



National Unit specification: general information

Unit title: Jewellery: Enamelling (SCQF level 5)

Unit code: H1KM 11

Superclass: JH

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Summary

This is an optional Unit within the National Certificate in Jewellery at SCQF level 6. It is also suitable for use as a free standing Unit. It is designed to enable candidates to develop the skills and techniques which will allow them to identify and use the different types of equipment appropriate to cut and pierce materials. It is intended for use within the context of the manufacture of jewellery and/or silverwares. This Unit is suitable for candidates who are undertaking the study of this subject for the first time or wish to obtain a basic knowledge of enamelling as an interest subject.

Outcomes

- 1 Prepare metal surfaces for enamelling according to a brief.
- 2 Prepare enamels for enamelling according to a brief whilst observing health and safety requirements
- 3 Enamel and finish metal surfaces to an acceptable standard using a range of techniques to prepare components for further use
- 4 Identify and repair faults in enamelled surfaces compared to the original brief.

Recommended entry

Entry is at the discretion of the centre.

Credit points and level

1 credit at SCQF level 5 (6 SCQF credit points at SCQF level 5*)

**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.*

National Unit specification: general information (cont)

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Core Skills

Achievement of this Unit gives automatic certification of the following Core Skills component:

Complete Core Skill None

Core Skill component Critical Thinking at SCQF level 4

There are also opportunities to develop aspects of Core Skills which are highlighted in the Support Notes of this Unit specification.

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

Prepare metal surfaces for enamelling according to a brief.

Performance Criteria

- (a) Select metal for enamelling appropriate to given brief.
- (b) Clean, deoxidise and degrease selected metal.
- (c) Handle prepared metal appropriately to avoid contamination.
- (d) Store prepared metal appropriately to avoid contamination.

Outcome 2

Prepare enamels for enamelling according to a brief whilst observing health and safety requirements.

Performance Criteria

- (a) Handle enamels in accordance with health and safety requirements.
- (b) Grind enamels to the required fineness appropriate to the brief.
- (c) Prepare enamels according to intended use according to the brief.
- (d) Store enamels in accordance with health and safety requirements and to prevent contamination.

Outcome 3

Enamel and finish metal surfaces to an acceptable standard using a range of techniques to prepare components for further use.

Performance Criteria

- (a) Enamel metal using a range of techniques.
- (b) Clean and pre-polish enamelled metal to an acceptable standard according to the brief.
- (c) Polish enamelled metal to an acceptable standard according to the brief.
- (d) Prepare enamelled components for further incorporation in jewellery or silverwares.

National Unit specification: statement of standards (cont)

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Outcome 4

Identify and repair faults in enamelled surfaces compared to the original brief.

Performance Criteria

- (a) Identify faults in enamelled surfaces compared to the original brief.
- (b) Repair faults in enamelled surfaces.

Evidence Requirements for this Unit

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

Product and performance evidence:

Working from a brief, the candidate must produce samples of enamelled surfaces along with notes and annotations to each sample outlining the procedure undertaken to create each sample. Faults must be identified and analysed and some samples must be examples of faulty enamelling which has been rectified. The candidate must demonstrate an understanding of counter-enamelling and when to use it.

The candidate must produce three samples of each of the following types of enamel surfaces: opaque; transparent; cloisonné; flat surface and; domed surface. Additionally, three samples of faulty enamelling should be prepared, one of which should be repaired.

These samples produced must conform accurately to the given instruction brief which should include acceptable tolerances and timescales.

The candidate should finish these samples to a standard where they are suitable for further use as components of finished items of jewellery or silverware. Oxidation should be removed and surfaces smoothed and polished the enamel surface undamaged.

The candidate must be observed to be adhering to the health and safety legislation appropriate to the enamelling process. The tutor/assessor should be satisfied that the candidate is aware of and capable of acting within the framework of health and safety legislation and any centre-devised health and safety policy.

The evidence can be produced over a period of time and may be generated as appropriate to the progress of the candidate.

Centres must be satisfied that the evidence submitted is the work of individual candidates.

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

It is envisaged that this Unit be taught as part of a broader jewellery course. Candidates require no previous workshop or metalworking abilities in order to access the Unit. Health and safety issues should be covered as part of the overview of the Unit and emphasised throughout the delivery.

This Unit is an introduction to the fundamentals of jewellery manufacture and it could usefully be taught in conjunction with H09W 12 *Jewellery: Polishing*, which focuses on the processes of metal finishing, required by Outcomes 2 and 4.

It is suggested that a blended approach should be adopted to delivering this Unit and that a mixture of brief demonstrations should be precursory to as much practical bench-based learning as possible. The candidate should be encouraged to see the importance of enamelling as a skill for the manufacture of jewellery, especially in terms of adding colour and graphic qualities to jewellery. candidates should be encouraged to find a way of working which suits their individual needs within the framework of the health and safety constraints. Candidates should be encouraged to find ways of working with enamels which suits their own practice.

This Unit aligns to elements of the National Occupational Standards for Jewellery from Creative and Cultural Skills as follows:

- J2.1 Contribute to keeping the workshop tidy and safe
- J2.2 Read jewellery manufacture or silversmithing drawings
- J2.3 Mark out and measure materials for jewellery or silverware components
- J2.6 File jewellery or silverware components
- J2.12 Identify and explain methods and tools used in vitreous enamelling

- J3.2 Produce jewellery, silverware or engraving from detailed drawings and specifications
- J3.3 Mark out and measure materials for jewellery manufacture or Silversmithing
- J3.18 Produce enamelled surfaces

- J4.1 Prepare and maintain the general workshop environment
- J4.2 Research, develop and produce drawn plans for precious metals
- J4.15 Produce enamelled surfaces using advanced techniques

National Unit specification: support notes (cont)

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Guidance on learning and teaching approaches for this Unit

It is envisaged that the teaching of this Unit should be primarily practical with an emphasis on the candidates learning by practising the techniques required.

Demonstrations by tutors and one-to-one instruction and guidance would be an important part of the delivery and candidates could be encouraged to explore the techniques as part of their own personal development as designer-makers. Candidates should be encouraged to be methodical and thorough in their approaches to enamelling and to make records of their own works for reference purposes.

It is envisaged that the Unit would be taught in a jewellery studio or workshop and that each candidate would have a bench, adequate lighting and access to enamelling kilns and jewellery torches.

Candidates should be encouraged to understand the importance of cleanliness and thoroughness in the preparation, application and firing of enamels and the importance of keeping notes and records of the processes used.

At all times, candidates should be encouraged to use materials economically and with care for environmental issues.

Guidance on approaches to assessment for this Unit

The Unit should usefully be taught within the context of commercial jewellery manufacturing, with absolute tolerances and applied timescales to each of the projects. Assessed projects should reflect commercial constraints.

Candidates could be given specific projects to ensure uniformity or could be given self-directed project, the end products of which reflect the requirements of the Outcomes. Candidates should produce and finish work to commercial standards.

The Unit should be assessed after a period of tuition and the candidate should be allowed to practice the techniques before assessment.

Outcome 1: Given brief; checklist and discussion/observation to ensure that the correct tools and methods are selected for the tasks. A candidate notebook containing annotated samples of work and descriptions of processes is recommended.

Outcome 2: Checklist and discussion/observation to ensure that the correct tools and methods are selected for the tasks. A candidate notebook containing annotated samples of work and descriptions of processes is recommended.

Outcome 3: Product evidence in the form of enamelled and finished samples of metal showing a range of approaches to enamelling. A candidate notebook containing annotated samples of work and descriptions of processes is recommended.

Outcome 4: Product evidence in the form of enamelled and finished samples of metal showing enamelling faults and repairs to faulty enamels. A candidate notebook containing annotated samples of work and descriptions of processes is recommended.

National Unit specification: support notes (cont)

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It is envisaged that the Unit would be taught as part of a holistic programme in which the Outcomes could be completed as part of a cross-assessed package of other related Units. Although assessment could be completed with a range of samples which are not jewellery or silverware objects, it would be advantageous to have an objective project, possibly candidate-generated, which summarises one or more of the approaches in a practical jewellery sense. A range of exercises could be generated which could be included in the candidate workbooks giving a portfolio of pieces which could be assessed individually if required.

Although the requirements for assessment are limited, candidates should be encouraged to research and experiment with other techniques.

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 social software. 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)*.

Opportunities for developing Core Skills

This Unit will teach the candidate how to enamel metal surfaces.

Candidates will:

- ◆ Prepare metal surfaces for enamelling.
- ◆ Prepare enamels for enamelling.
- ◆ Enamel metal surfaces.
- ◆ Diagnose and repair faults in enamelled surfaces.

As candidates are doing this Unit they will be developing aspects of the Core Skills in *Problem Solving, Working with Others, Numeracy and Communication*.

This Unit has the Critical Thinking component of Problem Solving embedded in it. This means that when candidates achieve the Unit, their Core Skills profile will also be updated to show they have achieved Critical Thinking at SCQF level 4.

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
02	Core Skills Component Critical Thinking at SCQF level 4 embedded.	10/10/2012

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