Iterative Project - Grading Criteria

Name & Surname		Date	
School			

Initial Project Proposal (30 marks)

Design Aspect - (24 marks)

		*Evidence	Mark	Assessor
1.1.1	Gain insight about a situation.		2	
1.1.2	Identify with different roles and stakeholders.		2	
1.1.3	Derive specifications.		2	
1.3.1	Facilitate two-way communication with different stakeholders through the Initial Project proposal.		3	
1.4.1	Write a design brief that seeks new opportunities beyond a given project situation.		2	
1.4.2	Propose a realistic, marketable and desirable solution.		5	
2.1.1	Develop the design brief based on the research carried out.		3	
2.4.1	Use tools to communicate data.		4	
2.4.2	Present the Initial Project Proposal and share with stakeholders, with a fair degree of clarity.		1	
		Design Aspect mark	24	

Technology Aspect - (6 marks)

		*Evidence	Mark	Assessor
6.1.2	Apply basic elements of design and annotations to enhance communication of the designs.		2	
6.3.2	Apply Freehand 3D Pictorial projection techniques, proportionally.		2	
6.4.5	Digitise media with a range of input devices and software.		2	
		Technology Aspect mark	6	

Initial project proposal		Assessor
Design Aspect mark	24	
Technology Aspect mark	6	
Initial project proposal total mark	30	

** Evidence column should be filled in with a reference to where such evidence is found in the submitted Proposal e.g.: Poster A; or: File A; or CD A, etc., reflecting the way the material is labelled.*

Iterative Project - Grading Criteria (Related to Syllabus 2019)

Name & Surname		Date	
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Final Design Project (70 marks)

Design Aspect - (30 marks)		*Evidence	Mark	Assessor
1.1.4	Identify opportunities.		2	
1.1.5	Reflect on Ideas to lead to feasible solutions.		2	
1.2.1	Generate a variety of creative and relevant design ideas.		3	
1.2.2	Use relevant data and knowledge to generate design solutions.		1	
1.2.3	Record the stages of design.		1	
1.2.4	Iterate between stages of design to refine solutions.		2	
1.2.5	Plan the implementation of the product.		2	
1.3.2	Communicate a finalised product.		1	
1.4.3	Take new initiatives in promoting or enhancing the value of the Final Design Project.		2	
2.1.2	Devise appropriate research tools.		1	
2.1.3	Devise scientific investigation.		1	
2.2.1	Collect data from a minimum of three different sources.		1	
2.2.2	Use tools to record and organise data.		1	
2.3.1	Analyse data and knowledge in the context of the final design project.		1	
2.3.2	Interpret data and results to develop project design and specifications.		2	
2.5.1	Reference data correctly, ethically and legally.		1	
2.5.2	Document own Product Health & Safety data and Proper Care data.		1	
3.2.3	Evaluate methods to reduce waste.		1	
3.3.1	Evaluate the critical contribution of peers within a task.		1	
3.4.1	Evaluate the final product and/or system against testing carried out.		2	
3.4.2	Communicate the iterative process of design.		1	
		Design Aspect mark	30	

** Evidence column should be filled with a reference to where such evidence is found in the submitted Design folio, e.g.: DF-p 1, 2 etc.; or Artefact (AR); or any other submitted material as part of the Final design project excluding the initial project proposal.*

Technology Aspect - (28 marks)

		*Evidence	Mark	Assessor
2.1.4	Apply the appropriate subject knowledge/data.		1	
4.1.4	Describe the reason for the selection of appropriate material/s and its form of supply.		1	
4.3.5	Independently select the appropriate tools and machinery for a desired task.		1	
4.4.1	Operate the tools and machinery, selected for the Final design project, safely and appropriately, under supervision. (excluding electronics equipment) (Show planning)		2	
4.4.2	Record the list of tools used to fabricate the final design project, including Health and Safety precautions taken.		1	
4.5.1	Construct parts of an artefact according given or own design.		1	
4.5.2	Construct an artefact from own design taking care of joining and fastening different parts together taking in account maintenance and improvements.		2	
4.5.3	Apply finishing processes to artefact parts and complete the Final Design Project.		2	
4.5.4	Produce an artefact/product that satisfies the functional, usability, aesthetic and ergonomic needs in a developed design brief.		3	
5.1.2	Describe the function of a system.		2	
5.4.3	Independently select the appropriate tools and machinery for a given task.		1	
5.4.6	Build working models to test parts of the Final Design Project.		1	
6.1.1	Select appropriate graphic materials and graphic media/tools for developing and presenting design ideas.		1	
6.1.3	Apply quality finishing techniques to illustrations, graphic products and prototypes.		1	
6.2.3	Mark accurate 2D parts for fabrication using marking out tools.		1	
6.2.5	Draw dimensions appropriately.		1	
6.2.6	Read and draw 2D working drawings in orthographic projection of 3D objects.		1	
6.4.1	Manipulate Raster/bitmap images using Image manipulation software.		1	
6.4.2	Produce accurate 2D drawings of parts of the final design project using Computer Aided Design [CAD] Software.		1	
6.5.1	Design a basic product branding scheme.		2	
6.5.2	Present data using infographic charts and organisational diagrams.		1	
		Technology Aspect mark	28	

* See note in previous page.

Important Note:- Elective Criteria

The students must choose six of the twelve criteria listed below and incorporate them within the Final Design Project. The six chosen criteria must be identified with a tick (✔). Only these six

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selected criteria will be considered and assessed as part of the Final Design Project. *(If more criteria are selected, only the first 6 in listing order will be considered.)*

Technology Aspect - Elective Criteria - (12 marks)

Code:	✔ Tick 6	Choose only six	*Evidence	Mark	Assessor
5.3.3		Program a microcontroller device through the use of graphic interface software.		2	
5.4.4		Operate electronics tools and machinery, selected for the Final design project, safely and appropriately, under supervision. (Show planning)		2	
5.4.9		Independently develop a simple circuit to achieve a desired function.		2	
5.4.10		Build a working model of a simple electronic circuit on a breadboard.		2	
5.4.11		Prototype a custom electronic circuit board using CAD.		2	
5.4.12		Assemble permanently a basic circuit on prototyping boards from given pictorial information.		2	
5.4.5		Measure components' parameters using measurement instruments or tools. (Record procedure)		2	
5.4.7		Independently apply a minimum of three working mechanical systems for a given task. (within project)		2	
5.4.13		Select connectors and fasteners, appropriate to assemble electrical and mechanical components.		2	
6.2.7		Design 2D surface geometry nets for basic 3D objects or 3D models, including flaps.		2	
6.4.3		Produce accurate 3D digital models using CAD Software.		2	
6.4.4		Use CAD software with a range of CNC and CAD-CAM.		2	
			Technology Aspect - Elective mark:	12	

Initial Project Proposal			**Final Design Project**		
Design Aspect mark	24		Design Aspect mark	30	
Technology Aspect mark	6		Technology Aspect mark	28	
Initial project proposal total mark	**30**		Technology Aspect Elective mark	12	
			Final Design Project total mark	**70**	
Iterative Project Total mark			100		

* See note in previous pages.

 Name & Surname: _____