

Course report 2026

Higher Design and Manufacture, SCQF level 6

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.

Statistical and grade boundary information

Course entries

Number of resulted entries in 2025: 1,939

Number of resulted entries in 2026: 1,849

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

Course award	Number of candidates	Percentage	Cumulative percentage	Minimum mark required
A	298	16.1	16.1	119
B	397	21.5	37.6	101
C	457	24.7	62.3	84
D	396	21.4	83.7	66
No award	301	16.3	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

Feedback from the marking team suggested there was appropriate range in course coverage and the level of demand was fair in both sections. Although feedback indicated that the paper was accessible and reflected the course specification, overall performance was lower than expected.

Assignment

The assignment performed as expected.

Candidates chose one brief from a choice of three. Many candidates chose brief 1: Skatepark storage, and brief 3: interactive water feature was the least popular choice. All tasks generated a wide range of responses and marks.

How candidates performed

Areas where candidates performed well

Question paper

Question 1(a)

Most candidates answered this question well and explained the suitability of the materials selected.

Question 1(b)

Most candidates answered this question well, and identified three different processes, and many candidates explained the suitability of these processes.

Question 1(c)

Most candidates answered this question well and described how function had influenced the design of the lamps.

Question 2(c)

Many candidates answered this question well and described two different benefits of launching under a successful brand name.

Question 3(a)

Most candidates answered this question well and identified two methods of protecting IPR. Many candidates demonstrated knowledge of what the methods protect.

Assignment

Practical modelling skills

Most candidates achieved at least four marks for this section, with some candidates achieving marks in the top band. Many candidates produced detailed and accurate models using card, foam and more resistant materials.

Producing a plan for commercial manufacture

Many candidates achieved at least four marks for this section. Most candidates completed the parts table with a range of materials and processes. Most candidates provided some overall sizes of the proposal and its components. Some candidates provided more intricate detail of some parts. Candidates used text or graphics to show how the product was assembled. Candidates who had good refinement of the assembly and manufacturing detail created the best opportunity to produce a detailed plan.

Carrying out research into a given brief

Most candidates achieved marks in the middle and top band. Most candidates demonstrated the ability to use a range of research techniques, gathered sizes of the required products, selected some relevant anthropometric data and asked some effective questions to inform the specification.

Producing a specification

Most candidates achieved marks in the middle or top band, demonstrating their ability to include appropriate information drawn from their research and the brief. These candidates included dimensions of products to be held, anthropometric sizes, location, functional aspects, cost and aesthetic requirements.

Generating initial ideas

Most candidates achieved marks in the top band and used the theme successfully to generate a range of creative ideas that addressed the brief. Candidates used annotations and graphics to provide sufficient detail of their ideas.

Application of knowledge and understanding of materials, manufacturing and assembly processes

Many candidates achieved at least five marks in this section. Candidates were able to gain marks by justifying appropriate materials, manufacturing, and assembly processes for components of their solution. Some candidates demonstrated

meaningful consideration of alternative materials, processes and assembly methods as they explored their idea.

Areas where candidates did not perform well

Question paper

Question 1(e)

Many candidates demonstrated limited knowledge of production and planning systems, and a few candidates did not make an attempt at a response.

Question 6(a)

Many candidates did not show a deep knowledge and understanding of material identification. Candidates often identified tests with little to no description given, for example, 'a flame test could be used to test the material'. This statement would not be enough to gain a mark, as the candidate should describe the information gained from the test which identifies the material, for example, 'a flame test could be used to identify the material as different plastic will give of a different smell'.

Question 6(b)

Most candidates demonstrated a limited knowledge of a knock-down fitting or gave a response that was simply too thin. A few candidates did not make an attempt at a response.

Assignment

Exploring ideas

Many candidates did not gain more than six marks. Many candidates did not show meaningful alternatives for a range of aspects of the proposal. Few candidates explored more than one idea, and this approach typically limited the response as candidates considered fewer aspects, often repeated similar points and demonstrated limited problem solving and limited use of knowledge.

Refining ideas

Some candidates did not gain more than half marks for this section.

Many candidates did not achieve more than 3 marks for this section and did not demonstrate a thorough refinement of ideas.

Applying knowledge and understanding of design

Few candidates achieved marks in the top band. Many candidates gained half marks or less. Although most candidates demonstrated an understanding of the functional and aesthetic aspects of the brief, many candidates did not make full use of the information from their brief and research to address the range or depth of knowledge required solve the design problem. Many candidates did not use anthropometric data of the sizes of spaces or products to be held when developing their solutions.

Applying graphic techniques

Many candidates achieved six marks or less for this section. Candidates often did not use a range of graphics as they progressed through the assignment. Candidates who gained marks in the top band used a wide range of graphics to communicate various details such as scale drawings, exploded details, hidden detail, sections, dimensioned sketches and drawings and/or component part manufacturing or mould details. Few candidates attracted marks in the top band for this section.

Applying modelling techniques

A few candidates did not attempt to use models in their assignment. Most candidates did not gain more than four marks for this section. Some candidates had evidence of models but lacked annotations to explain what they had learned and decisions they had made from these.

Many candidates had made a standard component to achieve practical modelling skills; however, they did not demonstrate any use of the model in the development of their design.

Preparing candidates for assessment

Question paper

You should use the exemplar materials (for example, question paper commentaries, the question paper webinar, past question papers and marking instructions) that are available on the [subject page](#) of our website to prepare candidates for the examination.

Many candidates did not describe or explain their answers in sufficient detail for a question paper at Higher level. Preparation for the question paper should include practising examination techniques to help produce acceptable responses to questions. You should ensure candidates have a clear understanding of the different command words that are likely to be used.

You should encourage candidates to develop their technical vocabulary, to enable them to produce more effective answers. This could be done by encouraging discussion and debate or giving opportunities to learn through practical activities.

For the question on methods used to identify materials, candidates should make sure they specify the materials in their description, for example wood, metal, plastics.

Candidates should consider the mark allocation for individual questions when producing their response. A four-mark question generally means either four different correct statements must be provided, or an extended response must be given to achieve full marks.

The course specification contains a section called 'Skills, knowledge and understanding' for the course assessment. This section lists all the available areas of sampling for the question paper. You should familiarise yourself with the mandatory content to help prepare candidates to respond to these areas of the exam. The course specification is available on the [subject page](#) of our website.

Assignment

Assignments must be presented on a maximum of 12 A3 sheets (or equivalent). This includes the four pro formas: 'research', 'research and specification', 'planning for commercial manufacture' and 'practical modelling skills'. You should ensure that candidates are aware that if any of their evidence is typed, the size of the text should be big enough for the marker to read.

You should give candidates the opportunity to practice effective and concise annotation skills during class tasks. Some candidates submitted assignments that contained a vast amount of writing, in which most of the text was unnecessary or repetitive. Annotations should be purposeful, concise and clearly linked to design decisions. Annotations should be written clearly, and the size of the text must be legible.

You should advise candidates to avoid scanned images or sketches as this can have a negative impact on the way they work through the stages of the assignment.

Examples of candidate evidence, including commentaries explaining where marks have been applied, are available on the Understanding Standards secure website.

Selecting a brief

Candidates should select the brief that will allow them to produce the evidence required. The tasks allow candidates to demonstrate different strengths and interests. Some candidates are successful when they have an opportunity to develop mechanisms or a more technical product, and others have more success with creative briefs.

You may discuss the pros and cons of each brief with your class, to ensure that candidates understand the breadth and depth of skills they need to demonstrate before they make a final decision on the brief they wish to attempt for their assignment. You should provide candidates with the 'Instructions for candidates' section of the assignment task, as this provides them with the requirements for each section of the assessment. Candidates can use this as a checklist to ensure they will be able to generate the required evidence for the brief they have selected.

Demonstrating practical modelling skills

You can prepare candidates by providing opportunities during learning and teaching sessions to make components, small assemblies or detailed block models.

Models can be made from quick modelling materials including corrugated card, foam, or workshop materials such as MDF or acrylic. The skill required to work with each material and form is considered by markers.

CAD or CAM models do not attract any marks in this section.

Evidence of practical modelling skills is likely to be generated as the candidate naturally explores and refines their proposal. Candidates could consider making one of the standard components as these can help them gain marks in this section.

Alternatively, candidates may choose to mock up part of their solution.

You should remind candidates that there is no need to annotate the pro forma page. Candidates will not gain marks for their use of modelling techniques or knowledge on the pro forma, as these skills should be demonstrated during the development of the proposal.

Producing a plan for commercial manufacture

You should remind candidates that marks for producing a plan can only be awarded for evidence on the pro forma sheet.

Component parts should be complex enough to allow candidates to generate an appropriate level of detail required at Higher level. You can prepare candidates by providing opportunities to look at the manufacturing and assembly features of component parts of existing products. This will help candidates improve the level of detail in their parts, such as wall thickness, webs, or size and position of holes.

Candidates can communicate detail through graphics or annotations.

Carrying out research into a given brief

You can find examples of candidate evidence from sessions 2022 and 2023 that include research pages on our secure site.

Candidates should demonstrate their use of appropriate techniques to research a range of issues, such as potential restrictions, anthropometric data, location and site details, or functional, aesthetic and performance requirements, or items to be stored (if appropriate). When gathering anthropometric data, candidates should select specific sizes and provide reasons for the selection.

Candidates should avoid product comparisons or research into existing products as these often generate invalid research.

You could provide opportunities in class time for candidates to explore what questions are effective and lead to useful information for a specification.

Producing a specification

You can prepare candidates by reminding them specifications should be written as 'it must' statements. You should also advise candidates to include specifics, such as sizes or quantities in their specification so that their research no longer needs to be referred to.

Generating initial ideas

You can prepare candidates throughout the year by providing opportunities for them to generate ideas to meet a brief. Using images related to the theme or models can help candidates generate creative and diverse ideas. Modelling some ideas at this stage can help with creativity as well as gaining marks in the 'applying modelling techniques' section.

Candidates should communicate how their idea works by adding detail to their sketch or by adding annotations. Candidates should select idea generation techniques that are appropriate to their strengths.

Exploring ideas

There are examples on the Understanding Standards secure site to support centres and candidates in this section, showing effective and highly effective exploration.

Candidates should use their brief and specification to identify aspects they can explore. Candidates should show a range of clear alternatives that are plausible for each aspect.

Effective exploration can increase the opportunity to gain marks for knowledge, graphics and modelling. It can help demonstrate skills in problem solving and working towards an improved solution. Exploration is likely to include options for different functional requirements, user interaction, ergonomics, incorporating the theme, how to use the standard component, size or cost restrictions and materials, manufacturing or assembly. Using models can be effective for candidates to explore quickly, especially if they find exploring through graphics more challenging.

Refining ideas

Candidates should use the details in the specification to make decisions, such as sizes of parts, information gained through modelling, the products to be stored, and reference to appropriate anthropometric sizes. Candidates should consider the use of modelling to aid refinement. They could use full size models, or scale models to make decisions on issues such as function, ergonomics and sizes.

Candidates should have knowledge from disassembling products during the course to communicate part detail, select appropriate processes, materials and assembly methods. Thorough refinement should help produce all the component details needed to complete the planning pro forma.

Application of knowledge and understanding of materials, manufacturing and assembly processes

Candidates who gain marks in this section typically apply their knowledge during their exploration and refinement by considering alternative processes, materials and assembly methods for their components.

Candidates should consider the features of components, such as incorporating features of diecast or injection moulded parts or their moulds.

Applying knowledge and understanding of design

Candidates can apply design knowledge by exploring a range of aspects from the brief and specification. If candidates make use of relevant anthropometric data or sizes of products to be stored, to inform the dimensions or ease of use of their proposal, they can show better application of design knowledge than simply exploring colour options.

Candidates can demonstrate effective knowledge of design by calculating sizes, identifying and solving safety concerns, recording findings of using models to test ideas, or calculating basic costs for some or all components.

Giving candidates opportunities to solve problems using modelling or anthropometric data during the course will help prepare them for this section.

Applying graphic techniques

You could prepare candidates during the course by doing a graphic study of a product where a range of different graphics techniques could be produced. This may include graphics such as quick sketches, 2D or 3D exploded details, hidden detail, scale drawings, detailed views, dimensioned sketches or drawings, 2D and recognised pictorial sketches. This could be done as a study of simple component parts, their manufacturing features and assembly details.

Applying modelling techniques

You could prepare candidates by providing opportunities during the course to use models for a range of different purposes and ensure candidates can record what has been learned from the model. When using models to generate ideas, candidates can be creative by adding detail to simple abstract 3D forms in card or modelling clay. Examples of this can be seen in the published materials on the Understanding Standards section of our secure site.

Candidates can make a standard component and explore how this could be used in their design.

Candidates should be aware of the limitations of CAD modelling in effective exploration.

Modelling can generate marks in various sections, including generating ideas, knowledge, exploring and refining, if candidates have recorded and acted on the information they have gained from the models. Photographs of the models must be placed throughout the assignment as and when they are produced, with relevant annotations. Candidates will not gain marks for this section from any models that are only included on the 'Demonstrating practical modelling skills pro forma'.