Higher National Unit Specification

General information for centres

Unit title: 3D Design: Project Management

Unit code: F0MS 35

Unit purpose: This Unit is designed to enable candidates to develop the knowledge and skills required to manage a 3D design project. It will enable candidates to produce the planning documentation required to allow the production of a final scheme or product.

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

1 Identify the processes required to produce a realised 3D scheme/product.
2 Produce initial specifications.
3 Produce final production schedule.

Credit points and level: 1 HN Credit at SCQF level 8: (8 SCQF credit points at SCQF level 8*)

**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.*

Recommended prior knowledge and skills: Access to this Unit is at the discretion of the centre. Candidates should have an understanding of the application of the 3D design process.

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.

Assessment: This Unit could be assessed holistically. This would require the production of a project management schedule covering the Evidence Requirements of all Outcomes. Alternatively, each Outcome could be assessed separately.

Higher National Unit specification: statement of standards

Unit title: 3D Design: Project Management

Unit code: F0MS 35

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

Identify the processes required to produce a realised 3D scheme/product

Knowledge and/or skills

- Illustrated proposals
- Processes
- Key roles
- Working practices
- Procedures
- Planning

Evidence Requirements

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

- outline the processes required to produce a finished 3D design scheme/product
- identify the roles of those involved in the process
- identify the materials and equipment required for the process
- identify the key stages of the planning process
- correctly interpret an illustrated proposal

Evidence should be presented in a written or oral report or equivalent.

Assessment guidelines

The assessment of this Outcome can be combined with Outcomes 2 and 3, as part of a single assessment for the Unit.

Responses to oral or written questions may be considered as part of a response to identify the processes required.

Higher National Unit specification: statement of standards (cont)

Unit title: 3D Design: Project Management

Outcome 2

Produce initial specifications

Knowledge and/or skills

- Data
- Specification formats
- Production information
- Documentation
- Current health and safety legislation

Evidence Requirements

Candidates will need to provide evidence to demonstrate their knowledge and/or skills by showing that they can, through the production of an outline specification for a 3D scheme/product:

- detail materials/products required
- correctly detail personnel required
- detail other resources required
- take account of current health and safety legislation in the planning process

Evidence should be presented as a written illustrated specification or an orally/digitally generated presentation.

Assessment guidelines

The assessment of this Outcome can be combined with Outcomes 1 and 3, as part of a single assessment.

The written specification may be supported by visual material which may include: plans, diagrams, drawings, photographs, etc.

Higher National Unit specification: statement of standards (cont)

Unit title: 3D Design: Project Management

Outcome 3

Produce final production schedule

Knowledge and/or skills

- Production planning
- Schedule formats
- Key stages
- Time planning

Evidence Requirements

Candidates will need to provide evidence to demonstrate their knowledge and/or skills by producing a production schedule for a finished 3D product/scheme showing that they can:

- correctly interpret a proposal
- correctly identify key stages
- correctly identify time constraints
- produce a schedule that is clear and easy to follow

Evidence should be presented as report or equivalent, as a production schedule. Deadlines should be set and structured round the Outcomes of the Unit.

Assessment guidelines

Evidence should be presented as a written production schedule, laid out to a format provided by the Tutor.

The assessment of this Outcome can be combined with Outcomes 1 and 2, as part of a single assessment.

Administrative Information

Unit code: F0MS 35

Unit title: 3D Design: Project Management

Superclass category: JC

Original date of publication: August 2007

Version: 01

History of Changes:

Version	Description of change	Date

Source: SQA

SQA acknowledges the valuable contribution that Scotland's colleges have made to the development of Higher National qualifications.

Additional copies of this Unit specification can be purchased from the Scottish Qualifications Authority. Please contact the Customer Contact Centre for further details, telephone 0845 279 1000.

Higher National Unit specification: support notes

Unit title: 3D Design: Project Management

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 within the 3D Design Group Award.

The knowledge gained from this Unit will provide the skills required to plan a 3D design project and produce the planning documentation to enable the production of a final product.

This Unit will develop the skills required to produce production specifications that will enable the final product to be produced. Candidates will be able to identify key roles (contractors, planners, manufacturers, etc) engaged in the realisation of a design proposal. Candidates will be able to explain time lines, working practices and schedules.

Guidance on the delivery and assessment of this Unit

This Unit has been developed as part of the HND 3D Design Group Award. It is recommended that it should be taught and assessed within the subject area of the Group Award to which it contributes.

Opportunities may be taken to link or integrate with other aspects of the course and a thematic approach adopted for both delivery and assessment. This Unit could be delivered and assessed in conjunction with other appropriate Unit/s where a holistic assessment would be encouraged.

The Unit could be used to allow candidates to plan a project such as an exhibition or installation of their own work.

The Unit could be presented to candidates as a design brief that they must respond to by undertaking the three Outcomes.

The tasks should explore various solutions and the application of forward planning to offer solutions.

The work should show an awareness of regulatory constraints and procedures such as the Disability Discrimination Act and relevant technical standards. Presentation could be in the form of a report and final production plan and this could be reviewed by individual or group critiques.

A Unit specific checklist or feedback sheet may be used to ensure the candidate has addressed all requirements within a given timeframe.

Consideration should be given to the use of the Virtual Learning Environment (VLE) to support existing teaching and learning practices. By identifying techniques that are currently being used consideration may be given to which online tools and resources are appropriate to engage the learner. Candidates would be given a secure user account were they could send their responses.

The learning and teaching materials should be accessible and inclusive and where applicable positively promote equality and cultural diversity.

Opportunities for developing Core Skills

All elements of the Core Skill of Problem Solving, that is, planning and organising, critical thinking, and reviewing and evaluating, should be naturally developed and enhanced as candidates develop strategies for the management of a project. They are required to formally analyse needs, including resources and personnel requirements and establish clear objectives. Identifying and assessing the relevance of all factors which may affect management of the project will require analytical and critical thinking. Understanding and acknowledging constraints, and designing schedules and a plan within the limitations of resources and timescales will develop enhanced understanding of the process of project management in industry practice. Candidates may benefit from the support of skills checklists and personal interviews with the assessor to reinforce analytical and evaluative approaches to project management including the discussion of ways to improve performance.

Open learning

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

For further information and advice please refer to the SQA document *Assessment and Quality Assurance for Open and Distance Learning* which is available on SQA's website: **www.sqa.org.uk**.

Candidates with disabilities and/or additional support needs

The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments, or considering alternative Outcomes for Units. Further advice can be found in the SQA document *Guidance on Assessment Arrangements for Candidates with Disabilities and/or Additional Support Needs* **(www.sqa.org.uk)**.

General information for candidates

Unit title: 3D Design: Project Management

This Unit will enable you to understand the processes and procedures that are required take a design from a proposal, in illustration or model format, into a realised 3 dimensional full-scale scheme.

For **Outcome 1** you will identify the process required to produce a realised 3D scheme or product. You will show that you understand the processes used to develop a design proposal into a finished product.

For **Outcome 2** you will produce an outline specification as a written and illustrated document or an orally/digitally generated presentation. You will show that you understand the need for a specification and apply the information you have researched in your workbook to meet an agreed deadline.

For **Outcome 3** you will produce a production schedule that correctly interprets an illustrated proposal into a production schedule for a finished 3D product/scheme. The schedule will identify key stages and time constraints and will be clear and easy to follow.