

# Course report 2025

# **Advanced Higher Graphic Communication**

This report provides information on candidates' performance. Teachers, lecturers and assessors may find it useful when preparing candidates for future assessment. The report is intended to be constructive and informative, and to promote better understanding. You should read the report with the published assessment documents and marking instructions.

We compiled the statistics in this report before we completed the 2025 appeals process.

# Grade boundary and statistical information

Statistical information: update on courses

Number of resulted entries in 2024: 333

Number of resulted entries in 2025: 286

# Statistical information: performance of candidates

# Distribution of course awards including minimum mark to achieve each grade

Course award	Number of candidates	Percentage	Cumulative percentage	Minimum mark required
Α	62	21.7	21.7	126
В	64	22.4	44.1	108
С	73	25.5	69.6	90
D	39	13.6	83.2	72
No award	48	16.8	100%	Not applicable

We have not applied rounding to these statistics.

You can read the general commentary on grade boundaries in the appendix.

### In this report:

- 'most' means greater than or equal to 70%
- 'many' means 50% to 69%
- 'some' means 25% to 49%
- 'a few' means less than 25%

You can find statistical reports on the <u>statistics and information</u> page of our website.

# Section 1: comments on the assessment

# **Question paper**

The question paper largely performed as expected. As a result, there was no adjustment to notional grade boundaries.

# **Project**

Overall, the project performed as expected and the standard of candidates' work has improved from previous years. There was a clear improvement in all areas with many candidates achieving higher marks across all aspects of the project. There was noticeable improvement in the quality of commercial and visual media graphics (CVMG) solutions, with many candidates demonstrating a high level of skill and visual impact.

Candidates selected a good range of contexts and many took a combined approach to their technical graphics (TG) and CVMG work, using TG models to support the development of CVMG graphics. There was no difference in performance between those who took a combined approach to those who separated their TG and CMVG work.

# Section 2: comments on candidate performance

# Areas that candidates performed well in

#### **Question paper**

The overall performance of candidates was an improvement on previous years.

There were fewer instances of 'no response'. It was encouraging to see improved responses to questions on Advanced Higher elements and principles and 3D modelling techniques.

Question 1(b) Most candidates gained at least 1 mark. Across the paper

there was better recognition and identification of

appropriate file types. However, some candidates wrote

rehearsed answers regardless of the nature of the

question, for example, 'this file type has a small file size'.

Question 1(c) There was good understanding of the meaning of depth

of field and rule of thirds. However, some candidates

could have better explained their use. Also, some

candidates did not reference the position of the cyclist

within the layout — which was positioned at a third's

division or being at a focal point.

Question 1(d) Most candidates were able to describe the features

and/or benefits of the Virtual Reality Modelling Language

(VRML) file format. Most candidates commented on viewing the image from a 360 degree 3D model and

customisation.

Question 1(e) This question was also attempted well. Most candidates

recognised how shape, layout and other edits created an

impression of movement. However, many candidates'

responses detailed the colour of the 'i' as a dynamic effect which was not correct. It was unclear how some candidates appeared to find the edges of the graphic blurry and commented on this in their responses.

Questions 1(f) and 1(g)

Variations of these questions have been asked in previous years. Most candidates continue to give strong responses. Candidates missed out on marks if they did not relate their answer to a logo, or their answer lacked necessary detail.

Question 2(a)

There was a significant improvement in candidates' understanding of this animation technique; what the process involved, how the technology works and advantages and disadvantages. However, there are some aspects of candidate responses that could be improved.

Questions 3(a)(i) - (iii)

Most candidates gained above half marks.

Question 4(c)

Although some candidates found it a challenge to look at the difference between digital and printed media in this context, most were able to access the marks.

Question 5(a)

Candidates' understanding of the role of engineers is strong. However, candidates were less familiar with the role of a model maker in the built environment sector.

Question 5(b)

Most candidates answered the Finite Element Analysis (FEA) part of the question well, but only a few were able to access full marks. Awareness of a technique may gain a mark but often, only a detailed understanding of techniques and how they are used in a variety of contexts, will ensure maximum marks. Most candidates were able to give one valid response for Computational Fluid Dynamics (CFD). This was similar to other

questions where candidates could give responses on a topic, but didn't have enough understanding or depth of knowledge to write more detailed analysis.

# **Project**

#### Analysing the graphic brief and research

Many candidates demonstrated a good approach to their research and identified appropriate target audiences for TG and CVMG, as well as some key research areas. Their research was valid, evidence-based and effective in allowing them to progress to preliminary graphics.

#### TG preliminary planning

Many candidates produced a range of 2D and 3D sketches that provided a good visual understanding of their project. They selected and correctly used appropriate modelling techniques and provided good information to enable them to progress to production graphics. Many candidates demonstrated skill in reverse-engineering and/or designing products or items to support the development of TG work.

#### **CVMG** preliminary planning

Many candidates produced creative and well annotated preliminary graphics, showing detailed technical requirements for print-based and digital work and justified their use of elements and principles.

Many candidates demonstrated good creativity in producing a range of layouts for print based or digital graphics that met the project requirements. Many candidates also demonstrated good planning and development work to show their progress towards a solution.

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#### **TG Graphic Solution**

This section of the project continues to be the area where candidates perform best. Most candidates demonstrated good performance when they produced:

- models with a clear visual link to their preliminary work that were complex enough for Advanced Higher level
- a suitable number of component drawings for all components, or key
   components, and included suitable dimensions that would enable manufacture
- assembly work with appropriate sections, enlarged views and exploded views to clearly demonstrate the correct assembly of their components
- a range of technical detail from the list provided in the project assessment task
- appropriate simulations that allowed them to test their models. Many candidates attempted FEA tests, which were of a good standard, with results well presented.
   There was an improvement in approach for those attempting mechanical animations, with some candidates attempting CFD tests.
- good-quality technical renders that demonstrated the use of the techniques listed in the project assessment task

#### **CVMG** graphic solution

There was a significant improvement in approaches to CVMG solutions this year. Many candidates:

- produced a range of appropriate graphics for print-based work and digital work that demonstrated a high level of skill and visual impact, and met the requirements of the project assessment task
- produced graphics in recognised formats for final solutions and included most of the required detail
- featured a clear link between their preliminary graphics and final graphic solution
- identified and explained the use of elements, principles and technical requirements across the range of graphic items
- demonstrated good skill in creating brand continuity between print-based and digital graphics

#### **Evaluation**

Candidate performance in this area improved this year, with many candidates producing detailed evaluations that included information about the strengths and weaknesses of their project overall and the performance of individual aspects. This was related to what had been set out in their brief and specification.

# Areas that candidates found demanding

#### **Question paper**

Many candidates found questions on surface modelling and British Standards more difficult. Additionally, candidates struggled to add depth or include more than one valid response to questions related to Gantt charts, freeform modelling and the impact of graphics technology on the environment as well as some file types. Some candidates provided a generic list of answers or facts about a topic and did not relate their knowledge to the question.

principles were answered well across the paper, some candidates found this question challenging. These

candidates found this question challenging. These

candidates identified the design elements and principles,

but did not necessarily describe how they aided

navigation. Others gave a response describing a feature

on the site but did not link this to a design specific

element or principle.

Question 1(b) Most candidates understood that jpg files are effective for

photographic images, but many gave a generic response

related to file size without an explanation.

Question 2(a) Some candidates struggled to give a second advantage

or disadvantage. Many candidates referred to older

technology where detailed movements, for example, on

faces and hands, could not be captured.

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Question 2(b) Many candidates were not able achieve above 4 marks

for this question. This was because answers did not relate to animated movies or video games, or were not

sufficiently detailed to justify the mark.

Question 2(c) Most candidates were able to gain one mark for

explaining its suitability for organic forms however, few were able to expand further and describe the function

specific terminology such as nodes or faces.

Question 3(b)(i) Only a few candidates managed to explain how top-down

modelling could be used to support the production of component B, often giving a generic description of what

top-down modelling was.

Question 3(b)(ii) Very few candidates managed to gain maximum marks

for this question. Many candidates were not aware of the suitability, advantages and disadvantages of surface

modelling technique for thin-walled models and the

additional edits that could be applied.

Question 3(c) Although some candidates could identify the symbols,

they were often not able to describe their relevance to the

model in the question.

Question 3(d) This question was poorly answered by most candidates.

Some candidates only gave the practical difference

between the two tolerances. Candidates often compared

the differences in the numerical values rather than

explaining their distinct functions.

Question 4(a) Many candidates reworded the question, mentioning use

of canvas, but not explaining its relevance to screen

printing. Candidates often suggested that screen printing

is suitable for mass production. Although it is possible to

screen print at volume, scalability is a not principle reason for choosing this print method.

Question 4(b)

Many candidates' default to a common response of vector files being smaller in size and not being able to give specific differences and/or benefits of a file type such as dwg. Questions relating to file types in general were not answered in enough detail. Although candidates largely understood the advantages and disadvantages of vector and raster, answers at this level should be specific to a particular file type rather than the generic advantages.

Questions 5(c) and (d)

Some candidates were not clear on the purpose of the surveys.

Question 6(b)

Often candidates gained 1 mark for the clarity provided by a silhouette to identify the city. Less candidates noticed that with these specific posters they had a role in creating depth and contrast and/or helping to keep the focal point on other features.

Question 6(d)

Most candidates gained 1 mark for the basic description of a Gantt chart, providing information on timescales and deadlines. Fewer candidates understood its role in personnel management — working out synchronous events, planning sub-contracting and contingency.

# **Project**

#### Analysing the graphic brief and research

Overall, candidates performed much better in this area. However, many candidates did not achieve higher marks where they had missed key pieces of information that would be crucial to progressing in their project. For example, they did not research:

- the sizes or the number of components required
- CVMG formats or analyse their use of styling, elements and principles

Some candidates did not analyse or research the requirements of intended audiences.

#### **Producing graphic specifications**

Some candidates did not achieve marks in this area because their specifications did not relate to analysis and research, or their responses were limited and did not confirm the range of graphics required.

#### TG preliminary planning

Many candidates did not provide sufficient technical detail to support an understanding of the model.

Some candidates did not include relevant technical detail such as enlarged views and sectional views.

Some candidates did not include complex 3D visualisation and only submitted preliminary graphics that were 2D.

Some candidates scanned and scaled their sketches poorly that resulted in very low quality images with limited clarity. Candidates should not do this as it makes it very hard to see their work and allocate marks.

#### TG graphic solution

Many candidates are still not producing technical detail as outlined in the project assessment task. This is particular to sectional work where candidates are not producing sections in both their component and assembly drawings, meaning they did not access higher marks in this section.

#### **CVMG** graphic solution

Some candidates did not achieve marks as they did not present their print-based solutions in the correct pre-press formats or produced solutions that contained placeholder text.

Some candidates did not complete the requirements for a suite of graphics as they only produced two items rather than three.

# Section 3: preparing candidates for future assessment

# **Question paper**

Teachers and lecturers should continue to make use of as many real-world examples of graphics as possible. An understanding of what makes one graphic more effective than another should be the core knowledge of Advanced Higher Graphic Communication. Teachers and lecturers should use up-to-date examples for information on graphics technologies. In CVMG, this could be the techniques used to ensure a message is communicated to a particular demographic. In TG it could be choosing the most effective drawings, computer models and/or digital testing methods that best communicate a design feature to the professionals working in different sectors.

At Advanced Higher level, candidates should have a detailed understanding of British Standards. They need to be able to identify specific standards, conventions, and symbols, and choose the most appropriate content for different creators and users. They also need to be able to interpret British Standard drawings used in 3D modelling questions and answer questions on specific features, such as sections, dimensional tolerances, and surface finishes. Teachers and lecturers should expose candidates to the wide range of information on British Standard drawings used at both Higher and Advanced Higher level such as assemblies, location plans, sections and pictorial exploded views.

Teachers and lecturers should encourage candidates to look at the appropriateness of different files in a variety of contexts.

Teachers and lecturers should, whenever possible, give candidates opportunities to use surface modelling and describe and learn the advantages and disadvantages of using this technique.

Teachers and lecturers should continue to teach the illustration and lighting techniques contained in the <a href="Course Specification">Course Specification</a>.

# **Project**

Teachers and lecturers should continue to make good use of <u>Understanding</u>
<u>Standards</u> material and the <u>course specification</u>.

#### Analysing the graphic brief and research

Candidates should focus on analysis and research that covers the following:

#### TG:

- a brief that confirms intended audiences, for example manufacturers, assembly technicians, and what is required to meet their needs
- · the number of components required
- potential choices for modelling techniques that can be used for modelling components
- key sizes for components
- · assembly information or key assembly methods for the chosen product
- illustration techniques: consideration of similar products, renders, materials and lighting
- FEA or CFD: consideration of suitable tests and what forces or pressures would be applied, materials required
- mechanical animations: analysing similar animations to inform decision making and suitability of approach

#### CVMG:

- a brief that confirms intended audiences, for example consumers or retailers
- consideration of similar documents or graphic items to support planning and analysing their use of elements and principles and styling
- consideration of formats, dimensions, layouts, sizing and structure
- device compatibility
- animation techniques or processes
- print-based graphics: consider printing techniques, paper weights or types, colour scheme (for example CMYK), print resolution

- digital graphics: consider navigation, transitions, animation type, accessibility, colour schemes (for example RGB), resolutions, frame rates, structure, device compatibility
- CVMG file types for print and digital graphics

Analysis and research is marked holistically and can occur at any point in the project. For example, candidates can conduct research for their FEA test when attempting this section of the project. This allows them to succinctly detail their approach and draw valid conclusions.

### **Producing graphic specifications**

Candidates should produce separate specifications for TG and CVMG detailing:

- the range and format of graphics required for their project, linked to the requirements outlined in the project assessment task
- conclusions determined from their analysis and research that specifies decisions for undertaking graphics moving forward

### TG preliminary planning

Candidates should annotate or label their work to show how they intend to use the required modelling techniques. Candidates will gain more marks if they provide relevant technical detail to enhance the clarity and understanding of their work.

Although candidates do not need to include every single dimension, they should ensure they include the critical sizes. It can be useful for candidates to complete skill-building tasks, where they apply dimensions to drawings to understand the expected standard at this level.

Candidates should present their work on two pages and avoid scanning and scaling work, as this results in diminished quality and limits clarity.

### **CVMG** preliminary planning

Candidates should ensure they plan for the range of graphics chosen for printed and digital graphic items as set out in their project brief.

Candidates should include suitable annotations, detailing the use of elements and principles and explaining the CVMG technical requirements of their graphics.

#### **Project plans**

To gain full marks candidates must include key stages and intermediate stages in their project planning, along with suitable timings for each stage. This should link to specifications and the requirements for graphics as outlined in the project assessment task.

#### TG graphic solution

Candidates do not need to produce component drawings for every component and should focus only on key components that demonstrate their chosen modelling techniques. This reduces the need to use too many pages when presenting work and improves clarity.

Candidates should annotate or label their components to demonstrate the modelling techniques they have used in their model. They should ensure they include sections in their component drawings, especially where this adds clarity to internal detail.

Although candidates can miss some dimensions, they should ensure they include the critical sizes.

In assembly work, cutting planes for sectional work must clearly demonstrate the assembly of the model. Where required, candidates can include more than one section.

Candidates must include enlarged views to demonstrate the correct assembly of components.

Candidates should ensure they correctly align exploded views with no overlapping components.

Candidates should ensure the scales and line weights they use result in clear printed drawings. Teachers and lecturers can advise candidates on suitable scales and line weights and may provide candidates with a centre devised template.

Candidates often benefit from skill-building lessons focusing on British Standards and conventions for clarity.

#### **CVMG** graphic solution

Candidates must present print-based solutions in a pre-press format and digital graphics in a format ready for digital publication. Candidates should ensure that they present solutions without placeholder text. Placeholder text indicates that graphics are still in the development phase and are not final.

Candidates should present pre-press formats correctly for their chosen graphic items with registration, crop marks and colour bars applied correctly, where required. For example, for a business card in a suite of graphics they should consider duplexing, or how many business cards they could print on one page.

The Advanced Higher course gives candidates complete creative freedom over their CVMG solution. Teachers and lecturers should spend time ensuring that candidates have opportunities to complete skill-builder tasks to help them improve their skills at this level, and their approach to preparing and presenting CVMG graphic items not covered in other levels.

The tasks should ensure graphics include effective visual impact and are of the standard required for Advanced Higher level. Teachers and lecturers should refer to <a href="Understanding Standards">Understanding Standards</a> materials to support with this.

To avoid producing too many graphics of limited quality, candidates should produce graphics for the specified criteria as listed under 'CVMG preliminary planning' above and not take on too much. Candidates should give themselves enough time to complete their CVMG work to the same standard as their TG work. Candidates

should focus on the requirement for each type of printed and digital graphic, as outlined in the project assessment task.

#### **Evaluating the solutions and the process**

Candidates must ensure that evaluations are concise with a focus on discussing the performance of their graphics in relation to achieving their specifications, and the strengths and weaknesses of their solutions.

Like analysis and research, evaluations are marked holistically and can occur at any point throughout the project. For example, a candidate could evaluate their FEA simulations or technical illustrations when producing work for this section.

# Appendix: 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 is 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 to make final decisions on grade boundaries based on this information. Members of our Executive Management Team normally chair these meetings.

Principal assessors utilise 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.

- The grade boundaries can be adjusted downwards if there is evidence that the question paper or other assessment has been more difficult than usual.
- The grade boundaries can be adjusted upwards if there is evidence that the question paper or other assessment has been less difficult than usual.
- Where levels of difficulty are comparable to previous years, similar grade boundaries are maintained.

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 <u>Awarding and Grading for National Courses Policy</u>.