# Pre-approved Learning and Assessment Plan

Stage 2 Material Products (context: Timber)

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** | **M** | **A/B** | **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 Products – 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: Skills and Applications Tasks – weighting 20%

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Assessment details | Assessment design criteria | | | | Assessment conditions  (e.g. task type, word length, time allocated, supervision) |
| I | Pl | Pr | E |
| Specialised Skills Application 1  Knock Down Fitting Exercise  Produce a Knock Down Fitting exercise to given specifications. The production process will allow the students to demonstrate the following application of skills and techniques, resources, equipment and materials to create the exercise safely:   * Use of machinery * Use of drilling jigs * Use of veneered particleboard * Use of Rastex 15 and VB 35 fittings to join panels | 3 |  | 1,2,3 |  | Supervised: 3 weeks  Finished in one attempt using efficient use of time after completing formative tasks. |
| Specialised Skills Application 2  Cutting Board  Demonstrate proficiency at machining rough sawn timber to size by producing a Cutting Board. The construction requires the students to demonstrate safe application of skills and techniques, resources, equipment and materials to create a product. |  | 2 | 1,2,3 | 3 | Supervised: 3 weeks  Students will complete formative tasks before applying new skills to the task. |
| Material application  Investigation and testing of the physical and chemical properties of Radiata Pine and Australian Oak.  Investigate and test the physical and chemical properties of Radiata Pine and Australian Oak. Study the appearance, workability, composition and use of the materials, and analyse the technologies impact on individuals and society. A recommendation is made for use in the major product based on results. | 1,3,4 | 3 |  | 3 | 3 weeks with some supervised time. Students use a two double lesson and one week of homework time to finish their investigation. A maximum of 800 words or equivalent in multi-modal form. |

Assessment Type 2: Product – weighting 50%

| Assessment details | Assessment design criteria | | | | Assessment conditions  (e.g. task type, word length, time allocated, supervision) |
| --- | --- | --- | --- | --- | --- |
| I | Pl | Pr | E |
| Minor product  Drawer for Bedside Cabinet  Students are shown examples of drawers in cabinets. They develop a drawer for their bedside cabinet. This process will complement the skills they show in their major product. The students will keep a product record and demonstrate meeting the specifications of a prepared design brief. |  | 3 | 1,2,3 | 2 | Unstructured in supervised workshop. Three weeks of lesson time spread over six weeks as students’ begin Folio for Major Product. |
| Major product  Bedside Cabinet Carcass  Students produce the Bedside Cabinet documented in their Folio. They keep a product record that includes evidence of:   * Development of skills * Selection and use of appropriate components, specialized processes, and production techniques * Application of knowledge and understanding to create the product * Safe and accurate use of appropriate equipment and processes * Modification of the design brief as a result of technical problems that arise * Use of materials with appropriate characteristics and properties * Ongoing reflection on ideas and procedures. |  | 3 | 1,2,3 | 2 | 8 weeks unstructured in supervised workshop. The product record is used to provide evidence of modification and planning, production, and/or evaluation aspects of the design process that occur during the creation of the product. |

Assessment Type 3: Folio – weighting 30%

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Assessment details | Assessment design criteria | | | | Assessment conditions  (e.g. task type, word length, time allocated, supervision) |
| I | Pl | Pr | E |
| External assessment (two assessment for the folio)  *Product design (documentation and analysis)*  *Students create a design brief and analyse their investigation and planning for their major product, based on the skills and activities outlined in the section ‘The Design Process’ section of the Learning Scope and Requirements .* The design brief should include a statement of intent, functional outcomes, aesthetic considerations, and constraints. It can be presented in dot point form.  The investigating part of the design process should include an investigation into the impact on individuals, society, and/or the environment of technological practices related to the type of product that the student is designing. The analysis involved in investigation can be included in the product design documentation or in the product evaluation.  *Product evaluation:*  *Students evaluate their producing skills, using evidence from the major product record in Assessment Type 2, and evaluate their realised major product.* The evaluation should include:   * a critical comparison of the realised product with the requirements of the design brief, and an explanation of and justification for any changes made * a review of criteria, standards, reliability, safety, quality, and cost-effectiveness * reflection on outcomes, with recommendations for possible improvement or redevelopment of designs or procedures * analysis of the impact of the product on individuals, society, and/or the environment (if not part of product design documentation) * evaluative observations about the student’s own skills development.   Evidence of development, with supporting written or oral summaries that explain, analyse, and evaluate the process and product, could take the form of:   * all or sections of the product record * photographic or electronic or digitally generated materials * audiovisual evidence * materials * products * models * sketches, diagrams, or annotations.   Oral summaries may emerge from teacher-led discussion questions*.* | 1,2,3,  4,5 | 1,2,3 |  | 1,2,3,4 | The combined evidence should be a maximum of 2000 words if written, or a maximum of 12 minutes recorded oral documentation, analysis, and evaluation, or the equivalent in multimodal form. |

*Seven or eight assessments.**Please refer to the Stage 2 Design and Technology subject outline.*