

2- Design

2.1 Design ideas (AO2 8 marks)

Exemplars of 2.1 Design ideas

Use [this live link](#) to view the latest exemplar materials for this assessment grid.

Stage	What students need to do:
2.1 Design ideas	<p>2.1a Production of a range of design ideas that address the criteria in the design brief and product specification.</p> <p>2.1b Consideration of a range of issues when producing the design ideas, including:</p> <ul style="list-style-type: none"> a budget b aesthetics c cultural issues d sustainability issues. <p>2.1c Exploration of different design approaches, including:</p> <ul style="list-style-type: none"> a materials b components c processes d techniques.

What the NEA content requires students to do:

2.1a Production of a range of design ideas that address the criteria in the design brief and product specification.

Students are required to produce 3-4 quality design ideas. Each should be visibly different, able to meet the needs and wants of the user/client or user group and solve the identified problem (as set out in the design brief). Communication of design ideas can be through sketching, modelling, and/or computer aided design (all of which will gain credit for grid 2.4 Communication). All designs will require written evidence in addition.

Students are free to approach the design task as they choose. The specific design strategies of collaboration, user centred design and systems thinking (1.16.1 of core content) would appear through design ideas by:

- **Collaboration** - designing with a user/client as a joint activity.
- **User centred design** - design ideas which focus on the user/client needs and wants.
- **Systems thinking** - design ideas that consider how the solution connects to other products or services (e.g. considering how a product might be recharged using a wall socket, the retail packaging of a product, or how the product is to be disassembled for recycling are all examples of systems thinking).

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2.1b Consideration of a range of issues when producing the design ideas.

Students will be able to show considerations of budget, aesthetics, and cultural and sustainability issues, through written annotation. Written evidence can be complemented through audio or video media.

2.1c Exploration of different design approaches.

Students will be able to show exploration of materials, components, processes, and techniques through annotation. It is likely that design ideas will convey these elements through graphical sketching, modelling, and/or CAD. At the design ideas stage, materials, components, processes, and techniques will all still be at an early consideration phase.

Level	Mark	2.1 Design ideas (AO2 8 marks)
	0	No rewardable material.
Level 1	1–3	<ul style="list-style-type: none">• Basic selection and use of design strategies to inform decisions to generate a limited range of simplistic design ideas in response to the contextual challenge.• Limited consideration for the user needs and specification parameters.• Ideas demonstrate a basic understanding of some materials and processes.
Level 2	4–6	<ul style="list-style-type: none">• Generally appropriate selection and use of design strategies to inform decisions to generate a range of design ideas in response to the contextual challenge.• Generally sound consideration for the user needs and specification parameters.• Ideas demonstrate a generally sound understanding of relevant materials, processes and techniques.
Level 3	7–8	<ul style="list-style-type: none">• Fully appropriate selection and use of design strategies to inform decisions to generate a wide range of design ideas in response to the contextual challenge.• Fully sound consideration for the user needs and specification parameters.• Ideas demonstrate a fully sound understanding of relevant materials, processes and techniques.

How this assessment grid differentiates student evidence of design ideas.

Design idea evidence is differentiated based upon a number of factors, which should be accounted for in how students approach the generation of evidence. The following questions will help students to consider how they present their design idea evidence:

1. Are sketches (both in 2.1 and 2.3 evidence) a suitable size on the page or have they produced thumbnails which lack detail?
2. Are sketches created with clear linework or are they hard to decipher? (both physical and digital)
3. Are all of the design ideas different solutions to solving the problem, or are they very similar to one another, with minor differences apparent (i.e. design fixation)?

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4. Has CAD been used appropriately alongside sketches to convey design ideas, or is the candidate lacking evidence of sketching? (i.e. is there a balance of skills on show?).
5. Is annotation around all of the design ideas appropriate to where the student is in the project? (i.e. has the student fixated onto specific materials, components, processes and techniques, or do they remain open to exploring the choices they still have?).