

## National Unit Specification: general information

<b>UNIT</b>	Product Model (Higher)
<b>NUMBER</b>	D128 12
<b>COURSE</b>	Craft and Design (Higher)

### SUMMARY

This is a component unit of Higher Craft and Design.

The external assessment of the course consists of a Design Assignment which allows the candidates to display competence in the learning which has taken place in the first three units of the course. To allow a full evaluation to be made of the candidate's proposal for a solution to the Design Assignment, a prototype or model has to be constructed.

### OUTCOMES

- 1 Plan the production of the prototype or presentation model of a proposed solution to a design specification.
- 2 Construct the prototype or presentation model of the proposed solution.

### RECOMMENDED ENTRY

While entry is at the discretion of the centre, candidates would normally be expected to have attained one of the following:

- Standard Grade Craft and Design at Grade 1 or 2
- Standard Grade Art and Design at Grade 1 or 2
- Intermediate 2 Craft and Design, or equivalent

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### Administrative Information

<b>Superclass:</b>	WA
<b>Publication date:</b>	December 1999
<b>Source:</b>	Scottish Qualifications Authority
<b>Version:</b>	04

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## National Unit Specification: general information (cont)

**UNIT**      Product Model (Higher)

### **CREDIT VALUE**

0.5 credit at Higher.

### **CORE SKILLS**

This unit gives automatic certification of the following:

<b>Complete core skills for the unit</b>	None
<b>Core skills components for the unit</b>	Planning and Organising    H

Additional information about core skills is published in *Automatic Certification of Core Skills in National Qualifications* (SQA, 1999).

## **National Unit Specification: statement of standards**

### **UNIT        Product Model (Higher)**

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 the Scottish Qualifications Authority.

#### **OUTCOME 1**

Plan the production of the prototype or presentation model of a proposed solution to a design specification.

##### **Performance criteria**

- a) The plan is sufficiently detailed to allow the prototype or model to be completed.
- b) The choice of construction and materials is appropriate for the production of the prototype or model.

##### **Evidence requirements**

Written and graphical evidence that the candidate can plan for the production of the prototype or model as defined in PCs (a) and (b).

#### **OUTCOME 2**

Construct the prototype or presentation model of the proposed solution.

##### **Performance criteria**

- a) The construction is sound and carefully executed.
- b) The prototype or model conforms in size and shape to the production drawings.
- c) The quality of finish reflects that of the commercial product.

##### **Evidence requirements**

Performance evidence that the candidate can construct the prototype or model to meet the PCs (a) to (c).

## National Unit Specification: support notes

### UNIT Product Model (Higher)

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 20 hours.

#### **GUIDANCE ON THE CONTENT AND CONTEXT FOR THIS UNIT**

To provide experience of making a prototype or presentation model to allow an evaluation to be made of a design proposal.

The external assessment Design Assignment undertaken for course assessment should have produced a proposal for a solution prior to this stage. This unit is the required prototype or model of that solution which has to be constructed to allow a full evaluation to be made of the proposal.

Where the final product is capable of being made more or less to final commercial specification, a *prototype* can be made. The materials used should be those of the final product. While this will be built by hand, it must always be borne in mind that the final version has to be manufactured on an industrial/commercial basis utilising one or more of the processes covered in the course.

Where the solution employs materials or processes which cannot be undertaken within the skills of the candidate or the resources of the institution, e.g. injection-moulding in plastics, then a presentation *model* would be appropriate. The function of the model will depend on the product. It may be to test ergonomics, aesthetics or function but will usually test more than one. This will determine the form and the materials to be used. The presentation model will normally be full-size.

#### **GUIDANCE ON TEACHING AND LEARNING APPROACHES FOR THIS UNIT**

The external assessment Design Assignment can commence about halfway through the course but this will vary depending on the teaching and learning approaches adopted.

Candidates will bring craft skills from the Standard Grade course and will have experienced modelling in Unit 2 as well as in developing their designs to their final solutions. The type of work will have varied according to purpose and this experience can be applied to the final stage. It is possible that the final prototype or model will have been developing as the design progressed, rather than all being undertaken after the 'paperwork' is complete. This approach can assist the candidate in the preparation of the final manufacturing and presentation drawings and reflects industrial practice. Individual skills may require enhancing for some aspects of the work.

The prototype or model will allow the candidate to make an evaluation of her or his design. The findings of the evaluation should be recorded in the folio of the external assessment Design Assignment.

Examples of commercially produced models should be available to stimulate interest.

For those candidates studying the single unit, the starting point will be production drawings of a typical solution to a design brief at this level. These will be provided by the institution. The drawings will be for the manufacture of the final industrial/commercial product. The candidate has to interpret these, plan the production and construct a suitable prototype or model.

## **National Unit Specification: support notes**

### **UNIT      Product Model (Higher)**

#### **GUIDANCE ON APPROACHES TO ASSESSMENT FOR THIS UNIT**

The plan for the construction of the prototype or model will provide performance evidence for Outcome 1. The prototype (fully crafted artefact) or presentation model produced will be retained and should be assessed against the performance criteria for Outcome 2.

Sufficient photographs will be required to accompany the external assessment Design Assignment folio for the external examiner to judge the worth of the candidate's evaluation.

#### **SPECIAL NEEDS**

This unit specification is intended to ensure that there are no artificial barriers to learning or assessment. Special needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments or considering alternative outcomes for units. For information on these, please refer to the SQA document *Guidance on Special Assessment and Certification Arrangements for Candidates with Special Needs/Candidates whose First Language is not English* (SQA, 1998).