Candidates should not know in advance the items on which they will be assessed and different items should be sampled on each assessment occasion.

Outcome 1

Explore a range of drawing media

Knowledge and/or skills

- ◆ Identification of potential subject matter
- ◆ Collation of reference and source material
- ◆ Experimentation with media

Evidence Requirements

Candidates will need to provide evidence to demonstrate their knowledge and/or skills by showing that they can:

- ◆ produce a minimum of eight A4 sheets or equivalent, showing examples of the use of two and three-dimensional drawing
- ◆ evaluative written evidence of 200/250 words which support the collated examples

Assessment guidelines

Candidates will need to provide evidence to demonstrate their understanding of the use of drawing in three-dimensional design, by showing that they can:

- ◆ Produce a body of initial research that will then allow for a range of exploration and experimentation to follow. Enquiry should be encouraged through the recording of visual information with supporting written annotation, where appropriate. Sketchbooks or workbooks should be used to record visual evidence.

Candidates will need to evidence:

- ◆ Exploration of a minimum of three types of different media/three separate applications within a software package.

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Outcome 2

Investigate three-dimensional form through developmental drawing

Knowledge and/or skills

- ◆ Experimentation with drawing techniques
- ◆ Production of developmental drawings
- ◆ Investigation of visual space, form and scale
- ◆ Use of media

Evidence Requirements

Candidates will need to provide evidence to demonstrate their knowledge and/or skills by showing that they can:

- ◆ produce a minimum of three A3 developmental drawings, showing the relationship between objects in terms of space, form and scale

Assessment guidelines

The assessment of this Outcome may be combined with Outcomes 1 and 3 as part of a single assessment, or assessed on an individual basis.

Outcome 3

Demonstrate application of drawing for three-dimensional design

Knowledge and/or skills

- ◆ Drawings produced for a given brief
- ◆ Drawing materials/equipment
- ◆ Visual presentation

Evidence Requirements

Candidates will need to provide evidence to demonstrate their knowledge and/or skills by showing that they can:

- ◆ produce a minimum of three visuals, demonstrating an appreciation of the relationship between objects in terms of space form and scale
- ◆ produce a single solution to the brief

Assessment guidelines

The assessment of this Outcome can be combined with Outcomes 1 and 2 as part of a single assessment for this Unit. Outcome 3 may also be integrated with another project-based unit.

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Administrative Information

Unit code:	HT48 47
Unit title:	Drawing for 3D Design
Superclass category:	JB
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Version	Description of change	Date

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SQA Advanced Unit specification: support notes

Unit title: Drawing for 3D Design

This part of the Unit specification is offered as guidance. The support notes are not mandatory.

While the exact time allocated to this Unit is at the discretion of the centre, the notional design length is 40 hours.

Guidance on the content and context for this Unit

This Unit is intended to encourage the development of candidates' drawing through practiced techniques. The Unit may be integrated with a project-based unit, giving credence to the relevance of drawing as the visual language of the designer/artist, or the Unit may be delivered as a standalone subject. The Unit can be delivered in Interior Design, Exhibition Design, Product Design and CAD or any design subject area.

As a preparatory exercise, this Unit could be used to establish a skills base, with which to build on for future project based work. By introducing the candidate to new techniques, medium or software packages, emphasis should be to encourage the understanding of the use of drawing in realising a three-dimensional piece of design. Therefore, the exploration of media in Outcome 1 and the expression of ideas in Outcome 2 should be specific to the subject of the Group Award.

The Unit can be used to facilitate project-based work in terms of visual presentation either technical drawing; freehand sketch proposals; 3D modelling on screen or finished rendered client visuals. It may also be used to introduce the candidate to a particular computer software package used in design visualisation.

Guidance on the delivery and assessment of this Unit

Assessment can be at the end of each Outcome or, if integrated, may be summative. This is a skills building Unit and should emphasise either the expressive or technical use of drawing in design.

From the experimental work undertaken in Outcome 1, the candidate should determine which of the media investigated could be used for further development. The tutor should encourage candidates to explore drawing techniques by undertaking a series of exercises, which allow the candidate to practise and gain confidence in using the chosen media.

It is important that the exercises undertaken in Outcome 2 allow the candidate to improve their drawing skills and thereby give them the skills to realise proposed design solutions in Outcome 3, using drawing as a medium.

The candidates should undertake a series of exercises, led by the tutor, which introduces them to the possibilities and use of media. The choice and investigation of media and techniques may differ from to one group award to another eg software packages in CAD, materials for freehand and technical drawing. The range of exercises and subject of the brief are at the discretion of the tutor, although candidates may personally direct the subject matter of a brief.

The exercises undertaken in the delivery of this Unit should allow the candidate to improve their drawing skills which will then in turn allow them to better undertake further project-based Units within the Group Award.

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Opportunities for developing Core Skills

Candidates will be required as they undertake the Unit to analyse and seek solutions to a range of practical issues involved in the development and application of drawing skills for 3D design work. Formative work in which they are encouraged to identify and consider variables including appropriate media and available resources, and to analyse the significance of each before identifying and justifying appropriate design approaches and techniques will be useful. The investigation and application of knowledge in experimental approaches to design and production will provide opportunities to develop problem solving skills to a significant level. Analytical evaluation of all stages of proposed design solutions and their potential and actual impact should be on-going and could usefully be supported by discussion with the assessor.

Open learning

This Unit could be delivery by distance learning. However, it would require planning by the centre to ensure the sufficiency and authenticity of candidate evidence.

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.

Further advice can be found on our website www.sqa.org.uk/assessmentarrangements.

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General information for candidates

Unit title: Drawing for 3D Design

Drawing is the visual language of the designer and artist, therefore it is very important that you begin to develop drawing skills that will allow you to visually express and realise your design ideas. You will also gain confidence in expressing ideas and concepts through the use of drawing.

The work undertaken may take the form of either freehand, technical or computer-generated drawing. The aim is to encourage your understanding of the use of drawing in realising a three-dimensional piece of design by investigating the principals of space, scale, volume and perspective.

Through tutor-led exercises you will be encouraged to investigate a range of media, which are appropriate to your programme subject area.