

Course report 2026

National 5 Design and Manufacture, SCQF level 5

We've written this report for teachers and lecturers. We recommend you read this with the published course assessment documents and marking instructions.

The report:

- provides a summary of how each course component performed
- highlights areas of the question paper and coursework where candidates performed well and areas where they did not perform well
- has advice you might find useful when preparing candidates for assessment

We collect and prepare the statistics in course reports before we complete the appeals process.

For information about the assignment — practical, you should read the verification summary 2025–26 on the Design and Manufacture page of our [website](#).

Statistical and grade boundary information

Course entries

Number of resulted entries in 2025: 3,988

Number of resulted entries in 2026: 3,791

Distribution of course awards (including minimum mark to achieve each grade)

Course award	Number of candidates	Percentage	Cumulative percentage	Minimum mark required
A	1,199	31.6	31.6	126
B	980	25.9	57.5	107
C	816	21.5	79.0	88
D	512	13.5	92.5	69
No award	284	7.5	100	Not applicable

We've not applied rounding to these statistics.

In this report:

- 'Most' means greater than or equal to 70%.
- 'Many' means 50% to 69%.
- 'Some' means 25% to 49%.
- 'Few' or 'a few' means less than 25%.

You can find [statistical reports](#) on our website.

General commentary on grade boundaries

Our main aim when setting grade boundaries is to be fair to candidates across all subjects and levels, and to maintain comparable standards across the years, even as arrangements evolve and change.

For most National Courses, we aim to set examinations and other external assessments and create marking instructions that allow:

- a competent candidate to score a minimum of 50% of the available marks (the notional grade C boundary)
- a well-prepared, very competent candidate to score at least 70% of the available marks (the notional grade A boundary)

It's very challenging to get the standard on target every year, in every subject, at every level. Therefore, we hold a grade boundary meeting for each course to bring together all the information available (statistical and qualitative) and make final decisions on grade boundaries based on this information. Senior Qualifications Scotland staff normally chair these meetings.

Principal assessors use their subject expertise to evaluate the performance of the assessment and propose suitable grade boundaries based on the full range of evidence. We can adjust the grade boundaries as a result of the discussion at these meetings. This allows the pass rate to be unaffected in circumstances where there is evidence that the question paper or other assessment has been more, or less, difficult than usual.

- We can adjust the grade boundaries downwards if there's evidence that the question paper or other assessment has been more difficult than usual.
- We can adjust the grade boundaries upwards if there's evidence that the question paper or other assessment has been less difficult than usual.
- If levels of difficulty are comparable to previous years, we maintain similar grade boundaries.

Every year, we evaluate the performance of our assessments in a fair way, while ensuring standards are maintained so that our qualifications remain credible. To do

this, we measure evidence of candidates' knowledge and skills against the national standard.

For full details of the approach, please refer to the [Awarding and Grading for National Courses Policy](#)

How the course assessment performed

Question paper

The question paper was more demanding than intended.

Assignment — design

The assignment — design performed as expected. All three tasks allowed candidates to access the full range of marks available. All tasks generated a wide range of responses and marks.

How candidates performed

Areas where candidates performed well

Question paper

Question 1(a)(i)

Most candidates answered this question correctly and showed a good knowledge of the benefits of softwoods.

Question 1(a)(ii)

Most candidates answered this question correctly and showed a clear understanding of how to mark out a dowel joint.

Question 1(a)(iv)

Most candidates answered this question correctly and showed a good knowledge of drilling to the correct depth.

Question 1(b)(i)

Most candidates answered this question well and showed a good knowledge of the suitability of aluminium for the rail.

Question 1(c)(i)

Most candidates answered this question well and showed a good knowledge of hardwoods.

Question 1(d)(ii)

Most candidates answered this question well and showed a good knowledge of how to remove the corners from mild steel sheet.

Question 4(a)

Most candidates answered this question well and showed a clear understanding of the information that can be gained from an exploded view.

Question 5

Most candidates answered this question well and showed a clear understanding of using models within the design process.

Question 6(a)(ii)

Most candidates answered this question well and showed a clear understanding of how function may have influenced the design of the treadmill.

Question 6(a)(iii)

Most candidates answered this question well and showed a clear understanding of how safety may have influenced the design of the treadmill.

Question 8(a)

Most candidates answered this question well and showed a clear understanding of the benefits of using CAM to the manufacturer.

Assignment — design

Research and specification

Many candidates produced effective evidence of their research, using a range of valid research techniques, applicable to their chosen brief. Most candidates transferred relevant information from the brief to feature in their specification, and many candidates drew appropriate conclusions from their research to include in their specification.

Idea generation

Most candidates produced appropriate evidence in the 'generating ideas' section of the assignment, showing a range of creative ideas relevant to their chosen task. Some candidates effectively used sketch modelling to communicate some of their ideas.

Exploration

Many candidates demonstrated an effective level of skill in exploration of their design. Candidates used a range of methods to explore individual components and explore the design in its entirety.

Refinement

Many candidates produced good evidence of refinement. Candidates were confident in making decisions relating to the manufacture of their project, with most candidates concentrating on dimensions, materials, manufacturing techniques and assembly.

Graphic techniques

Most candidates demonstrated an adequate level of skill in their use of graphic techniques, using a range of techniques appropriate to the stage of the design process. These included annotated 2D and 3D graphics, detailed graphics in refinement showing assembly methods, and dimensioned graphics in the planning for manufacture pro forma.

Planning for manufacture

Most candidates produced effective evidence across all three areas of the pro forma.

Areas where candidates did not perform well

Question paper

Question 1(a)(vi)

Candidates were asked to state 'two reasons why wood stain is a suitable finish for the base'. Most candidates gained 1 mark by referring to an aesthetic aspect, but many candidates struggled to gain a second mark.

Question 1(c)(ii)

Candidates were asked to outline 'four stages in preparing the blank'. Many candidates appeared to be unfamiliar with this process and did not gain more than 2 marks.

Question 1(d)(iii)

Candidates were asked to name 'a suitable finish for the spoon holder'. Many candidates appeared to be unfamiliar with appropriate finishes for mild steel and did not gain a mark.

Question 2(a)

Candidates were asked to outline 'three key stages of a user trip'. Many candidates referred to a user trial rather than a user trip and did not gain marks.

Question 3

Candidates were asked to outline 'the key stages of morphological analysis'. Many candidates appeared to be unfamiliar with this process and struggled to gain marks.

Question 6(a)(i)

Candidates were asked to describe how ergonomics 'may have influenced the design of the treadmill'. Some candidates were able to gain up to 2 marks, but many candidates could not formulate responses to gain the final 2 marks.

Question 6(c)(i)

Candidates were asked to describe 'what is meant by technology push'. Many candidates appeared to be unfamiliar with this term and did not gain a mark.

Question 6(c)(ii)

Candidates were asked to describe 'what is meant by market pull'. Many candidates appeared to be unfamiliar with this term and did not gain a mark.

Question 7(b)

Candidates were asked to state 'two identifying features that show products are die cast'. Some candidates appeared to be unfamiliar with this process and did not gain marks.

Question 7(c)(i)

Candidates were asked to state 'a manufacturing reason for tapered edges'. Most candidates appeared to be unfamiliar with this process and did not gain a mark.

Question 7(c)(ii)

Candidates were asked to state 'a manufacturing reason for rounded corners'. Most candidates appeared to be unfamiliar with features of vacuum forming and did not gain a mark.

Assignment — design**Knowledge of design**

Most candidates made effective use of their design knowledge when researching their chosen brief and annotating initial ideas. However, only a few candidates continued to explore and refine these areas as they progressed through their assignment.

Preparing candidates for assessment

Question paper

You should use the exemplar materials (for example, specimen question papers, past papers and marking instructions) that are available on [our website](#) to prepare candidates for the exam.

It is good practice to ensure candidates respond in sentence format rather than single-word responses. Single-word answers can attract marks where the command word is 'name' or 'state', but if 'outline', 'describe' or 'explain' are used as the command word, some degree of description or explanation is required.

You should note that unqualified responses such as 'quick', 'easy', and 'cheap', are not awarded marks for most questions. This is to ensure candidates who showed deeper understanding of the topics, and are able to qualify their responses, are differentiated from those candidates who simply stated a basic, unqualified response.

You should give candidates the opportunity to work through question papers that are similar in style to the exam. You could talk through the marking instructions with candidates as they complete each question. You can also encourage candidates to develop their exam technique, to ensure they are fully prepared for the final exam.

The course specification on [our website](#) contains a section titled 'Skills, knowledge and understanding for the course assessment'. This section lists all the available areas of sampling for the question paper. You should help prepare candidates to respond to these areas of questioning.

The course specification includes an appendix 'course support notes'. This contains suggested activities and approaches to develop knowledge and understanding which would help candidates prepare for the final exam.

Understanding standards materials are available for the question paper on our [Understanding Standards website](#). These give real examples of candidate responses with related commentaries and provide a clear indication on how marks are awarded.

Assignment — design

The assignment must be carried out without interruption by periods of learning and teaching. You should ensure that candidates are fully prepared and have the necessary skills before they start the assignment.

You should give candidates access to all relevant task documentation, allowing them to clarify any issues or concerns they may have before starting the assessment. It is good practice to share exemplification materials with candidates before they attempt the coursework assessment task.

You should ensure all work submitted is the candidate's own. You should work with your centre's support department to ensure they are meeting candidates' additional support needs within the assessment conditions.

We continue to have an increasing number of candidates and centres who had not completed the flyleafs correctly. Flyleafs should be completed with candidate details on the front, and the check boxes for the teacher should be completed on the back.

Advice on sections of assignment — design:

- Research should be relevant to the chosen brief and carried out using a range of valid research techniques. Responses that only state the candidate's opinions will not attract marks. If candidates choose to include images relating to the theme, they must analyse these images and identify specific aesthetic characteristics that will influence their design, for example specific colours or imagery.
- Their specification should contain points drawn from their chosen brief and a range of valid points drawn from the candidate's own research. The specification should be detailed, including information that will allow effective refinement later in the design process. Specification points based on the candidate's own opinions will not generate marks.
- Ideas should be clearly aimed at the chosen brief. These can be communicated through graphics, models or annotations. Basic shapes with no clear function will not attract marks. Copies of existing products will not attract marks. Candidates should aim to have a range of ideas, with clear differences.

- When carrying out exploration, candidates should clearly communicate the alternatives being considered through graphics, modelling or annotation, as well as communicating the opportunities or drawbacks each option will have on their design.
- When refining their final proposal, candidates should communicate how their final design will meet their specification and areas relating to manufacture, for example materials, dimensions, manufacturing techniques and assembly. These decisions allow candidates to demonstrate greater knowledge of design and manufacture.
- Candidates should use their specification to help generate evidence of design knowledge. Researching a range of design issues and taking information from the brief will provide a range of areas to consider throughout the design process. Exploration of these design issues will allow candidates to show a wider, more in-depth knowledge of design. Candidates may demonstrate their knowledge of design through annotations, graphics or modelling.
- Candidates should demonstrate their knowledge of materials and manufacturing by exploring alternative materials, processes, assembly methods and finishes. Candidates may demonstrate their knowledge of materials and manufacturing through supporting annotations, graphics or modelling.
- Candidates should use a range of graphic and modelling techniques throughout the design process to generate ideas, explore alternatives and refine their design to meet the specification and aid manufacture. When modelling, candidates should clearly communicate the purpose and outcome of the model. Modelling used only to communicate the overall look of the proposal is less likely to gain marks in the upper bands.
- Candidates should ensure the information on their planning for manufacture pro forma is clear, links across the three sections and communicates the information required to manufacture their final design.