Design assessment criteria: Year 1

Criterion A: Inquiring and analysing

Maximum: 8

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.

Achievement level	Level descriptor
0	The student **does not** reach a standard described by any of the descriptors below.
1–2	The student: i. **states** the need for a solution to a problem ii. **states** the findings of research.
3–4	The student: i. **outlines** the need for a solution to a problem ii. **states some** points of research needed to **develop** a solution, **with some guidance** iii. **states** the main features of an existing product that inspires a solution to the problem iv. **outlines some of** the main findings of research.
5–6	The student: i. **explains** the need for a solution to a problem ii. **states** and **prioritizes** the main points of research needed to **develop** a solution to the problem, **with some guidance** iii. **outlines** the main features of an existing product that inspires a solution to the problem iv. **outlines** the main findings of relevant research.
7–8	The student: i. **explains** and **justifies** the need for a solution to a problem ii. **states** and **prioritizes** the main points of research needed to **develop** a solution to the problem, **with minimal guidance** iii. **describes** the main features of an existing product that inspires a solution to the problem iv. **presents** the main findings of relevant research.

Criterion B: Developing ideas

Maximum: 8

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.

Achievement level	Level descriptor
0	The student **does not** reach a standard described by any of the descriptors below.
1–2	The student: i. **states one** basic success criterion for a solution ii. **presents one** design idea, which can be interpreted by others iii. **creates** an incomplete planning drawing/diagram.
3–4	The student: i. **states a few** success criteria for the solution ii. **presents more than one** design idea, using an appropriate medium(s) or labels key features, which can be interpreted by others iii. **states** the key features of the chosen design iv. **creates** a planning drawing/diagram or **lists** requirements for the creation of the chosen solution.
5–6	The student: i. **develops a few** success criteria for the solution ii. **presents a few** feasible design ideas, using an appropriate medium(s) and labels key features, which can be interpreted by others iii. **presents** the chosen design **stating** the key features iv. **creates** a planning drawing/diagram and **lists** the main details for the creation of the chosen solution.
7–8	The student: i. **develops a list of** success criteria for the solution ii. **presents** feasible design ideas, using an appropriate medium(s) and outlines the key features, which can be correctly interpreted by others iii. **presents** the chosen design **describing** the key features iv. **creates** a planning drawing/diagram, which **outlines** the main details for making the chosen solution.

Criterion C: Creating the solution

Maximum: 8

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.

Achievement level	Level descriptor
0	The student **does not** reach a standard described by any of the descriptors below.
1–2	The student: i. **demonstrates minimal** technical skills when making the solution ii. **creates** the solution, which functions **poorly** and is presented **in an incomplete form**.
3–4	The student: i. **lists** the main steps in a plan that contains some details, resulting in peers having difficulty following the plan to create the solution ii. **demonstrates satisfactory** technical skills when making the solution iii. **creates** the solution, which **partially** functions and is **adequately** presented iv. **states one change** made to the chosen design **or** plan when making the solution.
5–6	The student: i. **lists** the steps in a plan, which **considers** time and resources, resulting in peers being able to follow the plan to create the solution ii. **demonstrates competent** technical skills when making the solution iii. **creates** the solution, which functions **as intended** and is presented **appropriately** iv. **states one change** made to the chosen design **and** plan when making the solution.
7–8	The student: i. **outlines** a plan, which **considers** the use of resources and time, sufficient for peers to be able to follow to create the solution ii. **demonstrates excellent** technical skills when making the solution iii. follows the plan to **create** the solution, which functions as **intended** and is presented **appropriately** iv. **lists the changes** made to the chosen design and plan when making the solution.

Criterion D: Evaluating

Maximum: 8

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.

Achievement level	Level descriptor
0	The student **does not** reach a standard described by any of the descriptors below.
1–2	The student: i. **defines** a testing method, which is used to measure the success of the solution ii. **states** the success of the solution.
3–4	The student: i. **defines** a **relevant** testing **method**, which generates data, to measure the success of the solution ii. **states** the success of the solution against the design specification based on the results of **one relevant** test iii. **states one way** in which the solution could be improved iv. **states one way** in which the solution can impact the client/target audience.
5–6	The student: i. **defines relevant** testing **methods**, which generate data, to measure the success of the solution ii. **states** the success of the solution against the design specification based on **relevant** product testing iii. **outlines one way** in which the solution could be improved iv. **outlines** the impact of the solution on the client/target audience, **with guidance**.
7–8	The student: i. **outlines simple, relevant** testing methods, which generate data, to measure the success of the solution ii. **outlines** the success of the solution against the design specification based on **authentic** product testing iii. **outlines** how the solution could be improved iv. **outlines** the impact of the solution on the client/target audience.