T-LEVELS | Institute for Apprenticeships & Technical Education

T Level Technical Qualification in Design and Development for Engineering and Manufacturing

Employer-Set Project (8730-035)

Autumn 2023 Marking Grid

City & Guilds | eal

Contents

General marking approach

The following process details at high level the steps that will be undertaken by the external markers following the submission of candidate's submitted evidence.

Candidate evidence includes work produced by the candidate such as notes, reports, plans or drawings. As well as other generated evidence which demonstrates the candidate's performance such as the video of a presentation or notes of the Q&A session following the presentation. Only certain pieces of evidence should be considered for certain marking grids. The evidence which should be considered for a marking grid will be clearly outlined in the 'Guidance to markers' section.

Process

- Marker reviews the administrative paperwork for the candidate which includes;
    - Evidence checklist
        - **Has this form been completed fully?**
        - **Does it highlight any evidence which has not been uploaded?**
        - **Does the checklist align to the evidence available in the system?** – if no, make a note of this, mark the tasks which do have all evidence, Save, then flag as an Error making clear what is missing.
    - Declaration of Authenticity
        - **Has this been signed by the candidate and the provider?** – if no, make a note of this, mark the evidence, Save, then flag as an Error making clear that the DoA is not signed.
        - **Does it detail any support the candidate was given during the assessment which should be taken into consideration when marking?** – if yes, flag to supervisor and your assessment contact.

- Marker attempts to open/play all evidence files and checks the following:
    - Does the evidence contain a header form where the candidate details align to the candidate details in the marking platform?
    - Does all the evidence open/play?
    - Do the video files have clear sound?
      – if no, make a note of this, mark the tasks where evidence is available, Save, then flag as an Error making clear what is wrong.

- Marker begins 'marking' starting with the first marking grid and working through them in order.

- Marker must consider what the marking grid is trying to assess by:
    - noting what candidate evidence must be taken into consideration for this marking grid.
    - reading through the indicative content and familiarising themselves with the 'lens' they should be evaluating the candidates work through in relation to the prescribed assessment objective(s) the marking grid is assessing.
    - reading the band descriptors, noting how the descriptors differentiates performance between bands.

- Once familiar with the requirements of the marking grid the marker will:
    - scan/read the candidate's evidence that is relevant to that marking grid.
    - make an initial judgement on the level of performance the candidate has demonstrated taking all the relevant evidence for that grid into consideration.
    - allocate the marking band the candidate's performance best aligns to.

- Once the initial assessment is made, the marker needs to determine how well aligned the candidate's performance is to the band descriptor. The marker will:
    - review the relevant candidate evidence against the initially allocated band descriptor in more detail.
    - determine how well the candidate aligns to the band by placing them into one of the four levels of alignment detailed below:
        A. The candidate is **securely** in the band (i.e. meeting the band descriptor(s) fully).
        B. The candidate is **largely** meeting the band with most of the descriptor(s) met, but some may not be fully met.
        C. The candidate is **partially** meeting the band with some of the descriptor(s) met, but some may not be met.
        D. The candidate **does not align** to the descriptor(s) within the band.

- To help determine how well the candidate aligns to the band, the marker will consider the four levels of alignment in detail, taking into account:

    A. If the candidate's performance is **securely** in the band, (i.e. all characteristics described by the band descriptor are seen or it strongly meets the level of performance described by the descriptor holistically.) To confirm the correct band has been assigned the marker will also check the descriptor for the band above:
        - if evidence clearly shows some of the characteristics of the higher band, the marker will select a suitable mark at the bottom of that band.
        - if not showing characteristics of the higher band, the marker will revert to the original band, selecting a mark at the higher end of that mark range.

    B. If the candidate's performance is **largely** meeting the band. To confirm the correct band has been assigned the marker will:
        - check the descriptor for the band above
        - check the descriptor for the band below

        If there are only a few concerns with the initially allocated band, and the performance is not showing characteristics aligning with the higher or lower bands, the appropriate mark is likely to be in the middle range.

    C. If the candidate's performance is **partially** meeting the band. To confirm the correct band has been assigned the marker will:
        - check the descriptor of the level below.
        - decide on a suitable mark either:
            - at the bottom of the initial band as some characteristics shown, or
            - at the top of the lower band if it better describes the quality of performance being shown.

    D. If there is no alignment with the descriptor, the marker will reassess the starting band, and begin again.

- Once the appropriate band has been identified, where the band covers a range of marks, the marker will determine a final mark awarded from that band. Marks are evenly distributed across the bands.
    - if the quality of candidate performance fully aligns with the descriptor, the marker will assign a high mark within the band.
    - if the quality of the response partially aligns with the performance described by the descriptor, the marker will assign a low to medium mark within the band.

To support this decision, the marker will consider the quality of a range of similar responses (e.g. responses reviewed during standardisation, or experience as they move through candidates scripts) and choose a mark that would give an appropriate ranking amongst those responses in relation to the full range of marks available in each band.

Follow-through errors

Should a candidate make an error or display a weakness in one task that is further compounded through the inter-dependent nature of the tasks and carry through that error, the marker should penalise the candidate only once.

Evidence should be considered within the constraints of the relevant marking grid, focusing on the knowledge and skills to be demonstrated as outlined in the indicative content. For example, if the candidate does not research suitable options in Task 1, when they get to Task 4 where the solution is presented – the marker should focus on looking at how well the candidate presents the solution they are proposing, i.e. it is the presentation and communication skills that hold the main relevance in this task, rather than further penalising the candidate for a less than optimal research and proposal from the initial Task 1.

Candidates can also use evaluation within later task responses to address issues they have identified.

Worked Example (1)

Grid 1 AOs: AO1, AO2a, AO3, Relevant Evidence: research notes, list of references/sources

Task 1	Band 1			Band 2			Band 3		
	1	2	3	4	5	6	7	8	9

Research

(Planning, core knowledge, selecting techniques and resource)

Indicative Content – Sample version

AO1 – The candidate has planned their research. This may be evidenced in the coherence of structure of the research notes, and in the sources/resources listed. The consistency of coverage of research requirements as detailed in the technical brief in relation to required aspects of the task.

AO2a – Evidence of the candidate researching required elements and refining their approach to the problem and considering the jig requirements meet the specification given. Candidates provided details on research of materials, standard parts and relevant specifications. Research on responses to similar problems, similar solutions or ones that relate the provided brief. Detail of health and safety considerations and risk assessment requirements.

AO3 – The candidate's selected research techniques and resources to meet the brief and their relevance. The matching of resources and information to the various parts of the research requirement – use of specifications, diagrams, downloads etc to match the determinations that must be made.

Band 1			Band 2			Band 3		
1	2	3	4	5	6	7	8	9
Some evidence of a planned approach to research. (AO1)			Approach to research and collation of information shows planning and consistency. (AO1)			Brief requirements are considered consistently throughout the research and information collation – clear evidence of methodical and thorough approach to research and information gathering. (AO1)		
Some elements of core knowledge referenced but focus may be imbalanced and more focused on one area than another. (AO2a)			Core knowledge applied in most areas of the brief requirements. (AO2a)			Core knowledge applied in all areas of the brief requirements. (AO2a)		
Research techniques and resources clear as part of evidence submission. (AO3)			Evidence of a range of techniques and resources used and referenced, with different source types considered. (AO3)			Evidence of comprehensive research techniques, use of resources, and full range of sources. All sources fully detailed and presented fully and consistently. (AO3)		

Marker familiarises themselves with the marking grid, identifying:

- What candidate evidence is relevant.
- What aspects of the relevant evidence is to be considered from the indicative content.
- How performance is differentiated across the marking bands.

Marker scans the relevant evidence and makes an initial judgement on the level of performance.

Marker allocates the marking band that the candidate's performance best aligns to. E.g. Band 2.

If the candidate's performance is **partially** meeting the descriptors within the band, the marker will check the descriptor of the level below.

If the candidate's performance is **largely** meeting the descriptors within the band, with only a few concerns and is not aligning with the higher (B3) or lower (B1) bands, the appropriate mark is likely to be in the middle range.

If the candidate's performance is **securely** meeting the descriptors in the band, the marker will also check the descriptor for the band above. (e.g. Band 3).

Marker decides to award Band 2 = 5 marks.

Marker will decide on a suitable mark either:

- at the bottom of the original band (B2) as some characteristics shown, i.e. 4 marks, or
- top of the lower band (B1) if it better describes the characteristics being shown i.e. 3 marks.

Marker will decide on suitable mark either:

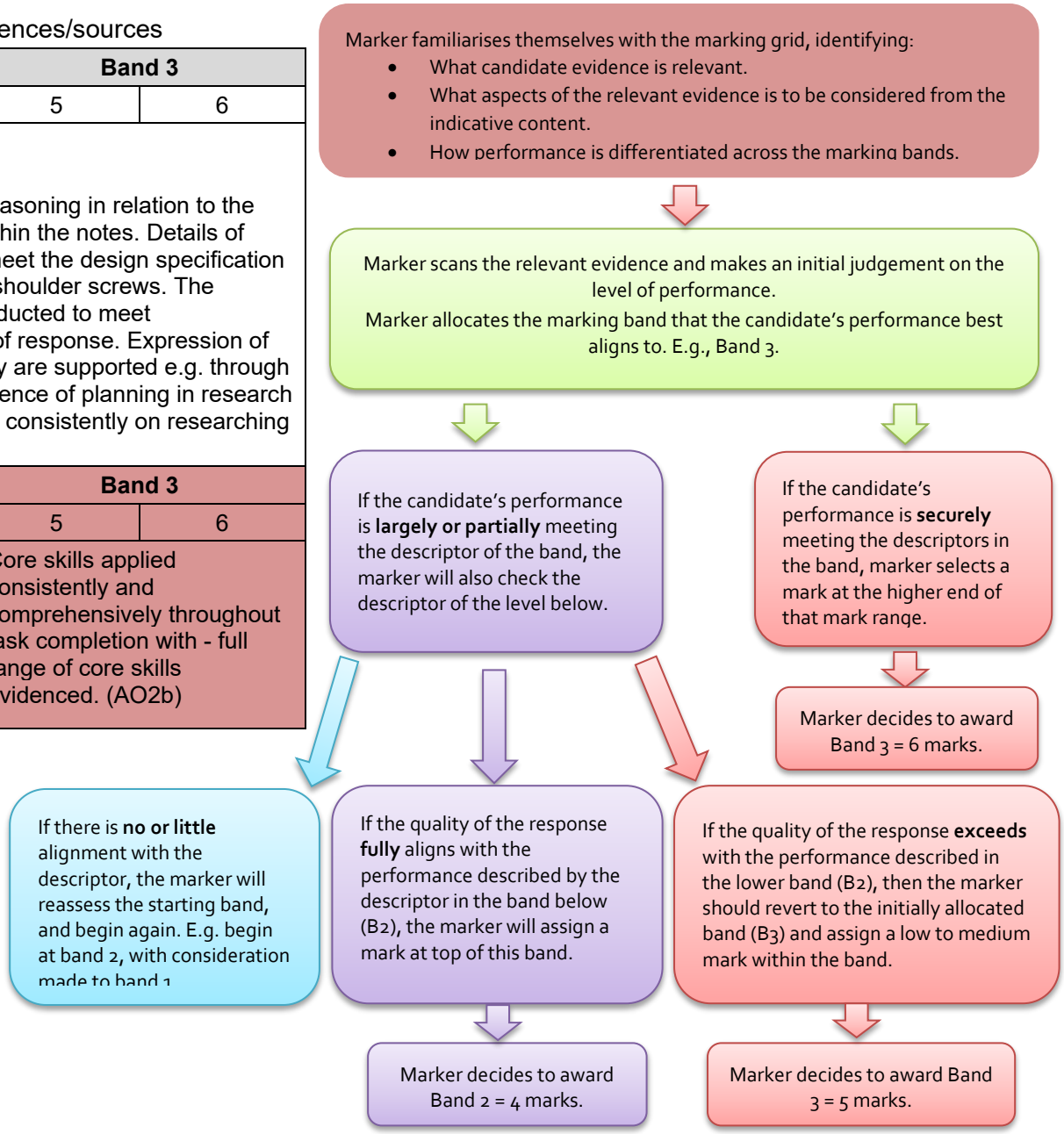
- at the bottom of the higher band (B3) as some characteristics are shown, i.e. 7 marks, or
- revert to the original band, (B2) selecting a mark at the higher end of that mark range i.e 6 marks.

Worked Example (2)

Grid 2 AOs: AO2b, Relevant Evidence: research notes, list of references/sources

Task 1	Band 1		Band 2		Band 3	
	1	2	3	4	5	6
Research (Core skills)	**Indicative Content – Sample version** **AO2b** – The candidate's demonstration of judgement and reasoning in relation to the review of the requirements from the brief and the content within the notes. Details of research on technology solutions for the drill jig in order to meet the design specification supplied by the client and support the order of the bespoke shoulder screws. The candidate's effectiveness of communication of research conducted to meet requirements outlined in the brief – clarity and conciseness of response. Expression of ideas in associated research analysis and level to which they are supported e.g. through inclusion of images and level of referencing to sources. Evidence of planning in research in terms of consistency and balance of response (time spent consistently on researching different elements).					

Band 1		Band 2		Band 3	
1	2	3	4	5	6
Some basic elements of core skills drawn on and evidenced within task response - limited use of skills in relation to brief requirements. (AO2b)		A range of core skills applied and evidenced consistently in task response in relation to different elements of the project brief. (AO2b)		Core skills applied consistently and comprehensively throughout task completion with - full range of core skills evidenced. (AO2b)	



Use of ChatGPT (or any other Artificial Intelligence)

What isn't permitted

AI misuse is where a candidate uses an AI tool in an assessment or fails to appropriately reference it in an assessment where internet use is permitted. Examples include the following:

- Failing to reference use of AI tools when they have been used as a source of information;
- Incomplete or poor referencing of AI tools;
- Copying sections of AI-generated content so that the work is no longer the student's own;
- Copying whole responses of AI-generated content;
- Submitting work with intentionally incomplete or misleading references or bibliographies.

AI misuse constitutes malpractice as defined in the JCQ Suspected Malpractice: Policies and Procedures (**https://www.jcq.org.uk/exams-office/malpractice/**). We encourage markers to read and reference this guidance if they feel the need to flag potential malpractice related to ChatGPT. The malpractice sanctions available for the offences of 'making a false declaration of authenticity' and 'plagiarism' include disqualification and debarment from taking qualifications for a number of years.

What is permitted

AI may have been used by the candidate as a source within their research task (Task 1 only). Where candidates use AI, they must acknowledge its use and show clearly how they have used it. However, how candidates have decided to use it will impact on the overall mark they are allocated.

The use of AI as a research technique will impact Grid 1. Below details how they will be impacted and what needs to be considered:

<u>Grid 1</u>

- AO1: Planning (Approach to research and information gathering)
    - Has the candidate validated the information given to them by the AI solution?
- AO2a: Application of Core Knowledge
    - Does the candidate's evidence demonstrate how they have taken the research provided by the AI and used this, alongside their own knowledge in response to the brief?
- AO3: Selecting Techniques and Resources
    - Has the candidate considered other approaches to research, or have they just deferred to AI?
    - Is the use of AI appropriate referenced?

Worked Example

Candidate A has referenced ChatGPT along with one other web-address, which has barely been used or referred to within their evidence. They have considered the majority of the prompt given in the brief but not all. The way the evidence is presented, it's difficult to determine what information is taken directly from the source and what is the learner's interpretation of this information. On this occasion, the learner is likely to be contained to marks within Band 1 because:

- There is some evidence that they carried out some planning – they've considered the majority of the prompts within the brief.
- It's difficult to determine how the candidate has interpreted the information from the research and applied their own knowledge within the evidence given the way it's presented.
- They have used ChatGPT as a primary source and have only followed up with one other website, and the reference to this is limited, therefore, minimal techniques have been used. To add to this the candidate has not made it clear within their reference what is the output from ChatGPT and what is their own work.

What to do if you believe you've identified potential misuse of AI

Any concerns around AI misuse must be treated as potential malpractice. You must flag this by putting the candidate on HOLD in myMarkis. Further guidance relating to this can be found in Section 12 (Page 6) of the 'myMarkis Checklist for Marking' document.

What to do if you're unsure

Your marking supervisor is there to support you through the process, as are the City & Guilds Assessment team. If you have a specific candidate, you'd like to talk through in more detail please reach out to them.

Assessment objectives

The Employer-Set Project is assessed against five assessment objectives. The assessment objectives are mapped against each task within the marking grids:

AO Ref	Assessment Objective
AO1	Plan their approach to meeting the project brief
AO2	Apply core knowledge and skills as appropriate
• AO2a	○ core knowledge
• AO2b	○ core skills i) **Planning and preparation** e.g., interpret and confirm project requirements; plan and scope project (e.g., timescales, requirements, resources, cost); develop project plans. ii) **Communication** e.g., interpret, use and produce engineering representations and drawings (including graphical language/conventions), interpret and use relevant technical information in a range of formats and media, communicate appropriately with technical and non-technical audiences (using appropriate technology, as appropriate). iii) **Develop and manufacture** e.g., design or devise a proposal to meet the brief, develop, model and revise concept/s. iv) **Evaluation** e.g., carry out appropriate tests, evaluation and analysis (at relevant stages), confirm appropriate model for final realisation, testing for suitability, evaluate how well the final product meets the brief (e.g., quality, time, resources, cost).
AO3	Select relevant techniques and resources to meet the brief
AO4	Use maths, English and digital skills as appropriate
• AO4a	○ maths
• AO4b	○ English
• AO4c	○ digital
AO5	Realise a project outcome and review how well the outcome meets the brief
• AO5a	○ realise a project outcome – was the right outcome achieved
• AO5b	○ review how well the outcome meets the brief, how well the brief was met, the quality of the outcome in relation to the brief

Employer-Set Project mark distribution

This table illustrates how the 90 marks for the Employer-Set Project are distributed against the tasks and mapped to each assessment objective. These have been set by subject matter experts and employers and will support the comparability between versions of the Employer-Set Project over time.

Tasks	**AO1**	**AO2a**	**AO2b**	**AO3**	**AO5a**	**AO5b**	**Total**	**AO4a**	**AO4b**	**AO4c**
1. Research	3	3	6	3	0	0	15	3	3	3
2. Design	3	6	6	3	3	3	24			
3. Plan	3	6	6	3	0	0	18			
4. Present	3	6	6	3	3	3	24			
Total	**12**	**21**	**24**	**12**	**6**	**6**	**81**	**9**		**90**
AO marks	12	45		12	12		-	9		90
AO %	13.3%	50%		13.3%	13.3%		-	10%		100%

NB - AO2 collectively must be at least 50% (ie 45 marks)

1. Research

<table>
<tr><th colspan="4">Grid 1: AO1, AO2a, AO3 Research (Planning, core knowledge, selecting techniques and resource)</th></tr>
<tr><td>Guidance for markers</td><td colspan="3">Only the following evidence must be used to assess performance against this marking grid:
Research notes which should include a list of sources/references
Technical brief which outlines initial concepts ideas for the lighting column</td></tr>
<tr><td rowspan="2">Indicative Content</td><td>AO1 – Plan their approach to meeting the project brief
The candidate’s:
approach to investigating potential solutions.
structure of the technical brief and research notes.
analysis of the design requirements and the issues outlined in the task, and how consistent/balanced the consideration of each of these are in comparison to each other, specifically:
suitable sustainable material options and finishes for the lighting column
appropriate lamp units suitable for the port environment
suitable control technology for switching the lamps on and off
aesthetic design features
options to enable lamp units to be changed at ground level.
AO2a – Apply core knowledge
The candidate’s:
confidence and appropriateness of use of terminology.
accuracy of the contents of technical brief.
interpretation of the information found within research and the accuracy of how this has been applied into the technical brief.
selection and definition key aspects of the task in relation to the design specification:
material options and finishes for the lighting column: the thickness of the materials, its yield strength or the ductility, considering 80% sustainable material requirement, corrosion resistance.</td><td>AOs (marks)

AO1 (3)

AO2a (3)

AO3 (3)</td><td>Total marks available

9</td></tr>
</table>

Grid 1: AO1, AO2a, AO3 Research (Planning, core knowledge, selecting techniques and resource)			
	○ lamp units: suitability for the port environment, suitable weight (maximum of 50 kg per column), volume of lamp units needed to cover the specified area. (each lamp unit must cover 2500 m^2, each column must cover 14000 m^2 i.e. 6 lamp units will be needed per column as an example) ○ control technology for illuminating (switching on) the lamps: use of main power supply and the arrangement of how they are switched on and off ○ aesthetic design features: fitting into the port landscape, the colour scheme – royal blue, ○ options to enable lamp units to be changed at ground level: base connect to the ground. • evaluation of different options and reasoning for refining/selecting solutions, how this links back to the specifics of the design specification and brief from client. **AO3 – Select relevant techniques and resources to meet the brief** The candidate's: • range of techniques/sources used to carry out research (such as the number of websites and the types of websites the candidate has used). • consideration of the relevance and reliability of the sources used during research. • ability to apply the findings from the research into their initial proposals. • range of potential solutions/options. • clarity of solutions, and how closely, they are derived from brief guidance and researched information. • references to sources from research of guidance and/or industry standards. • use of pictures, drawings, schematics, specifications, and sketches alongside prose to communicate their initial design concepts.		
Marking descriptors – All versions Note: where there is insufficient evidence to award a mark, a zero mark may be given			

Grid 1: AO1, AO2a, AO3 Research (Planning, core knowledge, selecting techniques and resource)								
Band 1 descriptor			**Band 2 descriptor**			**Band 3 descriptor**		
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
Some evidence of a planned approach to research. (AO1) Some elements of core knowledge referenced but focus may be imbalanced and more focused on one area than another. (AO2a) Research techniques and resources detailed as part of evidence submission. (AO3)			Approach to research and collation of information shows planning and consistency. (AO1) The application of core knowledge is referenced consistently for example in relation to technology, selection of materials and development of initial ideas. (AO2a) Evidence of a range of techniques and resources used and referenced, with different source types considered. (AO3)			Brief requirements are considered consistently throughout the research and information collation – clear evidence of methodical and thorough approach to research and information gathering. (AO1) Core knowledge applied in all areas of the brief requirements including - technology, construction materials, and idea summation. (AO2a) Evidence of comprehensive research techniques, use of resources, and full range of sources. All sources fully detailed and presented fully and consistently. (AO3)		

<table>
<tr><th colspan="6">Grid 2: AO2b Research (Core Skills)</th></tr>
<tr><td>Guidance for markers</td><td colspan="5">Only the following evidence must be used to assess performance against this marking grid:
• Research notes which should include a list of sources/references
• Technical brief which outlines initial concepts ideas for the lighting column</td></tr>
<tr><td rowspan="2">Indicative Content</td><td colspan="3">AO2b – Application of core skills
Core skills being assessed:
• Planning and Preparation:
○ level of synergy of initial considerations
○ research considerations in relation to client’s design specification
○ collation of initial concept considerations for the lighting column in the form of a technical brief
• Communication:
○ effectiveness of communicating the technical requirements for the lighting column.
○ use of industry conventions and technical language
○ use of methods to communicate concept ideas (i.e. images, drawings, sketches, diagrams schematics etc.)
○ clarity and conciseness of expression of concept ideas</td><td>AOs (marks)</td><td>Total marks available</td></tr>
<tr><td>AO2b (6)</td><td>6</td></tr>
<tr><td colspan="6">Marking descriptors – All versions
Note: where there is insufficient evidence to award a mark, a zero mark may be given</td></tr>
<tr><td colspan="2">Band 1 descriptor</td><td colspan="2">Band 2 descriptor</td><td colspan="2">Band 3 descriptor</td></tr>
<tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td></tr>
<tr><td colspan="2">Some basic elements of core skills drawn on and evidenced within task response - limited use of skills in relation to brief requirements. (AO2b)</td><td colspan="2">A range of core skills applied and evidenced consistently in task response in relation to different elements of project brief. (AO2b)</td><td colspan="2">Core skills applied consistently and comprehensively throughout task completion with - full range of core skills evidenced. (AO2b)</td></tr>
</table>

2. Design

<table>
<tr><th colspan="4">Grid 3: AO1, AO3 Design (Planned approach, selecting techniques)</th></tr>
<tr><td>Guidance for markers</td><td colspan="3">Only the following evidence must be used to assess performance against this marking grid:
Annotated sketches of at least two potential designs
Calculations - safe working load and maximum vertical force
Notes on how the two potential designs meet the brief requirements.
Dimensioned and scaled CAD drawing(s) of preferred chosen design.</td></tr>
<tr><td rowspan="2">Indicative Content</td><td>AO1 – Plan their approach to meeting the project brief
The candidate’s
layout of sketches and CAD drawing(s) and the conformance to industry standards/best practice.
coverage of the requested elements within the sketches:
lighting column base connection detail.
materials from which the unit is to be constructed.
number of lamp units and how they are arranged.
shape and aesthetic features of the lighting column.
full dimensions.
method to change a bulb at ground level
technology to switch the lamp units on and off.
coherence of structure and clarity of assumptions in relation to the safe working load and maximum vertical force calculations
AO3 – Select relevant techniques and resources to meet the brief
The candidate’s
presentation of sketches and CAD drawings, use of recognised techniques, adherence to drawing conventions and annotations, clarity, quality, and accuracy.
use of a drawing frame for drawings, and inclusion of titling block.
consideration of industry practices and use of adopted scale when creating the sketches and drawings.</td><td>AOs (marks)
AO1 (3)
AO3 (3)</td><td>Total marks available
6</td></tr>
</table>

<table>
<tr><th colspan="6">Grid 3: AO1, AO3 Design (Planned approach, selecting techniques)</th></tr>
<tr><td></td><td colspan="3">• presentation and format of calculations e.g. use of engineering calculation sheets; including a column for references (from design standards) and results.</td><td></td><td></td></tr>
<tr><td colspan="6">Marking descriptors – All versions
Note: where there is insufficient evidence to award a mark, a zero mark may be given</td></tr>
<tr><th colspan="2">Band 1 descriptor</th><th colspan="2">Band 2 descriptor</th><th colspan="2">Band 3 descriptor</th></tr>
<tr><th>1</th><th>2</th><th>3</th><th>4</th><th>5</th><th>6</th></tr>
<tr><td colspan="2">Some evidence of a planned approach to design task, response may lack detail and calculation information. (AO1)

Some relevant techniques used in the preparation and presentation of drawings/sketches and associated calculations. (AO3)</td><td colspan="2">Approach to design and calculations information is planned, organised and complete. (AO1)

Relevant techniques and industry drawing conventions used throughout the preparation and presentation of drawings/sketches and associated calculations. (AO3)</td><td colspan="2">Approach to design and calculations fully comprehensive and in line with standard industry practices / best practice (AO1)

Preparation and presentation of drawings/sketches and associated calculations is fully in line with industry drawing conventions showing the use of all correct techniques. (AO3)</td></tr>
</table>

<table>
<tr><th colspan="4">Grid 4: AO2a Design (Core Knowledge)</th></tr>
<tr><td>Guidance for markers</td><td colspan="3">Only the following evidence must be used to assess performance against this marking grid:
Annotated sketches of at least two potential designs
Calculations - safe working load and maximum vertical force
Notes on how the two potential designs meet the brief requirements.
Dimensioned and scaled CAD drawing(s) of preferred chosen design.</td></tr>
<tr><td rowspan="2">Indicative Content</td><td>AO2a – Apply core knowledge
The candidate’s
choice of language used in any text on the sketches and CAD drawings, its technical level and consistency with the intended audience.
proposed solutions for the design, how well the solutions comply with industry guidance, have the potential to be implemented (it’s viability) and the technical sense of the solution.
accuracy of technical principles applied throughout the design.
ability to make links between knowledge and understanding of engineering principles and apply this to the given scenario
approach to determining calculations, selected method used to determine this and level of consideration of safety factors.
Areas of the core knowledge being assessed:
Approaches to design and sustainability (1.1)
Development of materials, electrical power and electrical sources of artificial light (2.2)
Drawings and information conveyed by drawings (3.1)
Dimensions and tolerancing on engineering drawings (3.2)
Applied mathematical theory in engineering application (4.1)
Units of measurement in engineering (5.1)
Causes of material failure and their prevention (6.5)
Principles of motion and mechanics in engineering (7.1)</td><td>AOs (marks)</td><td>Total marks available</td></tr>
<tr><td>AO2a (6)</td><td>6</td></tr>
</table>

Grid 4: AO2a Design (Core Knowledge)					
Marking descriptors – All versions Note: where there is insufficient evidence to award a mark, a zero mark may be given					
Band 1 descriptor		**Band 2 descriptor**		**Band 3 descriptor**	
1	**2**	**3**	**4**	**5**	**6**
Some elements of core knowledge drawn on and evidenced - limited comprehension of knowledge in relation to brief requirements e.g., brief requirements omitted indicating lack of knowledge of that area. (AO2a) Some links to the application of core knowledge to support judgements, but connections are not always clear and accurate. (AO2a)		Knowledge from across the core applied and evident in relation to different elements of project brief. (AO2a) Links to the application of core knowledge to justify and support judgements, but with some gaps or inaccuracies. Concepts explained/ referenced clearly and correctly. (AO2a)		Core knowledge applied consistently throughout response with minimal technical inaccuracies. (AO2a) Connections between elements of core knowledge exploited to strengthen arguments and demonstrate understanding. (AO2a)	

<table>
<tr><th colspan="4">Grid 5: AO2b Design (Core skills)</th></tr>
<tr><td>Guidance for markers</td><td colspan="3">Only the following evidence must be used to assess performance against this marking grid:
Annotated sketches of at least two potential designs
Calculations - safe working load and maximum vertical force
Notes on how the two potential designs meet the brief requirements.
Dimensioned and scaled CAD drawing(s) of preferred chosen design.</td></tr>
<tr><td>Indicative Content</td><td>AO2b – Application of core skills

Core skills being assessed:
Planning and preparation
demonstrate reasoned judgement in the preparation of the solution.
incorporation of the required aspects in the design – use of logical and synergised approach.
designs meet the client’s design specification and the demands of the task.
Communication
effectiveness in communicating idea/information through sketches, CAD drawings and associated annotations so the key features of the designs can be interpreted.
use of proportion within sketches, use of dimension and annotations on CAD drawings.
Developing proposals and concepts
demonstration of judgement and reasoning in relation to the preparation of the solution, considering the original product design specification. The aesthetics and shape of the column respond to the proposed location within a busy working container port.
selection of materials from which the column is to be constructed, and technologies to be used for powering, lifting and lowering the lamp units, solution for fixing the column to the ground.
incorporation of the required aspects in the design- use of logical and synergised approach.
refinement of the initial design ideas to present one final design.</td><td>AOs (marks)

AO2b (6)</td><td>Total marks available

6</td></tr>
</table>

Grid 5: AO2b Design (Core skills)					
Marking descriptors – All versions Note: where there is insufficient evidence to award a mark, a zero mark may be given					
Band 1 descriptor		**Band 2 descriptor**		**Band 3 descriptor**	
1	**2**	**3**	**4**	**5**	**6**
Some elements of core skills drawn on and evidenced within task response - limited use of skills in relation to brief requirements. (AO2b) Design has limited logic and shows superficial coherence between different aspects of the brief. Representations lack proportionally, dimension, and annotation. (AO2b)		A range of core skills applied and evident in task response in relation to different elements of project brief. (AO2b) Design is logical and shows some coherence between different aspects of the brief. Representations are mostly proportional and correctly dimensioned with significant annotation. (AO2b)		Core skills applied consistently throughout task completion with - full range of core skills evidenced. (AO2b) Design is logical and demonstrates detailed coherence between different aspects of the design brief. Representations are proportional, have detailed dimensions and annotation. (AO2b)	

<table>
<tr><th colspan="4">Grid 6: AO5a, AO5b Design (Realise outcome, review outcome)</th></tr>
<tr><td>Guidance for markers</td><td colspan="3">Only the following evidence must be used to assess performance against this marking grid:
Annotated sketches of at least two potential designs
Calculations - safe working load and maximum vertical force
Notes on how the two potential designs meet the brief requirements.
Dimensioned and scaled CAD drawing(s) of preferred chosen design.</td></tr>
<tr><td rowspan="2">Indicative Content</td><td>AO5a - realise a project outcome – was the right outcome achieved
Considering the candidate’s preferred chosen design and;
the effectiveness of the solution in relation to the context given in the project brief
the extent the solution meets the requirements of the product design specification.
how ‘fit for purpose’ the design is
how ‘believable’ the solution is to meet client requirements.
the feasibility of the solution presented, and the levels of amendments required.
AO5b – review how well the outcome meets the brief, how well the brief was met, the quality of the outcome in relation to the brief
The candidate’s
evaluation and review of requirements of the product design specification and recognition of how these have been met with proposed design.
development of ideas from two potential solutions to one final solution, rationale for the selected design option from the prepared sketches, clarity on which has been taken forward and drawn up as a fully annotated and dimensioned CAD drawings.
evaluation of how the final design has met the client requirements given in the product design specification.
development of ideas throughout the task, refining, improving and building upon potential solutions as they progress.</td><td>AOs (marks)
AO5a (3)
AO5b (3)</td><td>Total marks available
6</td></tr>
<tr><td colspan="3">Marking descriptors – All versions
Note: where there is insufficient evidence to award a mark, a zero mark may be given</td></tr>
</table>

Grid 6: AO5a, AO5b Design (Realise outcome, review outcome)					
Band 1 descriptor		**Band 2 descriptor**		**Band 3 descriptor**	
1	**2**	**3**	**4**	**5**	**6**
Task response partially addresses some of the task requirements. (AO5a) Evaluation and review do not clearly address how well the task outcome met the brief and lacks clarity and reasoning in places. (AO5b)		Task response addresses all aspects of the task requirements. (AO5a) Evaluation and review address how well the task outcome was achieved. (AO5b)		Task response fully addresses all aspects of all elements of the task requirements. (AO5a) Evaluation and review are comprehensive and specifically addresses how well the task outcome was achieved. (AO5b)	

3. Plan

<table>
<tr><th colspan="4">Grid 7: AO1, AO3 Plan (Planned approach, selecting techniques)</th></tr>
<tr><td>Guidance for markers</td><td colspan="3">Only the following evidence must be used to assess performance against this marking grid:
Programme of work for the design, development and manufacture of the lighting columns
A supporting statement which considers health and safety (including risk assessment requirements), relevant standards, specialist equipment, waste management and environmental considerations and any assumptions relating to resources.</td></tr>
<tr><td rowspan="2">Indicative Content</td><td>AO1 – Plan their approach to meeting the project brief
The candidate’s
planning of activities, the duration given to each activity and the sequence presented.
adherence to the constraints set within the brief (100 columns, 49 weeks, manufacture rate of 7 units per week, installation between 20:00 hrs and 05:00 hrs).
achievability and realism of their plan.
inclusions of relevant information to facilitate delivery of the plan
consideration of dependences between the different activities, clarity and accuracy of connections, identification of critical path
AO3 – Select relevant techniques and resources to meet the brief
The candidate’s
choice of manufacturing methods and justifications.
judgements and justification of in the selection of the resources that will be required to design, develop and install the lighting column.
consideration of techniques deployed to minimise waste, and use of the selected resources, and clarity and depth of justifications provided within the supporting statement.</td><td>AOs (marks)
AO1 (3)
AO3 (3)</td><td>Total marks available
6</td></tr>
<tr><td colspan="3">Marking descriptors – All versions
Note: where there is insufficient evidence to award a mark, a zero mark may be given</td></tr>
</table>

Grid 7: AO1, AO3 Plan (Planned approach, selecting techniques)					
Band 1 descriptor		**Band 2 descriptor**		**Band 3 descriptor**	
1	**2**	**3**	**4**	**5**	**6**
Limited approach to planning, response contains evidence of some of the required elements. (AO1) There is limited justification for the selection of techniques, resources (e.g., equipment, contractors), methods, and materials (including disposal) to be used. The choices made are not always the most effective or appropriate for the prescribed project brief. (AO3)		Response contains required elements in logical order with consideration of deadline and layout. (AO1) Techniques and/or resources (e.g., equipment, contractors), methods, and materials (including disposal) selected from those available to respond to the brief requirements. The choices made are mostly accurate and appropriate for the prescribed project brief. (AO3)		Logical and clear approach used with evidence of a detailed plan and methodology in line with standard engineering industry practices / best practice and effective prioritisation. (AO1) There is a detailed and justified approach to the selection of resources (e.g., equipment, contractors), methods and materials (including disposal). The choices made are accurate and appropriate for the prescribed project brief. (AO3)	

<table>
<tr><th colspan="4">Grid 8: AO2a Plan (Core Knowledge)</th></tr>
<tr><td>Guidance for markers</td><td colspan="3">Only the following evidence must be used to assess performance against this marking grid:
Programme of work for the design, development and manufacture of the lighting columns
A supporting statement which considers health and safety (including risk assessment requirements), relevant standards, specialist equipment, waste management and environmental considerations and any assumptions relating to resources.</td></tr>
<tr><td rowspan="2">Indicative Content</td><td>AO2a – Apply core knowledge

The candidate’s
use of technical terminology with the supporting statement, its consistency and appropriateness for the intended audience (technical expert)
level of detail of health and safety requirements that should be considered.
consideration of relevant regulations during manufacturing, for example the influence of LOLER, PUWER regulations on crane operations, and Electricity at Work Regulations.
consideration and selection of specialist equipment
consideration and level of knowledge relating to waste management and environment factors.
level of detail within explanation of the approach taken to the manufacturing processes
assumptions made relating to the in-house manufacture of the lighting columns, the fullness of their explanation in the supporting statement, their validity and alignment to accepted best/industry practice.
breadth and depth of assumptions made in relation to the manufacture from across the core content.
attempt to make links between the different activities within the task, drawing together knowledge from multiple elements to devise a plan.</td><td>AOs (marks)

AO2a (6)</td><td>Total marks available

6</td></tr>
<tr><td colspan="3">Marking descriptors – All versions

Note: where there is insufficient evidence to award a mark, a zero mark may be given</td></tr>
<tr><td>Band 1 descriptor</td><td>Band 2 descriptor</td><td colspan="2">Band 3 descriptor</td></tr>
</table>

Grid 8: AO2a Plan (Core Knowledge)					
1	**2**	**3**	**4**	**5**	**6**
Some elements of core knowledge referenced within plan - limited comprehension of knowledge in relation to brief requirements. (AO2a) Supporting information details some links to the application of core knowledge to support judgements, but connections are not always clear and accurate. (AO2a)		Elements of core knowledge directly highlighted in brief referenced within plan – knowledge evidenced may have gaps or show some misunderstanding. (AO2a) Supporting information details links to the application of core knowledge to justify and support judgements, but with some gaps or inaccuracies. (AO2a)		Knowledge from across the core applied and evident in plan in relation to different elements of project brief. (AO2a) Connections between elements of core knowledge fully explained within the supporting information to strengthen arguments and demonstrate understanding. (AO2a)	

<table>
<tr><th colspan="4">Grid 9: AO2b Plan (Core skills)</th></tr>
<tr><td>Guidance for markers</td><td colspan="3">Only the following evidence must be used to assess performance against this marking grid:
Programme of work for the design, development and manufacture of the lighting columns
A supporting statement which considers health and safety (including risk assessment requirements), relevant standards, specialist equipment, waste management and environmental considerations and any assumptions relating to resources.</td></tr>
<tr><td rowspan="2">Indicative Content</td><td>AO2b – Application of core skills
Core skills being assessed:
Planning and preparation
professionalism of the presentation of the programme of works and to what extent it is conveyed using industry standard notation and features.
use of recognised methods of presentation for the programme (e.g., Gantt Chart) and comprehensiveness of completion (e.g., tasks, milestones, resources, and identification of critical path).
coverage of the activities required to complete the project and how comprehensive this is.
Developing proposals and concepts
how comprehensively the programme covers the activities required to complete the design, development and manufacture of the lighting column
justifying the approach taken during planning which considers:
health and safety including risks assessment requirements.
any standards relevant to the manufacturing process
specialist equipment which may be needed
waste management and environmental considerations
the manufacturing approach which has been used
all assumptions relating to in house manufacturing capabilities and resources.
Communication
structure, logic and coherence of the supporting statement and coverage of the required considerations.</td><td>AOs (marks)
AO2b (6)</td><td>Total marks available
6</td></tr>
<tr><td colspan="3">Marking descriptors – All versions</td></tr>
</table>

Grid 9: AO2b Plan (Core skills)					
Note: where there is insufficient evidence to award a mark, a zero mark may be given					
Band 1 descriptor		**Band 2 descriptor**		**Band 3 descriptor**	
1	**2**	**3**	**4**	**5**	**6**
Some elements of each core skill applied - limited application of skills in practice in relation to brief requirements. (AO2b)		Elements of most core skills directly highlighted in brief used efficiently and consistency throughout. (AO2b)		All aspects of all core skills applied effectively throughout plan creation with clear focus on to required outcomes and linking of skills to task elements is fully considered. (AO2b)	

4. Present

<table>
<tr><th colspan="4">Grid 10: AO1, AO3 Present (Planned approach, selecting techniques)</th></tr>
<tr><td>Guidance for markers</td><td colspan="3">Only the following evidence must be used to assess performance against this marking grid:
Video recording of presentation
Presentation materials (slides, handouts, notes etc)
Presentation Q&A Record (if this cannot be heard on the video)
The presentation should cover: the key features of their chosen design, the plans relating to manufacturing, including and outline of the manufacturing method that is to be used, challenges present by the brief and how these were overcome, how well the design meets the brief.

Audience: Representative of the client, with a technical background.</td></tr>
<tr><td rowspan="2">Indicative Content</td><td>AO1 – Plan their approach to meeting the project brief
The candidate’s
logic, order and coherence, of the presentation
AO3 – Select relevant techniques and resources to meet the brief
The candidate’s
selection and application of techniques for delivering the presentation, how appropriate and effective they are (e.g., use of slide deck, reference to notes, provision of handouts, use of other reference material).
use of positive non-verbal communication during delivery (e.g., maintaining eye contact with the audience) and the clarity of speaking/delivery, and the level of which distraction behaviour is displayed (e.g. rocking, tapping., pausing).</td><td>AOs (marks)

AO1 (3)

AO3 (3)</td><td>Total marks available

6</td></tr>
<tr><td colspan="3">Marking descriptors – All versions

Note: where there is insufficient evidence to award a mark, a zero mark may be given</td></tr>
</table>

Grid 10: AO1, AO3 Present (Planned approach, selecting techniques)					
Band 1 descriptor		**Band 2 descriptor**		**Band 3 descriptor**	
1	**2**	**3**	**4**	**5**	**6**
The presentation lacks structure and does not always follow a logical approach due of ineffective planning. (AO1) Technique used to deliver the presentation is sometimes effective. However technical information is not always complete and accurate. (AO3)		The presentation is structured and follows a logical approach in response to the task with evidence of planning. (AO1) Techniques used to deliver the presentation are mostly effective. The technical information provided is accurate most of the time with valid reasoning. (AO3)		The presentation is organised, structured and logical in its approach. It is clear that the presentation content has been considered in terms of its audience. (AO1) Techniques used to deliver the presentation are effective with well justified reasoning behind the information provided. (AO3)	

<table>
<tr><th colspan="4">Grid 11: AO2a Present (Core Knowledge)</th></tr>
<tr><td>Guidance for markers</td><td colspan="3">Only the following evidence must be used to assess performance against this marking grid:
Video recording of presentation
Presentation materials (slides, handouts, notes etc)
Presentation Q&A Record (if this cannot be heard on the video)
The presentation should cover: the key features of their chosen design, the plans relating to manufacturing, including and outline of the manufacturing method that is to be used, challenges present by the brief and how these were overcome, how well the design meets the brief.

Audience: Representative of the client, with a technical background.</td></tr>
<tr><td rowspan="2">Indicative Content</td><td>AO2a – Apply core knowledge

The candidate’s
judgements in the preparation of the presentation, how well they are reasoned and cover the key features of the design, development and the proposed approach to manufacture of the column.
interpretation of the challenges within the design brief/specification and explanations as to how these have been overcome in the design presented.
understanding of engineering principles which has influenced the solutions and with reasoning of why these suitably meet the design specification from the client for the following features:
lighting column base connection detail
materials from which the unit is to be constructed
number of lamp units and how they are arranged
shape and aesthetic features of the lighting column and how these fit into a port setting
technology to switch the lamp units on and off.
confidence and accuracy when responding to question from the client (tutor/assessor)
use of technical language (with consideration of both technical and non-technical audience)</td><td>AOs (marks)

AO2a (6)</td><td>Total marks available

6</td></tr>
<tr><td colspan="3">Marking descriptors – All versions

Note: where there is insufficient evidence to award a mark, a zero mark may be given</td></tr>
</table>

Grid 11: AO2a Present (Core Knowledge)					
Band 1 descriptor		**Band 2 descriptor**		**Band 3 descriptor**	
1	**2**	**3**	**4**	**5**	**6**
Engineering concepts relating to the core knowledge conveyed through the presentation - these may not always be accurate or be directly linked to the brief requirements. (AO2a) Terminology used may have inaccuracies and content provided may include inconsistencies and not clear to the targeted audience. (AO2a)		Engineering concepts relating to the core knowledge are coherent throughout the presentation to meet the requirements of the brief set. (AO2a) Terminology used is mostly accurate with minor errors. The content provided is in the most correct but does not always consider target audience / may be imbalanced or biased (e.g., to either technical or non-technical focus). (AO2a)		Engineering concepts relating to the core knowledge are coherent with clear justifications on how these are applied in response to the brief requirement. (AO2a) Terminology used is accurate and error free. The content provided is clear and easily understood by the target audience, with no bias in tone / imbalance across audience type (where appropriate). (AO2a)	

<table>
<tr><th colspan="4">Grid 12: AO2b Present (Core skills)</th></tr>
<tr><td>Guidance for markers</td><td colspan="3">Only the following evidence must be used to assess performance against this marking grid:
Video recording of presentation
Presentation materials (slides, handouts, notes etc)
Presentation Q&A Record (if this cannot be heard on the video)
The presentation should cover: the key features of their chosen design, the plans relating to manufacturing, including and outline of the manufacturing method that is to be used, challenges present by the brief and how these were overcome, how well the design meets the brief.

Audience: Representative of the client, with a technical background.</td></tr>
<tr><td rowspan="2">Indicative Content</td><td>AO2b – Application of core skills
Core skills being assessed:
Communication
professionalism of presentation resources (slides/presentation methods.)
effectiveness in communicating the key features of the design – including fluency, accuracy, clarity and conciseness
clarity and size of images and figures, inclusion of labels, font size
of the final solution is technically accurate.
Evaluation
evaluate how well the final product meets the brief.</td><td>AOs (marks)</td><td>Total marks available</td></tr>
<tr><td>AO2b (6)</td><td>6</td></tr>
<tr><td colspan="4">Marking descriptors – All versions

Note: where there is insufficient evidence to award a mark, a zero mark may be given</td></tr>
</table>

Grid 12: AO2b Present (Core skills)					
Band 1 descriptor		**Band 2 descriptor**		**Band 3 descriptor**	
1	**2**	**3**	**4**	**5**	**6**
Communication of engineering concepts is sometimes effective. The delivery of technical information may lack accuracy and clarity for the audience. (AO2b)		Engineering concepts are communicated effectively most of the time in an appropriate manner for the target audience. There are minor inaccuracies in the delivery of information which causes a lack of clarity in some instances. (AO2b)		Highly effective communication of engineering concepts is appropriate for the target audience. Technical information is presented accurately and delivered with clarity. (AO2b)	

<table>
<tr><th colspan="4">Grid 13: AO5a, AO5b Present (Realise outcome, review outcome)</th></tr>
<tr><td>Guidance for markers</td><td colspan="3">Only the following evidence must be used to assess performance against this marking grid:
Video recording of presentation
Presentation materials (slides, handouts, notes etc)
Presentation Q&A Record (if this cannot be heard on the video)
The presentation should cover: the key features of their chosen design, the plans relating to manufacturing, including and outline of the manufacturing method that is to be used, challenges present by the brief and how these were overcome, how well the design meets the brief.

Audience: Representative of the client, with a technical background.</td></tr>
<tr><td rowspan="2">Indicative Content</td><td>AO5a - realise a project outcome – was the right outcome achieved
The candidate’s
effectiveness in evaluating the challenges presented by the brief and how these have been overcome.
identification of which areas of the brief were/were not satisfied.
reflections on additional aspects of research/design process they could have done, any rework of that would improve / enhance a future project outcome.
AO5b – review how well the outcome meets the brief, how well the brief was met, the quality of the outcome in relation to the brief
The candidate’s
clarity within their evaluation and review of the challenges of the product design specification, and indications within the presentation on how these have been overcome.
clarity of explanation of how the final design addresses the requirements of the product design specification brief, including any featured considered by the candidate to be improved.
evaluation on ideas relating to how earlier tasks could be built on and indications of reasons why this has happened.</td><td>AOs (marks)

AO5a (3)

AO5b (3)</td><td>Total marks available

6</td></tr>
<tr><td colspan="3">Marking descriptors – All versions

Note: where there is insufficient evidence to award a mark, a zero mark may be given</td></tr>
</table>

Grid 13: AO5a, AO5b Present (Realise outcome, review outcome)					
Band 1 descriptor		**Band 2 descriptor**		**Band 3 descriptor**	
1	**2**	**3**	**4**	**5**	**6**
Project outcome as a whole partially addresses some of the brief requirements. Articulates some challenges encountered. (AO5a) No or minimal reasons and justification in how effectively the brief was met across project tasks. (AO5b)		Project outcome as a whole address all aspects of the brief requirements. Articulates all challenges encountered and the attempts to overcome them. (AO5a) There is reason and justification in how effectively some areas of the brief were met across project tasks. (AO5b)		Project outcome as a whole fully addresses all aspects of the brief requirements and considers alternative options where appropriate. Articulates fully challenges encountered and comprehensively covers how they were overcome. (AO5a) Detailed reasoning behind how successfully the project brief was met across project tasks. (AO5b)	

Maths, English and Digital skills

<table>
<tr><th colspan="4">Grid 14: AO4a (Maths)</th></tr>
<tr><td>Guidance for markers</td><td colspan="3">Only the following evidence must be used to assess performance against this marking grid:
Annotations of dimensions on sketches (Task 2)
Dimensioning and scaling CAD drawing (Task 2)
Calculations for safe working load and maximum vertical force (Task 2)
Calculation of timescales and critical path within the Programme of work (Task 3)</td></tr>
<tr><td rowspan="2">Indicative Content</td><td rowspan="2">The candidate’s:
use of numeracy to provide dimensioned sketches and scaled CAD drawing(s). - MC1, MC3, MC8
selection and use of mathematical methods to determine the safe working load and maximum vertical force. - MC2, MC4, MC8
clarity and accuracy in the calculations and determining duration of activities and critical path within programme of work. - MC7, MC8, MC10</td><td>AOs (marks)</td><td>Total marks available</td></tr>
<tr><td>AO4a (3)</td><td>3</td></tr>
<tr><td colspan="4">Marking descriptors – All versions
Note: where there is insufficient evidence to award a mark, a zero mark may be given</td></tr>
<tr><td>Band 1 descriptor</td><td colspan="2">Band 2 descriptor</td><td>Band 3 descriptor</td></tr>
<tr><td>1</td><td colspan="2">2</td><td>3</td></tr>
<tr><td>Some mathematical concepts and calculations applied appropriately. (AO4a)

Workings or techniques omitted as part of calculations, assumptions lack detail and full definition. Workings shown but calculation errors made / inaccurate execution. (AO4a)</td><td colspan="2">A range of mathematical concepts and calculations applied. (AO4a)

Working contains inaccuracies or could be more efficient (i.e., expressed in shorthand). Workings inconsistently shown. (AO4a)</td><td>Mathematical approaches and concepts applied fully and consistently. (AO4a)

Calculations presented accurately and in correct format, workings shown and evidence of checking to ensure correct results (e.g., estimation workings, reverse calculation checks) (AO4a)</td></tr>
</table>

Grid 15: AO4b (English)			
Guidance for markers	**Only** the following evidence must be used to assess performance against this marking grid: • Technical brief (Task 1) • Notes detailing how the designs meet the brief requirement (Task 2) • Supporting statement for the programme of work (Task 3) • Presentation delivery (orally) and materials to support presentation (e.g. slides etc) (Task 4)		
Indicative Content	The candidate's: • use of appropriate and accurate English • clarity and articulateness of use of English to present information and ideas • accuracy of grammar, spelling and punctuation • use of terminology, which is technical and consistent with the intended audience • confidence in the use of language during verbal presentations, level of articulation and clarity in the delivery of information to summarise information/ideas.	**AOs (marks)** **AO4b (3)**	**Total marks available** **3**

Marking descriptors – All versions

Note: where there is insufficient evidence to award a mark, a zero mark may be given

Band 1 descriptor	Band 2 descriptor	Band 3 descriptor
1	**2**	**3**
Evidence within task responses lacks structure where outcome is partially understandable. Communication style is generally appropriate to the outcome but has some inconsistencies across tasks. (AO4b) Meaning is clear, but the language is not always fluent. Grammar and/or spelling contain errors or inconsistencies. Audibility of oral presentation is inconsistent. (AO4b)	Evidence within task responses uses conventional structure which is understandable. Communication style is appropriate to the outcome across most tasks. (AO4b) Meaning is clear, language is fluent, although the response may contain colloquialisms or jargon etc. Grammar and spelling are mainly accurate. Audibility of oral presentation is good. (AO4b)	Evidence within task responses uses a structure which makes it easy to fully understand. Communication style is appropriate to the outcome across all tasks. (AO4b) Meaning is clear, language is fluent and consistent across tasks. Grammar and spelling are consistently accurate across tasks. Deploys a range of grammatical constructions.

Grid 15: AO4b (English)		
		Audibility of oral presentation is excellent. (AO4b)

Grid 15: AO4c (Digital)			
Guidance for markers	**Only** the following evidence must be used to assess performance against this marking grid: • Types of sources used for Research (Task 1) • CAD Drawing (Task 2) • Presentation of the programme of work (Task 3) • Presentation materials (slides, handouts, notes etc) (Task 4)		
Indicative Content	The candidate's: • selection of digital resources and the effective of the resource in meeting task requirements • application of features available within digital resources (e.g. formatting, layout, presentation modes, animations / transitions in presentation, application of CAD package features). • selection and use of software to support delivery of the presentation. • use of a range of digital options used across tasks, the extent to which they have been used to add value and their effectiveness of use. • use of current digital techniques, resources, and sources in adherence with industry practice, convention, and trends. • use of a digital presentation package such as PowerPoint (selecting appropriate images, videos and figures)	**AOs (marks)** **AO4c (3)**	**Total marks available** **3**

Marking descriptors – All versions

Note: where there is insufficient evidence to award a mark, a zero mark may be given

Band 1 descriptor	Band 2 descriptor	Band 3 descriptor
1	**2**	**3**
Digital technology attempted as part of task responses. (AO4c)	Consideration and use of basic digital options / features to strengthen task responses throughout project across tasks. (AO4c)	Digital options applied effectively in line with industry practices / best practice, demonstrating use of range of technology features. Digital techniques used effectively to add value to task responses. (AO4c)

Get in touch

City & Guilds Technicals Quality Team

We are here to answer any queries you may have regarding your T Level Technical Qualification delivery.

Should you require assistance, please contact us using the details below:

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E: **technicals.quality@cityandguilds.com**

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