

Construction Pathways

A / M / V

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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.

# Vocational Education and Training in ACT Senior Secondary Schools

The Board of Senior Secondary Studies is responsible for the certification of senior secondary school studies in government and non-government schools in the ACT. Students can undertake Vocational Education and Training (VET) as part of a senior secondary certificate and completion by a student can provide credit towards both a recognised VET qualification and a Senior Secondary School Certificate.

The BSSS certificates VET qualifications and Statements of Attainment on behalf of ACT colleges and high schools that offer Australian VET Qualifications and are Registered Training Organisations (RTOs) or have a Third-Party Service Agreement (TPSA) with an RTO. The Board also recognises VET qualifications delivered by external RTOs and facilitates the allocation of credit towards the ACT Senior Secondary Certificate based on assessment and hours of training.

The BSSS is not an RTO and is not responsible for those aspects that relate to VET delivery in schools or externally that fall within the role of the RTO.

Vocational programs must be assessed in accordance with the *Standards for Registered Training Organisations 2015* and the guidelines outlined in the relevant training package. Students undertaking A, T and M accredited vocational programs will be assessed against the criteria and achievement standards referenced in the framework to produce A-E grades and scores. They will also be assessed against competency standards as described in the relevant training package.

The BSSS certificates VET that:

* is listed on the national training.gov.au website; and
* is delivered and assessed by an ACT college or high school, which is an RTO or has a Third-Party Service Agreement (TPSA) with an RTO that has scope from the Australian Skills Quality Authority (ASQA) to deliver specified qualifications
* is delivered and assessed in accordance with relevant Training Package requirements.

Vocational learning contributes to the ACT Senior Secondary Certificate in a variety of ways:

* BSSS accredited A, T, and M vocational courses with embedded competencies delivered by colleges are reported with A–E grades
* BSSS accredited C courses (competency-based assessment only) delivered and assessed by colleges are reported with the grade ‘P’ (Pass) where at least one competency is achieved by the student; or ‘Q?’ ‘Participated’ where no competencies are achieved but attendance requirements are met
* BSSS E courses recognising study at external RTOs are reported with the grade ‘P’ (Pass)
* Australian School Based Apprenticeships (ASBAs) are reported as E courses with the
grade ‘P’ (Pass).

The BSSS credit arrangements recognise VET studies externally:

* through direct credit when the qualification or Units of Competence relate to a VET course that is being studied by the student
* towards the Senior Secondary Certificate, providing the VET does not duplicate content.

*Implementing Vocational Education and Training* *Courses* (Appendix F) provides further course information, including training package requirements, and should be read in conjunction with course documents.

## 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 *Construction Pathways*, students further develop and apply their reading, comprehension, written and oral skills. They develop and understanding of the terminology of the construction industry. They read and interpret technical information, plans and specifications, and analyse and follow systems, processes, and safe operating procedures. They communicate orally in seeking assistance, solving problems with others and justifying choices. The develop written literacy skills by evaluating and analysing Work Health and Safety requirements, industry practices, procedures and innovations, and acknowledging sources appropriately. They apply processes for writing, editing and recording of procedures. Students use language for different purposes including to interpret, discuss and explain concepts, problems and solutions**.**

### Numeracy

Students extend and apply their industry specific numeracy skills by selecting and using appropriate measurement tools, software and apps. They apply formulas and numerical concepts in calculations and measurements. 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 research using multimodal approaches. They read and interpret online plans, specifications and documentation. They evaluate, select and apply apps to work more productively and safely. They evaluate and apply innovations in industry specific ICT.

### Critical and Creative Thinking

Students use the design process to solve problems, propose solutions and justify decisions in completing projects. They analyse existing product characteristics and features to inform the construction process and think creatively about solutions. They select and refine construction techniques and materials to address problems. They make decisions to combine form, function and aesthetics.

### 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 collaborate with others to interpret plans, find solutions and complete projects. 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 construction.

### Ethical Understanding

Students develop understanding of ethical implications and sustainability through considered selection and use of materials, processes and construction 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 develop intercultural awareness by working with people of different cultural backgrounds and understand that implementing industry process and practices may be influenced by cultural factors. They consider construction techniques and materials from other cultures in finding solutions and solving problems.

# Cross-Curriculum Priorities

### Aboriginal and Torres Strait Islander Histories and Cultures

Opportunities exist for drawing students’ attention to the value of First Nations Australians knowledge and perspectives from the past and the present in the construction industry.

### Asia and Australia’s Engagement with Asia

Students consider construction materials and techniques from Asia within this course and identify links between Australian and Asian construction industries.

### Sustainability

Environmental considerations in the selection and use of materials, techniques, processes, and disposal of waste are integral to this course. Students consider the sustainability of construction process and practices in regard to worker well-being.

**Construction Pathways**

**A/M/V**

# Rationale

*Construction Pathways* focuses on the construction processes and industry practices required to create, maintain and repair the built environment in an increasingly technological and complex world. Students develop knowledge, understanding and skills associated with traditional and contemporary tools, and materials used by the Australian building and construction industry to create structures. They examine the challenges facing the construction industry in adapting to new technology, building systems, products and practices, and explore future options.

Key concepts and ideas in *Construction Pathways* include the nature of building and construction enterprises and occupations, safety, personal and interpersonal skills in building and construction workplaces, standard industry processes and practices, innovation and future trends in construction, and the sustainability of construction processes. The course provides an opportunity to explore the diverse range of occupations that exist across the construction industry.

Through both individual and collaborative learning experiences, students learn to meet employer expectations and establish productive and appropriate work habits. Participating in construction projects promotes development of adaptable, competent, self-motivated individuals who consider safety and work collaboratively with colleagues to solve problems and complete practical work according to the client brief.

By undertaking construction projects, students develop transferable skills relevant to a range of domestic and commercial applications, and future employment opportunities. They understand industry practices, interpret specifications, including information and drawings, safely demonstrate fundamental construction skills and apply skills and procedures with tools and equipment, and how to approach new tools and processes safely. Students build skills in communicating orally, and in written and graphical modes. They organise, calculate and plan construction processes and evaluate the structures they create using predefined specifications.

The course provides opportunities to complete VET qualifications or a Statement of Attainment from the Construction, Plumbing and Services Training Package (CPC). Students may elect to develop relevant technical, vocational and interpersonal competencies suitable for employment and further training in the construction industry. It also provides for the development of employability skills such as communication and teamwork which are transferable to other industry areas. Through the study of this subject, students will gain experiences that can be applied in a range of contexts, including work, study and recreation that will assist them to make informed choices.

# Goals

All courses based on this framework should enable students to:

* analyse industry practices, processes and procedures
* analyse technical information and specifications
* understand materials and equipment
* 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

* Industry Practices
* Construction Processes
* Innovations in Construction
* Construction Project
* Independent Study

# Organisation of Content

### Industry Practices

In this unit, students investigate industry practices in construction used in residential and commercial contexts. They examine and implement the practices that are used to manage construction enterprises, workplace health and safety, employee personal and interpersonal skills and customer expectations to safely change raw materials into structures. Students demonstrate Work Health and Safety practices in the handling of equipment, materials and in working with others.

### Construction Processes

This unit focuses on construction processes that combine construction skills and procedures to safely construct buildings and other structures to specifications using tools, digital tools, equipment and materials. Students interpret plans and specifications, using accurate measurements and calculations. They develop skills in the selection and use of materials, equipment and techniques to undertake construction projects. Students develop skills in collaboration, communication and reflection, as they work individually and with others to plan and complete projects.

### Innovations in Construction

In this unit, students consider a range of emerging and future approaches to materials, techniques and processes in construction, locally, nationally and globally. They consider social, environmental and technological reasons for adopting innovative construction processes and materials. Students gain an understanding of a range of emerging and innovative methods to solve problems in these construction contexts. They examine the safety, sustainability and ethical considerations raised by emerging and future construction settings.

### Construction Project

Students demonstrate and document industry practices and construction processes to create projects to specifications. Students apply a range of cognitive, communication, collaboration, technical and practical skills in their project. They apply knowledge, skills and understanding of industry practices and construction processes to solve problems and find solutions in their construction projects. Students are given specifications, including drawings and technical information, to complete projects.

### 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.

**Note: Training Package requirements for students seeking VET qualifications through the Construction, Plumbing and Services Training Package (CPC) must still be met.**

# 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/V 1.0 and 0.5 Units**  | 30 - 40% | 60 - 70% |
| **Weighting in M/V 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 must 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 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 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 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
 |

# Industry Practices Value: 1.0

Industry Practices a Value 0.5

Industry Practices b Value 0.5

## Prerequisites

For students undertaking the Vocational Education and Training components of this course this unit is studied first to meet Training Package requirements.

## Unit Description

In this unit, students investigate industry practices in construction used in residential and commercial contexts. They examine and implement the practices that are used to manage construction enterprises, workplace health and safety, employee personal and interpersonal skills and customer expectations to safely change raw materials into structures. Students demonstrate Work Health and Safety practices in the handling of equipment, materials and in working with others.

## Specific Unit Goals

This unit should enable students to:

|  |  |
| --- | --- |
| A Course | M Course |
| * evaluate industry practices in construction in residential and commercial contexts
 | * describe industry practices in construction in residential and/or commercial contexts
 |
| * examine and implement the practices that are used to manage construction enterprises
 | * follow construction industry practices
 |
| * apply personal and interpersonal skills and customer expectations in working with others
 | * apply interpersonal skills to work productively with others
 |
| * evaluate workplace organisation and procedures, including Work Health and Safety, and apply to the workplace, including tools, materials, and personal interactions
 | * describe workplace organisation and procedures, including Work Health and Safety, and apply to the workplace
 |

## Content Descriptions

All knowledge, understanding and skills below must be delivered:

| A Course | M Course |
| --- | --- |
| Industry practices, processes and procedures |
| * evaluate construction industry practices in residential and commercial contexts and explain their significance, for example, site controls and measures, safety practices, trade specific roles and expectations, documentation, site specific practices
 | * describe industry practices in construction in residential and/or commercial contexts
 |
| * apply industry practices, processes and procedures to create a product to set specifications, for example, toolbox talk, read and interpret plans, building code requirements
 | * apply construction industry practices
 |
| * analyse the impact of ethical and sustainable construction choices and the challenges people face in accessing sustainable and ethically produced materials, for example, cost, availability, locally sourced materials
 |  |
| * apply ethical, environmental and sustainable work practices
 | * follow ethical, environmental and sustainable work practices
 |
| * analyse and apply construction industry planning practices and requirements to planning and making, for example, working to a timeline
 | * follow a work plan to complete a project using industry practices
 |
| Technical information |
| * select appropriate tools and equipment according to task requirements
 | * use appropriate tools and equipment
 |
| * apply construction skills to complete a project
 | * use construction skills to complete a project
 |
| * apply skills in measuring and marking out to suit job requirements
 | * use skills in measuring and marking out to suit job requirements
 |
| Work Health and Safety (WHS) |
| * evaluate safety practices and procedures, including the use of personal protective equipment
 | * describe workplace procedures, including Work Health and Safety (WHS)
 |
| * conduct risk assessment for using specific equipment, processes and materials
 |  |
| * follow Work Health and Safety (WHS) practices appropriate to tasks, and reflect on own contribution to the health and safety of self and others
 | * follow Work Health and Safety practices in the workplace
 |
| Problem Solving |
| * identify problems, analyse possible solutions and select the best option
 | * find solutions to problems
 |
| * interact with others in solving problems, proposing solutions and justifying ideas
 | * interact with others in problem solving
 |
| Industry literacy and numeracy |
| * apply processes for writing, editing and recording of procedures
 | * use literacy skills in writing in construction projects
 |
| * interpret and evaluate plans and specifications
 | * follow plans for construction projects
 |
| * apply formulas and numerical concepts in calculations and measurements
 | * use numeracy skills in construction projects
 |
| Behaviour and attitudes for the workplace |
| * apply interpersonal skills required to work with others and to understand, communicate with and effectively interact with a diverse range of people and cultures
 | * apply interpersonal skills to work productively with others
 |
| * demonstrate management skills, behaviours and attributes which contribute positively to work, learning and group activities
 | * use self-management skills to contribute positively to work, learning and group activities
 |
| * demonstrate organisation of self, materials and work to achieve quality products within deadlines
 |  |
| Reflection on own learning |
| * reflect on own learning and ways of improving, and apply feedback
 | * reflect on feedback and ways of improving
 |
| Communication |
| * communicate accurately with others in an appropriate format, both orally and in writing, using correct terminology
 | * use skills to communicate with others
 |
| * articulate ideas to seek assistance, clarify, offer suggestions or justify approaches
 | * use communication skills to seek advice, clarify instructions, and to explain ideas
 |

## 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.

For colleges wishing to deliver the VET qualification, there is flexibility for a teacher (provided the RTO has scope) to develop a program of learning aligned with the elements of the VET competencies and A content descriptions. The knowledge, skills and understandings within the competencies reflect the knowledge, skills and understandings of the BSSS course unit content descriptions.

Alternatively, a college may choose the A course without the VET qualification. In delivering the course teachers will write a program of learning aligned with students’ needs and interests, meeting the A content descriptions.

## Units of Competency

Competence must be demonstrated over time and in the full range of construction contexts. Teachers must use this unit document in conjunction with the Units of Competence from the **Certificate I in Construction** or **Certificate II in Construction Pathways**, which provides performance criteria, range statements and assessment contexts.

Teachers must address **all content** related to the competencies embedded in this unit. Reasonable adjustment may be made only to the mode of delivery, context and support provided according to individual student needs.

Competencies are attached to units and must be delivered in those units. However, ongoing assessment of competencies can occur while the student is enrolled as an ACT Senior Secondary student.

In order to be deemed competent to industry standard, assessment must provide authentic, valid, sufficient and current evidence as indicated in the relevant Training Package.

### Certificate I in Construction

The following **core competencies** must be delivered and assessed over the semester:

|  |  |
| --- | --- |
| Code | Competency Title |
| CPCCWHS1001 | Prepare to work safely in the construction industry |
| CPCCWHS2001\* | Apply WHS requirements, policies and procedures in the Construction Industry |

The following **elective competency** must also be delivered and assessed over the semester**:**

|  |  |
| --- | --- |
| Code | Competency Title |
| CPCCCM1014 | Conduct workplace communication  |

### Certificate II in Construction Pathways

The following **core** **competency** must be delivered and assessed over the semester:

|  |  |
| --- | --- |
| Code | Competency Title |
| CPCCWHS2001\* | Apply WHS requirements, policies and procedures in the Construction Industry |

The following **elective competencies MUST** also be delivered and assessed over the semester**:**

|  |  |
| --- | --- |
| Code | Competency Title |
| CPCCCM2006 | Apply basic levelling procedures (Group I) |
| CPCPCM2043 | Carry out WHS requirements (Group I) |

\*The competency CPCCWHS2001 is the prerequisite for subsequent competencies.

**All units of competency are optional for students undertaking an M course.**

It is essential to access www.training.gov.au for detailed up to date information relating to the above competencies.

## Assessment

Refer to pages 9-11.

# Construction Processes Value: 1.0

Construction Processes a Value 0.5

Construction Processes b Value 0.5

## Prerequisites

For students undertaking the Vocational Education and Training components of this course, there are pre-requisite competencies to be completed before VET competencies listed in this unit may be undertaken.

## Unit Description

This unit focuses on construction processes that combine construction skills and procedures to safely construct buildings and other structures to specifications using tools, digital tools, equipment and materials. Students interpret plans and specifications, using accurate measurements and calculations. They develop skills in the selection and use of materials, equipment and techniques to undertake construction projects. Students develop skills in collaboration, communication and reflection, as they work individually and with others to plan and complete projects.

## Specific Unit Goals

This unit should enable students to:

|  |  |
| --- | --- |
| A Course | M Course |
| * evaluate construction processes procedures to safely construct buildings and other projects
 | * describe construction processes and procedures to safely construct buildings and other projects
 |
| * apply construction skills in the selection and use of materials, equipment and techniques to undertake construction projects
 | * apply construction skills
 |
| * apply plans and specifications using accurate measurements and calculations
 | * follow plans
 |
| * demonstrate skills in collaboration and communication to work individually and with others to plan and complete projects
 | * use skills to work individually and with others to complete projects
 |

## Content Descriptions

All knowledge, understanding and skills below must be delivered:

| A Course | M Course |
| --- | --- |
| Industry practices, processes and procedures |
| * evaluate construction processes and procedures, and apply when interpreting plans and undertaking construction projects
 | * describe construction processes and procedures
 |
| * apply industry practices, processes and procedures to create a product to set specifications
 | * apply practices, processes and procedures to create a product to set specifications
 |
| * analyse the impact of ethical and sustainable construction choices and the challenges people face in accessing sustainable and ethically produced materials, for example, labour hours, worker wellbeing, workplace entitlements, workplace rights
 |  |
| * apply ethical, environmental and sustainable work practices
 | * follow ethical, environmental and sustainable work practices
 |
| * analyse factors that affect construction processes and procedures, for example, weather, human resources, site location
 | * describe factors that affect construction process and procedures, and give examples
 |
| Technical information |
| * select appropriate tools and equipment according to task requirements
 | * use appropriate tools and equipment
 |
| * apply construction skills to complete a project
 | * use construction skills to complete a project
 |
| * apply skills in measuring and marking out to suit job requirements
 | * use skills in measuring and marking out to suit job requirements
 |
| Work Health and Safety (WHS) |
| * evaluate safety practices and procedures, including the use of personal protective equipment
 | * describe workplace procedures, including Work Health and Safety (WHS)
 |
| * conduct risk assessment for using specific equipment, processes and materials
 |  |
| * follow Work Health and Safety (WHS) practices appropriate to tasks, and reflect on own contribution to the health and safety of self and others
 | * follow Work Health and Safety practices in the workplace
 |
| Problem Solving |
| * identify problems, analyse possible solutions and select the best option
 | * find solutions to problems
 |
| * interact with others in solving problems, proposing solutions and justifying ideas
 | * interact with others in problem solving
 |
| Industry literacy and numeracy |
| * apply processes for writing, editing and recording of procedures
 | * use literacy skills in writing in construction projects
 |
| * interpret and evaluate plans and specifications
 | * follow plans for construction projects
 |
| * apply formulas and numerical concepts in calculations and measurements
 | * use numeracy skills in construction projects
 |

| A Course | M Course |
| --- | --- |
| Behaviour and attitudes for the workplace |
| * apply interpersonal skills required to work with others and to understand, communicate with and effectively interact with a diverse range of people and cultures
 | * apply interpersonal skills to work productively with others
 |
| * demonstrate management skills, behaviours and attributes which contribute positively to work, learning and group activities
 | * use self-management skills to contribute positively to work, learning and group activities
 |
| * demonstrate organisation of self, materials and work to achieve quality products within deadlines
 |  |
| Reflection on own learning |
| * reflect on own learning and ways of improving, and apply feedback
 | * reflect on feedback and ways of improving
 |
| Communication |
| * communicate accurately with others in an appropriate format, both orally and in writing, using correct terminology
 | * use skills to communicate with others
 |
| * articulate ideas to seek assistance, clarify, offer suggestions or justify approaches
 | * use communication skills to seek advice, clarify instructions, and to explain ideas
 |

## 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.

For colleges wishing to deliver the VET qualification, there is flexibility for a teacher (provided the RTO has scope) to develop a program of learning aligned with the elements of the VET competencies and A content descriptions. The knowledge, skills and understandings within the competencies reflect the knowledge, skills and understandings of the BSSS course unit content descriptions.

Alternatively, a college may choose the A course without the VET qualification. In delivering the course teachers will write a program of learning aligned with students’ needs and interests, meeting the A content descriptions.

## Units of Competency

Competence must be demonstrated over time and in the full range of construction contexts. Teachers must use this unit document in conjunction with the Units of Competence from the **Certificate I in Construction** or **Certificate II in Construction Pathways**, which provides performance criteria, range statements and assessment contexts.

Teachers must address **all content** related to the competencies embedded in this unit. Reasonable adjustment may be made only to the mode of delivery, context and support provided according to individual student needs.

Competencies are attached to units and must be delivered in those units. However, ongoing assessment of competencies can occur while the student is enrolled as an ACT Senior Secondary student.

In order to be deemed competent to industry standard, assessment must provide authentic, valid, sufficient and current evidence as indicated in the relevant Training Package.

### Certificate I in Construction

If *Construction Processes* is the student’s first unit, they must complete prerequisite - **CPCCWHS2001 Apply WHS requirements, policies and procedures in the Construction Industry** before undertaking any other competency

The following **core** **competency** must be delivered and assessed over the semester:

|  |  |
| --- | --- |
| Code | Competency Title |
| CPCCVE1011\* | Undertake a basic construction project |

The following **elective competencies** must also be delivered and assessed over the semester**:**

|  |  |
| --- | --- |
| Code | Competency Title |
| CPCCOM1015  | Carry out measurements and calculations |
| CPCCCM2001\* | Read and interpret plans and specifications |

### Certificate II in Construction Pathways

If *Construction Processes* is the student’s first unit, they must complete prerequisite - **CPCCWHS2001 Apply WHS requirements, policies and procedures in the Construction Industry** before undertaking any other competency

The following **core** **competencies** must be delivered and assessed over the semester:

|  |  |
| --- | --- |
| **Code** | **Competency Title** |
| CPCCOM1015 | Carry out measurements and calculations |
| CPCCVE1011\* | Undertake a basic construction project |

**Choose at least one of the following elective** **competencies** tobe delivered and assessed over the semester**:**

|  |  |
| --- | --- |
| **Code** | **Competency Title** |
| MEM11011 | Undertake manual handling (Group I) |

**OR**

|  |  |
| --- | --- |
| **Code** | **Competency Title** |
| CPCCCA2002\* | Use carpentry tools and equipment (Group B)  |
| CPCCCA2011\* | Handle carpentry materials (Group B) |

**OR**

|  |  |
| --- | --- |
| **Code** | **Competency Title** |
| CPCCBL2001\* | Handle and prepare bricklaying and blocklaying materials (Group A) |
| CPCCBL2002\* | Use bricklaying and blocklaying tools and equipment (Group A) |

**OR**

|  |  |
| --- | --- |
| **Code** | **Competency Title** |
| CPCCSP2001\* | Handle Solid Plastering Materials (Group C) |

**OR**

|  |  |
| --- | --- |
| **Code** | **Competency Title** |
| CPCCCM2013\* | Undertake basic installation of wall tiles (Group D) |

**\* Prerequisite** - CPCCWHS2001 Apply WHS requirements, policies and procedures in the Construction Industry

**All units of competency are optional for students undertaking an M course.**

It is essential to access www.training.gov.au for detailed up to date information relating to the above competencies.

## Assessment

Refer to pages 9-11.

# Innovations in Construction Value: 1.0

Innovations in Construction a Value 0.5

Innovations in Construction b Value 0.5

## Prerequisites

For students undertaking the Vocational Education and Training components of this course, there are pre-requisite competencies to be completed before VET competencies listed in this unit may be undertaken.

## Unit Description

In this unit, students consider a range of emerging and future approaches to materials, techniques and processes in construction, locally, nationally and globally. They consider social, environmental and technological reasons for adopting innovative construction processes and materials. Students gain an understanding of a range of emerging and innovative methods to solve problems in these construction contexts. They examine the safety, sustainability and ethical considerations raised by emerging and future construction settings.

## Specific Unit Goals

This unit should enable students to:

|  |  |
| --- | --- |
| A Course | M Course |
| * evaluate a range of emerging and future approaches to materials, techniques and processes in construction, locally, nationally and globally
 | * describe old and new materials and techniques and processes in construction
 |
| * analyse social, environmental and technological reasons for adopting innovative construction processes and materials
 | * describe reasons for choosing innovative construction processes and materials
 |
| * apply a range of emerging and innovative methods to solve problems in these construction contexts
 | * use a range of emerging and innovative methods to solve problems
 |
| * evaluate the safety, sustainability and ethical considerations raised by emerging and future construction settings
 |  |

## Content Descriptions

All knowledge, understanding and skills below must be delivered:

| A Course | M Course |
| --- | --- |
| Industry practices, processes and procedures |
| * evaluate a range of emerging and future approaches to materials, techniques and processes in construction, locally, nationally and globally, for example, 3D Printing, prefabricated components and buildings, drones for site inspection
 | * describe old and new materials and techniques and processes in construction
 |
| * apply a range of emerging and innovative methods to solve problems in these construction contexts
 | * use a range of emerging and innovative methods to solve problems
 |
| * analyse the impact of ethical and sustainable construction choices and the challenges people face in accessing sustainable and ethically produced materials, for example, assessing new technologies and materials
 | * describe reasons for choosing innovative construction processes and materials
 |
| * apply ethical, environmental and sustainable work practices
 | * follow ethical, environmental and sustainable work practices
 |
| * analyse factors that lead to innovation in construction processes and procedures, for example, cost, aesthetics, availability of materials and tradespeople
 |  |
| * analyse how innovation and contemporary trends draw on the construction practices of a range of cultures and places, including construction in cultural traditions of a range of communities, including Aboriginal and Torres Strait Islander
 | * describe examples of technologies from a range of cultures that are being used and how they have improved construction
 |
| Technical information |
| * select appropriate tools and equipment according to task requirements
 | * use appropriate tools and equipment
 |
| * apply construction skills to complete a project
 | * use construction skills to complete a project
 |
| * apply skills in measuring and marking out to suit job requirements
 | * use skills in measuring and marking out to suit job requirements
 |
| Work Health and Safety (WHS) |
| * identify and apply safety practices and procedures, including the use of personal protective equipment
 | * describe workplace procedures, including Work Health and Safety (WHS)
 |
| * conduct risk assessment for using specific equipment, processes and materials
 |  |
| * follow Work Health and Safety (WHS) practices appropriate to tasks, and reflect on own contribution to the health and safety of self and others
 | * follow Work Health and Safety practices in the workplace
 |
| Problem Solving |
| * identify problems, analyse possible solutions and select the best option
 | * find solutions to problems
 |
| * interact with others in solving problems, proposing solutions and justifying ideas
 | * interact with others in problem solving
 |

|  |  |
| --- | --- |
| A Course | M Course |
| Industry literacy and numeracy |
| * apply processes for writing, editing and recording of procedures
 | * use literacy skills in writing in construction projects
 |
| * interpret and evaluate plans and specifications
 | * follow plans for construction projects
 |
| * apply formulas and numerical concepts in calculations and measurements
 | * use numeracy skills in construction projects
 |
| Behaviour and attitudes for 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 to work productively with others
 |
| * demonstrate management skills, behaviours and attributes which contribute positively to work, learning and group activities
 | * use self-management skills to contribute positively to work, learning and group activities
 |
| * demonstrate organisation of self, materials and work to achieve quality products within deadlines
 |  |
| Reflection on own learning |
| * reflect on own learning and ways of improving, and apply feedback
 | * reflect on feedback and ways of improving
 |
| Communication |
| * communicate accurately with others in an appropriate format, both orally and in writing, using correct terminology
 | * use skills to communicate with others
 |
| * articulate ideas to seek assistance, clarify, offer suggestions or justify approaches
 | * use communication skills to seek advice, clarify instructions, and to explain ideas
 |

## 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.

For colleges wishing to deliver the VET qualification, there is flexibility for a teacher (provided the RTO has scope) to develop a program of learning aligned with the elements of the VET competencies and A content descriptions. The knowledge, skills and understandings within the competencies reflect the knowledge, skills and understandings of the BSSS course unit content descriptions.

Alternatively, a college may choose the A course without the VET qualification. In delivering the course teachers will write a program of learning aligned with students’ needs and interests, meeting the A content descriptions.

## Units of Competency

Competence must be demonstrated over time and in the full range of construction contexts. Teachers must use this unit document in conjunction with the Units of Competence from the **Certificate I in Construction** or **Certificate II in Construction Pathways**, which provides performance criteria, range statements and assessment contexts.

Teachers must address **all content** related to the competencies embedded in this unit. Reasonable adjustment may be made only to the mode of delivery, context and support provided according to individual student needs.

Competencies are attached to units and must be delivered in those units. However, ongoing assessment of competencies can occur while the student is enrolled as an ACT Senior Secondary student.

In order to be deemed competent to industry standard, assessment must provide authentic, valid, sufficient and current evidence as indicated in the relevant Training Package.

### Certificate I in Construction

If *Innovations in Construction* is the student’s first unit, they must complete prerequisite - **CPCCWHS2001 Apply WHS requirements, policies and procedures in the Construction Industry** before undertaking any other competency.

The following **core** **competencies** must be delivered and assessed over the semester:

|  |  |
| --- | --- |
| Code | Competency Title |
| CPCCCM2004\* | Handle construction materials |
| CPCCCM2005\* | Use construction tools and equipment |
| CPCCOM1012  | Work effectively and sustainably in the construction industry |

Certificate II in **Construction Pathways**

If *Innovations in Construction* is the student’s first unit, they must complete prerequisite - **CPCCWHS2001 Apply WHS requirements, policies and procedures in the Construction Industry** before undertaking any other competency

The following **core** **competencies** must be delivered and assessed over the semester:

|  |  |
| --- | --- |
| **Code** | **Competency Title** |
| CPCCOM1012 | Work effectively and sustainably in the construction industry |

**Choose at least ONE of the following elective competencies** to be delivered and assessed over the semester**:**

|  |  |
| --- | --- |
| **Code** | **Competency Title** |
| CPCCCM2004\* | Handle construction materials (Group I) |
| MEM11011 | Undertake manual handling (Group I) |

**OR**

|  |  |
| --- | --- |
| **Code** | **Competency Title** |
| CPCCCA2002\* | Use carpentry tools and equipment (Group B)  |
| CPCCCA2011\* | Handle carpentry materials (Group B) |

**OR**

|  |  |
| --- | --- |
| **Code** | **Competency Title** |
| CPCCBL2001\* | Handle and prepare bricklaying and blocklaying materials (Group A) |
| CPCCBL2002\* | Use bricklaying and blocklaying tools and equipment (Group A) |

**OR**

|  |  |
| --- | --- |
| **Code** | **Competency Title** |
| CPCCSP2001\* | Handle Solid Plastering Materials (Group C) |

**OR**

|  |  |
| --- | --- |
| **Code** | **Competency Title** |
| CPCCCM2013\* | Undertake basic installation of wall tiles (Group D) |

\* **Prerequisite** - CPCCWHS2001 Apply WHS requirements, policies and procedures in the Construction Industry

**All units of competency are optional for students undertaking an M course.**

It is essential to access www.training.gov.au for detailed up to date information relating to the above competencies.

## Assessment

Refer to pages 9-11.

# Construction Project Value: 1.0

Construction Project a Value 0.5

Construction Project b Value 0.5

## Prerequisites

For students undertaking the Vocational Education and Training components of this course, there are pre-requisite competencies to be completed before VET competencies listed in this unit may be undertaken.

## Unit Description

Students demonstrate and document industry practices and construction processes to create projects to specifications. Students apply a range of cognitive, communication, collaboration, technical and practical skills in their project. They apply knowledge, skills and understanding of industry practices and construction processes to solve problems and find solutions in their construction projects. Students are given specifications, including drawings and technical information, to complete projects.

## Specific Unit Goals

This unit should enable students to:

|  |  |
| --- | --- |
| A Course | M Course |
| * demonstrate and document industry practices and construction processes to create projects to specifications
 | * follow industry practices and construction processes to create projects to specifications
 |
| * apply a range of cognitive, communication, collaboration, technical and practical skills in projects
 | * apply interpersonal skills to work productively with others
 |
| * apply knowledge understanding and skills in industry practices and construction processes and skills to solve problems and find solutions
 | * use construction skills and knowledge in projects
 |
| * apply specifications to complete projects, including drawings and technical information
 | * follow specifications to complete projects
 |

## Content Descriptions

All knowledge, understanding and skills below must be delivered:

| A Course | M Course |
| --- | --- |
| Industry practices, processes and procedures |
| * evaluate industry practices and construction processes and procedures appropriate to the project, for example, traditional or prefabricated components, justification of selection of materials and techniques
 | * follow industry practices and construction processes to create projects to specifications
 |
| * apply a range of cognitive, communication, collaboration, technical and physical skills in projects
 | * apply interpersonal skills to work productively with others
 |
| * analyse the impact of ethical and sustainable construction choices appropriate to the project
 |  |
| * apply ethical, environmental and sustainable work practices
 | * follow ethical, environmental and sustainable work practices
 |
| * analyse factors that affect project completion and success, for example, planning, organisation, ongoing evaluation, communication and collaboration
 |  |
| Technical information |
| * select appropriate tools and equipment according to task requirements
 | * use appropriate tools and equipment
 |
| * apply construction skills to complete a project
 | * use construction skills to complete a project
 |
| * apply skills in measuring and marking out to suit job requirements
 | * use skills in measuring and marking out to suit job requirements
 |
| Work Health and Safety (WHS) |
| * identify and apply safety practices and procedures, including the use of personal protective equipment
 | * describe workplace procedures, including Work Health and Safety (WHS)
 |
| * conduct risk assessment for using specific equipment, processes and materials
 |  |
| * follow Work Health and Safety (WHS) practices appropriate to tasks, and reflect on own contribution to the health and safety of self and others
 | * follow Work Health and Safety practices in the workplace
 |
| Problem Solving |
| * identify problems, analyse different possible solutions and select the best option
 | * find solutions to problems
 |
| * interact with others in solving problems, proposing solutions and justifying ideas
 | * interact with others in problem solving
 |
| Industry literacy and numeracy |
| * apply processes for writing, editing and recording of procedures
 | * use literacy skills in writing in construction projects
 |
| * interpret and evaluate plans and specifications
 | * follow plans for construction projects
 |
| * apply formulas and numerical concepts in calculations and measurements
 | * use numeracy skills in construction projects
 |

| A Course | M Course |
| --- | --- |
| Behaviour and attitudes for 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 to work productively with others
 |
| * demonstrate self-management skills, behaviours and attributes which contribute positively to work, learning and group activities
 | * use self-management skills to contribute positively to work, learning and group activities
 |
| * demonstrate organisation of self, materials and work to achieve quality products within deadlines
 |  |
| Reflection on own learning |
| * reflect on own learning and ways of improving, and apply feedback
 | * reflect on feedback and ways of improving
 |
| Communication |
| * communicate accurately with others in an appropriate format, both orally and in writing, using correct terminology
 | * use skills to communicate with others
 |
| * articulate ideas to seek assistance, clarify, offer suggestions or justify approaches
 | * use communication skills to seek advice, clarify instructions, and to explain ideas
 |

## 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 learning is 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.

For colleges wishing to deliver the VET qualification, there is flexibility for a teacher (provided the RTO has scope) to develop a program of learning aligned with the elements of the VET competencies and A content descriptions. The knowledge, skills and understandings within the competencies reflect the knowledge, skills and understandings of the BSSS course unit content descriptions.

Alternatively, a college may choose the A course without the VET qualification. In delivering the course teachers will write a program of learning aligned with students’ needs and interests, meeting the A content descriptions.

## Units of Competency

Competence must be demonstrated over time and in the full range of construction contexts. Teachers must use this unit document in conjunction with the Units of Competence from the **Certificate I in Construction** or **Certificate II in Construction Pathways**, which provides performance criteria, range statements and assessment contexts.

Teachers must address **all content** related to the competencies embedded in this unit. Reasonable adjustment may be made only to the mode of delivery, context and support provided according to individual student needs.

Competencies are attached to units and must be delivered in those units. However, ongoing assessment of competencies can occur while the student is enrolled as an ACT Senior Secondary student.

In order to be deemed competent to industry standard, assessment must provide authentic, valid, sufficient and current evidence as indicated in the relevant Training Package.

### Certificate I in Construction

If *Construction Project* is the student’s first unit, they must complete prerequisite -
**CPCCWHS2001 Apply WHS requirements, policies and procedures in the Construction Industry** before undertaking any other competency.

The following **core competencies** must be delivered and assessed over the semester:

|  |  |
| --- | --- |
| Code | Competency Title |
| CPCCCM1011  | Undertake basic estimation and costing |
| CPCCOM1013 | Plan and organise work |

### Certificate II in Construction Pathways

If *Construction Project* is the student’s first unit, they must complete prerequisite -
**CPCCWHS2001 Apply WHS requirements, policies and procedures in the Construction Industry** before undertaking any other competency.

The following **core** **competency** must be delivered and assessed over the semester:

|  |  |
| --- | --- |
| **Code** | **Competency Title** |
| CPCCOM1013 | Plan and organise work |

**Choose at least one of the following electives** tobe delivered and assessed over the semester**:**

|  |  |
| --- | --- |
| **Code** | **Competency Title** |
| CPCCCM1011 | Undertake basic estimation and costing (Group I) |
| MEM11011 | Undertake manual handling (Group I) |

**OR**

|  |  |
| --- | --- |
| **Code** | **Competency Title** |
| CPCCCA2002\* | Use carpentry tools and equipment (Group B)  |
| CPCCCA2011\* | Handle carpentry materials (Group B) |

**OR**

|  |  |
| --- | --- |
| **Code** | **Competency Title** |
| CPCCBL2001\* | Handle and prepare bricklaying and blocklaying materials (Group A) |
| CPCCBL2002\* | Use bricklaying and blocklaying tools and equipment (Group A) |

**OR**

|  |  |
| --- | --- |
| **Code** | **Competency Title** |
| CPCCSP2001\* | Handle Solid Plastering Materials (Group C) |

**OR**

|  |  |
| --- | --- |
| **Code** | **Competency Title** |
| CPCCCM2013\* | Undertake basic installation of wall tiles (Group D) |

\* **Prerequisite** - CPCCWHS2001 Apply WHS requirements, policies and procedures in the Construction Industry

**All units of competency are optional for students undertaking an M course.**

It is essential to access www.training.gov.au for detailed up to date information relating to the above competencies.

## Assessment

Refer to pages 9-11.

# 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.

**NOTE:** **Training Package requirements for students seeking VET qualifications through the Construction, Plumbing and Services Training Package (CPC) must still be met.**

## Duplication of content

Students must not duplicate topics, case studies or issues studied in this course.

## Specific Unit Goals

This unit should enable students to:

|  |  |
| --- | --- |
| A Course | M Course |
| * evaluate aspects of construction and apply practices, processes relevant to the chosen topic
 | * describe aspects of construction and apply practices, processes relevant to the chosen topic
 |
| * demonstrate and document industry practices and construction processes relevant to the chosen topic of study to create projects to specifications
 | * apply industry practices and construction processes relevant to the chosen topic of study to create projects to specifications
 |
| * analyse the impact of ethical and sustainable construction choices in the chosen area of study
 | * describe ethical and sustainable construction choices in the chosen area of study
 |
| * demonstrate skills in communication and reflection to work individually to plan, follow set timelines, and complete projects
 | * use skills in communication and reflection to work individually to plan, follow set timelines, and complete projects
 |

## Content Descriptions

All knowledge, understanding and skills below must be delivered:

| A Course | M Course |
| --- | --- |
| Industry practices, processes and procedures |
| * evaluate industry practices, processes and procedures and apply to the chosen topic
 | * describe industry practices, processes and procedures and apply to the chosen topic
 |
| * demonstrate and document industry practices and construction processes and procedures relevant to the chosen topic of study to create projects to specifications
 | * apply industry practices and construction processes relevant to the chosen topic of study to create projects to specifications
 |
| * analyse the impact of ethical and sustainable construction choices in the chosen topic of study
 | * describe ethical and sustainable construction choices in the chosen area of study
 |
| * apply ethical, environmental and sustainable work practices
 | * follow ethical, environmental and sustainable work practices
 |
| * analyse factors that affect projects completion and success in the chosen area of study
 |  |
| Technical Information |
| * select appropriate tools and equipment according to task requirements
 | * use appropriate tools and equipment
 |
| * apply construction skills to complete a project
 | * use construction skills to complete a project
 |
| * apply skills in measuring and marking out to suit job requirements
 | * use skills in measuring and marking out to suit job requirements
 |
| Work Health and Safety (WHS) |
| * identify and apply safety practices and procedures, including the use of personal protective equipment
 | * describe workplace procedures, including Work Health and Safety (WHS)
 |
| * conduct risk assessment for using specific equipment, processes and materials
 |  |
| * follow Work Health and Safety (WHS) practices appropriate to tasks, and reflect on own contribution to the health and safety of self and others
 | * follow Work Health and Safety practices in the workplace
 |
| Problem Solving |
| * identify problems, analyse different possible solutions and select the best option
 | * find solutions to problems
 |
| * interact with others in solving problems, proposing solutions and justifying ideas
 | * interact with others in problem solving
 |

| A Course | M Course |
| --- | --- |
| Industry literacy and numeracy |
| * apply processes for writing, editing and recording of procedures
 | * use literacy skills in writing in construction projects
 |
| * interpret and evaluate plans and specifications
 | * follow plans for construction projects
 |
| * apply formulas and numerical concepts in calculations and measurements
 | * use numeracy skills in construction projects
 |
| Behaviour and attitudes for 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 to work productively with others
 |
| * demonstrate self-management skills, behaviours and attributes which contribute positively to work, learning and group activities
 | * use self-management skills to contribute positively to work, learning and group activities
 |
| * demonstrate organisation of self, materials and work to achieve quality products within deadlines
 |  |
| Reflection on own learning |
| * reflect on own learning and ways of improving, and apply feedback
 | * reflect on feedback and ways of improving
 |
| Communication |
| * communicate accurately with others in an appropriate format, both orally and in writing, using correct terminology
 | * use skills to communicate with others
 |
| * articulate ideas to seek assistance, clarify, offer suggestions or justify approaches
 | * use communication skills to seek advice, clarify instructions, and to explain ideas
 |

## 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.

For colleges wishing to deliver the VET qualification, there is flexibility for a teacher (provided the RTO has scope) to develop a program of learning aligned with the elements of the VET competencies and A content descriptions. The knowledge, skills and understandings within the competencies reflect the knowledge, skills and understandings of the BSSS course unit content descriptions.

Alternatively, a college may choose the A course without the VET qualification. In delivering the course teachers will write a program of learning aligned with students’ needs and interests, meeting the A content descriptions.

## Assessment

Refer to pages 9-11.

# 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. While it is acceptable for a student to be given the opportunity to demonstrate competence in VET qualifications over more than one semester, substantial overlap of content is not permitted. Students will only be given credit for covering the content once.

### Relationship to other courses

This course shares common competencies with other BSSS accredited courses:

* Construction Pathways C

### New and/or updated Training Package

Training Packages are regularly updated through the mandatory continuous improvement cycle. This may result in updating of qualifications and a change in the composition of competencies within a qualification. Where qualifications from the new Training Package have been deemed to be equivalent, students may continue their study without interruption. Students will be granted direct credit for those competencies already achieved.

Where there are new competencies or updated competencies with significant change and these are deemed not equivalent, students may apply for Recognition of Prior Learning (RPL) for all or part of competencies.

Granting of RPL for competencies does not equate to points towards the Senior Secondary Certificate.

## Recognition of Prior Learning (RPL)

RPL is an assessment process that assesses an individual’s formal, non-formal and informal learning to determine the extent to which that individual has achieved the required learning outcomes, competence outcomes, or standards for entry to, and/or partial or total completion of, a VET qualification.

Recognition of competence through the RPL process should be granted to students through gathering supplementary evidence against elements, skills and knowledge from the Training Package as well as through established assessment criteria. RPL may be granted for individual Units of Competence where the evidence is sufficient to do so.

A student having been granted RPL for one or more Units of Competence will still be required to fulfill the time based component of units that contributes to points and A to E grading for the Senior Secondary Certificate.

To cater for this requirement, curriculum designers should design the course to be flexible enough to accommodate students who have gained some competencies through RPL.

Students may demonstrate the achievement of learning outcomes through challenge testing, interview or other means that the teacher deems reasonable. Full records of the RPL process and results must be stored by the college for perusal by the National VET Regulator upon request and should confirmation be required for VET certification. The college must be informed of the application of RPL before the start of the unit that includes the competency. For RPL to be awarded, the Units of Competency must be demonstrated in the Industry context.

## 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.

## Reasonable Adjustment

Units in this course are suitable for students requiring reasonable adjustment for delivery and assessment. However, standards of competency (outcomes) as dictated by National Training Packages **cannot be modified**. Students must demonstrate competence to the level required by industry in order to gain a Statement of Attainment or Vocational Certificate.

## 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 |
| Scott Clegg | St Mary MacKillop College |
| Kathryn Shaw | UCSSC Lake Ginninderra |
| Michael Sullivan | Melba Copland Secondary School |
| Vince Ball | ACT Regional Building and Construction Industry Training Council |

# 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 – Implementation of VET Qualifications

## VET Qualifications

### Construction Induction Training

The [*Work Health and Safety Regulation 2011*](http://www.legislation.act.gov.au/sl/2011-36/default.asp) requires that a person conducting a business or undertaking must ensure workers have successfully completed [general construction induction training](https://www.accesscanberra.act.gov.au/s/article/general-construction-induction-card-white-card-tab-construction-induction-training) before starting construction work. This is often called the ‘White Card’.

## General Construction Induction Training is a nationally accredited competency unit known as: *“Prepare to work safely in the construction industry” (CPCCWHS1001).*

The competency unit is a training program that provides workers in the construction industry with an awareness and understanding of:

* their rights and responsibilities under Work Health and Safety law
* common hazards and risks in the construction industry
* basic risk management principles
* the standard of behaviour expected of workers on construction sites.

The competency unit is approximately six hours in duration and can only be delivered face to face by a registered training organisation registered with the Australian Skills Quality Authority having the scope to train the specified competency unit "*Prepare to work safely in the construction industry*" in the ACT.

This training must be completed through a registered training organisation and completed within 60 days prior to applying for a General Construction Induction Card.

After successfully completing the General Construction Induction Training, the registered training organisation will issue the person with certification. The person must then apply to Access Canberra for a General Construction Induction Card within 60 days of the certification being issued. If an applicant is unable to apply to Access Canberra for a General Construction Induction Card within the 60 days allowed, they must provide a written declaration from the trainer that the applicant has successfully completed general construction induction training.

Construction workers in the ACT require a General Construction Induction Card (White Card) when working on a construction site.

The [*Work Health and Safety Regulation 2011*](http://www.legislation.act.gov.au/sl/2011-36/default.asp) requires that a person conducting a business or undertaking must ensure workers have successfully completed [general construction induction training](https://www.accesscanberra.act.gov.au/s/article/general-construction-induction-card-white-card-tab-construction-induction-training) before starting construction work. Each construction worker must hold:

* a general construction induction training card
* a general construction induction training certification that has been issued within the preceding 60 days if the worker has applied for but not yet been issued with a general construction induction training card.

### General Construction Induction Card (White Card)

Construction workers in the ACT require a General Construction Induction Card (White Card) when working on a construction site.

The unit CPCCWHS1001 *Prepare to work safely in the construction industry* is designed to meet WHS regulatory authority requirements for WHS induction and must be achieved before access to any building and construction work site.

This is a core competency for Certificate I Construction, however, it must not be delivered by colleges. The unit of competency also relates directly to the competency CPCCWHS2001 *Apply WHS requirements, policies and procedures in the Construction Industry* in Certificate II Construction Pathways.

**CPC10120 Certificate I in Construction**

**For CPC10120 Certificate I in Construction** the following packaging rules apply:

**Total number of units** = 11

**8 core units** plus

**3 elective units**

The elective units consist of:

* the 3 elective units listed below

This course, with listed competencies, meets these requirements at time of development.

Colleges are advised to check current training package requirements before delivery.

If the full requirements of a Certificate are not met, students will be awarded a Statement of Attainment listing Units of Competence achieved according to Standard 3 of the Standards for Registered Training Organisations (RTOs) 2015.

### Competencies for CPC10120 Certificate I in Construction

|  |  |  |
| --- | --- | --- |
| Code | Competency Title | Core/Elective |
| CPCCOM1012 | Work effectively and sustainably in the construction industry | Core |
| CPCCCM2004\* | Handle construction materials | Core |
| CPCCCM2005\* | Use construction tools and equipment | Core |
| CPCCCM1011 |  Undertake basic estimation and costing | Core |
| CPCCOM1013 | Plan and organise work | Core |
| CPCCVE1011\* | Undertake a basic construction project | Core |
| CPCCWHS1001 | Prepare to work safely in the construction industry | Core |
| CPCCWHS2001 | Apply WHS requirements, policies and procedures in the Construction Industry | Core |
| CPCCCM1014 | Conduct workplace communication  | Elective |
| CPCCOM1015 | Carry out measurements and calculations  | Elective |
| CPCCCM2001\* | Read and interpret plans and specifications  | Elective |

An asterisk (\*) against a unit code below indicates that there is a prerequisite requirement that must be met.

**CPC20220 Certificate II in Construction Pathways**

**For CPC20220 Certificate II in Construction Pathways** the following packaging rules apply:

**Total number of units** = 10

**5 core units** plus

**5 elective units**

Elective units are to be chosen from at least two but no more than four of groups A to I.

* One elective may be chosen from any current training package or accredited course as long as it contributes to a valid industry-supported vocational outcome, maintains the AQF level of this qualification, and does not replicate the content of another unit used to achieve this qualification

This course, with listed competencies, meets these requirements at time of development.

Colleges are advised to check current training package requirements before delivery.

If the full requirements of a Certificate are not met, students will be awarded a Statement of Attainment listing Units of Competence achieved according to Standard 3 of the Standards for Registered Training Organisations (RTOs) 2015.

### Competencies for CPC20220 Certificate II in Construction Pathways

|  |  |  |
| --- | --- | --- |
| Code | Competency Title | Core/Elective |
| CPCCOM1012 | Work effectively and sustainably in the construction industry | Core |
| CPCCOM1013 | Plan and organise work | Core |
| CPCCOM1015 | Carry out measurements and calculations | Core |
| CPCCVE1011\* | Undertake a basic construction project | Core |
| CPCCWHS2001 | Apply WHS requirements, policies and procedures in the Construction Industry | Core |
| Group A |
| CPCCBL2001\* | Handle and prepare bricklaying and blocklaying materials  | Elective |
| CPCCBL2002\* | Use bricklaying and blocklaying tools and equipment  | Elective |
| Group B |
| CPCCCA2002\* | Use carpentry tools and equipment  | Elective |
| CPCCCA2011\* | Handle carpentry materials | Elective |
| Group C |
| CPCCSP2001\* | Handle Solid Plastering Materials  | Elective |
| Group D |
| CPCCCM2013\* | Undertake basic installation of wall tiles  | Elective |
| Group I |
| CPCCCM2004\* | Handle construction materials | Elective |
| MEM11011 | Undertake manual handling | Elective |
| CPCCM1011 | Undertake basic estimation and costing | Elective |
| CPCCCM2006 | Apply basic levelling procedures  | Elective |
| CPCPCM2043 | Carry out WHS requirements | Elective |

An asterisk (\*) against a unit code below indicates that there is a prerequisite requirement that must be met.

If the full requirements of a Certificate are not met, students will be awarded a Statement of Attainment listing Units of Competence achieved according to Standard 3 of the Standards for Registered Training Organisations (RTOs) 2015.

## VET Competencies Mapped to Course Units

Grouping of competencies within units may not be changed by individual colleges.

Competencies designated at the Certificate III level can only be delivered by schools that have scope to do so. Colleges must apply to have additional competencies at a higher level listed on their scope of registration.

**Note**: When selecting units, colleges must ensure that they follow packaging rules and meet the requirements for the Certificate level. In the event that full Certificate requirements are not met a Statement of Attainment will be issued.

All core competencies must be delivered in the relevant unit. The elective competencies delivered are dependent on the elective units chosen.

## VET Implementation Summary

### CPC10120 Certificate I in Construction

|  |  |
| --- | --- |
| BSSS Unit Title | Competencies |
| Industry Practices | Core code | Core title |
| CPCCWHS1001 | Prepare to work safely in the construction industry  |
| CPCCWHS2001 | Apply WHS requirements, policies and procedures in the Construction Industry |
| Elective code | Elective title |
| CPCCCM1014 | Conduct workplace communication |
| **Construction Processes**  | Core code | Core title |
| CPCCVE1011\* | Undertake a basic construction project |
| Elective code | Elective title |
| CPCCOM1015 | Carry out measurements and calculations |
| CPCCCM2001\* | Read and interpret plans and specifications |
| **Innovations in Construction** | Core code | Core title |
| CPCCOM1012 | Work effectively and sustainably in the construction industry |
| CPCCCM2005\* | Use construction tools and equipment |
| CPCCCM2004\* | Handle construction materials |
| **Construction Project** | Core code | Core title |
| CPCCCM1011  | Undertake basic estimation and costing |
| CPCCOM1013 | Plan and organise work |

### CPC20220 Certificate II in Construction Pathways

|  |  |
| --- | --- |
| BSSS Unit Title | Competencies |
| Industry Practices | Core code | Core title |
| CPCCWHS2001 | Apply WHS requirements, policies and procedures in the Construction Industry |
| Elective code | Elective title |
| CPCCCM2006 | Apply basic levelling procedures (Group I) |
| CPCPCM2043 | Carry out WHS requirements (Group I) |
| **Construction Processes**  | Core code | Core title |
| CPCCOM1015 | Carry out measurements and calculations  |
| CPCCVE1011\* | Undertake a basic construction project |
| Elective code | Elective title |
| CPCCBL2001\* | Handle and prepare bricklaying and blocklaying materials (Group A) |
| CPCCBL2002\* | Use bricklaying and blocklaying tools and equipment (Group A) |
| or |  |
| CPCCCA2002\* | Use carpentry tools and equipment (Group B)  |
| CPCCCA2011\* | Handle carpentry materials (Group B)  |
| or |  |
| CPCCSP2001\* | Handle Solid Plastering Materials (Group C) |
| CPCCCM2013\* | Undertake basic installation of wall tiles (Group D) |
| or |  |
| CPCCCM2004\* | Handle construction materials (Group I) |
| MEM11011 | Undertake manual handling (Group I) |
| **Innovations in Construction** | Core code | Core title |
| CPCCOM1012 | Work effectively and sustainably in the construction industry |
| Elective code | Elective title |
| CPCCBL2001\* | Handle and prepare bricklaying and blocklaying materials (Group A) |
| CPCCBL2002\* | Use bricklaying and blocklaying tools and equipment (Group A) |
| or |  |
| CPCCCA2002\* | Use carpentry tools and equipment (Group B) |
| CPCCCA2011\* | Handle carpentry materials (Group B)  |
| or |  |
| CPCCSP2001\* | Handle Solid Plastering Materials (Group C) |
| CPCCCM2013\* | Undertake basic installation of wall tiles (Group D) |
| or |  |
| CPCCCM2004\* | Handle construction materials (Group I) |
| MEM11011 | Undertake manual handling (Group I) |
| **Construction Project** | Core code | Core title |
| CPCCOM1013 | Plan and organise work |
| Elective code | Elective title |
| CPCCBL2001\* | Handle and prepare bricklaying and blocklaying materials (Group A) |
| CPCCBL2002\* | Use bricklaying and blocklaying tools and equipment (Group A) |
| or |  |
| CPCCCA2002\* | Use carpentry tools and equipment (Group B) (With external provider) |
| CPCCCA2011\* | Handle carpentry materials (Group B)  |
| or |  |
| CPCCSP2001\* | Handle Solid Plastering Materials (Group C) |
| CPCCCM2013\* | Undertake basic installation of wall tiles (Group D) |
| or |  |
| CPCCCM1011 | Undertake basic estimation and costing (Group I) |
| CPCCCM2004\* | Handle construction materials (Group I) |
| MEM11011 | Undertake manual handling (Group I) |

## An asterisk (\*) against a unit code below indicates that there is a prerequisite requirement that must be met.

## Competency Based Assessment

The assessment of competence must focus on the competency standards and the associated elements as identified in the Training Package. Assessors must develop assessment strategies that enable them to obtain sufficient evidence to deem students competent. This evidence must be gathered over a number of assessment items. Competence to industry standard requires a student to be able to demonstrate the relevant skills and knowledge in a variety of industry contexts on repeated occasions. Assessment must be designed to collect evidence against the four dimensions of competency.

* **Task skills** – undertaking specific workplace task(s)
* **Task management skills** – managing a number of different tasks to complete a whole work activity
* **Contingency management skills** – responding to problems and irregularities when undertaking a work activity, such as: breakdowns, changes in routine, unexpected or atypical results, difficult or dissatisfied clients
* **Job/role environment skills** – dealing with the responsibilities and expectations of the work environment when undertaking a work activity, such as: working with others, interacting with clients and suppliers, complying with standard operating procedures or observing enterprise policy and procedures.

The most appropriate method of assessing workplace competence is on-the-job in an industry setting under normal working conditions. This includes using industry standard tools, equipment and job aids and working with trade colleagues. Where this is not available, a simulated workplace environment that mirrors the industry setting will be used. The following general principles and strategies apply:

* assessment is competency based
* assessment is criterion-referenced.

Quality outcomes can only be assured through the assessment process. The strategy for assessment is based on an integration of the workplace competencies for the learning modules into a holistic activity. The awarding of vocational qualifications is dependent on successful demonstration of the learning outcomes within the modules through the integrated competency assessment that meets the Training Package rules and requirements.

The integrated assessment activity will require the learner to:

* use the appropriate key competencies
* apply the skills and knowledge which underpin the process required to demonstrate competency in the workplace
* integrate the most critical aspects of the competencies for which workplace competency must be demonstrated
* provide evidence for grades and or scores for the Board course component of the assessment process.

## Standards for Registered Training Organisations 2015

These Standards form part of the VET Quality Framework, a system which ensures the integrity of nationally recognised qualifications.

RTOs are required to comply with these Standards and with the:

* National Vocational Education and Training Regulator Act 2011
* VET Quality Framework.

The purpose of these Standards is to:

* set out the requirements that an organisation must meet in order to be an RTO
* ensure that training products delivered by RTOs meet the requirements of training packages or VET accredited courses, and have integrity for employment and further study
* ensure RTOs operate ethically with due consideration of learners’ and enterprises’ needs.

To access the standards, refer to:

<https://www.legislation.gov.au/Details/F2017C00663>

To access The Users’ Guide to the Standards refer to:
<https://www.asqa.gov.au/standards>

## Guidelines for Colleges Seeking Scope

Colleges must apply to have their scope of registration extended for each new qualification they seek to issue. There is no system-level process. Each college must demonstrate capacity to fulfil the requirements outlined in the Training Package. Applications for extension of scope are lodged through the Australian Skills Quality Authority (ASQA).

## Assessment of Certificate III Units of Competence

Colleges delivering any Units of Competence from Certificate III (apart from those competencies allowed in training package rules) will need to have them listed on their scope **or** negotiate a Third Party Agreement with a scoped training partner. This document must be kept on record by the college as the RTO.

# Appendix G – 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: | Construction Pathways |
| **Classification/s:** | **A T M** | or | **A/V T/V M/V** |
| Accredited from: | 2022 |
| Framework: | Industry and Services 2018 |