

DESIGN AND VISUAL COMMUNICATION

DVC3023Y1

INTERNAL ASSESSMENT ACTIVITY

ACHIEVEMENT STANDARD AS91630 (VERSION 3) (Design and Visual Communication) 3.33

Resolve a product design through graphics practice

Level 3, Internal assessment

6 credits

STUDENT INSTRUCTIONS

In this project you will:

- select the most promising design idea or combination of ideas you generated as part of the concept design process or from the activity for Achievement Standard 91627 Initiate design ideas through exploration
- work towards resolving a product design that effectively communicates the features of the project.
- apply visual communication and design techniques and knowledge to explore and refine ideas
- make informed designer decisions that integrate product design knowledge, understanding of the wider environmental conditions, and human factors related to the product design
- visually communicate the design and justify it in terms of the significant opportunities and constraints identified.

Product design knowledge includes elements of design approaches, technical knowledge and visual communication techniques relevant to the specific product design context. These may include:

- design tools used for the development of product design ideas (e.g. market research, anthropometrics, ergonomics, mockups, and models)
- technical knowledge of materials, joining, fitting, assembly, finish, fasteners, sustainability, and environmental considerations
- product design visual communication techniques and approaches (e.g. product design drawings and rendering, prototypes, models, and animation).

Graphics practice involves expressing a visual literacy through the developing of design ideas by applying design and visual communication techniques and knowledge, leading to the communication of an outcome in response to a brief.

Conditions:

- This is an individual assessment activity
- There is no time limit. Expect to spend at least 60 hours on the activity.

You will need:

- The equipment and resource requirements are listed in the online topic Product design.

Supervisor requirements

You and your supervisor must complete the online authenticity declaration to verify that the work is your own.

ASSESSMENT CRITERIA

ACHIEVEMENT STANDARD AS91630 (VERSION 3) (Design and Visual Communication) 3.33

Resolve a product design through graphics practice

Evidence/Judgements for Achievement	Evidence/Judgements for Achievement with Merit	Evidence/Judgements for Achievement with Excellence
The student has resolved a product design through graphics practice.	The student has clearly resolved a product design through graphics practice.	The student has effectively resolved a product design through graphics practice.
<p>In their portfolio, the student has:</p> <ul style="list-style-type: none"> explored and refined design ideas based on an analysis of the design context (including opportunities and constraints) and the understanding of product design knowledge. <p><i>For example:</i> The student has used diagrams, photographs, sketches, and notes to identify key features/characteristics of the location, e.g. placement of product, functional requirements, and the aesthetics/style of the location. The student has produced a sequence (or sequences) of visuals (2D and 3D) informed by research information and product knowledge. This sequence shows how the student has improved and evolved the exterior form and refined functional details such as materials and construction. The student has communicated a product design that addresses identified opportunities and constraints</p> <ul style="list-style-type: none"> visually communicated design and thinking, using visual communication techniques that address the identified opportunities and constraints. <p><i>For example:</i> The student has used 2D design sketches and 3D sketches and/or modelling techniques to communicate the resolved design solution and address the identified opportunities and constraints</p>	<p>In their portfolio, the student has:</p> <ul style="list-style-type: none"> explored and refined the wider environmental conditions and human factors related to the design context to identify opportunities and constraints. <p><i>For example:</i> The student has used diagrams, photographs, sketches, and notes to identify key features/characteristics of the location and explained how these will influence their design possibilities (e.g. users and their needs, placement of product and the aesthetics/style of the location and existing surroundings. The student has considered how the location is linked to wider factors, including but not limited to legal, ethical, social, cultural, historical, economic, and technological factors and human factors such as ergonomics related to the human factors related to the product. The student has produced a sequence (or sequences) of visuals (2D and 3D) informed by research information that explains how they have improved and defined the exterior form (e.g. shape, size, proportion, and position within the location) and refined functional details such as materials and manufacturing . The student has used design tools, human dimensions, and technical knowledge of product design. Notes and visuals explain how design possibilities have been considered and improved throughout the progression of the design based on their reflection.</p> <ul style="list-style-type: none"> visually communicated a product design that addresses the significant opportunities and constraints. <p><i>For example:</i> The student has presented 2D design sketches and drawings (exploded views, sequential and cutaway views) and 3D sketches and drawings (overall form, partial views and details) and/or modelling techniques to communicate the resolved design solution and address the significant opportunities and constraints.</p>	<p>In their portfolio, the student has:</p> <ul style="list-style-type: none"> explored and refined the design ideas by making informed designer judgements that integrate product design knowledge, the understanding of the wider environmental conditions, and human factors relating to lighting design. <p><i>For example:</i> The student has produced a sequence of visuals (2D and 3D) informed by research information that explains in detail how they have finalised and integrated the exterior form and style, materials, and intended use. The student has used design tools, human dimensions, and technical knowledge of product design. Notes and visuals explain how selected design possibilities are integrated into design thinking incorporating product knowledge, human factors, and wider environmental conditions, to produce a resolved design outcome.</p> <ul style="list-style-type: none"> visually communicated a product design that is justified in terms of the significant opportunities and constraints identified. <p><i>For example:</i> The student has presented extensive 2D drawings/sketches (exploded views, sequential and cutaway views) and a range of 3D sketches (overall form, partial views, and details), using refined rendering techniques, and/or mock-ups that justify the design in terms of the design brief, opportunities, and constraints.</p>

ASSESSMENT ACTIVITY

DVC3023Y1

INSTRUCTIONS

Complete the research, design and presentation processes outlined in the online topic Product design.

Check that your submission includes:

Selection of a design idea

- selection of the most appropriate design idea or concept for development

Research

- examples of product design visual communication techniques and approaches (e.g. product design drawing and rendering, prototyping, modelling, or animation).
- examples of existing design solutions for similar uses or contexts
- technical information (e.g. materials, joining, fitting, assembly, finish, fasteners, sustainability, and environmental considerations.)
- information on human factors to consider (e.g. anthropometric data, market research on user preferences)
- additional research occurring throughout the design process to inform and support your design decisions.

You must identify the source of all research material.

Design development

- exploration, refinement and review of your selected idea using visual communication techniques and approaches that explain your design thinking
- progression in your thinking by refining and reviewing initial ideas
- critical analysis of the solution with informed designer decisions that integrate specialist product design knowledge, an understanding of the wider environmental conditions, and human factors related to the product design
- justification it in terms of the significant opportunities and constraints identified.

Presentation

- a final solution that clearly communicates the design solution, using skilful presentation and compositional techniques and application of modes and media.

When you have checked and assembled all the worksheets:

- Check and assemble all sheets you have completed in an order that shows a logical and coherent development of your design ideas.
- Scan and/or photograph sheets and assemble them in a single, digital file (preferably PDF format) Do not send any three-dimensional mock-ups or models. Photograph these and include the photographs as part of your submission

ASSESSMENT RESOURCES

The equipment and resource requirements are listed in the online topic Product design.

ACKNOWLEDGEMENTS

Every effort has been made to acknowledge and contact copyright holders. Te Aho o Te Kura Pounamu apologises for any omissions and welcomes more accurate information.

Assessment Criteria adapted from Design & Visual Communication Level 3 Internal Assessment Resources 3.33 © Crown
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ASSESSMENT FEEDBACK

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Fill in your name and ID number. Your teacher will complete the rest.

Student name: _____

Student ID: _____

	Not Attempted	Not Achieved	Achieved	Merit	Excellence
Resolve a product design through graphics practice					

GRADE ALLOCATION

Not Attempted	
Not Achieved (N)	
Achieved (A)	
Merit (M)	
Excellence(E)	

Resubmission (If appropriate, please indicate)	Yes / No
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Further Assessment Opportunity	
Is not available	
Is available, please contact your teacher	
Is attached	

Teacher comments - see attached letter

NOW

- Record your achievement on your record sheet in the Course and assessment guide
- Read your teacher's comments to get feedback on your assessment
- We strongly encourage you to take advantage of a further assessment opportunity, if it is available and you wish to improve your grade.



Contact your teacher if you want to talk about any of this work or query the result you have been given.