

# Route map through assessment

**Course: Design and Manufacture**

**Level: National 5**

This document is intended to assist staff in planning and delivering the overall vision for Curriculum for Excellence.

The vision for the new national qualifications is to create assessment opportunities that follow and support learning and teaching. This follows the principles laid out in *Building the Curriculum 5* and makes assessment a natural part of learning and teaching.

This route map aims to signpost all of the relevant material that is available to support your subject. Your professional judgement is vital and the documents listed below are intended to support you in deciding the most appropriate ways to generate evidence and assess learners.

Education Scotland has produced a professional focus paper for design and manufacture, and this is a good starting point as it provides support to help develop learning and teaching approaches that take forward the purposes and principles of Curriculum for Excellence through Design and Manufacture National 5.

[http://www.educationscotland.gov.uk/nqcoursematerials/subjects/d/nqresource\\_tcm4748136.asp](http://www.educationscotland.gov.uk/nqcoursematerials/subjects/d/nqresource_tcm4748136.asp)

## Design and Manufacture National 5 course content

This is a new course replacing Craft and Design and Product Design. Skills, knowledge and understanding will continue to be integrated but the unit titles are different: evaluating, research techniques, idea generation, using tools, equipment and software, modelling, planning, design factors, manufacturing process and materials properties and uses.

The main SQA design and manufacture page is found at <http://www.sqa.org.uk/sqa/45645.html>, with pages specifically relating to National 5 at <http://www.sqa.org.uk/sqa/47457.html>. Staff should also regularly check the updates and announcements section of this page.

The course specification can be found at

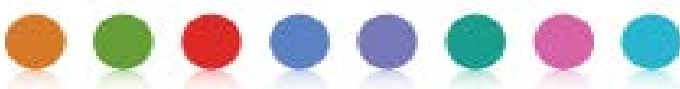
[http://www.sqa.org.uk/files\\_ccc/CfE\\_CourseSpec\\_N5\\_Technologies\\_DesignandManufacture.pdf](http://www.sqa.org.uk/files_ccc/CfE_CourseSpec_N5_Technologies_DesignandManufacture.pdf).

There are two units: Design and Manufacture: Design and Design and Manufacture: Materials and Manufacturing.

**Design and Manufacture: Design:** This unit focuses on the product design process from brief to resolved design proposals, including specification.

**Design and Manufacture: Materials and Manufacturing:** This unit focuses on the product design process from the design proposal to prototype and product.

To gain an award at National 5 learners must complete both units as well as the course assessment.



## Course assessment

The assignment and question paper will address one or more of breadth, challenge and application. Course assessment will provide the basis for grading attainment in the course award. The course assessment is graded A–D. The grade is determined on the basis of the total mark for all course assessments together.

### Assignment

The assignment (worth 60% of overall grade) requires learners to demonstrate challenge and application in a practical context by providing a solution to an appropriately challenging design proposal.

### Question paper

The question paper (worth 40% of overall grade) requires learners to demonstrate breadth and application in theoretical contexts by applying a breadth of knowledge and depth of understanding to provide descriptions and explanations to theoretical design and manufacture contexts.

## Verification

The verification process is meant to be supportive and not onerous.

Internal verification is the process of ensuring standards are applied uniformly and consistently within a school in line with national standards. External verification is the process of ensuring that national standards are maintained consistently across all schools.

Quality assurance: <http://www.sqa.org.uk/sqa/58448.html>.

### Prior verification

[http://www.sqa.org.uk/files\\_ccc/Prior%20Verification%20Centre%20Guidance%20FINAL.pdf](http://www.sqa.org.uk/files_ccc/Prior%20Verification%20Centre%20Guidance%20FINAL.pdf)

Staff who devise their own assessments can send them to SQA for prior verification, free of charge. This is only necessary where significant changes have been made to the unit assessment provided. It gives departments confidence that their proposed assessment is fit for purpose and meets national standards.

### Internal verification

[http://www.sqa.org.uk/sqa/files\\_ccc/InternalVerificationGuideforSQAcentres.pdf](http://www.sqa.org.uk/sqa/files_ccc/InternalVerificationGuideforSQAcentres.pdf)

As a matter of course staff should be quality assuring their assessments by carrying out activities that they have always done for NABs, for example double marking and blind marking. A sample of learners' work should be marked by more than one staff member in a department, and in single-person departments an arrangement should be made with another local authority school.

### External verification

In design and manufacture schools will submit a sample of learners' evidence for scrutiny by subject-specialist qualification verifiers. SQA intend that every school will be verified over the first few years. Verification will take place in November, February and May. Twelve samples will be asked for.

[http://www.sqa.org.uk/sqa/files\\_ccc/Evidence\\_required\\_for\\_verificationevents.pdf](http://www.sqa.org.uk/sqa/files_ccc/Evidence_required_for_verificationevents.pdf)

Schools must retain the evidence until 31 July of each academic year.

[http://www.sqa.org.uk/sqa/files\\_ccc/SQA\\_Evidence\\_retention\\_requirements\\_A3\\_table.pdf](http://www.sqa.org.uk/sqa/files_ccc/SQA_Evidence_retention_requirements_A3_table.pdf)

Key messages from verification will be put up on the SQA website.

### Recognising positive achievement

[http://www.sqa.org.uk/files\\_ccc/Recognising\\_Positive\\_Achievement\\_N4N5.pdf](http://www.sqa.org.uk/files_ccc/Recognising_Positive_Achievement_N4N5.pdf)

This is only applicable to National 5, **not** Higher. A learner who achieves 'No Award' in a National 5 course assessment will be able to gain a National 4 course award as long as he/she has passed all the internally assessed units of the National 5 course **and** has passed the National 4 Added Value Unit.

### Results services

[http://www.sqa.org.uk/sqa/files\\_ccc/FA6669\\_SQA\\_Results\\_Services\\_A5\\_8pp\\_brochure\\_web.pdf](http://www.sqa.org.uk/sqa/files_ccc/FA6669_SQA_Results_Services_A5_8pp_brochure_web.pdf)

<http://www.sqa.org.uk/sqa/65427.html>

There are no longer any appeals. SQA offers two services: (1) Exceptional Circumstances Consideration Service (within ten days of sitting external assessment) and (2) Post Results Service. The latter consists of either a clerical check or a marking review. It is likely that these will be carried out in conjunction with the school SQA co-ordinator.

## Education Scotland Support Materials

Advice and support for new national qualifications (Glow password required):

[Design and Manufacture: Advice and guidance](#)

[Skills in Practice](#)

## Other useful websites

A quick guide to finding vital information about Curriculum for Excellence:

<http://www.educationscotland.gov.uk/keycfesupport/index.asp>

This appears under three headings:

- the latest guidance, updates and plans for embedding Curriculum for Excellence
- information on assessment
- information on the new qualifications.

The BBC has pulled together all its learning content in a new Knowledge and Learning Beta site that includes Class Clips:

[www.bbc.co.uk/education](http://www.bbc.co.uk/education)