# Pre-approved Learning and Assessment Plan

Stage 2 Material Solutions (furniture design) (from 2022)

Pre-approved learning and assessment plans are for *school use only*.

* Teachers may make changes to the plan, retaining alignment with the subject outline.
* The principal or delegate endorses the use of the plan, and any changes made to it, including use of an addendum.
* The plan does not need to be submitted to the SACE Board for approval.

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| School |  | Teacher(s) |  |

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| SACE school code | | |  | Year |  | Enrolment code | | | | |  | Program variant code (A–W) |
| Stage | Subject code | | | No. of credits (10 or 20) |
|  |  |  |  | **2** | **M** | **R** | **S** | **20** |  |

Addendum – changes made to the pre-approved learning and assessment plan

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| Describe any changes made to the pre-approved learning and assessment plan to support students to be successful in meeting the requirements of the subject. In your description, please explain:  what changes have been made to the plan   * the rationale for making the changes * whether these changes have been made for all students, or for individuals within the student group. |

Endorsement

The use of the learning and assessment plan is approved for use in the school. Any changes made to the plan support student achievement of the performance standards and retain alignment with the subject outline.

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| Signature of principal or delegate |  | Date |  |

# Assessment overview

Stage 2 Material Solutions (furniture design)— 20-credits

The table below provides details of the planned tasks and shows where students have the opportunity to provide evidence for each of the specific features of all of the assessment design criteria.

Assessment Type 1:Specialised Skills Tasks – 20%

| Assessment details | Assessment design criteria | | | | Assessment conditions  (e.g. task type, word length, time allocated, supervision) |
| --- | --- | --- | --- | --- | --- |
| IA | D | P | E |
| Students will produce a hall table under guided instruction from their teacher as well as orthogonal drawings.  The project will use a range of tools, machines and power tools. This skills task should give students a range of skills needed to produce their designed product. Students will evaluate the table against the drawings and example. |  |  | 1 | 1 | 4-6 Week practical workshop task  500 word written or 3-minute multimodal equivalent |
| Students will learn how to use AutoInvetor Software to create a joints and parts of products. This task will support students to gain basic CAD skills or improve current skill sets. Students will evaluate the drawings and skills that they obtain and how effective they will be for their product. |  |  | 2 | 1 | 2-3 Week Computer based task  500 word written or 3-minute multimodal equivalent |

Assessment Type 2: Design Process and Product – 50%

| Assessment details | Assessment design criteria | | | | Assessment conditions  (e.g. task type, word length, time allocated, supervision) |
| --- | --- | --- | --- | --- | --- |
| IA | D | P | E |
| Students will undertake a design process where they will:  **Investigate** and create a design brief. Investigate and analyse products that clearly connect to their design brief. Throughout the investigation students will explore product features such as function, aesthetics and constraints in direct relation to their brief.  **Design, develop and plan** concepts that they have analysed from their investigation. Create a variety of solutions for the brief using drawings and sketches. Validate a designed solution that best meets the brief and develop a series of CAD drawings to support their production process. Students will develop a materials and costing list for the product, as well as a procedure and schedule for the safe and timely manufacture of their product.  **Produce** a product by applying skills, processes, procedures and techniques to create the product that best meets their brief.  **Evaluate** the design process and product they have created in response to their design brief as well as their product realisation. | 1 | 1,2 | 1,2 | 1 | Design process documentation of maximum 3000 words or equivalent multimodal form  Video record of product  Mixture of practical workshop time and computer based.  14-16 weeks |

Assessment Type 3: Resources Study – 30%

| Assessment details | Assessment design criteria | | | | Assessment conditions  (e.g. task type, word length, time allocated, supervision) |
| --- | --- | --- | --- | --- | --- |
| IA | D | P | E |
| Students will Investigate and analyse the functional characteristics and properties of two or more materials of their choice. Students will create a series of tests to generate data on the functional characteristics of the materials. Students will also investigate the sustainability of the materials they test and explore ethical, legal or economic issues related to their designed solution in AT2. | 1,2 | 2 |  | 1 | Written report  Maximum 2000 words  3-5 Weeks |

*Please refer to the Stage 2 Design, Technology, and Engineering subject outline.*