

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

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

## 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
- v. present the solution as a whole.

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

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