



National Unit specification: general information

Unit title: Art and Design: 3D Design — Spatial Design
(SCQF level 6)

Unit code: F9WM 12

Superclass: JC

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Summary

This Unit has been designed to assist and support candidates to gain experience in the Spatial Design Process. Candidates will have the opportunity to interpret and work to a given brief that will enable them to develop and produce a 3D scale model.

This Unit is suitable for candidates who:

- ◆ have some experience or understanding of 3D design studies and Spatial Design processes
- ◆ want to develop 3D planning skills and explore 3D Spatial Design fully

Outcomes

- 1 Investigate the requirements of a given spatial design brief.
- 2 Produce rough and scale working drawings to meet the brief.
- 3 Produce a finished 3D scale model.

Recommended entry

While entry is at the discretion of the centre, candidates would benefit from having previous experience of an Art and Design Course or Units.

General information (cont)

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Credit points and level

1 National Unit credits at SCQF level 6: (6 SCQF credit points at SCQF level 6*)

**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 Access 1 to Doctorates.*

Core Skills

Opportunities to develop aspects of Core Skills are highlighted in the support notes of this Unit specification.

There is no automatic certification of Core Skills or Core Skill component in this Unit.

National Unit specification: statement of standards

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Acceptable performance in this Unit will be the satisfactory achievement of the standards set out in this part of the Unit specification. All sections of the statement of standards are mandatory and cannot be altered without reference to SQA.

Outcome 1

Investigate the requirements of a given spatial design brief.

Performance Criteria

- (a) Identify the main requirements of the brief.
- (b) Gather and collate relevant source material with development potential.
- (c) Identify and record 3D shapes and their relationship to architectural and or interior spaces.

Outcome 2

Produce rough and scale working drawings to meet the brief.

Performance Criteria

- (a) Identify a variety of ideas and approaches which can be developed.
- (b) Produce scale working drawings, orthographic views and axonometric projections.

Outcome 3

Produce a finished 3D scale model.

Performance Criteria

- (a) Identify scale of model and suitable materials for use in producing a 3D scale model.
- (b) Apply safe working practices and use of equipment appropriately.

National Unit specification: statement of standards (cont)

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Evidence Requirements for this Unit

Evidence is required to demonstrate that candidates have achieved all Outcomes and Performance Criteria.

Written and/or oral evidence and product evidence will be produced to demonstrate that candidates have achieved all of the Outcomes and Performance Criteria.

Candidates will produce a folio that includes:

- ◆ collated visual and annotated research material that demonstrates understanding of the main requirements of the brief
- ◆ annotated initial development studies, which demonstrate the investigation of selected media, materials and techniques in 3D spatial design, using scale and sketches, which use research material to inform the creative development process
- ◆ a range of scale working drawings, orthographic views and axonometric projections
- ◆ a professionally finished scale model, which can be photographed for candidate's record and for assessment purposes

The evidence for this Unit must be produced under open-book conditions throughout the delivery of the Unit, with progress monitored by teachers/lecturers on an ongoing basis. Teachers/lecturers will use an assessor observation checklist to record candidates' are working safely during practical activities.

The folio of work can be presented in sketchbook, workbook or display board format and all assessment evidence must be retained along with a copy of the brief and the final 3D scale model.

National Unit specification: support notes

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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 an optional Unit of the National Certificate of Art and Design at SCQF level 6. It can also be taken as a free-standing Unit.

This Unit will enable candidates to explore the 3D spatial design process. On completion of this Unit candidates will have investigated ideas for 3D models, by way of a given brief. Through the production of scale working drawings candidates will produce a scale model using appropriate materials and applied construction techniques.

The final model as specified in the brief should be capable of being produced by candidates with some experience in 3D work at this level. The completed model will relate to the requirements of the brief and should show increased confidence in the handling of media, materials and techniques from the earlier development work. The presentation of the completed model will involve the display of candidates' work. Given centre restrictions on space and storage, candidates and teachers/lecturers may find it helpful to record their final model and/or development work photographically throughout the Unit. Candidates should produce a model that shows a degree of finish and relates to professional studio practice. Accuracy of construction and precise representation of scale and detail should be applied to the model.

Guidance on learning and teaching approaches for this Unit

This Unit provides an introduction to the 3D spatial design process. Candidates will work to a brief and explore scale, dimension and construction techniques. Teachers/lecturers can provide candidates with exemplars of models explaining exploration of 3D concepts and space, use of scale, the application of dimensions and use of suitable materials. This can include group discussion and critical analysis of 3D spatial design, perhaps related to a designer and their use of investigative techniques, working drawings and construction methods. This could be used as an introduction to the Unit and would be of benefit to the candidate both in the informed methods of scale drawings and in the later selection of materials in the development of the construction stage of their 3D model. The teacher/lecturer could explain the safe use of materials and their importance when constructing and finishing a 3D model. Teachers/lecturers should use formative assessment methods to encourage the candidate to reflect on their work individually or in groups. The candidate should have the opportunity to explore a wide range of media eg a variety of cards, boards and papers, plastics, expanded polystyrene, balsa wood, suitable glues etc and should have the opportunity to explain the development of their work on an ongoing basis. Candidates can work individually for the duration of this Unit or in groups. The following information gives further clarification regarding the context in which the Outcomes and Performance Criteria are to be achieved.

National Unit specification: support notes (cont)

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Candidates should work primarily in two dimensions, through working drawings as part of the ongoing special investigative process. The brief should be imaginative and well constructed to guide candidates through the creative process of researching and developing ideas for the final model. It should be designed to allow for individual creativity, and any constraints should be clearly related to professional practice. When constructing candidate briefs teachers/lecturers should ensure that there are no artificial barriers to learning and assessment and candidates' special needs should be taken into account when planning learning experiences and preparing assessments.

The brief for spatial exploration and model making can involve the creation and development of a model based on a theme or topic either specified by teachers/lecturers or negotiated with candidates. This should be linked with a defined area of spatial design, which would inform the presentation of the final model, and it could be developed as a class brief or for individual use. This brief should allow candidates to gather suitable research material with development potential before generating and developing ideas through the use of media, materials and construction techniques in mixed media in response to the given brief. Teachers/lecturers should ensure that each candidate understands the main requirements of the brief before starting the developmental process. This understanding could be fostered through group or one to one discussions with candidates in addition to the ongoing monitoring, discussion and reviewing of the collated research materials with individual candidates.

Opportunities for developing Core Skills

Candidates may have opportunities to develop aspects of the Core Skill of *Communication* through teacher/lecturer led group discussions and through commentary when analysing the 3D form of spatial design.

The Core Skill of Problem Solving could be developed while experimenting with the construction of 3D forms, as well as the Core Skill of *Numeracy* when analysing different scales and dimensions for the development of the model.

Guidance on approaches to assessment for this Unit

A suitable instrument for assessment for this Unit would be a series of practical exercises. The Outcomes may be assessed on an individual basis or a combined staged assessment could be used to cover all three Outcomes.

If holistic assessment is being used, the spatial design and model making brief should indicate the scope of the activities involved and include realistic timescales for completion and should be constructed to provide candidates with some flexibility of choice. A checklist for safe working practices can be used for all Outcomes. Through open questions and group discussions 3D construction techniques can be considered exploring the use of materials and media related to specific 3D spatial design processes and methods of construction.

National Unit specification: support notes (cont)

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Candidates can be encouraged to keep a photographic record of all their 3D models and these should show:

- ◆ compliance to the requirements of the brief
- ◆ the effective use of construction methods, media and techniques developed during this Unit.

Teachers/lecturers must be satisfied that the evidence submitted is the work of individual candidates. Although group work may be used as a learning and teaching approach, any work that contributes to candidates' assessment evidence must be carried out on an individual basis to ensure authenticity.

Opportunities for the use of e-assessment

E-assessment may be appropriate for some assessments in this Unit. By e-assessment we mean assessment which is supported by Information and Communication Technology (ICT), such as e-testing or the use of e-portfolios or e-checklists. Centres which wish to use e-assessment must ensure that the national standard is applied to all candidate evidence and that conditions of assessment as specified in the Evidence Requirements are met, regardless of the mode of gathering evidence. Further advice is available in *SQA Guidelines on Online Assessment for Further Education (AA1641, March 2003)*, *SQA Guidelines on e-assessment for Schools (BD2625, June 2005)*.

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

History of changes to Unit

Version	Description of change	Date

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