

Design Objectives: Year 1

Objective A: Inquiring and Analysing

At the end of year 1, students should be able to:

- (i) explain and justify the need for a solution to a problem
- (ii) state and prioritize the main points of research needed to develop a solution to the problem
- (iii) describe the main features of one existing product that inspires a solution to the problem
- (iv) present the main findings of relevant research.

Objective B: Developing Ideas

At the end of year 1, students should be able to:

- (i) develop a list of success criteria for the solution
- (ii) present feasible design ideas, which can be correctly interpreted by others
- (iii) present the chosen design
- (iv) create a planning drawing/diagram which outlines the main details for making the chosen solution.

Objective C: Creating the Solution

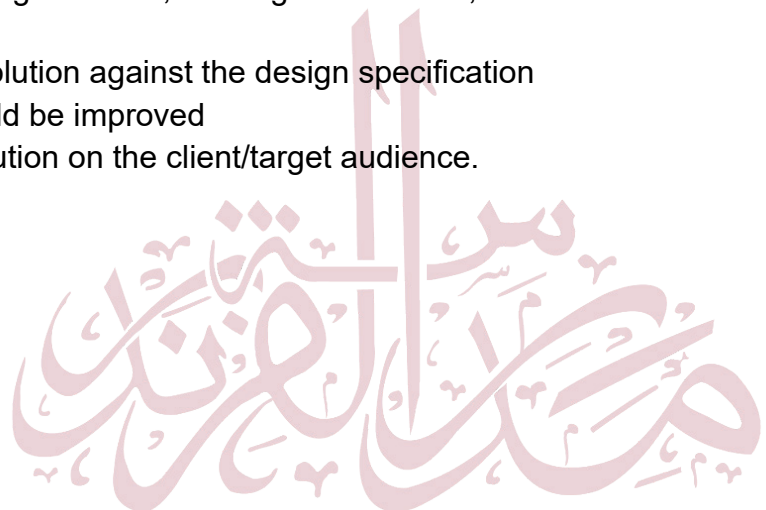
At the end of year 1, students should be able to:

- (i) outline a plan, which considers the use of resources and time, sufficient for peers to be able to follow to create the solution
- (ii) demonstrate excellent technical skills when making the solution
- (iii) follow the plan to create the solution, which functions as intended
- (iv) list the changes made to the chosen design and plan when making the solution.

Objective D: Evaluating

At the end of year 1, students should be able to:

- (i) outline simple, relevant testing methods, which generate data, to measure the success of the solution
- (ii) outline the success of the solution against the design specification
- (iii) outline how the solution could be improved
- (iv) outline the impact of the solution on the client/target audience.

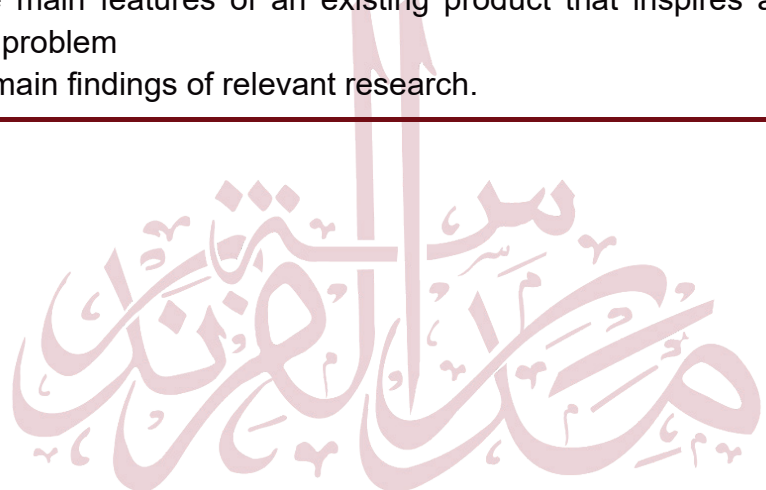


Design Assessment Criteria: Year 1

Criterion A: Inquiring and Analysing

Maximum: 8

Achievement level	Level descriptor
0	The student does not reach a standard described by any of the descriptors below.
1 – 2	The student: <ol style="list-style-type: none"> states the need for a solution to a problem states the findings of research.
3 – 4	The student: <ol style="list-style-type: none"> outlines the need for a solution to a problem states some points of research needed to develop a solution, with some guidance states the main features of an existing product that inspires a solution to the problem outlines some of the main findings of research.
5 – 6	The student: <ol style="list-style-type: none"> explains the need for a solution to a problem states and prioritizes the main points of research needed to develop a solution to the problem, with some guidance outlines the main features of an existing product that inspires a solution to the problem outlines the main findings of relevant research.
7 – 8	The student: <ol style="list-style-type: none"> explains and justifies the need for a solution to a problem states and prioritizes the main points of research needed to develop a solution to the problem, with minimal guidance describes the main features of an existing product that inspires a solution to the problem presents the main findings of relevant research.



Design Assessment Criteria: Year 1

Criterion B: Developing Ideas

Maximum: 8

Achievement level	Level descriptor
0	The student does not reach a standard described by any of the descriptors below.
1 – 2	The student: <ol style="list-style-type: none"> states one basic success criterion for a solution presents one design idea, which can be interpreted by others creates an incomplete planning drawing/diagram.
3 – 4	The student: <ol style="list-style-type: none"> states a few success criteria for the solution presents more than one design idea, using an appropriate medium(s) or labels key features, which can be interpreted by others states the key features of the chosen design creates a planning drawing/diagram or lists requirements for the creation of the chosen solution.
5 – 6	The student: <ol style="list-style-type: none"> develops a few success criteria for the solution presents a few feasible design ideas, using an appropriate medium(s) and labels key features, which can be interpreted by others presents the chosen design stating the key features creates a planning drawing/diagram and lists the main details for the creation of the chosen solution.
7 – 8	The student: <ol style="list-style-type: none"> develops a list of success criteria for the solution presents feasible design ideas, using an appropriate medium(s) and outlines the key features, which can be correctly interpreted by others presents the chosen design describing the key features creates a planning drawing/diagram, which outlines the main details for making the chosen solution.

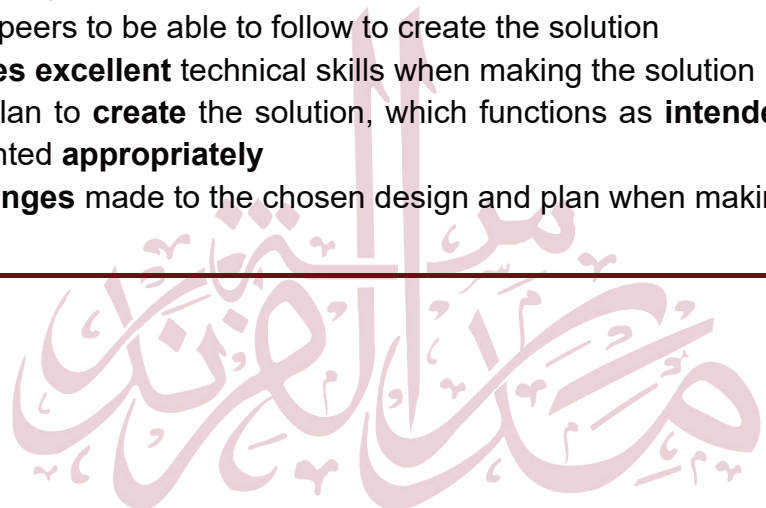


Design Assessment Criteria: Year 1

Criterion C: Creating the Solution

Maximum: 8

Achievement level	Level descriptor
0	The student does not reach a standard described by any of the descriptors below.
1 – 2	The student: <ol style="list-style-type: none"> demonstrates minimal technical skills when making the solution creates the solution, which functions poorly and is presented in an incomplete form.
3 – 4	The student: <ol style="list-style-type: none"> lists the main steps in a plan that contains some details, resulting in peers having difficulty following the plan to create the solution demonstrates satisfactory technical skills when making the solution creates the solution, which partially functions and is adequately presented states one change made to the chosen design or plan when making the solution.
5 – 6	The student: <ol style="list-style-type: none"> lists the steps in a plan, which considers time and resources, resulting in peers being able to follow the plan to create the solution demonstrates competent technical skills when making the solution creates the solution, which functions as intended and is presented appropriately states one change made to the chosen design and plan when making the solution.
7 – 8	The student: <ol style="list-style-type: none"> outlines a plan, which considers the use of resources and time, sufficient for peers to be able to follow to create the solution demonstrates excellent technical skills when making the solution follows the plan to create the solution, which functions as intended and is presented appropriately lists the changes made to the chosen design and plan when making the solution.



Design Assessment Criteria: Year 1

Criterion D: Evaluating

Maximum: 8

Achievement level	Level descriptor
0	The student does not reach a standard described by any of the descriptors below.
1 – 2	The student: <ol style="list-style-type: none"> defines a testing method, which is used to measure the success of the solution states the success of the solution.
3 – 4	The student: <ol style="list-style-type: none"> defines a relevant testing method, which generates data, to measure the success of the solution states the success of the solution against the design specification based on the results of one relevant test states one way in which the solution could be improved states one way in which the solution can impact the client/target audience.
5 – 6	The student: <ol style="list-style-type: none"> defines relevant testing methods, which generate data, to measure the success of the solution states the success of the solution against the design specification based on relevant product testing outlines one way in which the solution could be improved outlines the impact of the solution on the client/target audience, with guidance.
7 – 8	The student: <ol style="list-style-type: none"> outlines simple, relevant testing methods, which generate data, to measure the success of the solution outlines the success of the solution against the design specification based on authentic product testing outlines how the solution could be improved outlines the impact of the solution on the client/target audience.

