Questions & Answers

Advanced Higher Graphic Communication

General

What programs are suitable for candidates to work from at home?

SQA does not specify what software should be used for Graphic Communication, this allows centres the flexibility to use a wide range to suit their individual circumstances. If you are unable to use your usual software during lockdown, some centres are using a variety of web-based software for course delivery and/or assessment. You will need to determine if this is suitable for your centre/candidates as it may involve using new packages and is dependent on access to IT equipment.

In my opinion the mandatory CAD commands at times feel forced and don't always offer candidates the best opportunity to choose the most efficient commands to showcase skills. Are there any plans to review this?

The project was reviewed in 2019 and there are no further plans to review it at this time. It is a course assessment component and candidates need to demonstrate that they have the knowledge and skills to carry out the CAD commands detailed in the course specification.

Understanding Standards

I've seen a previous version of the marker commentary for candidate 2. Has there been a change to the marking scheme?

Working versions of the marking commentaries were published in error, they were then removed from the Understanding Standards website and replaced with the final versions. This has been communicated via centre news and we apologise for any inconvenience this may have caused.

Project

Is there any expectation that TG preliminary graphics should be based on standards in principle even though they are freehand?

There are no marks awarded for British Standards in the preliminary graphics section of the coursework assessment task. Please see the breakdown of marks on page 6 of the coursework assessment task and note that any detail should be communicated clearly, and to a high standard to access the full marks range.

Can candidates demonstrate 3D modelling technique planning to be used in the environment?

No. Please see page 22 of the Coursework Assessment Task. Candidates should use their chosen product as a focus and produce a range of explorative sketches that demonstrate how they will produce a 3D CAD model of their product.

Are static wire frames acceptable for planning the digital graphic?

Yes. This approach is acceptable however, candidates must demonstrate the required level of planning and creativity for the graphics being developed. Candidates should clearly annotate their work to show understanding and planning of design elements, principles, features and edits, as well as the relevant technical requirements listed on page 8 of the Coursework Assessment Task.

For application of the specified modelling procedures, is there an expectation of high complexity or is a simple application of each acceptable to access all marks?

Yes, it is stated on pages 6, 18 & 22 of the Coursework Assessment Task that the five modelling techniques should all be complex at Advanced Higher. However, within an assembly/product, candidates can use simple components that support the requirements of the design.

Can you clarify follow on rule for candidate 2's TG solution? They have lost all marks for no preliminary work, but then have been penalised again within modelling techniques as they can't reference preliminary work.

The candidate has not been penalised. The Advanced Higher Graphic Communication project is marked positively. Please see the introduction to the Marking Instructions on page 5 of the Coursework Assessment Task document. Positive marking means that candidates accumulate marks for the demonstration of relevant skills, knowledge and understanding; marks are not deducted for errors or omissions. In example 2, the candidate has not completed any preliminary work therefore, they cannot be awarded an additional mark within modelling techniques. A follow-on rule cannot be applied as there is no candidate work to apply it to.

Can CAD library components be used for simple parts like washers and screws?

Yes, this is acceptable.

Would multiple sub-assemblies be acceptable rather than an overall assembly if the model is too large?

Yes. Sub-assemblies are acceptable.

How much detail is required for surface texture symbols?

Candidates must understand what the symbols are and correctly apply them to appropriate components. Please see page 35 of the Course Specification for information on surface finish conventions.

Is a mechanical simulation just an exploded view animated?

No. Mechanical simulations require candidates to visually represent the functional features and/or assembly requirements of a product. Mechanical simulations should clearly demonstrate how the product works.

Can candidates show bump mapping in the environment and gain marks?

Yes. Illustration techniques can be shown within sited environments. Candidates should use a similar approach to applying techniques to models. They should clearly label and annotate their work to show how techniques have been applied, and produce clear graphics that demonstrate application of the skill.