

Design assessment criteria: Years 2 and 3

Criterion A: Inquiring and analysing

Maximum: 8

At the end of year 3, students should be able to:

- i. explain and justify the need for a solution to a problem
- ii. construct a research plan, which states and prioritizes the primary and secondary research needed to develop a solution to the problem
- iii. analyse a group of similar products that inspire a solution to the problem
- iv. develop a design brief, which presents the analysis 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: <ol style="list-style-type: none">i. states the need for a solution to a problemii. states some of the main findings of relevant research.
3–4	The student: <ol style="list-style-type: none">i. outlines the need for a solution to a problemii. states the research needed to develop a solution to the problem, with some guidanceiii. outlines one existing product that inspires a solution to the problemiv. develops a basic design brief, which outlines some of the findings of relevant research.
5–6	The student: <ol style="list-style-type: none">i. explains the need for a solution to a problemii. constructs a research plan, which states and prioritizes the primary and secondary research needed to develop a solution to the problem, with some guidanceiii. describes a group of similar products that inspire a solution to the problemiv. develops a design brief, which outlines the findings of relevant research.
7–8	The student: <ol style="list-style-type: none">i. explains and justifies the need for a solution to a problemii. constructs a research plan, which states and prioritizes the primary and secondary research needed to develop a solution to the problem independentlyiii. analyses a group of similar products that inspire a solution to the problemiv. develops a design brief, which presents the analysis of relevant research.

Criterion B: Developing ideas

Maximum: 8

At the end of year 3, students should be able to:

- i. develop a design specification which outlines the success criteria for the design of a solution based on the data collected
- ii. present a range of feasible design ideas, which can be correctly interpreted by others
- iii. present the chosen design and outline the reasons for its selection
- iv. develop accurate planning drawings/diagrams and outline requirements for the creation of 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: <ol style="list-style-type: none"> i. lists a few basic success criteria for the design of a solution ii. presents one design idea, which can be interpreted by others iii. creates incomplete planning drawings/diagrams.
3–4	The student: <ol style="list-style-type: none"> i. constructs a list of the success criteria for the design of a solution ii. presents a few feasible design ideas, using an appropriate medium(s) or explains key features, which can be interpreted by others iii. outlines the main reasons for choosing the design with reference to the design specification iv. creates planning drawings/diagrams or lists requirements for the chosen solution.
5–6	The student: <ol style="list-style-type: none"> i. develops design specifications, which identify the success criteria for the design of a solution ii. presents a range of feasible design ideas, using an appropriate medium(s) and explains key features, which can be interpreted by others iii. presents the chosen design and outlines the main reasons for its selection with reference to the design specification iv. develops accurate planning drawings/diagrams and lists requirements for the creation of the chosen solution.
7–8	The student: <ol style="list-style-type: none"> i. develops a design specification which outlines the success criteria for the design of a solution based on the data collected ii. presents a range of feasible design ideas, using an appropriate medium(s) and annotation, which can be correctly interpreted by others iii. presents the chosen design and outlines the reasons for its selection with reference to the design specification iv. develops accurate planning drawings/diagrams and outlines requirements for the creation of the chosen solution.

Criterion C: Creating the solution

Maximum: 8

At the end of year 3, students should be able to:

- i. construct a logical plan, which outlines the efficient use of time and resources, 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. explain changes made to the chosen design and the 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: <ol style="list-style-type: none"> 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: <ol style="list-style-type: none"> i. outlines each step 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. outlines changes made to the chosen design or plan when making the solution.
5–6	The student: <ol style="list-style-type: none"> i. constructs a plan, which considers time and resources, sufficient for peers to be able to follow 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. outlines changes made to the chosen design and plan when making the solution.
7–8	The student: <ol style="list-style-type: none"> i. constructs a logical plan, which outlines the efficient use of time and resources, 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. explains changes made to the chosen design and plan when making the solution.

Criterion D: Evaluating

Maximum: 8

At the end of year 3, students should be able to:

- i. describe detailed and relevant testing methods, which generate accurate data, to measure the success of the solution
- ii. explain the success of the solution against the design specification
- iii. describe how the solution could be improved
- iv. describe 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: <ol style="list-style-type: none">i. describes a testing method, which is used to measure the success of the solutionii. states the success of the solution.
3–4	The student: <ol style="list-style-type: none">i. describes a relevant testing method, which generates data, to measure the success of the solutionii. outlines the success of the solution against the design specification based on relevant product testingiii. lists the ways in which the solution could be improvediv. outlines the impact of the solution on the client/target audience.
5–6	The student: <ol style="list-style-type: none">i. describes relevant testing methods, which generate data, to measure the success of the solutionii. describes the success of the solution against the design specification based on relevant product testingiii. outlines how the solution could be improvediv. describes the impact of the solution on the client/target audience, with guidance.
7–8	The student: <ol style="list-style-type: none">i. describes detailed and relevant testing methods, which generate accurate data, to measure the success of the solutionii. explains the success of the solution against the design specification based on authentic product testingiii. describes how the solution could be improvediv. describes the impact of the solution on the client/target audience.