

Timber Products

A / M

Cover Art provided by Canberra College student Aidan Giddings

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# The ACT Senior Secondary System

The ACT senior secondary system recognises a range of university, vocational or life skills pathways.

The system is based on the premise that teachers are experts in their area: they know their students and community and are thus best placed to develop curriculum and assess students according to their needs and interests. Students have ownership of their learning and are respected as young adults who have a voice.

A defining feature of the system is school-based curriculum and continuous assessment. School-based curriculum provides flexibility for teachers to address students’ needs and interests. College teachers have an opportunity to develop courses for implementation across ACT schools. Based on the courses that have been accredited by the BSSS, college teachers are responsible for developing programs of learning. A program of learning is developed by individual colleges to implement the courses and units they are delivering.

Teachers must deliver all content descriptions; however, they do have flexibility to emphasise some content descriptions over others. It is at the discretion of the teacher to select the texts or materials to demonstrate the content descriptions. Teachers can choose to deliver course units in any order and teach additional (not listed) content provided it meets the specific unit goals.

School-based continuous assessment means that students are continually assessed throughout years 11 and 12, with both years contributing equally to senior secondary certification. Teachers and students are positioned to have ownership of senior secondary assessment. The system allows teachers to learn from each other and to refine their judgement and develop expertise.

Senior secondary teachers have the flexibility to assess students in a variety of ways. For example: multimedia presentation, inquiry-based project, test, essay, performance and/or practical demonstration may all have their place. College teachers are responsible for developing assessment instruments with task specific rubrics and providing feedback to students.

The integrity of the ACT Senior Secondary Certificate is upheld by a robust, collaborative and rigorous structured consensus-based peer reviewed moderation process. System moderation involves all year 11 and 12 teachers from public, non-government and international colleges delivering the ACT Senior Secondary Certificate.

Only students who desire a pathway to university are required to sit a general aptitude test, referred to as the ACT Scaling Test (AST), which moderates student scores across courses and colleges. Students are required to use critical and creative thinking skills across a range of disciplines to solve problems. They are also required to interpret a stimulus and write an extended response.

Senior secondary curriculum makes provision for student-centred teaching approaches, integrated and project-based learning inquiry, formative assessment and teacher autonomy. ACT Senior Secondary Curriculum makes provision for diverse learners and students with mild to moderate intellectual disabilities, so that all students can achieve an ACT Senior Secondary Certificate.

The ACT Board of Senior Secondary Studies (BSSS) leads senior secondary education. It is responsible for quality assurance in senior secondary curriculum, assessment and certification. The Board consists of nominees from colleges, professional bodies, universities, industry, parent/carer organisations and unions. The Office of the Board of Senior Secondary Studies (OBSSS) consists of professional and administrative staff who support the Board in achieving its objectives and functions.

# ACT Senior Secondary Certificate

Courses of study for the ACT Senior Secondary Certificate:

* provide a variety of pathways, to meet different learning needs and encourage students to complete their secondary education
* enable students to develop the essential capabilities for twenty-first century learners
* empower students as active participants in their own learning
* engage students in contemporary issues relevant to their lives
* foster students’ intellectual, social and ethical development
* nurture students’ wellbeing, and physical and spiritual development
* enable effective and respectful participation in a diverse society.

Each course of study:

* comprises an integrated and interconnected set of knowledge, skills, behaviours and dispositions that students develop and use in their learning across the curriculum
* is based on a model of learning that integrates intended student outcomes, pedagogy and assessment
* outlines teaching strategies which are grounded in learning principles and encompass quality teaching
* promotes intellectual quality, establish a rich learning environment and generate relevant connections between learning and life experiences
* provides formal assessment and certification of students’ achievements.

## Underpinning beliefs

* All students are able to learn.
* Learning is a partnership between students and teachers.
* Teachers are responsible for advancing student learning.



# Learning Principles

* 1. Learning builds on existing knowledge, understandings and skills.

(Prior knowledge)

* 1. When learning is organised around major concepts, principles and significant real world issues, within and across disciplines, it helps students make connections and build knowledge structures.

(Deep knowledge and connectedness)

* 1. Learning is facilitated when students actively monitor their own learning and consciously develop ways of organising and applying knowledge within and across contexts.

(Metacognition)

* 1. Learners’ sense of self and motivation to learn affects learning.

(Self-concept)

* 1. Learning needs to take place in a context of high expectations.

(High expectations)

* 1. Learners learn in different ways and at different rates.

(Individual differences)

* 1. Different cultural environments, including the use of language, shape learners’ understandings and the way they learn.

(Socio-cultural effects)

* 1. Learning is a social and collaborative function as well as an individual one.

(Collaborative learning)

* 1. Learning is strengthened when learning outcomes and criteria for judging learning are made explicit and when students receive frequent feedback on their progress.

(Explicit expectations and feedback)

# General Capabilities

All courses of study for the ACT Senior Secondary Certificate should enable students to develop essential capabilities for twenty-first century learners. These ‘capabilities’ comprise an integrated and interconnected set of knowledge, skills, behaviours and dispositions that students develop and use in their learning across the curriculum.

The capabilities include:

* literacy
* numeracy
* information and communication technology (ICT)
* critical and creative thinking
* personal and social
* ethical understanding
* intercultural understanding

Courses of study for the ACT Senior Secondary Certificate should be both relevant to the lives of students and incorporate the contemporary issues they face. Hence, courses address the following three priorities. These priorities are:

* Aboriginal and Torres Strait Islander histories and cultures
* Asia and Australia’s engagement with Asia
* Sustainability

Elaboration of these General Capabilities and priorities is available on the ACARA website at [www.australiancurriculum.edu.au](http://www.australiancurriculum.edu.au).

### Literacy

In this course students further develop and apply their reading, comprehension, written and oral skills. They understand and apply specific instructions in relation to systems, processes, and safe operating procedures, interpreting technical information. They communicate orally in seeking assistance, solving problems with others and justifying choices. They write to record project development. Students use language for different purposes including to interpret, discuss and explain concepts, issues, problems and solutions, read and interpret online documentation and acknowledge sources appropriately**.**

### Numeracy

Students extend and apply their numeracy capability by, for example, selecting and using appropriate measurement tools and programs and applying numerical calculations appropriate to the context. They display numerical information in accordance with correct technical standards and procedures. They interpret plans and diagrams, technical data, properties of materials and product information.

### Information and Communication Technology (ICT) Capability

Students locate and access information using digital technologies and present project progress, findings or solutions using multimodal approaches.

### Critical and Creative Thinking

Students analyse existing product characteristics and features to inform the design and realisation process, visualising possibilities and scoping solutions for the construction of their products. They refine the design development in response to results of testing and research. They identify and deconstruct problems and use initiative in finding solutions using materials available.

### Personal and Social Capability

Students listen to and respect the perspective of others, participating in activities that foster problem-solving and practical application skills. They seek advice, share ideas about problems, progress and innovative solutions. They have opportunities to interact with people in different contexts. Students develop personal capabilities and skills such as planning effectively and managing time, planning and working in productive, creative, collaborative, and independent ways. They make decisions and take initiative. They acquire practical skills, knowledge, and understanding related to the design, development and realisation of products.

### Ethical Understanding

Students develop understanding of ethical implications and sustainability through considered selection and use of materials, processes and production techniques. They recognise the importance of responsible participation in social, economic, environmental, scientific and/or ethical decision making. They apply an understanding of personal and group safety in a work environment. Students consider the impact of technological practices and products, on individuals, society and sustainability.

### Intercultural Understanding

Students may learn to work with people of different cultural backgrounds and that the process of implementing a design solution may be influenced by cultural factors.

# Cross-Curriculum Priorities

### Aboriginal and Torres Strait Islander Histories and Cultures

Opportunities exist for drawing students’ attention to the value of Aboriginal and Torres Strait Islander knowledge and perspectives from the past and the present in working timber products.

### Asia and Australia’s Engagement with Asia

Opportunities to look at timber production, sourcing and use, and changing patterns of engagement with Asia are within this course.

### Sustainability

Environmental considerations in the selection and use of timbers, finishing products and disposal are integral to this course.

**Timber Products**

**A/M**

# Rationale

This course provides students with knowledge, understanding and skills relating to areas of work inside the industry & services domains of constructing timber products.

In broad terms, students learn about industry practices, processes, procedures and concepts such as technical information, materials, sustainability, equipment and work health & safety (WHS).

Students learn to analyse, problem solve, make decisions and develop interpersonal and intrapersonal skills suitable for employment and further training.

In Timber Products students learn to use tools and timber materials to create products. They learn skills that are useful life-long or as a transition to employment or further education.

# Goals

This course enables students to:

* analyse and apply industry practices, processes and procedures including workplace health and safety
* analyse and apply technical information and specifications to create a product to a chosen standard
* understand and use materials and equipment to create a product
* demonstrate industry specific literacy and numeracy skills
* solve problems and use industry specific terminology
* organise resources and material to create quality products and services
* work independently and collaboratively in accordance with WHS principles and industry standards
* communicate in a range of modes and mediums.

# Unit Titles

* Working with Timber
* Techniques in Timber Manufacture
* Creating to a Design Brief or Plan
* Timber Project
* Independent Study

# Organisation of Content

### Working with Timber

This unit is designed to familiarise students with workshop procedures using timber. Students learn the fundamentals of working safely with timber products, using and naming selected tools and materials correctly. Students learn to use selected hand and power tools, machinery, make joints and follow a given design to complete the projects undertaken in this unit. They learn communication skills such as following instructions, seeking help and recording processes as well as strategies to solve problems.

### Techniques in Timber Manufacture

This unit is designed to develop skills in the workshop using timber and other materials. Students learn the fundamentals of workshop safety requirements, including attitudes and behaviours. They learn techniques for the manufacture and use of jigs, as well as tool maintenance for both power and hand tools. Students make decisions about appropriate jointing techniques according to the product. They learn communication skills such as reading plans and drawings, measurement and scale, as well as the reasons for selecting particular materials for a given task.

### Creating to a Design Brief or Plan

This unit focuses on sustainable workshop practices and procedures, including interpretation of plans and the concept of the design brief and the design process. They explore the nature and properties of materials to fulfil a design brief. Students learn about of the selection of appropriate materials and calculate cost of production, including the whole manufacturing process. They learn communication skills such as to actively listen, and to reflect on and implement feedback from clients.

### Timber Project

In this unit students create a project of their own design, or modify an existing design, to meet a particular need. Using a project timeline, students learn to manage the entire construction of a project, from conception to delivery. They consider the choice of appropriate materials, finishes and techniques, in accordance with the project requirements, proactively managing risks associated with constructing the product in the workshop. They learn communication skills such as maintaining an ongoing record of evaluation of production processes and techniques.

### Independent Study

An Independent Study unit has an important place in senior secondary courses. It is a valuable pedagogical approach that empowers students to make decisions about their own learning. An Independent Study unit can be proposed by an individual student for their own independent study and negotiated with their teacher. The program of learning for an Independent Study unit must meet the unit goals and content descriptions as they appear in the course.

Independent Study units are only available to individual students in Year 12. A student can only study a maximum of one Independent Study unit in each course. Students must have studied at least three standard 1.0 units from this course. An Independent Study unit requires the principal’s written approval. Principal approval can also be sought by a student in Year 12 to enrol concurrently in an Independent Study unit and their third 1.0 unit in this course of study.

# Assessment

The identification of criteria within the achievement standards and assessment task types and weightings provides a common and agreed basis for the collection of evidence of student achievement.

**Assessment Criteria** (the dimensions of quality that teachers look for in evaluating student work) provide a common and agreed basis for judgement of performance against unit and course goals, within and across colleges. Over a course, teachers must use all these criteria to assess students’ performance but are not required to use all criteria on each task. Assessment criteria are to be used holistically on a given task and in determining the unit grade.

**Assessment Tasks** elicit responses that demonstrate the degree to which students have achieved the goals of a unit based on the assessment criteria. The Common Curriculum Elements (CCE) is a guide to developing assessment tasks that promote a range of thinking skills (see Appendix C). It is highly desirable that assessment tasks engage students in demonstrating higher order thinking.

**Rubrics** are constructed for individual tasks, informing the assessment criteria relevant for a particular task and can be used to assess a continuum that indicates levels of student performance against each criterion.

## Assessment Criteria

Students will be assessed on the degree to which they demonstrate:

* knowledge and understanding
* skills.

## Assessment Task Types

|  |  |  |
| --- | --- | --- |
|  | Theory | Practical |
|  | **Suggested tasks:*** test
* folio
* assignment
* research project
* cooperative task
* planning tasks
* risk assessments
* presentations
* drawings
 | **Suggested tasks:*** demonstration
* individual project/activity
* group project
* continuous observation (e.g. skills, WH&S)
* folio
* test
* presentations
* online collaboration/discussion forum
 |
| Weightings in A 1.0 and 0.5 units | 30 - 40% | 60 - 70% |
| Weightings in M 1.0 and 0.5 units | 30 - 70% | 30 - 70% |

### Additional Assessment Information

* For a standard unit (1.0), students must complete a minimum of three assessment tasks and a maximum of five.
* For a half standard unit (0.5), students must complete a minimum of two and a maximum of three assessment tasks.
* Assessment tasks for a standard (1.0) or half-standard (0.5) unit must be informed by the Achievement Standards.
* Students should experience a variety of task types and different modes of communication to demonstrate the Achievement Standards.

# Achievement Standards

Years 11 and 12 achievement standards are written for A/T courses. A single achievement standard is written for M courses.

A Year 12 student in any unit is assessed using the Year 12 achievement standards. A Year 11 student in any unit is assessed using the Year 11 achievement standards. Year 12 achievement standards reflect higher expectations of student achievement compared to the Year 11 achievement standards. Years 11 and 12 achievement standards are differentiated by cognitive demand, the number of dimensions and the depth of inquiry.

An achievement standard cannot be used as a rubric for an individual assessment task. Assessment is the responsibility of the college. Student tasks may be assessed using rubrics or marking schemes devised by the college. A teacher may use the achievement standards to inform development of rubrics. The verbs used in achievement standards may be reflected in the rubric. In the context of combined Years 11 and 12 classes, it is best practice to have a distinct rubric for Years 11 and 12. These rubrics should be available for students prior to completion of an assessment task so that success criteria are clear.

|  |
| --- |
| Achievement Standards Industry & Services Timber Products A Course - Year 11 |
|  | *A student who achieves an* ***A*** *grade typically* | *A student who achieves a* ***B*** *grade typically* | *A student who achieves a* ***C*** *grade typically* | *A student who achieves a* ***D*** *grade typically* | *A student who achieves an* ***E*** *grade typically* |
| Knowledge and understanding | * analyses work practices, processes and procedures
 | * explains work practices, processes and procedures
 | * describes work practices, processes and procedures
 | * identifies work practices, processes and procedures
 | * identifies some work practices, processes and procedures
 |
| * analyses technical information and specifications
 | * explains technical information and specifications
 | * describes technical information and specifications
 | * identifies technical information
 | * identifies some technical information
 |
| * evaluates work, health and safety practices
 | * analyses work, health and safety practices
 | * describes work, health and safety practices
 | * identifies work, health and safety practices
 | * identifies some work, health and safety practices
 |
| Skills | * applies with high proficiency, industry practices, processes and procedures to deliver a service and/or create a product
 | * applies with proficiency, industry practices, processes and procedures to deliver a service and/or create a product
 | * applies effectively industry practices, processes and procedures to deliver a service and/or create a product
 | * applies some industry practices, processes and procedures to deliver a service and/or create a product
 | * applies little or no industry practices, processes and procedures to deliver a service and/or create a product
 |
| * applies with high proficiency, technical information and specifications to create high quality products and/or services
 | * applies with proficiency, technical information and specifications to create quality products and/or services
 | * applies effectively technical information and specifications to create quality products and/or services
 | * applies some technical information and specifications to create products and/or services
 | * applies little or no technical information and specifications to create products and/or services
 |
| * solves problems, proposes solutions and justifies decisions in completing a task
 | * solves problems, proposes solutions and explains decisions in completing a task
 | * solves problems, proposes solutions and describes decisions in completing a task
 | * follows instructions, guidelines and procedures
 | * follows simple instructions, guidelines and procedures
 |
| * demonstrates with high proficiency, industry specific literacy and numeracy skills to a range of tasks
 | * demonstrates with proficiency, industry specific literacy and numeracy skills to a range of tasks
 | * demonstrates effectively industry specific literacy and numeracy skills to tasks
 | * demonstrates some industry specific literacy and numeracy skills to tasks
 | * demonstrates little or no industry specific literacy and numeracy skills to tasks
 |
| * demonstrates highly developed behaviours and attitudes and contributes positively to learning and work
 | * demonstrates developed behaviours and attitudes and contributes positively to learning and work
 | * demonstrates appropriate behaviours and attitudes and contributes positively to learning and work
 | * demonstrates some appropriate behaviours and attitudes and mainly contributes positively to learning and work
 | * demonstrates limited appropriate behaviours and attitudes
 |
| * reflects with insight on own learning processes
 | * explains own learning processes
 | * describes own learning processes
 | * describes some learning processes
 | * describes limited learning processes
 |
| * communicates with high proficiently, using a range of modes and medium using industry terminology and effectively organises materials and resources
 | * communicates with proficiency, using industry terminology and competently organises materials and resources
 | * communicates effectively, using industry terminology and organises materials and resources
 | * communicates using some industry terminology and demonstrates some ability to organise materials and resources
 | * communicates using little or no industry terminology and demonstrates little or no ability to organise materials and resources
 |

|  |
| --- |
| Achievement Standards Industry & Services Timber Products A Course - Year 12 |
|  | *A student who achieves an* ***A*** *grade typically* | *A student who achieves a* ***B*** *grade typically* | *A student who achieves a* ***C*** *grade typically* | *A student who achieves a* ***D*** *grade typically* | *A student who achieves an* ***E*** *grade typically* |
| Knowledge and understanding | * analyses industry practices, processes and procedures and explains their significance in the application to workplace and/or work related contexts
 | * explains industry practices, processes and procedures and describes their significance in the application to workplace and/or work related contexts
 | * describes industry practices, processes and procedures and identifies their significance in the application to workplace and/or work related contexts
 | * identifies industry practices, processes and procedures with some reference to their significance in the application to workplace and/or work related contexts
 | * identifies industry practices, processes and procedures with little or no reference to their significance in the application to workplace and/or work related contexts
 |
| * analyses technical information and specifications and evaluates a wide range of materials and equipment
 | * explains technical information and specifications and describes a range of materials and equipment
 | * describes technical information and specifications and identifies a range of materials and equipment
 | * identifies technical information and specifications and identifies some materials and equipment
 | * identifies some technical information with little or no reference to materials and equipment
 |
| * evaluates work, health and safety practices and analyses how they apply to the workplace and/or work related contexts
 | * analyses work, health and safety practices and explains how they apply to the workplace and/or work related contexts
 | * describes work, health and safety practices and identifies how they apply to the workplace and/or work related contexts
 | * identifies work, health and safety practices, with some reference to how they apply to the workplace and/or work related contexts
 | * identifies work, health and safety practices, with little or no reference to how they apply to the workplace and/or work related contexts
 |
| Skills | * applies with high proficiency, industry practices, processes and procedures to deliver a service and/or create a product
 | * applies with proficiency, industry practices, processes and procedures to deliver a service and/or create a product
 | * applies effectively industry practices, processes and procedures to deliver a service and/or create a product
 | * applies some industry practices, processes and procedures to deliver a service and/or create a product
 | * applies little or no industry practices, processes and procedures to deliver a service and/or create a product
 |
| * applies with high proficiency, technical information and specifications to create high quality products and/or services
 | * applies with proficiency, technical information and specifications to create quality products and/or services
 | * applies effectively technical information and specifications to create quality products and/or services
 | * applies some technical information and specifications to create products and/or services
 | * applies little or no technical information and specifications to create products and/or services
 |
| * solves problems, proposes solutions and justifies decisions in completing a task
 | * solves problems, proposes solutions and explains decisions in completing a task
 | * solves problems, proposes solutions and describes decisions in completing a task
 | * follows instructions, guidelines and procedures
 | * follows simple instructions, guidelines and procedures
 |
| * demonstrates with high proficiency, industry specific literacy and numeracy skills to a wide range of tasks
 | * demonstrates with proficiency, industry specific literacy and numeracy skills to a range of tasks
 | * demonstrates effectively industry specific literacy and numeracy skills to tasks
 | * demonstrates some industry specific literacy and numeracy skills to tasks
 | * demonstrates little or no industry specific literacy and numeracy skills to tasks
 |
| * demonstrates highly developed behaviours and attitudes and contributes positively to learning and work
 | * demonstrates developed behaviours and attitudes and contributes positively to learning and work
 | * demonstrates appropriate behaviours and attitudes and contributes positively to learning and work
 | * demonstrates some appropriate behaviours and attitudes and mainly contributes positively to learning and work
 | * demonstrates limited appropriate behaviours and attitudes
 |
| * reflects with insight on own learning processes and needs related to industry and the workplace
 | * explains own learning processes and needs related to industry and the workplace
 | * describes own learning processes and needs related to industry and the workplace
 | * describes some learning processes and needs related to industry and the workplace
 | * describes limited learning processes and needs related to industry and the workplace
 |
| * communicates with high proficiency, using industry terminology and effectively organises materials and resources
 | * communicates with proficiency, using industry terminology and competently organises materials and resources
 | * communicates effectively, using industry terminology and organises materials and resources
 | * communicates using some industry terminology and demonstrates some ability to organise materials and resources
 | * communicates using little or no industry terminology and demonstrates little or no ability to organise materials and resources
 |

|  |
| --- |
| Achievement Standards Industry & Services Timber Products M Course - Years 11 and 12 |
|  | *A student who achieves an* ***A*** *grade typically* | *A student who achieves a* ***B*** *grade typically* | *A student who achieves a* ***C*** *grade typically* | *A student who achieves a* ***D*** *grade typically* | *A student who achieves an* ***E*** *grade typically* |
| Knowledge and understanding | * describes industry practices, processes and procedures independently
 | * explains industry practices, processes and procedures with some assistance
 | * describes industry practices, processes and procedures with assistance
 | * identifies industry practices, processes and procedures with continuous guidance
 | * identifies some industry practices, processes and procedures
 |
| * describes technical information and specifications independently
 | * explains technical information and specifications with some assistance
 | * describes technical information and specifications with assistance
 | * identifies technical information with continuous guidance
 | * identifies some technical information with direct instruction
 |
| * describes work, health and safety practices independently
 | * describes work, health and safety practices with some assistance
 | * recounts work, health and safety practices with assistance
 | * recounts work, health and safety practices with continuous guidance
 | * recounts work, health and safety practices with direct instruction
 |
| Skills | * applies industry practices, processes and procedures to deliver a service and/or create a product independently
 | * applies industry practices, processes and procedures to deliver a service and/or create a product with some assistance
 | * applies industry practices, processes and procedures to deliver a service and/or create a product with assistance
 | * applies industry practices, processes and procedures to deliver a service and/or create a product with continuous guidance
 | * applies industry practices, processes and procedures to deliver a service and/or create a product with direct instruction
 |
| * applies technical information and specifications to products and/or services independently
 | * applies technical information and specifications to products and/or services with some assistance
 | * applies technical information and specifications to products and/or services with assistance
 | * applies technical information and specifications to products and/or services with continuous guidance
 | * applies technical information and specifications to products and/or services with direct instruction
 |
| * demonstrates industry specific literacy and numeracy skills to a range of tasks independently
 | * demonstrates industry specific literacy and numeracy skills to a range of tasks with some assistance
 | * demonstrates industry specific literacy and numeracy skills to a range of tasks with assistance
 | * demonstrates industry specific literacy and numeracy skills to a range of tasks with continuous guidance
 | * demonstrates industry specific literacy and numeracy skills to a range of tasks with direct instruction
 |
| * demonstrates behaviours and attitudes and contributes positively to learning independently
 | * demonstrates behaviours and attitudes and contributes positively to learning with some assistance
 | * demonstrates behaviours and attitudes and contributes positively to learning with assistance
 | * demonstrates behaviours and attitudes and contributes positively to learning with continuous guidance
 | * demonstrates behaviours and attitudes and contributes positively to learning with direct instruction
 |
| * communicates ideas using appropriate terminology independently
 | * communicates ideas using appropriate terminology with some assistance
 | * communicates ideas using appropriate terminology with assistance
 | * communicates ideas using appropriate terminology with continuous guidance
 | * communicates ideas using appropriate terminology with direct instruction
 |

# Working with Timber Value: 1.0

Working with Timber a Value: 0.5

Working with Timber b Value: 0.5

## Unit Description

This unit is designed to familiarise students with workshop procedures through the use of timber. Students learn the fundamentals of working safely with timber products, using and naming selected tools and materials correctly. Students learn to use selected hand and power tools, machinery, make joints and follow a given design to complete the projects undertaken in this unit. They learn communication skills such as following instructions, seeking help and recording processes as well as strategies to solve problems.

## Specific Unit Goals

This unit should enable students to:

|  |  |
| --- | --- |
| A Course | M Course |
| * analyse and apply workshop organisation and procedures including Workplace Health and Safety
 | * follow basic workshop organisation and procedures including Workplace, Health and Safety
 |
| * explore and apply a range of communication skills including drawing and sketching
 | * apply communication skills including basic drawing and sketching
 |
| * apply technical skills to produce a variety of timber projects following a given design
 | * apply basic technical skills to produce selected timber projects /simple products
 |

## Content Descriptions

All knowledge, understanding and skills below must be delivered:

|  |  |
| --- | --- |
| A Course | M Course |
| Industry practices, processes and procedures |
| * analyse and apply workshop standards, policies and procedures, organisational standards and processes to seek assistance and clarification from relevant personnel as required
* analyse and apply relevant processes, for example, the use of technical drawing conventions
 | * demonstrate understanding of workplace practices, procedures and standards to seek assistance and clarification as required
 |
| * create timber products following instructions and a given design
* analyse and apply ethical environmental and sustainable work practices
 | * create timber products following instructions and a given design
 |

|  |  |
| --- | --- |
| A Course | M Course |
| Technical information |
| * understand the nature and properties of materials including classification of timber as either natural or engineered timber
 | * understand that timber can be either engineered or natural
 |
| * apply standard methods in constructing and finishing a variety of simple timber products, including procedures to remove imperfections in timber
 | * apply standard methods in constructing and finishing simple timber products
 |
| * analyse requirements to prepare and produce a variety of jointing techniques
 | * demonstrate different jointing techniques
 |
| * create a finished product using tools designed for a specific task
 | * create a finished product using tools designed for a specific task
 |
| * identify common timber sizes, lengths, widths and thicknesses
 | * identify common timber sizes, lengths, widths and thicknesses
 |
| * evaluate the properties of a range of stains, finishing products and adhesives and their suitability for different applications, and their environmental impacts
 | * identify a range of stains, finishing products and adhesives, their uses and environmental impacts
 |
| Workplace, health and safety (WHS) |
| * identify and apply safety practices and procedures in the workshop, including the use of personal protective equipment
 | * understand and follow WHS practices and procedures including the use of personal protective equipment
 |
| * conduct risk assessment for using specific tools and equipment.
 |  |
| * interpret and apply Materials Safety Data Sheets (MSDS) with regard to storage and handling of hazardous substances appropriate to situation
 | * apply all safety procedures and/or seek appropriate assistance when handling hazardous substances
 |
| * follow Workplace Health and Safety (WHS) practices appropriate to tasks being undertaken in the workshop and reflect on own contribution to the health and safety of self and others in the workshop
 | * take responsibility for health and safety of self and contribute to the health and safety of others
 |
| Problem Solving |
| * identify and define problems, analyse different possible solutions and select the best option
 | * solve simple problems and justify choices
 |
| * interact with others in solving problems, proposing solutions and justifying ideas
 | * interact with others in solving problems
 |

|  |  |
| --- | --- |
| A Course | M Course |
| Industry literacy and numeracy |
| * analyse and apply processes for writing, editing and recording of work procedures
* correctly interpret and evaluate plans/ patterns/templates
 | * develop writing, editing skills and recording of work procedures
* interpret plans/patterns/templates
 |
| * interpret numerical information in projects and plans
 |  |
| * demonstrate accurate use of numeracy in practical activities
 | * demonstrate accurate use of numeracy in practical activities
 |
| Behaviour and attitudes in the workplace |
| * apply interpersonal skills required to work with others and to understand, communicate with and effectively interact with people across cultures
 | * apply interpersonal skills in working with a range of people
 |
| * demonstrate self-management skills and behaviours and attributes which contribute positively to work and continuous learning and contribute positively to group activities
* demonstrate organisation of self, materials and work to achieve quality products within deadlines
 | * demonstrate self-management skills which contribute to positive outcomes
 |
| Reflection on own learning |
| * reflect on own learning and needs
* self- assess whether own work meets industry standards and reflect on ways of improving
 | * reflect on own learning and ways of improving
 |
| Communication |
| * communicate accurately with others in an appropriate format, both orally and in writing
 | * demonstrate basic communication skills, both orally and in writing
 |
| * articulate ideas to seek assistance, clarify, offer suggestions or justify approaches
 | * seek assistance and act on feedback
 |
| * actively listen to guide decision making and receive and use feedback
 | * actively listen and follow instructions
 |

## A guide to reading and implementing content descriptions

Content descriptions specify the knowledge, understanding and skills that students are expected to learn and that teachers are expected to teach. Teachers are required to develop a program of learning that allows students to demonstrate all the content descriptions. The lens which the teacher uses to demonstrate the content descriptions may be either guided through provision of electives within each unit or determined by the teacher when developing their program of learning.

A program of learningis what a college provides to implement the course for a subject. It is at the discretion of the teacher to emphasis some content descriptions over others. The teacher may teach additional (not listed) content provided it meets the specific unit goals. This will be informed by the student needs and interests.

## Assessment

Refer to pages 8-9.

# Techniques in Timber Manufacture Value: 1.0

Techniques in Timber Manufacture a Value: 0.5

Techniques in Timber Manufacture b Value: 0.5

## Unit Description

This unit is designed to develop skills in the workshop using timber and other materials. Students learn the fundamentals of workshop safety requirements, including attitudes and behaviours. They learn techniques for the manufacture and use of jigs, as well as tool maintenance for both power and hand tools. Students make decisions about appropriate jointing techniques according to the product. They learn communication skills such as reading plans and drawings, measurement and scale, as well as the reasons for selecting particular materials for a given task.

## Specific Unit Goals

This unit should enable students to:

|  |  |
| --- | --- |
| A Course | M Course |
| * apply knowledge of workplace health and safety and workshop procedures
 | * apply workplace health and safety and workshop procedures
 |
| * interpret a design brief or drawing and use a range of simple fabrication techniques to produce a finished timber item using appropriate hand and power tools
 | * follow a design brief or drawing to apply 2-3 simple fabrication techniques to create a finished product using appropriate hand and power tools
 |
| * analyse the properties and limitations of tools, machinery and materials
 | * apply a basic understanding of the properties of tools and materials
 |

## Content Descriptions

All knowledge, understanding and skills below must be delivered:

|  |  |
| --- | --- |
| A Course | M Course |
| Industry practices, processes and procedures |
| * analyse and apply workshop standards, policies and procedures, including organisational standards, and processes to seek assistance and clarification from relevant personnel as required
 | * demonstrate basic understanding of workshop practices and procedures
 |
| * evaluate and where appropriate apply traditional and or innovative materials, tools and techniques in working with timber
* create timber products following instructions and a given design
 | * seek assistance and clarification from relevant personnel as required
 |
| * analyse and apply ethical environmental and sustainable work practices
 | * analyse and apply ethical environmental and sustainable work practices
 |

|  |  |
| --- | --- |
| A Course | M Course |
| Technical information |
| * analyse and apply quality standards in producing a variety of works to specifications
 | * produce a variety of works to specification
 |
| * analyse requirements to create a variety of joints using hand and/or power tools
 | * produce joints to specification
 |
| * demonstrate understanding and knowledge of graphic communication skills by identifying a number of techniques for example isometric drawing and hand sketches for project development
 | * demonstrate some knowledge of technical drawing
 |
| * demonstrate appropriate use and maintenance of a range of tools and machinery designed for a specific task
 | * demonstrate appropriate use of tools and machinery
 |
| * demonstrate knowledge of the nature, properties and uses of materials such as the difference between engineered and natural timber
 | * demonstrate basic knowledge of timber materials and their uses
 |
| * evaluate the properties of a range of stains, finishing products and adhesives including their suitability for different applications, and their environmental impacts
 | * identify a range of stains, finishing products and adhesives, their uses and environmental impacts
 |
| Workplace, health and safety |
| * identify and apply safety practices and procedures in the workshop, including the use of personal protective equipment
* conduct risk assessment for using specific tools and equipment
 | * understand and follow WHS practices and procedures including the use of personal protective equipment
 |
| * Interpret and apply Materials Safety Data Sheets (MSDS) with regard to storage and handling of hazardous substances appropriate to situation
 | * apply all safety procedures and/or seek appropriate assistance when handling hazardous substances
 |
| * follow Workplace Health and Safety (WHS) practices appropriate to tasks being undertaken in the workshop and reflect on own contribution to the health and safety of self and others in the workshop
 | * take responsibility for health and safety of self and contribute to the health and safety of others
 |
| Problem solving |
| * identify and define problems, analyse different possible solutions and select the best option
* interact with others in solving problems, proposing solutions and justifying ideas
 | * solve simple problems
 |

|  |  |
| --- | --- |
| A Course | M Course |
| Industry literacy and numeracy |
| * analyse and apply processes for writing, editing and production of accurate documentation of projects
* interpret numerical information in projects and plans
 | * develop writing and editing skills
 |
| * correctly interpret and evaluate plans/ patterns/templates
* demonstrate accurate use of numeracy in practical activities
 | * read, correctly interpret plans/patterns/ templates
* use numeracy skills in practical activities
 |
| Behaviour and attitudes in the workplace |
| * apply interpersonal skills required to work with others and to understand, communicate with and effectively interact with people across cultures
 | * apply interpersonal skills in working with a range of people
 |
| * demonstrate self -management skills and behaviours and attributes which contribute positively to work and continuous learning and contribute positively to group activities
* demonstrate organisation of self, materials and work to achieve quality products within deadlines
 | * demonstrate self -management skills which contribute to positive outcomes
 |
| Reflection on own learning |
| * reflect on own learning processes and needs within the workplace
* analyse and use workshop criteria to assess and reflect on whether finished work meets standards
 | * reflect on own learning needs for skill development
 |
| Communication |
| * communicate accurately with others in an appropriate format both orally and in writing
 | * apply basic communication skills, orally, using sketches and writing
 |
| * articulate ideas to seek assistance, clarify, offer suggestions or justify approaches
 | * seek assistance to clarify, and follow instructions
 |
| * actively listen to guide decision making and receive and use feedback
 |  |

## A guide to reading and implementing content descriptions

Content descriptions specify the knowledge, understanding and skills that students are expected to learn and that teachers are expected to teach. Teachers are required to develop a program of learning that allows students to demonstrate all the content descriptions. The lens which the teacher uses to demonstrate the content descriptions may be either guided through provision of electives within each unit or determined by the teacher when developing their program of learning.

A program of learningis what a college provides to implement the course for a subject. It is at the discretion of the teacher to emphasis some content descriptions over others. The teacher may teach additional (not listed) content provided it meets the specific unit goals. This will be informed by the student needs and interests.

## Assessment

Refer to pages 8-9.

# Creating to a Design Brief or Plan Value: 1.0

Creating to a Design Brief or Plan a Value: 0.5

Creating to a Design Brief or Plan b Value: 0.5

## Unit Description

This unit focuses on sustainable workshop practices and procedures, including interpretation of plans and the concept of the design brief and the design process. Students explore the nature and properties of materials to fulfil a design brief. Students learn about the selection of appropriate materials and calculate cost of production, including the whole manufacturing process. They learn communication skills such as to actively listen, and to reflect on and implement feedback from clients.

## Specific Unit Goals

This unit should enable students to:

|  |  |
| --- | --- |
| A Course | M Course |
| * use a given design brief, apply advanced technical skills in the production of a timber project
 | * produce a timber product to a plan or design brief
 |
| * demonstrate WHS and positive workplace behaviours
 | * demonstrate WHS and positive workplace behaviours
 |

## Content Descriptions

All knowledge, understanding and skills below must be delivered:

|  |  |
| --- | --- |
| A Course | M Course |
| Industry practices, processes and procedures |
| * analyse and apply workshop standards, policies and procedures, including organisational standards, and processes to seek assistance and clarification from relevant personnel as required
 | * demonstrate understanding of workshop, practices, standards and procedures
 |
| * evaluate plans and investigate the concept of the design brief and design process
 | * explore the concept of a design brief and the design process
 |
| * create timber products following investigation of a design in the design process
 | * create timber products
 |
| * analyse and apply ethical environmental and sustainable work practices
 | * demonstrate ethical, environmental and sustainable work practices
 |

|  |  |
| --- | --- |
| A Course | M Course |
| Technical information |
| * demonstrate construction skills relevant to the product, such as economical marking out, joining, and finishing
* analyse and apply knowledge of a range of components and their uses in product designs
 | * demonstrate construction skills relevant to the product, such as economical marking out, joining, finishing techniques
 |
| * analyse tool requirements for a variety of applications
 | * identify tool requirements
 |
| * demonstrate how to correctly use and adjust tools designed for a specific task
 | * demonstrate how to correctly use tools
 |
| * understand the nature and properties of selected materials that include the identification, origins, classification and structure of timbers, and engineered timber
 | * understand the nature and properties of materials
 |
| * evaluate the suitability of a range of finishing products for the chosen design, and their environmental impacts
 | * apply suitable finishes, describing environmental impacts of different products
 |
| Workplace, health and safety |
| * identify and apply safety practices and procedures in the workshop, including the use of personal protective equipment
 | * understand and follow WHS practices and procedures including the use of personal protective equipment
 |
| * conduct risk assessment for using specific tools and equipment. Interpret and apply Materials Safety Data Sheets (MSDS) with regard to storage and handling of hazardous substances appropriate to situation
 | * apply all safety procedures and/or seek appropriate assistance when handling hazardous substances
 |
| * follow Workplace Health and Safety (WHS) practices appropriate to tasks being undertaken in the workshop and reflect on own contribution to the health and safety of self and others in the workshop
 | * take responsibility for health and safety of self and contribute to the health and safety of others
 |
| Problem solving |
| * identify and define problems, evaluate possible solutions and select the best option
 | * solve simple problems
 |
| * interact with supervisors and/or peers in solving problems, proposing solutions and justifying processes
 | * interact with supervisors and/or peers in solving problems
 |

|  |  |
| --- | --- |
| A Course | M Course |
| Industry literacy and numeracy |
| * analyse and apply processes for writing, editing and producing accurate documentation of projects
 | * develop basic writing and editing skills
 |
| * read, correctly interpret and evaluate plans/patterns/templates
* interpret numerical information in practical activities such as costings, measuring and marking out and timelines
 | * read, correctly interpret and evaluate plans/patterns/templates
 |
| * demonstrate accurate use of numeracy in practical activities
 | * use numeracy skills in a timber working environment
 |
| Behaviour and attitudes in the workplace |
| * apply interpersonal skills required to work with others and to understand, communicate with and effectively interact with people across cultures
 | * apply interpersonal skills in working with a range of people
 |
| * demonstrate self-management skills and behaviours and attributes which contribute positively to work and continuous learning and contribute positively to group activities
 | * understand how self-management skills contribute to positive outcomes
 |
| * demonstrate organisation of self, materials and work to achieve quality products within deadlines
 | * demonstrate organisation of self, materials and work to achieve goals
 |
| Reflection on own learning |
| * review criteria, standards, reliability, safety, quality, and cost-effectiveness of the product
 | * reflect on outcomes and areas for improvement
 |
| * reflect on the effectiveness of procedures used in the design and realisation process
 | * reflect on the effectiveness of processes used in creating a product
 |
| Communication |
| * communicate accurately with others in an appropriate format
* articulate ideas to seek assistance, clarify, offer suggestions or justify approaches
 | * apply correct terminology when communicating with others
* seek assistance and act on feedback
 |
| * actively listen to guide decisions and receive and implement feedback
 | * follow instructions
 |

## A guide to reading and implementing content descriptions

Content descriptions specify the knowledge, understanding and skills that students are expected to learn and that teachers are expected to teach. Teachers are required to develop a program of learning that allows students to demonstrate all the content descriptions. The lens which the teacher uses to demonstrate the content descriptions may be either guided through provision of electives within each unit or determined by the teacher when developing their program of learning.

A program of learningis what a college provides to implement the course for a subject. It is at the discretion of the teacher to emphasis some content descriptions over others. The teacher may teach additional (not listed) content provided it meets the specific unit goals. This will be informed by the student needs and interests.

## Assessment

Refer to pages 8-9.

# Timber Project Value: 1.0

Timber Project a Value: 0.5

Timber Project b Value: 0.5

## Unit Description

In this unit students create a project of their own design, or modify an existing design, to meet a particular need. Using a project timeline, students learn to manage the entire construction of a project, from conception to delivery. They consider the choice of appropriate materials, finishes and techniques, in accordance with the project requirements, proactively managing risks associated with constructing the product in the workshop. They learn communication skills such as maintaining an ongoing record of evaluation of production processes and techniques.

## Specific Unit Goals

This unit should enable students to:

|  |  |
| --- | --- |
| A Course | M Course |
| * design and manufacture timber projects
* apply a design process
* apply knowledge of WHS and workshop procedures
 | * design and manufacture timber projects
 |
| * apply knowledge of specific purpose materials and products, justifying approaches
 | * apply knowledge of specific purpose materials and products, justifying approaches
 |
| * document the design, production and evaluation of the student centred project in a folio
 | * document the design, production and evaluation of the student centred project in a folio
 |

## Content Descriptions

All knowledge, understanding and skills below must be delivered:

|  |  |
| --- | --- |
| A Course | M Course |
| Industry practices, processes and procedures |
| * analyse and apply workshop standards, policies and procedures, including organisational standards, and processes to seek assistance and clarification from relevant personnel as required
* evaluate and apply product conventions to meet the requirements of the project, such as size and ergonomics, to create a product
 | * basic understanding of workplace practices and procedures
 |

|  |  |
| --- | --- |
| A Course | M Course |
| * manage the construction of a project and maintain an ongoing evaluation of production processes and techniques, including use of photography and notes to record progress of skills that contribute to a positive outcome
 |  |
| * analyse and apply ethical environmental and sustainable work practices
 |  |
| Technical information |
| * analyse and apply workshop standards and methodologies in the creation of a finished product
 | * demonstrate appropriate use of workshop standards to create a simple finished product
 |
| * demonstrate and apply correct techniques to create a project
* investigate and analyse the nature and properties of materials including, identification of natural defects in timber and the suitability of materials for the project
* demonstrate how to correctly use and adjust tools designed for a specific task
 | * demonstrate knowledge of tools and techniques to create a project
 |
| * demonstrate knowledge and control of the selection of appropriate materials
 | * demonstrate knowledge of materials and appropriate selection for the project
 |
| * evaluate the suitability of a range of finishing products for the chosen design, as well as their environmental impacts
 | * apply appropriate finishes
 |
| Workplace, health and safety |
| * identify and apply safety practices and procedures in the workshop, including the use of personal protective equipment
 | * understand and follow WHS practices and procedures including the use of personal protective equipment
 |
| * conduct risk assessment for using specific tools and equipment. Interpret and apply Materials Safety Data Sheets (MSDS) with regard to storage and handling of hazardous substances appropriate to situation
 | * apply all safety procedures and/or seek appropriate assistance when handling hazardous substances
 |
| * follow Workplace Health and Safety (WHS) practices appropriate to tasks being undertaken in the workshop and reflect on own contribution to the health and safety of self and others in the workshop
 | * take responsibility for health and safety of self and contribute to the health and safety of others
 |

|  |  |
| --- | --- |
| A Course | M Course |
| Problem solving |
| * identify and define problems, analyse different possible solutions and select the best options in creating a project
 | * solve simple problems
 |
| * interact with supervisors and/or peers in solving problems, proposing solutions and justifying processes
 | * interact with supervisors and/or peers in solving problems
 |
| Industry literacy and numeracy |
| * analyse and apply processes for writing, editing and producing accurate documentation such as sketches, photographs, justification of choices and evaluation of work
* read, correctly interpret and evaluate plans/ patterns/templates
 | * develop writing and editing skills
 |
| * interpret numerical information in practical activities such as costings, measuring and marking out, and timelines
* demonstrate accurate use of numeracy in practical activities
 | * use numeracy skills in activities
 |
| Behaviour and attitudes in the workplace |
| * apply interpersonal skills required to work with others and to understand, communicate with and effectively interact with people across cultures
 | * apply interpersonal skills in working with a range of people
 |
| * demonstrate self-management skills and behaviours and attributes which contribute positively to work and continuous learning and contribute positively to group activities
 | * understand how self-management skills contribute to positive outcomes
 |
| * demonstrate organisation of self, materials and work to achieve quality products within deadlines
 | * demonstrate organisation of self, materials and work to achieve goals
 |
| Reflection on own learning |
| * reflect on personal learning including project management, practical skills, capabilities, accuracy of costings and evaluation of features of the final product
 | * reflect on own learning
 |

|  |  |
| --- | --- |
| A Course | M Course |
| Communication |
| * communicate accurately with others in an appropriate format both orally and in writing
 | * apply basic oral and written communication skills
 |
| * articulate ideas to seek assistance, clarify, receive suggestions and justify approaches in completing a project
 | * seek assistance and act on feedback
 |
| * critically analyse and present clear and relevant documented evidence of process, decision making and evaluation of product
 | * present a report on processes and problems in producing a finished project
 |

## A guide to reading and implementing content descriptions

Content descriptions specify the knowledge, understanding and skills that students are expected to learn and that teachers are expected to teach. Teachers are required to develop a program of learning that allows students to demonstrate all the content descriptions. The lens which the teacher uses to demonstrate the content descriptions may be either guided through provision of electives within each unit or determined by the teacher when developing their program of learning.

A program of learningis what a college provides to implement the course for a subject. It is at the discretion of the teacher to emphasis some content descriptions over others. The teacher may teach additional (not listed) content provided it meets the specific unit goals. This will be informed by the student needs and interests.

## Assessment

Refer to pages 8-9.

# Independent Study Value: 1.0

Independent Study a Value: 0.5

Independent Study b Value: 0.5

## Prerequisites

Independent Study units are only available to individual students in Year 12. A student can only study a maximum of one Independent Study unit in each course. Students must have studied at least three standard 1.0 units from this course. An Independent Study unit requires the principal’s written approval. Principal approval can also be sought by a student in Year 12 to enrol concurrently in an Independent Study unit and their third 1.0 unit in this course of study.

## Unit Description

An Independent Study unit has an important place in senior secondary courses. It is a valuable pedagogical approach that empowers students to make decisions about their own learning. An Independent Study unit can be proposed by an individual student for their own independent study and negotiated with their teacher. The program of learning for an Independent Study unit must meet the unit goals and content descriptions as they appear in the course.

## Specific Unit Goals

This unit should enable students to:

|  |  |
| --- | --- |
| A Course | M Course |
| * use tools and materials to create a finished timber product
* focus on specified knowledge, skills and techniques to develop competencies and experience
 | * use tools and materials to create a finished timber product
* focus on specified knowledge, skills and techniques to develop competencies and experience
 |
| * create and apply a design brief using a design process
 | * create and apply a design brief using a design process
 |

## Content Descriptions

All knowledge, understanding and skills below must be delivered:

|  |  |
| --- | --- |
| A Course | M Course |
| Industry practices, processes and procedures |
| * create timber products
* analyse and apply workshop standards, policies and procedures, including organisational standards, and processes to seek assistance and clarification from relevant personnel as required
* analyse and apply ethical environmental and sustainable work practices
 | * create timber products
* analyse and apply workshop standards, policies and procedures, including organisational standards, and processes to seek assistance and clarification from relevant personnel as required
* apply ethical environmental and sustainable work practices
 |

|  |  |
| --- | --- |
| A Course | M Course |
| Technical information |
| * analyse and apply workshop standards and techniques in the creation of a finished product
 | * apply workshop standards and techniques in the creation of a finished product
 |
| Workplace, health and safety |
| * identify and apply safety practices and procedures in the workshop, including the use of personal protective equipment
 | * apply safety practices and procedures in the workshop, including the use of personal protective equipment
 |
| Problem solving |
| * identify and define problems, analyse different possible solutions and select the best option
 | * solve simple problems
 |
| Industry literacy and numeracy |
| * read, correctly interpret and evaluate plans/patterns/templates
 | * interpret plans/patterns/templates
 |
| * analyse and apply processes for writing, editing and producing accurate documentation of projects
 | * apply processes for writing, editing and producing accurate documentation of projects
 |
| * demonstrate accurate use of numeracy in practical activities
 | * demonstrate accurate use of numeracy in practical activities
 |
| Behaviour and attitudes in the workplace |
| * apply interpersonal skills required to work with others and to understand, communicate with and effectively interact with people across cultures
 | * apply interpersonal skills required to work with others and to understand, communicate with and effectively interact with people across cultures
 |
| Reflection on own learning |
| * reflect on own learning and needs
 | * reflect on own learning and needs
 |
| Communication |
| * communicate accurately with others in an appropriate format both orally and in writing
* critically analyse and present clear and relevant documented evidence of process, decision making and evaluation of project
 | * communicate accurately with others in an appropriate format both orally and in writing
 |

## Assessment

Refer to pages 8-9.

# Appendix A – Implementation Guidelines

## Available course patterns

A standard 1.0 value unit is delivered over at least 55 hours. To be awarded a course, students must complete at least the minimum units over the whole minor, major, major/minor or double major course.

|  |  |
| --- | --- |
| Course | Number of standard units to meet course requirements |
| Minor | Minimum of 2 units |
| Major | Minimum of 3.5 units |

Units in this course can be delivered in any order.

### Prerequisites for the course or units within the course

Students must have studied at least three standard 1.0 units from this course in order to access the Independent Study unit. An Independent Study unit requires the principal’s written approval. Principal approval can also be sought by a student in Year 12 to enrol concurrently in an Independent Study unit and their third 1.0 unit in this course of study.

### Arrangements for students continuing study in this course

Students who studied the previous course may undertake any units in this course provided there is no duplication of content.

## Duplication of Content Rules

Students cannot be given credit towards the requirements for a Senior Secondary Certificate for a unit that significantly duplicates content in a unit studied in another course. The responsibility for preventing undesirable overlap of content studied by a student rests with the principal and the teacher delivering the course. Students will only be given credit for covering the content once.

## Guidelines for Delivery

### Program of Learning

A program of learning is what a school provides to implement the course for a subject. This meets the requirements for context, scope and sequence set out in the Board endorsed course. Students follow programs of learning in a college as part of their senior secondary studies. The detail, design and layout of a program of learning are a college decision.

The program of learning must be documented to show the planned learning activities and experiences that meet the needs of particular groups of students, taking into account their interests, prior knowledge, abilities and backgrounds. The program of learning is a record of the learning experiences that enable students to achieve the knowledge, understanding and skills of the content descriptions. There is no requirement to submit a program of learning to the OBSSS for approval. The Principal will need to sign off at the end of Year 12 that courses have been delivered as accredited.

### Content Descriptions

Are all content descriptions of equal importance? No. It depends on the focus of study. Teachers can customise their program of learning to meet their own students’ needs, adding additional content descriptions if desired or emphasising some over others. A teacher must balance student needs with their responsibility to teach all content descriptions. It is mandatory that teachers address all content descriptions and that students engage with all content descriptions.

### Half standard 0.5 units

Half standard units appear on the course adoption form but are not explicitly documented in courses. It is at the discretion of the college principal to split a standard 1.0 unit into two half standard 0.5 units. Colleges are required to adopt the half standard 0.5 units. However, colleges are not required to submit explicit documentation outlining their half standard 0.5 units to the BSSS. Colleges must assess students using the half standard 0.5 assessment task weightings outlined in the framework. It is the responsibility of the college principal to ensure that all content is delivered in units approved by the Board.

## Moderation

Moderation is a system designed and implemented to:

* provide comparability in the system of school-based assessment
* form the basis for valid and reliable assessment in senior secondary schools
* involve the ACT Board of Senior Secondary Studies and colleges in cooperation and partnership
* maintain the quality of school-based assessment and the credibility, validity and acceptability of Board certificates.

Moderation commences within individual colleges. Teachers develop assessment programs and instruments, apply assessment criteria, and allocate Unit Grades, according to the relevant Framework. Teachers within course teaching groups conduct consensus discussions to moderate marking or grading of individual assessment instruments and Unit Grade decisions.

### The Moderation Model

Moderation within the ACT encompasses structured, consensus-based peer review of Unit Grades for all accredited courses over two Moderation Days. In addition to Moderation Days, there is statistical moderation of course scores, including small group procedures, for T courses.

### Moderation by Structured, Consensus-based Peer Review

Consensus-based peer review involves the review of student work against system wide criteria and standards and the validation of Unit Grades. This is done by matching student performance with the criteria and standards outlined in the Achievement Standards, as stated in the Framework. Advice is then given to colleges to assist teachers with, or confirm, their judgments. In addition, feedback is given on the construction of assessment instruments.

### Preparation for Structured, Consensus-based Peer Review

Each year, teachers of Year 11 are asked to retain originals or copies of student work completed in Semester 2. Similarly, teachers of a Year 12 class should retain originals or copies of student work completed in Semester 1. Assessment and other documentation required by the Office of the Board of Senior Secondary Studies should also be kept. Year 11 work from Semester 2 of the previous year is presented for review at Moderation Day 1 in March, and Year 12 work from Semester 1 is presented for review at Moderation Day 2 in August.

In the lead up to Moderation Day, a College Course Presentation (comprised of a document folder and a set of student portfolios) is prepared for each A, T and M course/units offered by the school and is sent into the Office of the Board of Senior Secondary Studies.

### The College Course Presentation

The package of materials (College Course Presentation) presented by a college for review on Moderation Days in each course area will comprise the following:

* a folder containing supporting documentation as requested by the Office of the Board through memoranda to colleges, including marking schemes and rubrics for each assessment item
* a set of student portfolios containing marked and/or graded written and non-written assessment responses and completed criteria and standards feedback forms. Evidence of all assessment responses on which the Unit Grade decision has been made is to be included in the student review portfolios.

Specific requirements for subject areas and types of evidence to be presented for each Moderation Day will be outlined by the Board Secretariat through the *Requirements for Moderation Memoranda* and Information Papers.

### Visual evidence for judgements made about practical performances

It is a requirement that schools’ judgements of standards to practical performances (A/T/M) be supported by visual evidence (still photos or video).

The photographic evidence submitted must be drawn from practical skills performed as part of the assessment process.

Teachers should consult the BSSS website for current information regarding all moderation requirements including subject specific and photographic evidence.

# Appendix B – Course Developers

|  |  |
| --- | --- |
| Name | College |
| David Moss | Lake Tuggeranong College |
| Mark Gannon | Radford College |

# Appendix C – Common Curriculum Elements

Common curriculum elements assist in the development of high-quality assessment tasks by encouraging breadth and depth and discrimination in levels of achievement.

|  |  |  |
| --- | --- | --- |
| Organisers | Elements | Examples |
| create, compose and apply | apply | ideas and procedures in unfamiliar situations, content and processes in non-routine settings |
| compose | oral, written and multimodal texts, music, visual images, responses to complex topics, new outcomes |
| represent | images, symbols or signs |
| create | creative thinking to identify areas for change, growth and innovation, recognise opportunities, experiment to achieve innovative solutions, construct objects, imagine alternatives |
| manipulate | images, text, data, points of view |
| analyse, synthesise and evaluate | justify | arguments, points of view, phenomena, choices |
| hypothesise | statement/theory that can be tested by data |
| extrapolate | trends, cause/effect, impact of a decision |
| predict | data, trends, inferences |
| evaluate | text, images, points of view, solutions, phenomenon, graphics |
| test | validity of assumptions, ideas, procedures, strategies |
| argue | trends, cause/effect, strengths and weaknesses |
| reflect | on strengths and weaknesses |
| synthesise | data and knowledge, points of view from several sources |
| analyse | text, images, graphs, data, points of view |
| examine | data, visual images, arguments, points of view |
| investigate | issues, problems |
| organise, sequence and explain | sequence | text, data, relationships, arguments, patterns |
| visualise | trends, futures, patterns, cause and effect |
| compare/contrast | data, visual images, arguments, points of view |
| discuss | issues, data, relationships, choices/options |
| interpret | symbols, text, images, graphs |
| explain | explicit/implicit assumptions, bias, themes/arguments, cause/effect, strengths/weaknesses |
| translate | data, visual images, arguments, points of view |
| assess | probabilities, choices/options |
| select | main points, words, ideas in text |
| identify, summarise and plan | reproduce | information, data, words, images, graphics |
| respond | data, visual images, arguments, points of view |
| relate | events, processes, situations |
| demonstrate | probabilities, choices/options |
| describe | data, visual images, arguments, points of view |
| plan | strategies, ideas in text, arguments |
| classify | information, data, words, images |
| identify | spatial relationships, patterns, interrelationships |
| summarise | main points, words, ideas in text, review, draft and edit |

# Appendix D – Glossary of Verbs

|  |  |
| --- | --- |
| Verbs | Definition |
| Analyse | Consider in detail for the purpose of finding meaning or relationships, and identifying patterns, similarities and differences |
| Apply | Use, utilise or employ in a particular situation |
| Argue | Give reasons for or against something |
| Assess | Make a Judgement about the value of |
| Classify | Arrange into named categories in order to sort, group or identify |
| Compare | Estimate, measure or note how things are similar or dissimilar |
| Compose | The activity that occurs when students produce written, spoken, or visual texts |
| Contrast | Compare in such a way as to emphasise differences |
| Create | Bring into existence, to originate |
| Critically analyse | Analysis that engages with criticism and existing debate on the issue |
| Demonstrate | Give a practical exhibition an explanation |
| Describe | Give an account of characteristics or features |
| Discuss | Talk or write about a topic, taking into account different issues or ideas |
| Evaluate | Examine and judge the merit or significance of something |
| Examine | Determine the nature or condition of |
| Explain | Provide additional information that demonstrates understanding of reasoning and /or application |
| Extrapolate | Infer from what is known |
| Hypothesise | Put forward a supposition or conjecture to account for certain facts and used as a basis for further investigation by which it may be proved or disproved  |
| Identify | Recognise and name |
| Interpret | Draw meaning from |
| Investigate | Planning, inquiry into and drawing conclusions about |
| Justify | Show how argument or conclusion is right or reasonable |
| Manipulate | Adapt or change |
| Plan | Strategize, develop a series of steps, processes |
| Predict | Suggest what might happen in the future or as a consequence of something |
| Reflect | The thought process by which students develop an understanding and appreciation of their own learning. This process draws on both cognitive and affective experience |
| Relate | Tell or report about happenings, events or circumstances |
| Represent | Use words, images, symbols or signs to convey meaning |
| Reproduce | Copy or make close imitation |
| Respond | React to a person or text |
| Select | Choose in preference to another or others |
| Sequence | Arrange in order |
| Summarise | Give a brief statement of the main points |
| Synthesise | Combine elements (information/ideas/components) into a coherent whole |
| Test | Examine qualities or abilities |
| Translate | Express in another language or form, or in simpler terms |
| Visualise | The ability to decode, interpret, create, question, challenge and evaluate texts that communicate with visual images as well as, or rather than, words |

# Appendix E – Glossary for ACT Senior Secondary Curriculum

Courses will detail what teachers are expected to teach and students are expected to learn for year 11 and 12. They will describe the knowledge, understanding and skills that students will be expected to develop for each learning area across the years of schooling.

**Learning areas** are broad areas of the curriculum, including English, mathematics, science, the arts, languages, health and physical education.

A **subject** is a discrete area of study that is part of a learning area. There may be one or more subjects in a single learning area.

**Frameworks** are system documents for Years 11 and 12 which provide the basis for the development and accreditation of any course within a designated learning area. In addition, frameworks provide a common basis for assessment, moderation and reporting of student outcomes in courses based on the framework.

The **course** sets out the requirements for the implementation of a subject. Key elements of a course include the rationale, goals, content descriptions, assessment, and achievement standards as designated by the framework.

BSSS courses will be organised into units. A unit is a distinct focus of study within a course. A standard 1.0 unit is delivered for a minimum of 55 hours generally over one semester.

**Core** units are foundational units that provide students with the breadth of the subject.

**Additional** units are avenues of learning that cannot be provided for within the four core 1.0 standard units by an adjustment to the program of learning.

An **Independent Study unit** is a pedagogical approach that empowers students to make decisions about their own learning. Independent Study units can be proposed by a student and negotiated with their teacher but must meet the specific unit goals and content descriptions as they appear in the course.

An **elective** is a lens for demonstrating the content descriptions within a standard 1.0 or half standard 0.5 unit.

A **lens** is a particular focus or viewpoint within a broader study.

**Content descriptions** refer to the subject-based knowledge, understanding and skills to be taught and learned.

A **program of learning** is what a college develops to implement the course for a subject and to ensure that the content descriptions are taught and learned.

**Achievement standards** provide an indication of typical performance at five different levels (corresponding to grades A to E) following completion of study of senior secondary course content for units in a subject.

ACT senior secondary system **curriculum** comprises all BSSS approved courses of study.

# Appendix F – Course Adoption

**Conditions of Adoption**

The course and units of this course are consistent with the philosophy and goals of the college and the adopting college has the human and physical resources to implement the course.

**Adoption Process**

Course adoption must be initiated electronically by an email from the principal or their nominated delegate to bssscertification@ed.act.edu.au. A nominated delegate must CC the principal.

The email will include the **Conditions of Adoption** statement above, and the table below adding the **College** name, and circling the **Classification/s** required.

|  |  |
| --- | --- |
| College: |  |
| Course Title: | Timber Products |
| Classification/s: | A M |
| Accredited from: | 2020 |
| Framework: | Industry and Services 2017 |