



Common questions about National 4, National 5, Higher and Advanced Higher Design and Manufacture

Units

Do I need to use the National 4 Added Value Unit assessment support pack to assess candidates?

The Design and Manufacture Added Value Unit assessment is an assignment. To support schools and colleges, it was agreed that the use of SQA-developed Added Value Unit assessments would be mandatory during the first two sessions of the new qualifications in 2013/2014 and 2014/2015. Centres are permitted to adapt the published assessment or create their own, within limits that are clearly described in the 'Assessment Overview' of the *Added Value Unit assessment*.

In accordance with this, the assessor provides overall guidelines for the assignment including a brief and questions/tasks/prompts, to lead candidates through the assignment in clear stages. Candidates are required to design and manufacture a solution in response to a problem situation, by interpreting a brief, creating and developing design ideas, and using practical skills to manufacture a prototype.

We will continue to provide a free prior verification service to schools and colleges who devise their own assessments, or who significantly change SQA's assessments to suit their particular needs. Find out more about prior verification [here](#).

Do I need to use SQA's Unit assessment support packs to assess candidates for the Units?

Assessors may use SQA's Unit assessments as they are, adapt/modify them and/or use them to develop their own Unit assessments.

For example, although sample tasks are provided in the *Unit assessment support pack*, centres can choose to devise their own tasks, as long as they meet the rigour and demands of the Assessment Standards and the relevant SCQF level.

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Do candidates have to achieve all Assessment Standards in order to pass a Unit?

Yes. All Assessment Standards must be met in order to pass a Unit.

If a candidate achieves the 'Design' and 'Materials and Manufacturing' Units for Design and Manufacture National 4, but does not pass the Added Value Unit, will they be able to gain a National 3 Course award?

Yes. Candidates in this position can be certificated for National 3 Design and Technology; however, this process is not automatic. Centres would have to enter their candidates for National 3 Design and Technology.

This applies to National 4 Graphic Communication and National 4 Engineering Science.

Verification

Can centres use their own tasks/projects for assessment?

Yes. Centres may use any task(s) which allows candidates the opportunity to generate evidence at a suitable level, to overcome the Assessment Standards.

Do all centre-devised tasks have to be prior verified?

No. Prior verification is only required if major changes are made to the approach to assessment. Centres should ensure that the task(s) they intend to use will allow candidates the opportunity to generate appropriate evidence for all Assessment Standards.

How is the Design Unit verified?

The Design Unit evidence is portable. If a centre is selected for verification, evidence should be sent to SQA to be verified during verification events.

How is the Materials and Manufacturing Unit verified?

The Materials and Manufacturing Unit evidence is non-portable. Team Leaders (Visiting Verifiers) will visit centres to verify a sample of judgements made by centre.

How is the National 4 (Added Value Unit) verified?

The National 4 (Added Value Unit) is portable. If a centre is selected for verification, evidence should be sent to SQA to be verified during verification events.

How are the National 5, Higher and Advanced Higher assignments verified?

Team Leaders (Visiting Verifiers) will visit centres to carry out the verification process. The Team Leader will verify a centre's judgements on a sample of completed and marked assignments. The Team Leader will inform the centre prior to the visit which level they are verifying.

Course assessment — National 5 assignment

Can marks be awarded for practical skills in the Course assessment if work has been produced by Computer Numerical Control (CNC)?

No. The marks awarded for practical skills are for a candidate's skills in measuring and marking out, cutting, shaping and forming, assembly of components, and finishing. Details can be found in the 'Detailed Marking Instructions' which are published in the *Coursework assessment tasks*.

Is CNC work allowed in the Course assessment?

Yes. Candidates may choose to produce models as part of the development of the proposal or produce parts of the proposal by CNC machining. Marks may be awarded in the 'communication' stage for any appropriate models that are produced. It should be noted that marks cannot be awarded for practical skills, for parts that are CNC machined.

Can practical skills marks be awarded to formers, jigs or models produced by the candidate?

Yes. Any activity where the candidate has demonstrated practical skills in developing and manufacturing their prototype may be awarded marks. Reference should be made to the range statements in the 'Detailed Marking Instructions' which are published in the *Coursework assessment tasks*.

Does the complexity of the prototype impact on the practical marks awarded?

Yes. The prototype must allow the candidate to demonstrate their practical ability. A very simple prototype (even if perfectly executed), is very unlikely to allow a candidate to access full marks. Candidates must be made aware of the skills they are required to demonstrate before they undertake the task, as it likely to impact on their design proposal.

Does the manufactured product have to be the product designed in response to the Course assignment?

Yes. The Course assignment assesses the candidate's ability to apply skills, knowledge and understanding to solve a design task, in a given context. Work from other task(s) cannot be used as evidence for design or practical skills.

Course assessment — Higher assignment

Does the use of templates impact on the marks awarded for measuring and marking out?

Yes. Candidates must demonstrate their skill and accuracy in measuring and marking out. Templates which are created manually, eg drawn out on card, may be awarded marks as appropriate (reference should be made to the range statements in the Detailed Marking Instructions). However, templates generated using Computer-aided Design (CAD) software, will not allow candidates to demonstrate the appropriate skills and will not attract marks.

Can marks be awarded for measuring and marking out, if a candidate has not created a working drawing?

Yes. Although candidates should be encouraged to create a working drawing as it will aid their manufacturing and attract marks in the 'communication' stage, the accuracy of their measuring and marking out may be assessed against other evidence, such as a dimensioned sketch.

Course assessment — National 5 question paper

Will the paper have a similar format every year?

Yes, it will follow a familiar format with section 1 and section 2 (being groupings of questions), as described in the *Course Assessment Specification*.

Do candidates need to write extended responses to questions?

There are some types of question where the 'explain' and 'describe' command words are used. In those instances, extended responses are expected to be written. Other subsidiary parts of questions (including the 'justify your answer' statement) require extended sentence responses to gain full marks.

General

Is there a bank of assessment tasks for the National 4 Added Value Unit and the National 5–Higher assignments?

Yes. A bank of assessment tasks is available from SQA's secure website and can be accessed via your SQA Co-ordinator, using the following link:

<https://secure.sqa.org.uk/login.html>.

When should the National 5, Higher and Advanced Higher assignment be carried out?

The assignment should be carried out over a period of time. Candidates should undertake the assessment at an appropriate point in the Course. This will normally be when they have completed most of the work on the Units in the Course.

General Curriculum for Excellence questions and answers can be found on the [frequently asked questions section](#) of SQA's website.