Companion Volume Implementation Guide Part 1

AHC Agriculture, Horticulture and Conservation and Land Management Training Package Release 12

January 2027



Skills Insight

Contents

Implementation Guide modification history 9

Introduction 12

About this Guide 12

Structure of this Guide 12

Overview 13

About training packages 13

Training package products 13

Endorsed products 14

Non-endorsed products 14

Training package development 15

Key stakeholder roles 15

The development process 16

Contents of this training package 18

Pre-requisite requirements 18

Imported units 18

Mapping information 20

Registered Training Organisation (RTO) use 20

Employer use 20

How equivalence is determined 21

Units of competency 21

Qualifications 22

Superseded and deleted training package products 22

Coding conventions 23

Training package codes 23

Qualification codes 23

Unit of competency codes 24

Key work and training requirements in the industry 25

Sector description 25

Businesses 27

Implementation information 32

Industry sectors and occupational outcomes of qualifications 32

Sector overview 33

Agriculture and agribusiness 33

Agricultural chemicals 33
Animal reproduction 33
Arboriculture 33
Beekeeping 34
Broadacre cropping 34
Carbon farming 34
Community coordination and facilitation 34
Composting 34
Conservation coordination and facilitation 35
Cultural Sites Work 35
Dairy 35
Ecological restoration 35
Environmental sustainability 35
Explosives 36
Fauna 36
Feedlot 36
Fire 37
Floriculture 37
Green infrastructure 38
Irrigation 38
Lands, parks and wildlife 38
Landscape construction and design 38
Livestock 38
Livestock branding and marking 41
Marine 41
Medicinal cannabis 41
On Country Management 41
Organic production 41
Parks and gardens 42
Permaculture 42
Pest management 42
Pork 42
Poultry 42
Primary Industries and Rural Operations 43
Production horticulture 43
Production nursery 43
Protected horticulture 44
Retail nursery 44
Rural merchandising 44
Seed processing 44
Seed testing 44

Sports turf management 44
Viticulture 45
Water trading 45
Wool harvesting (including shearing, crutching, handling and wool classing) 45
Occupational outcomes of qualifications 45
Occupational outcomes for industry sectors 49
Agribusiness 49
Agronomy 49
Animal and other livestock production 50
Arboriculture 51
Conservation and ecosystem management 51
Dairy 52
Gardening 52
Grain production 53
Horticulture 54
Irrigation 54
Medicinal cannabis 54
On Country Management 54
Permaculture 55
Production horticulture 57
Rural and general operations 59
Shearing/Wool harvesting and handling 60
Key features of the training package and the industry that will impact on the selection of training pathways 61
AQF Qualifications Pathways Policy requirements 61
Multiple pathways to gain qualifications 61
Training and assessment pathway 61
RPL pathway 62
Australian apprenticeships/traineeships 62
VET for secondary students 62
Pathways charts – progression between qualifications 64
Entry requirements for qualifications 76
Entry requirements for the Certificate III in Shearing 79
Entry requirements for the post-trade qualifications in Arboriculture 79
Diploma of Arboriculture 79
Advanced Diploma of Arboriculture and Graduate Diploma of Arboriculture 80
Entry requirements for the Diploma of Sports Turf Management 80
Entry requirements for the Certificate IV in Nursery Operations 81
Entry requirements for the Diploma of Horticulture Management 81
Entry requirements for the Diploma of Nursery Management 82

Selecting electives to enable different occupational outcomes 82
Choosing electives 82
Mandatory electives 82
Mandatory requirements for specialisations 84
Choosing electives for specialisations 84
Training package delivery and assessment 105
Amount of training and volume of learning 106
Access and equity considerations 107
Reasonable adjustment for learners with disabilities 107
Foundation skills in units of competency 109
Key legislative implications for implementation 111
Health and safety requirements 111
State/Territory regulators 111
National organisations 112
Other legislative requirements 113
Industry regulations and standards 113
Arboriculture 113
Permaculture 114
Environmental regulations 114
Food regulations 115
Landscape construction and design, including green infrastructure 115
Grape growing legislation 116
Animal reproduction 116
Livestock management legislation 116
Australian ruminant feed ban 117
Biosecurity legislation 117
Live-animal export legislation 118
Conservation legislation 118
Legislation relevant to agricultural chemical use 118
Legislation for beekeeping 119
Legislation for pest animals and weeds 119
Grain trade standards and legislation 121
Wool harvesting industry 121
International regulations and access to markets 122
Industry certification programs 122
Regulated occupations in the industry 123
Industry codes of practice 123
Codes of practice relevant to agriculture chemical use 124
Codes of practice for beekeeping 124
Codes of practice for pest animals and weeds 125

Training and assessing environments 126
Training and assessment environments for Pork sector units 126
Mandatory Workplace Requirements 126
Other pork industry advice 128
Performance Evidence and pig requirements 128
Selection of electives in Certificate III in Pork Production 129
Training and assessment environments for Poultry sector units 130
Legal considerations for learners in the workplace/on placements 130
Resources and equipment lists 131
Other information relevant to the implementation of the training package 131
General assessment conditions 131
Machinery operation and maintenance units 131
Green infrastructure 132
Agronomy 132
Assessment requirements for Agribusiness and Business sectors 132
Precision Agriculture terminology 132
Sport Turf Management 133
Arboriculture 133
Diploma of Pest Management 133
Aboriginal and/or Torres Strait Islander Cultural Sites Work and On Country Management 134
Implementation notes for wool harvesting (SHG and WOL) units of competency 135
Training and assessment notes for wool and shearing components 146
Links 150
Agronomy 150
Green Infrastructure 153
Arboriculture 154
Beekeeping 155
Carbon Farming 156
Composting, Organic Production and Permaculture 156
Livestock and Feedlot 159
Medicinal Cannabis 160
Nursery Production and Production Horticulture 160
On Country Management 164
Pork and Poultry 166
Sales and Merchandising 167
Sports Turf Management 168
Viticulture 169
Water Trading 170
Wool Harvesting (including shearing, crutching, handling and wool classing) 172

State and Territory Training Authorities 173
General 174

Disclaimer

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Implementation Guide modification history

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19	October 2026	11.1	Content updates to accompany release of *AHC Agriculture, Horticulture and Conservation and Land Management Training Package R11.1.* Minor updates to the following: • Add *AHCPCM308 Identify and select plants* to the electives of *AHC31024 Certificate III in Parks and Gardens and update superseded RIIWHS204E Work safely at heights unit* • Add *AHCCHM306 Prepare and apply chemicals for hand held application equipment* to Group I – General Electives of *AHC31424 Certificate III in Conservation and Ecosystem Management* • Correct a typographical error in the code of the elective unit *Maintain work health and safety processes* in the text field in the packaging rules, from *AHCWHS401* to *AHCWHS402* of *AHC42021 Certificate IV in Landscape Construction Management*
18	March 2025	11.0	Content updates to accompany release of *AHC Agriculture, Horticulture and Conservation and Land Management Training Package R11.0.* Mapping information corrected for *AHC40122 Certificate IV in Agriculture.*
17	February 2025	11.0	Content updates to accompany release of *AHC Agriculture, Horticulture and Conservation and Land Management Training Package R11.0.*

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13	January 2023	9.0	Content updates to accompany release of *AHC Agriculture, Horticulture and Conservation and Land Management Training Package R9.0.*
12	July 2022	8.0	Content updates to accompany release of *AHC Agriculture, Horticulture and Conservation and Land Management Training Package R8.0.*
11	March 2022	7.1	Content updates to accompany release of *AHC Agriculture, Horticulture and Conservation and Land Management Training Package R7.1.*
10	February 2022	7.0	Content updates to accompany release of *AHC Agriculture, Horticulture and Conservation and Land Management Training Package R7.0.*
9	March 2021	6.2	Content updates to accompany release of *AHC Agriculture, Horticulture and Conservation and Land Management Training Package R6.2.*
8	February 2021	6.1	Content updates to accompany release of *AHC Agriculture, Horticulture and Conservation and Land Management Training Package R6.1.*

CVIG Version Number	CVIG Release date	AHC Release Number	Comments
7	December 2020	6.0	Content updates to accompany release of *AHC Agriculture, Horticulture and Conservation and Land Management Training Package R6.0.*
6	August 2020	5.0	Content updates to accompany release of *AHC Agriculture, Horticulture and Conservation and Land Management Training Package R5.0.*
5	October 2019	4.0	Content updates to accompany release of *AHC Agriculture, Horticulture and Conservation and Land Management Training Package R4.0.*
4	December 2018	3.0	Content updates to accompany release of *AHC Agriculture, Horticulture and Conservation and Land Management Training Package R3.0.*
3	December 2017	2.0	Content updates to accompany release of *AHC Agriculture, Horticulture and Conservation and Land Management Training Package R2.0.*
2	September 2016	1.1	Content updates to accompany release of *AHC Agriculture, Horticulture and Conservation and Land Management Training Package R1.1* Mapping and typographical errors corrected.
1	June 2016	1.0	Implementation Guide created to accompany release of *AHC Agriculture, Horticulture and Conservation and Land Management Training Package R1.0.*

Introduction

About this Guide

This Companion Volume Implementation Guide (Implementation Guide) is designed to assist assessors, trainers, Registered Training Organisations (RTOs) and enterprises to use the Training Package.

Structure of this Guide

This Implementation Guide contains two sections.

1. Overview

This section includes information about:

- *what training packages are, and how they are developed*
- *the qualifications, skill sets and units of competency (including imported and pre-requisite units of competency) in the training package*
- *mapping between previous and current versions of the qualifications and units of competency*
- *key work, training and regulatory/licensing requirements in the industry.*

Note: Lists of qualifications, skill sets and units of competency, together with mapping information for qualifications, skill sets and units of competency, are in the Appendices section.

2. Implementation

This section explains some of the key features of the *AHC Agriculture, Horticulture and Conservation and Land Management Training Package* and the industry that will impact on the use of the Training Package. It includes information about:

- *training pathways*
- *occupational outcomes of qualifications*
- *entry requirements for qualifications*
- *access and equity considerations*
- *resources and equipment requirements*
- *mandatory workplace requirements.*

Overview

About training packages

Training packages specify the skills and knowledge (known as competencies) that individuals need in order to perform effectively in workplaces. Training packages:

- *reflect identified workplace outcomes*
- *support national (and international) portability of skills and competencies*
- *reflect the core, job-specific and transferable skills required for job roles*
- *enable the awarding of nationally recognised qualifications*
- *facilitate recognition of peoples' skills and knowledge, and support movement between school, VET and higher education sectors*
- *promote flexible modes of training to suit individual and industry requirements.*

Note: To make them easy to interpret, training packages are written in simple, concise language, with delivery and assessment requirements clearly described. Training package products do not prescribe how an individual should be trained so that users can develop training and assessment strategies to suit the needs of their particular learners.

Training package products

Training packages consist of endorsed and non-endorsed products.

Although all products must be developed to comply with the Standards for Training Packages 2022, endorsed products must be submitted for approval by the Australian Industry and Skills Committee before they are released for use.

A summary of endorsed and non-endorsed products is provided on the following page.

Endorsed products

Product	Description
Qualification	A qualification combines the skills standards (called units of competency) into meaningful groups that meet workplace roles and align to the Australian Qualifications Framework (AQF).
Unit of competency	A unit of competency describes the requirements for effective performance in a discrete area of work, work function, activity or process. A unit specifies the standard against which training delivery and assessment of competency can take place.
Assessment requirements	Assessment requirements accompany each unit of competency and include the performance evidence, knowledge evidence and conditions for assessment.
Credit arrangements	Credit arrangements provide details of existing arrangements between training package qualifications and higher education qualifications in accordance with the AQF. Note: There are currently no nationally applicable credit arrangements between any Skills Insight training package qualification and higher education qualification.

Non-endorsed products

Product	Description
Skill set	A skill set addresses a particular industry need or a licensing or regulatory requirement. A skill set is not endorsed but includes endorsed units of competency.
Companion volume	This general term refers to any quality assured product (including this Implementation Guide) that supports training and assessment.

Training package development

Training packages are developed through a process of national consultation with industry. There are some key stakeholders that drive training package development.

Key stakeholder roles

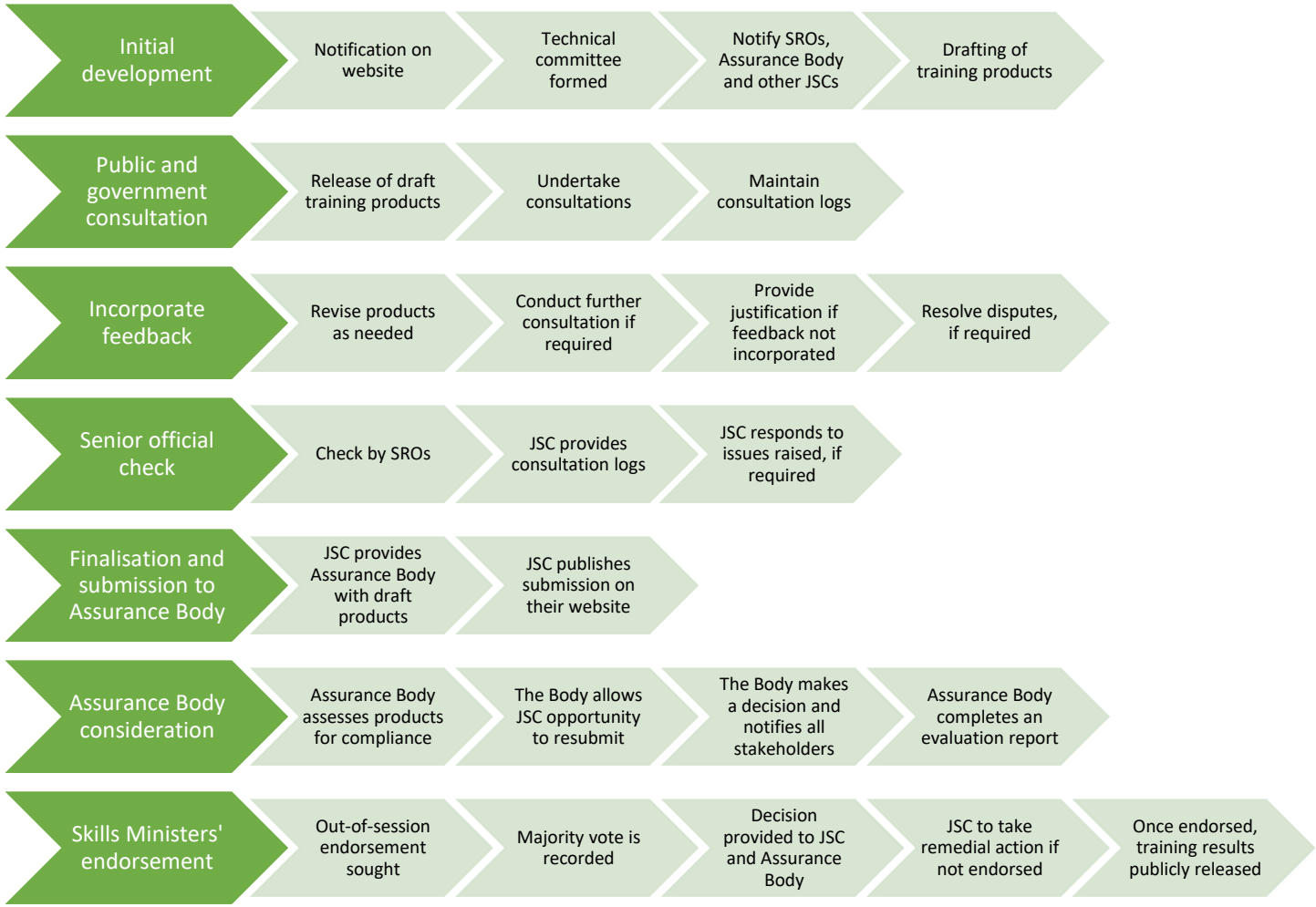
Stakeholder	Role
Skills Ministers	Skills Ministers work with the VET sector on reforms to improve VET quality and relevance, strengthen engagement, and deliver more meaningful evidence to inform skills policy.
Jobs and Skills Council (JSC)	JSCs identify skills and workforce needs, map career pathways across education sectors, develop VET training products, support collaboration between industry and training providers to improve training and assessment practice and act as a source of intelligence on issues affecting their industries. (Australian Government, 2023)
Commonwealth and state/territory Senior Responsible Officers (SROs)	SROs are senior government officials nominated by a Commonwealth, state or territory department with responsibility for skills and training policy.
Assurance Body	The Assurance Body is responsible for assessing training products for compliance with the Training Package Organising Framework (TPOF), using the completed submission pack as the main source of evidence.
State/Territory Training Authorities (STAs/TTAs)	STAs/TTAs canvass stakeholder views about training packages, provide implementation advice, identify issues and develop purchasing guides for training providers.
Australian Skills Quality Authority (ASQA)	ASQA are responsible for regulating VET providers in all states except Victoria and Western Australia unless they offer courses to interstate and overseas students.
Vocational education and training regulators	A VET regulator, as defined by the National Vocational Education and Training Regulator Act 2011 means: • the National VET Regulator; and • a body of a non-referring State that is responsible for the kinds of matters dealt with by this Act.

The development process

The process used to develop and endorse training products is based on the following principles:

- *open and inclusive industry participation in development and endorsement of training products*
- *strong stakeholder engagement and the opportunity for industry to drive change*
- *highly responsive and capable of meeting industry needs and priorities for new skills*
- *clear and transparent arrangements for resolving disputes*
- *accountability of all stakeholders for the role that they play in the process.*

The following diagram summarises the process of training product development. [1]



[1] The training package development and endorsement process policy can be downloaded from the Department of Employment and Workplace Relations website at <https://www.dewr.gov.au/skills-support-individuals/resources/training-package-products-development-and-endorsement-process-policy>

Contents of this training package

The *AHC Agriculture, Horticulture and Conservation and Land Management Training Package* contains AQF aligned qualifications, skill sets and units of competency.

Pre-requisite requirements

Some units of competency have pre-requisite requirements. This means that an individual must be competent in the pre-requisite unit(s) of competency before undertaking any assessment in the unit containing the pre-requisite(s).

Imported units

Qualifications include units of competency from different training packages, including:

- *ACM Animal Care and Management*
- *AMP Australian Meat Processing*
- *AUM Automotive Manufacturing*
- *AVI Aviation*
- *BSB Business Services*
- *CHC Community Services*
- *CPC Construction, Plumbing and Services*
- *CPP Property Services*
- *CUA Creative Arts and Culture*
- *FBP Food, Beverage and Pharmaceutical*
- *FWP Forest and Wood Products*
- *HLT Health*
- *ICI Information and Communications Technology*
- *LGA Local Government*
- *MAR Maritime*
- *MEM Manufacturing and Engineering*
- *MSF Furnishing*
- *MSL Laboratory Operations*
- *MSM Manufacturing*
- *MSS Sustainability*
- *MST Textiles, Clothing and Footwear*
- *NWP National Water*
- *PMB Plastics, Rubber and Cablemaking*
- *PSP Public Sector*
- *PUA Public Safety*

- *RII Resources and Infrastructure Industry*
- *RGR Racing and Breeding*
- *SFI Seafood*
- *SIR Retail Services*
- *SIS Sport, Fitness and Recreation*
- *SIT Tourism, Travel and Hospitality*
- *TAE Training and Education*
- *TLI Transport and Logistics*
- *UEE Electrotechnology*
- *UET Transmission, Distribution and Rail.*

Please refer to the *AHC Agriculture, Horticulture and Conservation and Land Management Training Package Implementation Guide Version 20 Part 2: Component Details* file for lists of:

- *qualifications, skill sets and units of competency in the AHC Agriculture, Horticulture and Conservation and Land Management Training Package R12*
- *units of competency with pre-requisite requirements*
- *imported units of competency.*

This file can be downloaded from the National Training Register:
https://training.gov.au/training/details/AHC/summary

Mapping information

Mapping to previous versions of a training package can be useful for delivery and assessment because it:

- *outlines the changes between current and previous versions of qualifications, skill sets and units of competency*
- *states whether the vocational outcomes of the current and previous versions of units of competency and qualifications are equivalent*
- *shows any products that have been added to, or removed from, the training package.*

> **Note:** The mapping tables are summary documents only and cannot be used alone to determine an individual's competence.

Please refer to the *AHC Agriculture, Horticulture and Conservation and Land Management Training Package Implementation Guide Version 20 Part 2: Component Details* file for details of mapping between previous and current qualifications, skill sets and units of competency.

> This file can be downloaded from the National Training Register:
> https://training.gov.au/training/details/AHC/summary

Registered Training Organisation (RTO) use

An RTO may use the mapping information to help design training and assessment strategies, including recognition of prior learning (RPL) systems. In addition to the mapping information, RPL processes must take into account other evidence of current competency; for example, how long ago an individual was awarded a superseded unit of competency, and current work experience.

Employer use

An employer might use the mapping information to determine whether there are gaps between a qualification held by workers and the current expectations of a job role. Once gaps are identified, this could assist in planning professional development activities.

Credit arrangements

There are no credit arrangements in the AHC training package at the time of publication.

How equivalence is determined

Units of competency

The training package developer determines equivalence based on the definition provided in the *Training Package Products Policy*[2] which states that:

'Training package developers are responsible for mapping units and determining their equivalent or not equivalent status.

- *Where a unit of competency is superseded and the workplace outcome of the unit has changed, the superseding unit must be deemed 'Not Equivalent'.*
- *The workplace outcome can be determined to have changed when the skills and knowledge (reflected through the elements, performance criteria and assessment requirements) required to achieve the workplace outcome of the superseded and superseding units cannot be mapped to each other.*
- *Determinations of 'Not Equivalent' may also be used to support licensing, regulatory, legislative or certification requirements. The equivalence table must list the units of competency and clearly identify the status of each unit according to the following categories:*
- ***Equivalent** – the workplace outcomes of the superseded and superseding units are equivalent*
- ***Not Equivalent** – the workplace outcomes of the superseded and superseding units are not equivalent (refer Section 2.5)*
- ***Newly created** – the unit has been created to address an emerging skill or task required by industry*
- ***Deleted** – the unit is deleted as the skill or task is no longer required by industry.'*

If two units are determined to be equivalent, an RTO can recognise an 'old' unit as satisfying the outcomes of a newly created unit (including RPL). However, an RTO cannot assume that no changes are needed for the training and assessment of the new unit.

If a unit of competency is not equivalent to its predecessor, this means that there are significant changes in the new unit. These changes would need to be addressed; for example, through training or providing additional RPL evidence.

[2] The policy is available from the Department of Employment and Workplace Relations website at <https://www.dewr.gov.au/skills-support-individuals/resources/training-package-products-policy-0>

Qualifications

'Training package developers are responsible for mapping qualifications and determining their equivalent or not equivalent status.

- *Where a qualification is superseded and the occupational outcome and/or the AQF level of the qualification has changed, the superseding qualification must be deemed 'Not Equivalent'.*
- *The occupational outcome can be determined to have changed when the skills and knowledge required to achieve the occupational outcome of the superseded and superseding qualifications cannot be mapped to each other.*
- *Determinations of 'Not Equivalent' may also be used to support licensing, regulatory, legislative or certification requirements.*
- *The equivalence table must list the qualifications and clearly identify the equivalence status of each qualification according to the following categories:*
    - *Equivalent – the occupational outcomes of the superseded and superseding qualifications are equivalent*
    - *Not Equivalent – the occupational outcomes of the superseded and superseding qualifications are not equivalent*
    - *Newly Created – the qualification has been created to address an original skill or occupational outcome required by industry*
    - *Deleted – the qualification is deleted as the skill or occupational outcome is no longer required by industry.'*

Superseded and deleted training package products

A product is **superseded** when another training product replaces it. This happens if the skill needs of industry change so training package developers need to alter a qualification, unit of competency or skill set.

A product is **deleted** when another training product does not replace it. This happens if industry determines that there is no longer sufficient demand for a qualification, unit of competency or skill set.

The rules for the use of superseded and deleted products for training purposes are in Clause 1.26 of the Standards for Registered Training Organisation (RTOs) 2015.

This can be accessed from: <https://www.legislation.gov.au/Details/F2014L01377>

Coding conventions

There are agreed conventions for the national codes used for training packages and their products.

Training package codes

Each training package has a unique three-letter national code assigned when the Training Package is endorsed. For example, **AHC** is the code used for the *Agriculture, Horticulture and Conservation and Land Management Training Package*.

> The practice of assigning two numbers to identify the year of endorsement is no longer used as it is not consistent with national policy.

Qualification codes

Within the training package, each qualification has a unique eight-character code that is used to identify the qualification, along with its title. The table explains the format of a qualification code for the *Agriculture, Horticulture and Conservation and Land Management Training Package*.

Identifiers	Description	Example for AHC31522
Training package identifier	Three letters	= AHC
AQF level identifier	One number identifying the Australian Qualifications Framework level	= 3
Sequence identifier	Two numbers identifying the sequence of the qualification at that level in the Training Package	= 15
Version identifier	Two numbers identifying the year in which the qualification was endorsed.	= 22

Unit of competency codes

Within the training package, each unit of competency has a unique code (up to 12 characters). The code, as well as the title, is used to identify the unit of competency. The table explains the format of a unit of competency code for the *Agriculture, Horticulture and Conservation and Land Management Training Package.*

Identifiers	Description	Example for AHCIRG401X
Training package identifier	Three letters	= AHC (Agriculture, Horticulture and Conservation and Land Management)
Sector identifier	Two to four letters	= IRG (Irrigation)
AQF level indicator	One number that is a guide as to the type and depth of skills and knowledge described in the unit. This identifier is loosely tied to the Australian Qualifications Framework and can range from 1 (indicates Certificate 1) to 8 (indicates Graduate Certificate/Graduate Diploma)	= 4
Sequence identifier	The final numbers identify the sequence of the unit in the particular unit sector and AQF level, and allows each unit to have a unique code	= 01
Cross-sector unit	Cross-sector units must have 'X' as the final character.	= X

In training.gov.au, the release history of each unit is shown in both the web view of the unit and in the unit modification history and mapping tables.

Key work and training requirements in the industry

Agriculture, horticulture, conservation and land management play vital roles in Australia, contributing to the social, economic and environmental sustainability of the nation. The industry has been at the forefront of federal, state and territory government policies and Australian economic growth throughout the modern history of Australia.

The Agriculture, Horticulture and Conservation and Land Management (AHC) Training Package covers the majority of training in the businesses and operations that underpin the overwhelming majority of Australia's regional, rural and Indigenous communities. The sector employs almost 350,000 people, with more than 72,000 learners serviced by 643 Registered Training Organisations (2017 figures).

Table 1: Industry snapshot

Revenue	Industry Value Added[3]	Exports	Imports	Wages	Domestic Demand
$144.4bn	$39.1bn	$18.4bn	$1.5bn	$11.2bn	$127.4bn

Source: IBISWorld Industry Wizard

The AHC Training Package has 1,008 Units of Competency across 79 qualifications and 54 Unit Sectors. Each qualification within this Training Package typically includes units crossing several different industry sectors.

More than 80 per cent of Australian land hosts activities related to the AHC Training Package, with dominant uses including livestock grazing of native vegetation, grazing of modified pastures, conservation and parks, and dryland cropping. This excludes horticulture, micro-production, landscaping and gardening work within Australia's urban areas.

Sector description

The agriculture, horticulture and conservation and land management industry sector is highly diverse, encompassing businesses that operate in the following sub-sectors:

Amenity horticulture

- *Arboriculture*
- *Landscape services*
- *Gardening services*
- *Turf and sports turf management*
- *Permaculture*

Agriculture support services

- *Shearing, cropping and agricultural support service*
- *Water trading*
- *Grain storage services*
- *Agronomy*

[3] Industry value added (IVA) is the contribution by businesses in each industry to gross domestic product (GDP). Put another way, IVA records the market value of the goods and services produced by the industry, with the cost of goods and services used in production subtracted from the total.

- *Green infrastructure*

Production horticulture

- *Turf production (commercial)*
- *Nursery production*
- *Retail nursery*
- *Floriculture production*
- *Vegetable growing*
- *Fruit tree growing*
- *Nut tree growing*
- *Seed processing*

Broadacre farming

- *Grain growing*
- *Fodder growing*
- *Sugar cane growing*
- *Cotton growing*
- *Seed production*

Livestock farming

- *Sheep farming*
- *Beef cattle farming*
- *Sheep-beef cattle farming*
- *Dairy cattle farming*
- *Poultry farming*
- *Other livestock farming*

Mixed crop and livestock farming

- *Grain-sheep farming*
- *Grain-beef cattle farming*
- *Lifestyle block farming*

Agricultural product wholesaling

- *Fruit and vegetable wholesaling*
- *Cereal grain wholesaling*
- *Wool wholesaling*
- *Fish and seafood wholesaling*

Conservation & Land Management

- *National parks*
- *Nature reserves*
- *Council reserves*
- *Cultural and Heritage Sites*
- *On Country lands, waterways and seas*
- *Corridors (national, state and local)*
- *Botanical gardens*
- *Landcare*
- *Coastcare*
- *Rivercare*
- *Seed banks*
- *Private land*

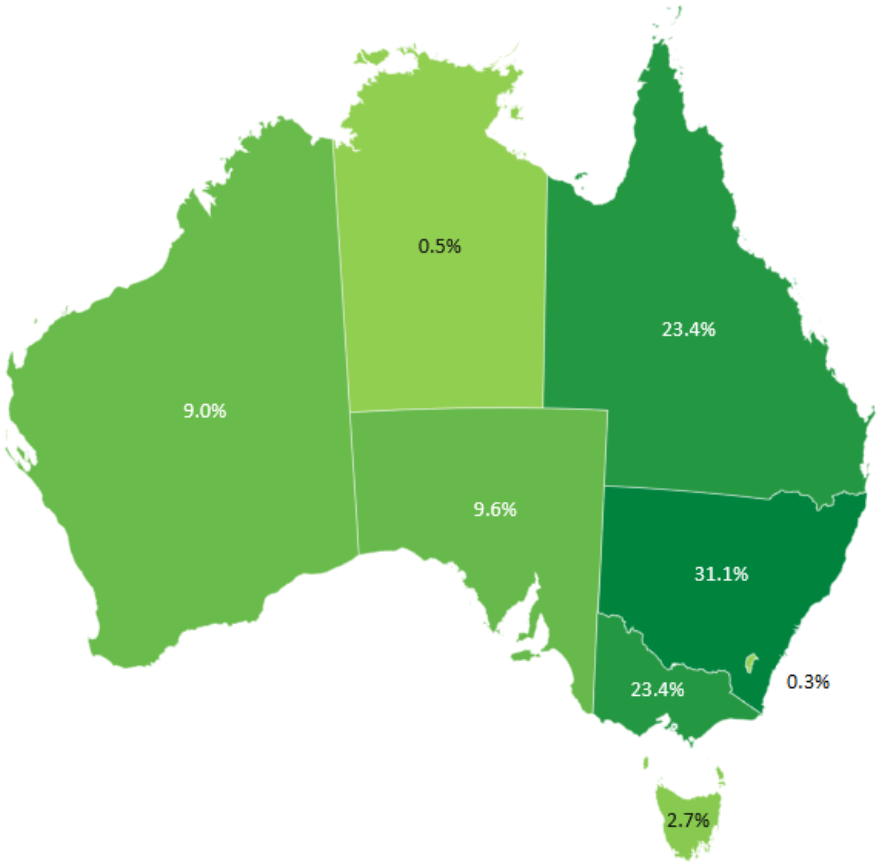
Landscaping

- *Landscaping construction*
- *Public and private space design and scoping*
- *Feature installation and design*
- *Lawn and garden installation and design*
- *Residential, office & commercial building landscaping and maintenance services*
- *Watering systems and features*

Businesses

As at June 2019, there were 179,231 businesses across agriculture, horticulture, agricultural product wholesaling and parks and gardens operations[4]. Over 70 per cent (125,971) of businesses were non-employing, and 28 per cent (50,692) were small businesses, employing fewer than 20 people. There were 2,434 medium businesses (between 20 and 199 employees) and 101 large businesses (over 200 employees).

Figure 1: Business locations by state



Source: Australian Bureau of Statistics, 2020, 8165.0 Counts of Australian Businesses, including Entries and Exits, June 2015 to June 2019

AHC-related activities are a significant source of employment, particularly in regional, rural and remote areas, and make an important contribution to the Australian economy (see

[4] Australian Bureau of Statistics, 2020, *8165.0 Counts of Australian Businesses, including Entries and Exits, June 2015 to June 2019*

Figure 2).

Figure 2: AHC Industry Sector Performance, 2019–2020

Australian Industry Sector	Employment	Wages ($m)	Revenue ($m)	Contribution to GDP ($m)
Floriculture Production	2,090	85.3	276.8	105.2
Under Cover Vegetable Growing	2,473	156.8	757.7	340.5
Outdoor Vegetable Growing	12,911	564.8	4,313.1	1,277.4
Rice Growing	290	3.3	27.2	7.2
Grain Growing	27,537	387.8	13,044.8	4,043.9
Sugar Cane Growing	9,179	132.4	1,037.5	380.9
Cotton Growing	4,783	184.0	1,398.6	564.6
Hay and Other Crop Growing	4,239	114.7	2,100.7	380.9
Apple, Pear and Stone Fruit Growing	6,856	107.8	954.1	201.5
Grape Growing	11,993	263.6	1,559.8	627.1
Olive Growing	1,394	15.0	119.3	41.7
Citrus Fruit, Nut and Other Fruit Growing	12,858	397.3	3,972.8	948.2
Egg Farming	3,994	97.6	868.2	157.4
Poultry Meat Farming	2,201	56.0	580.7	140.6
Sheep Farming	18,273	213.0	4,561.1	1,590.3
Beef Cattle Farming	76,902	1,077.6	16,623.8	6,932.1
Beef Cattle Feedlots	1,994	66.4	4,676.5	651.6
Sheep-Beef Cattle Farming	22,949	194.4	6,184.2	2,554.1
Grain-Sheep or Grain-Beef Cattle Farming	37,209	301.3	11,595.3	4,297.5
Dairy Cattle Farming	17,237	253.1	4,573.9	1,138.6
Pig Farming	2,253	126.8	1,138.3	253.2
Grain Storage	7,051	411.2	2,717.4	747.7
Hydroponic Crop Farming	2,789	170.7	458.5	269.9
Organic Crop Farming	5,171	92.7	1,130.2	373.3
Organic Livestock and Poultry Farming	676	12.7	1,384.7	559.4
Shearing, Cropping & Agricultural Support Services	30,051	708.4	3,909.8	1,321.3
Nursery Production	2,898	133.1	746.7	216.0
Turf Growing	1,139	51.5	259.8	79.1
Landscaping Services	34,463	1,669.5	5,934.5	2,550.4

Australian Industry Sector	Employment	Wages ($m)	Revenue ($m)	Contribution to GDP ($m)
Gardening Services	41,530	1,308.2	2,667.5	2,019.9
Nature Reserves and Conservation Parks	12,392	588.1	1,618.4	841.6
Zoological and Botanical Gardens	7,207	326.4	850.9	443.4
Organic Farming	6,078	142.4	2,564.2	956.4
Wool Wholesaling	647	36.4	3,806.7	171.3
Cereal Grain Wholesaling	3,266	216.1	21,504.1	824.3
Fruit and Vegetable Wholesaling	14,226	750.9	12,344.0	1,530.7

Source: IBISWorld Australia Industry Wizard

Figure 3: The industry in a 'nutshell'

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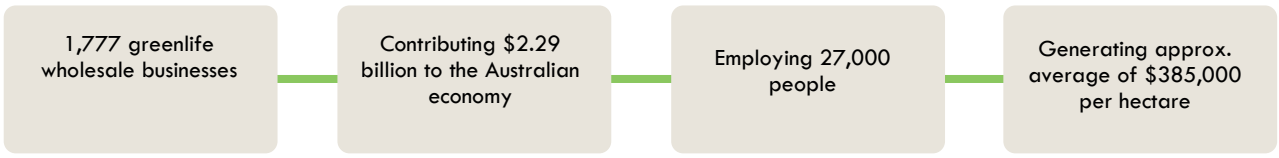
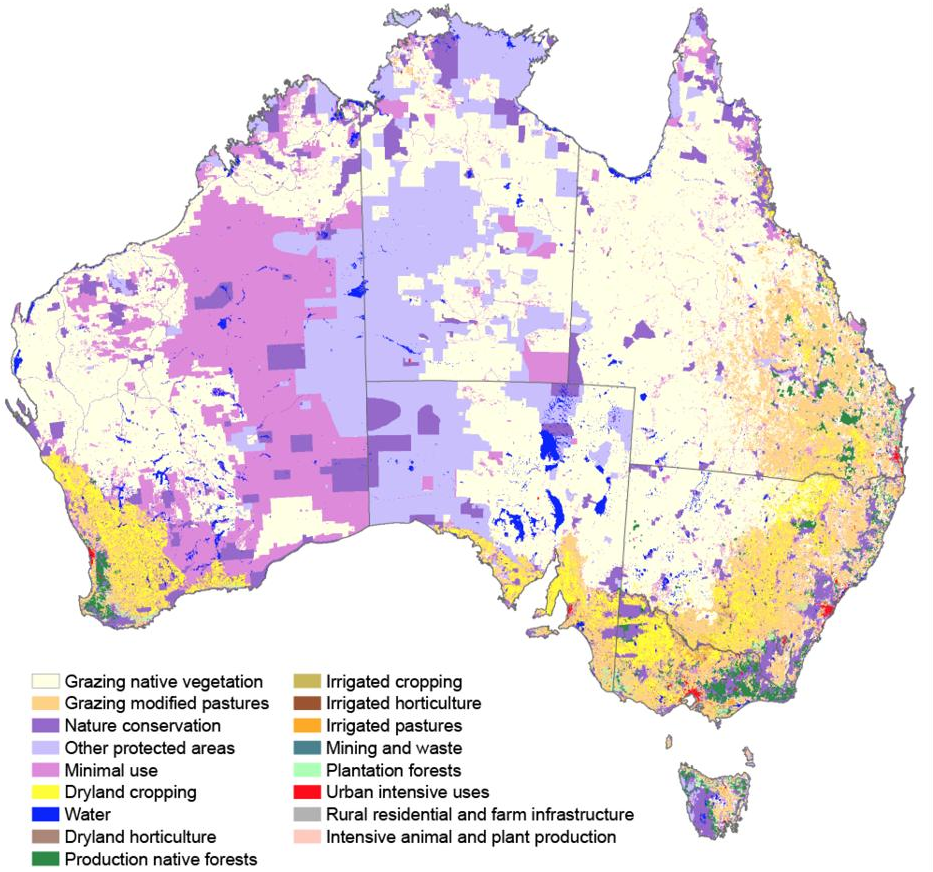


Source: Hort Innovation, 2018, Nursery Industry Statistics and Research, p.3

In addition to businesses, each level of government and a number of Non-Government Organisations are employers of graduates from the AHC Training Package.

The breadth of the scope of work undertaken by these businesses and operations can be illustrated by Australian Land Use mapping, which is regularly undertaken at various levels of government as information required for current and future policies and strategies. The complexity of activities covered is illustrated in the size and training coverage of the AHC Training Package.

Figure 4: Land use in Australia



Source: Australian State of the Environment 2016
<https://soe.environment.gov.au/theme/land/topic/2016/land-use-and-management>

It should be noted that many activities in horticulture, conservation and land management, landscaping and micro-production also take place in urban intensive areas.

AgriFutures Australia has identified the decline in land used for farming in Australia as a current trend that is likely to be ongoing.

Skills Insight has responsibility for overseeing the development of industry units of competency, skill sets and qualifications relative to the following sectors:

- *Agricultural chemicals*
- *Agricultural irrigation*
- *Agricultural support services*
- *Broadacre cropping and farming*
- *Floriculture production*
- *Fruit growing*
- *Livestock farming*
- *Nut growing*
- *Vegetable growing.*

Implementation information

Industry sectors and occupational outcomes of qualifications

The *AHC Agriculture, Horticulture and Conservation and Land Management Training Package* includes units of competency from the following industry sectors.

Sector Code	Sector	Sector Code	Sector
AGB	Agribusiness	MAR	Marine
AIS	Artificial Insemination	MDC	Medicinal Crops
ARB	Arboriculture	MER	Merchandising and Sales
BAC	Broad Acre Cropping	MKH	Milk Harvesting
BEK	Beekeeping	MOM	Machinery Operation and Maintenance
BER	Biosecurity Emergency Response	NRM	Natural Resource Management
BIO	Biosecurity	NSY	Nursery
BUS	Business	OCM	On Country Management
CCF	Community Coordination and Facilitation	ORG	Organic Production
CFP	Carbon Farming	PCM	Plant Culture and Maintenance
CHM	Chemicals	PER	Permaculture
COM	Composting	PGD	Parks and Gardens
CSW	Cultural Sites Work	PHT	Production Horticulture
DER	Deer	PLY	Poultry
DES	Design	PMG	Pest Management
DRG	Drainage	PRK	Pork
DRY	Dairy	SAW	Soil and Water Conservation
ECR	Ecological Restoration	SDT	Seed Processing
EXP	Explosives	SHG	Shearing
FAU	Fauna	SOL	Soils and Media
FIR	Fire	SPO	Seed Testing
GRI	Green Infrastructure	SUS	Sustainability
HYD	Hydroponics	THH	Therapeutic Horticulture
INF	Infrastructure	TRF	Turf Management

Sector Code	Sector	Sector Code	Sector
IRG	Irrigation	WAT	Water
LPW	Lands, Parks and Wildlife	WHS	Work Health and Safety
LSC	Landscaping	WOL	Wool
LSK	Livestock	WRK	Work

Sector overview

Agriculture and agribusiness

Agriculture and agribusiness are diverse sectors including both plant and animal-based production systems along with supporting agribusiness enterprises that supply agriculture goods and services. Job roles within the sector range from farmhands to farm business managers, and include numerous agricultural service roles. This sector is a leader in the uptake and development of new technologies and attracting investment on an international level.

Australian producers have a reputation for green and safe agricultural products, which provides a marketing advantage that must be retained. As a result, biosecurity will be an important issue as Australia develops its export trade in agricultural goods. There is an increased interest in the area of carbon farming for land owners, especially in the area of Emissions Reduction Fund projects, which are supported by the Clean Energy Regulator.

Agricultural chemicals

Agricultural chemicals and veterinary medicines play an essential role in maintaining and improving productivity of agriculture and related industries. The registration of chemicals for use in Australia is controlled by the Australian Pesticides and Veterinary Medicines Authority (APVMA). State and territory governments control the use of pesticides and veterinary medicines. The various state jurisdictions have a range of training requirements for the use and purchase of various classes of pesticides and veterinary medicines.

Currently there is a National Agvet Chemical Task Group looking at developing a more harmonised approach to chemical training requirements. Once this work is complete, a more comprehensive review of Training Package products will be required to ensure vocational training options meet the needs of all stakeholders.

Animal reproduction

Farmers need a range of skills and knowledge to manage the reproduction of animals, helping them to keep up with the high demand for products like meat, dairy and wool. Skills to identify breeding objectives, genetic influences, animal soundness and animal breeding health have been used for generations to increase livestock and poultry production and profitability. Recent developments in the availability of technologies have made this work even more effective and efficient, improving animal welfare, profitability and sustainability.

Arboriculture

Arborists work in private and government positions to foster the economic, ecological, environmental, health and social benefits of trees and professional tree care. Arborists

provide for the care and management of trees in conservation and tree preservation roles, tree climbing, tree maintenance, and the diverse operations of vegetation management, power line clearance, professional tree management and urban forestry. Consulting arborists have professional consulting, expert witness, research and academic roles in diagnostic testing and tree assessment.

Beekeeping

Beekeeping is the maintenance of native and/or honey bee colonies, commonly in hives, by humans. A commercial beekeeper (or apiarist) keeps bees in order to collect their honey and other products that the hive produces (including beeswax, propolis, pollen, and royal jelly) for sale, to pollinate crops, and/or to produce bees for sale to other beekeepers. Beekeeping is a form of animal husbandry that involves providing feed when nectar and pollens are lacking, preventing infections from various microbes and diseases and dealing with parasitic mites.

Broadacre cropping

Broadacre cropping or farming on arable land exists in Australia wherever farming in the soil is possible, especially across the grain and wheat belts, and for more water-intensive crops along the Murray River and in the tropics. Workers in the sector must be skilled in how to grow their crops and related tasks.

Carbon farming

Carbon farming is the process of changing agricultural practices or land use to increase the amount of carbon stored in the soil and vegetation (sequestration) and to reduce greenhouse gas emissions from livestock, soil or vegetation (avoidance). Carbon farming projects contribute to the reduction of Australia's net greenhouse gas emissions by providing incentives to reduce emissions through the Emissions Reduction Fund and non-ERF markets such as voluntary markets (for example, enterprises such as Qantas and Shell) and secondary markets where carbon credits are sold to others who then on-sell.

Community coordination and facilitation

Workers in this sector are generally responsible for fostering, promoting, organising and supporting community groups to undertake conservation activities.

Composting

There are approximately 140 businesses around Australia recovering more than 5.2 million tonnes of organic waste and turning it into useful products and services each year. New products are continuously being developed for environmental applications such as erosion control and storm water treatment.

Qualifications and units of competency enable workers to process material into compost-based products such as soil conditioners, mulches, garden soils, top dressing soils and potting mixes and tailored products to be developed for agricultural applications such as fruit and vegetables, grains, pasture improvement and forestry.

Employment in this industry is growing and the units in this Training Package will give employees a career pathway in this and related industries.

Conservation coordination and facilitation

The conservation and land management sector is made up of workers from unskilled to professional levels and includes a large cohort of volunteer workers. There are a number of different areas people may work in the conservation and land management sector. Some examples are conservation earthworks, where workers are involved in the design and implementation of earthworks associated with soil conservation on rural properties, and erosion and sediment control on rural, urban and infrastructure construction sites.

Cultural Sites Work

Aboriginal and Torres Strait Islander cultures possess skills and knowledge that are crucial to land and sea management activities, including conservation and cultural heritage roles. Some of these skills are described in nationally endorsed qualifications, skill sets and units to equip leaners for jobs as council workers, rangers, conservation field officers, cultural and heritage officers, land council site officers and tourism operators and guides.

Dairy

The dairy industry is one of Australia's major rural industries and is located across the temperate and some subtropical areas of Australia. The bulk of milk production occurs in south-eastern Australia, with Victoria having the largest number of dairy farming enterprises. The associated downstream milk processing industry is also concentrated in the south-eastern regions. Dairy industry enterprises range from large corporations through to small owner-operators. The industry has had a long-term commitment to training, which is promoted through its peak body Dairy Australia. This sector of training covers troubleshooting the machines used in large scale milk harvesting.

Ecological restoration

This sector is mostly involved in conservation and restoration of ecological areas in order to regenerate bushlands and improve the ecological integrity and biodiversity of an area. This sector employs a high proportion of volunteers.

Environmental sustainability

Sustainability in the broadest sense refers to the ability to maintain or support a process continuously over time. Sustainability can be broken into three areas: economic, social and environmental. However, with respect to agriculture and horticulture, sustainability should perhaps be considered as actions that seek to prevent depletion of natural, physical, human and economic resources, so they will remain available for the long-term. This is all-encompassing for a successful business.

As a key driver for all industry sectors, the importance of environment and sustainability or environmental sustainability must be explicitly taught. The units of competency pertaining directly to this are now core units of competency in both agriculture and horticulture general qualifications.

Students are most likely to engage if this is taught in a meaningful and connected manner. Every enterprise uses resources, and those resources need to be looked at from the point of view of sustainability.

It is the role of the RTO to contextualise sustainability to ensure the student engages. Likely engagement occurs where the student is asked to consider the topic of environmental sustainability from their own perspective in their own workplace. It must be emphasised that the sustainability conversation is not simply about 'organic, green, recycling and careful water use'. Ask students to consider every item, machine, consumable, worker, animal, soil additive and chemical. The list of items, actions and inputs that can be considered in order to improve environmental sustainability is endless.

The RTO has achieved a competent outcome when the student capably understands how they, as an individual, can contribute to and improve any aspect of environmental sustainability in their workplace.

Explosives

These units are strictly regulated and are mostly for use in the pest management industry, primarily for the destruction of rabbit warrens.

Fauna

This sector's units are utilised across the Conservation and Ecosystem certificates and relate to identifying and monitoring fauna. This sector is of use for rangers and organisations that require ranger-like tasks to be performed.

Feedlot

Encyclopedia Britannica[5] defines a feedlot as: '*a plot of land on which* livestock *are fattened for market. A feedlot intensively manages* cattle *or other animals in a relatively small area and feeds them primarily* grains *until they are ready for processing for human* consumption. *(See also* intensive animal farming).'

There are a number of definitions of what constitutes a feedlot in Australia and the approval processes associated with their operation. For example, the Commonwealth Scientific and Industrial Research Organisation (CSIRO)[6] defines a beef feedlot as: '*a confined yard area with watering and feeding facilities where cattle are completely hand or mechanically fed for the purpose of production.*

This definition does not include the feeding or penning of cattle in this way for weaning, dipping or similar husbandry purposes or for drought or other emergency feeding, or at a slaughtering place or in recognised saleyards.'

Whereas the Australian Lot Feeders' Association (ALFA)[7] – the peak body representing the Australian cattle feedlot industry – defines a feedlot as:

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[5] Encyclopedia Britannica. (2024) feedlot. Available at: Feedlot | Description, History, Benefits, Antibiotics, Pollution, & Facts | Britannica (Accessed 5 September 2024).

[6] Standing Committee on Agriculture and Resource Management. (1997) National Guidelines for Beef Cattle Feedlots in Australia (2nd Edition). Report No. 47. Available at: https://www.publish.csiro.au/ebook/download/pdf/114 (Accessed 5 September 2024).

7 Australian Lot Feeders Association (ALFA). (2019). Feedlot Definition. Available at: ABOUT + | ALFA (feedlots.com.au) (Accessed 5 September 2024).

'Feedlot" means a constructed facility with designated water points where cattle are confined with a stocking density of 25m² per Standard Cattle Unit (SCU)or less and are only fed a prepared ration for the purposes of production.'

Another great definition of feedlots in Australia is available on the Australian Good Meat website:

[8]*'Feedlots are purpose-built facilities where livestock are provided with a balanced grain-based diet to help them reach their quality potential. All aspects of their welfare are planned and monitored by trained staff in this highly-regulated industry.'*

To find out more about Australian cattle feedlots, how they operate and the rules and regulations that apply to their operations, visit the CSIRO or ALFA references provided above.

In recent times the use of feedlots in Australia has increased and expanded to include sheep production. In 2020 MLA produced the 'Sheep feedlotting and containment management guidelines update'. These guidelines have been created to guide intensive lamb finishing in Australia. These guidelines are available at the link below:

Sheep feedlotting and containment management guidelines update | Meat & Livestock Australia (mla.com.au)

The operational employees of feedlots fall into four main classifications: livestock handlers (including pen riders); feeding and milling operators; feedlot maintenance workers; and administrative staff. In larger feedlot operations there may also be farming and quality assurance staff. Staff are generally able to move from operational roles to leading hand and supervisor positions.

Fire

The fire sector in the AHC training package focuses on burning for ecological purposes. It uses the knowledge of First Nations Peoples, who work closely with Skills Impact to make sure the units are culturally appropriate and the knowledge adequately captured. The Country Fire Association has also been heavily consulted to make sure these units are distinctly ecological in nature, as opposed to the Public Safety (PUA) training package, which focuses on fire extermination for a professional fire fighter.

Floriculture

Floriculture or flower growing involves the growing, harvesting and preparing of flowers and foliage for sale. Floriculture businesses produce fresh and dried flowers and foliage for wholesale flower markets, florists and retail outlets, and increasingly for overseas exporting. The range of different flowers and foliage is immense and could include roses, carnations, orchids, native flowers, bulb and annual flowers, and tropical flowers. Some flower farms also grow flowers in open fields for their essential oils.

8 Australian Good Meat. (2024) The role of feedlots in the Australian beef industry. Available at: https://www.goodmeat.com.au/animal-health-welfare/feedlot/ (Accessed 10 September 2024).

Green infrastructure

Roof garden, vertical wall and green facade infrastructure is a subset of the 'green infrastructure' or 'living infrastructure' industry sector, which is of increasing significance to a range of stakeholders (product suppliers, government policy makers, builders/property developers, landscapers/horticulturalists and the community) as increasing urbanisation motivates green infrastructure projects in urban development for aesthetic, environmental, economic and/or social reasons.

Irrigation

Irrigation is the artificial application of water to the land or soil. It is used to assist in the growing of agricultural and horticultural crops, maintenance of landscapes, and revegetation of disturbed soils in areas to replicate the natural rainfall during dry periods. Irrigation systems are also used for dust suppression, disposal of sewage, and in mining. Irrigation is often associated with drainage, which is the natural or artificial removal of surface and sub--surface water from a given area. The irrigation qualifications and units of competency support the skills base of the industry's retailers, designers, managers, installers and maintenance workers.

The irrigation industry designs, manages, installs, maintains and monitors irrigation systems ranging from domestic systems through to large commercial irrigation systems. This may include open irrigation and drainage, pressurised or gravity-fed irrigation systems. Job roles within the sector range from irrigation installation assistant to irrigation system designer. This sector is a leader in the uptake of technology such as applications-based technology, controller and sensor technology and drones.

Lands, parks and wildlife

Lands, parks and wildlife officers, rangers and managers are involved in the management and maintenance of areas of native and cultural significance. They may be employed by government or non-government organisations. Roles will generally involve a mixture of conservation and restoration tasks as well as tourism, education, construction and pest management.

Landscape construction and design

A skilled workforce of landscape professionals design, construct and maintain the gardens and green spaces in our public spaces and backyards. As urban city blocks get smaller, people are looking to landscapers to create and deliver outcomes where they can get the most out of their garden space. Many backyards these days are an extension to the living room, so it is important they offer a safe, comfortable, and sustainable space for entertainment and enjoyment. Well-designed public gardens, parks, and streetscapes increase the liveability of local communities.

Livestock

The term 'livestock' encompasses animals raised for agricultural purposes, including cattle, sheep, pigs and poultry. For the purpose of this Training Package, these are animals that can be categorised as farm animals that are regarded as an asset. That is, they are animals that provide labour or are kept and raised for their meat, milk or other valuable commodity. In this regard in Australia there are a range of animals considered livestock, including:

- cattle (beef and dairy)
- sheep
- pigs
- goats
- poultry (including chickens, turkeys, geese, ducks, guineafowls, quails, pigeons, pheasants and partridges)
- deer
- buffalo
- camelids (camels, llama, alpacas)
- horses
- honeybees.

Good stock handling techniques

On the advice of industry, the Training Package has included the term 'good stock handling techniques' in those units of competency that deal with stock handling. The use of good stock handling techniques can vary between workplaces depending on matters such as the design of the property and/or handling facilities, type of livestock, environment and other considerations.

The following advice on what constitutes good stock handling techniques, has been included in this companion volume to assist RTOs.

Good stock handling techniques should aim to minimise stress to the livestock and handler. Livestock and handler health and welfare are prime concern; however, handling can also affect animal performance and meat quality.

Some good stock handling techniques for adult livestock may not be appropriate techniques for handling of young. Young livestock require patience, as they can be easily startled. Moving slowly and avoiding loud noises can help to keep the animal calm. Gentle handling, especially when they are with their mothers, is important to ensure that the mother's maternal instincts to defend their young doesn't lead to handler or livestock safety concern or injuries. In a number of jurisdictions there are limitations on what type of handling techniques can be used for young livestock.

The excerpt below is from Meat & Livestock Australia (MLA)[9] – the declared industry marketing body and industry research body of the Australian Meat and Live-stock Industry – website:

'***Animal handling***

Successful handling of livestock requires an understanding of their natural behaviour.

Cattle, sheep and goats are herd animals – meaning they like to follow each other. A separated animal will always try to return to the mob.

[9] Meat & Livestock Australia. (2024) Animal handling. Available at: Animal handling | Meat & Livestock Australia (mla.com.au) (Accessed: 05 September 2024).

Livestock handling should aim to minimise stress – to the livestock and the operator. Livestock and operator health and welfare are prime concern, however, handling can also affect animal performance and meat quality.

Minimising stress

Low stress livestock handling has productivity benefits for farming enterprises. It will deliver improved livestock health and production, and better meat quality to the customer. It will also improve occupational health & safety.

Stress can be minimised by:

- *Keeping animal handling to the minimum level necessary for health management and productivity.*
- *Designing handling facilities to minimise the risk of injury and to take advantage of natural cattle, sheep or goat behaviour.*
- *Maintaining handling facilities in good working order and completing repairs well before major husbandry practices are carried out.*
- *Ensuring livestock handlers are competent.*
- *Avoiding sudden jerking movements and loud noises.*
- *Behaving in a calm and controlled manner.*
- *Applying optimal pressure rather than excessive pressure by taking advantage of the 'flight zone' (extensively managed livestock that are not familiar with people have a larger flight zone than livestock handled more often).*
- *Calmly speaking to livestock while you work with them can have a calming effect (avoid shouting, yelling or other sudden loud noises).*
- *Avoiding rushing livestock, give them time to assess a situation.*
- *Using dogs carefully (muzzle dogs that bite and tie them up when they are not working).*
- *Preventing overcrowding in confined spaces.*
- *Avoiding handling livestock during extreme weather conditions.*

Changes in diet and water supply are also stressful for livestock, increasing the risk of weight loss and dehydration and susceptibility to disease. Changes need to be carefully planned and introduced gradually. Producers should try to avoid major changes in diet and water supply at the same time as other stressful husbandry procedures.'

There are a number of great online resources on livestock handling, including articles on livestock behaviour and handling facility layout. Conducting an online search using terms such as 'low stress livestock handling', 'how to improve livestock handling', and 'reducing handling stress on livestock' can produce some excellent results. The following are some useful links to reference material that can be used to increase understanding of good stock handling techniques:

Behavioral Principles of Livestock Handling (appliedanimalscience.org)

https://farmsafe.org.au/-in-safe-hands---national-farm-safety-week-spotlights-low-stress-stock-handling

Managing Livestock Stress: Strategies & Tips (thefarminginsider.com)

Cattleyards III part1.indd (futurebeef.com.au)

How to improve livestock handling and reduce stress | Request PDF (researchgate.net)

Livestock branding and marking

Permanent branding serves as a lifelong identification method, essential for tracking livestock. In certain Australian jurisdictions, branding is a compulsory requirement. While there are no specific national regulations governing the process of marking or branding, the requirements in some regions have driven the development of *AHCLSK237 Brand livestock* to complement *AHCLSK225 Identify and mark livestock*.

For more information on branding requirements and regulations, refer to the specific guidelines provided by the following states and territory:

- **Queensland (QLD)**: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/animal/move/brand-earmark
- **Northern Territory (NT)**: https://nt.gov.au/industry/agriculture/livestock-and-animals/brand-and-identify-livestock

Marine

The marine sector is a group of units that focus on ecological work being undertaken at sea. It recognises the unique needs of these rangers who work in marine environments, as there are skills unique to working in the ocean, even separate from other aquatic environments.

Medicinal cannabis

Working in the medicinal cannabis industry in Australia involves working in medium to large sized protected cropping facilities where a range of skilled work is undertaken in controlled growing, licensed medicinal cannabis operations. Workers in this sector are required to be over 18 years of age and must comply with strict workplace security and regulatory employment obligations while undertaking cultivation and production practices. Tasks may be associated with the propagation, growth and harvesting of the plant and job roles include cultivation technicians and cultivation supervisors and managers. The Australian medicinal cannabis industry is expected to undergo major developments over the next couple of years and significant production and manufacturing capacity coming online from the licensed sector.

On Country Management

On Country Land Managers, as the title suggests, are responsible for the management of Aboriginal and/or Torres Strait Islander owned/held lands. These lands are used for a range of activities including tourism, horticulture and agriculture. On Country Management job roles may include a range of these activities as well as conservation and restoration of cultural and heritage sites. Aboriginal and/or Torres Strait Island On Country Management officers generally use a combination of traditional and contemporary approaches to land management.

Organic production

Organic farming focuses on utilising natural, non-synthetic farming techniques. These include crop rotation, the use of green manure and biological pest control. Organic farms aim to be

sustainable with an emphasis on the use of renewable resources. The considerations of energy, soil and water resources as well as the maintenance of environmental quality are key attributes of organic farming.

Parks and gardens

The Australian parks and gardens industry maintains and manages public green spaces for recreation and leisure that benefit all Australians. Many parks and gardens areas are home to native and unique plant species, animals and historic structures. They hold cultural and social importance and are visited by thousands of locals and tourists every year. The diversity, beauty, safety and sustainability of these parks and gardens is managed and maintained by a skilled workforce of grounds keepers and gardeners. Park managers are responsible for staff and park operations as well as managing contracts for outsourced services.

Permaculture

Permaculture is a multi-disciplinary ecological design science focused on care for the earth, care for people and all species, sharing of surpluses and setting limits to industrial and exploitative growth and consumption. It is based on the premise that the planet is a finite ecological system with limited energy and material resources to be shared and managed in a manner inspired by nature.

Pest management

This covers non-urban pest management roles. Integrated pest management requires workers in this field to be able to apply several management options strategically in order to reduce pest damage levels. Pest management officers may be employed by government agencies or private organisations. Pest management may also be undertaken by workers in other industry sectors such as: agriculture; horticulture; conservation and land management; parks and wildlife services; parks and gardens; viticulture and wine grape growing. Pest management covers both plant and animal pests.

Pork

The Australian pork industry is spread throughout Australia with a range of enterprise sizes and production systems. There are three main types of pig farming systems: Indoor Housing, Outdoor Bred and Free Range. The pork industry is particularly focused on addressing the welfare needs of pigs, environmental stewardship and the education of stock persons who handle pigs.

Poultry

The poultry industry is established in all states of Australia, with the focus of the industry in the three eastern states. It is located around capital cities or major provincial centres that are close to cereal grain cropping areas. It comprises two main sectors: poultry meat and egg layer industries. Poultry industry enterprises range from large corporations through to small owner-operators. Animal welfare and biosecurity are two key issues that the industry is seeking to address through training.

Primary Industries and Rural Operations

The *AHC21227 Certificate II in Primary Industries and Rural Operations* is a broad entry-level qualification designed to support diverse local government areas (LGAs) and regional contexts across Australia including:

- Regional
- Remote
- Peri urban
- Rural and semi-rural

The qualification title explicitly reflects this diverse geographical and sector footprint by combining two key focus areas:

- **Rural Operations:** Preserves decades of established market recognition, ensuring long-standing training networks in regional, rural, and remote (RRR) communities retain clear occupational visibility and structural continuity.
- **Primary Industries:** Broadens the qualification's focus beyond agriculture to also include sectors like aquaculture, forestry, and specialised horticulture. This ensures the title also reflects modern career pathways for city, regional, and coastal learners alike.

This combined flexibility allows those who may not have a linear career pathway to explore their options for further education and training or direct employment opportunities in areas outside of capital cities and across the primary production landscape.

Please refer to the User Guide to see detailed contextualisation examples of how this qualification can be tailored to suit specific local government areas and varied industry disciplines.

Production horticulture

Production horticulture is a diverse industry that involves growing and harvesting fruit or vegetables. Production horticulture businesses produce fresh and dried fruit and vegetables for local markets, processing and exporting. The range of produce is vast and could include many varieties of different fruits, nuts and vegetables. Many production horticulture businesses operate as farms growing vegetables, while others are based on extensive orchards. Some businesses are intensive and grow fruit, vegetables and mushrooms in controlled environments.

Production nursery

Production or wholesale nurseries propagate and supply plants to supermarkets, retail nurseries, garden centres and landscapers. They are often large and are generally located on the outskirts of major cities. They may employ from ten to 100 staff. Some also maintain retail outlets.

Production nurseries can also be found in some municipal councils, government departments, landscape companies and 'greening' or revegetation organisations. These nurseries grow plants for local landscape and revegetation projects. Other businesses allied to the nursery

industry include indoor plant hire and maintenance companies and suppliers of garden products.

Protected horticulture

Protected horticulture is a fast-growing diverse sector that includes the production of vegetables and flowers using a ranged of protected horticulture facilities ranging from commercial hydroponics and greenhouse facilities through to covered crops. Job roles within the sector range from picker, packer, crop and nursery worker through to senior grower and integrated pest manager (IPM). This sector is a leader in the uptake of technology such as controlled environment technology, robotics and automated technology.

Retail nursery

Retail nurseries, also called garden centres, sell plants and gardening products to the general public. They employ workers with a good knowledge of plants and gardening products. Most importantly, they require workers who can communicate well with customers.

Rural merchandising

Rural merchandising supports diverse sectors of the agricultural industry, including production horticulture, broadacre crop production, nursery production and protected cropping. Job roles within the sector range from rural sales assistants to specialist rural merchandisers in areas such as farm machinery, irrigation, livestock, farm chemicals, fertiliser and soil ameliorant sales.

Seed processing

Seed processing involves the cleaning and grading of seed after it has been harvested and dried to meet required levels of physical purity and germination. Cleaning removes extraneous material, while grading aims at removal of less developed, dead and diseased seeds. Careful handling and specific procedures are necessary to maintain seed vigour and a satisfactory shelf life in storage. Workers in this industry operate seed processing equipment and machinery, pack and store seed, including the operation of vehicles such as a forklift.

Seed testing

Seed testing is the science of evaluating seed quality for agricultural and horticultural purposes. This includes the physical quality of a seed lot, including freedom from unwanted seeds and material, and evaluation of the germination potential of the seed. Seed may also be tested for freedom from seed-borne diseases. Seed testing plays a major role in the international trade in seed.

Sports turf management

The sports turf management industry involves the construction and maintenance of grassed and lawn areas that are used for sport and recreation. The sports turf management industry employs people who care for and manage turf playing surfaces. There are several major employers, including local councils, sporting clubs, golf clubs and horse racecourses. The workplaces include bowling greens, lawn tennis courts, cricket wickets, sports fields and ovals, recreational parks and grounds, domestic and commercial mowing and lawn maintenance operations and commercial turf farms. Work in the sports turf management industry focuses on the maintenance of these surfaces and preparation for play.

The work may involve early starting times and some weekend work. Skills in the operation of specialist machinery and equipment are required for work in this industry. At the supervisory and management level, there is also emphasis on agronomy, greens reconstruction and renovation, irrigation management, chemical use and healthy turf growth. Managers are responsible for budgets and may have to report to club committees.

Viticulture

Viticulture is a diverse sector including production of grapes for wine production and table grapes. Job roles within the sector range from pickers, technical scouts to vineyard manager. This sector is a leader in the uptake of technology such as drone and automation.

Water trading

Water trading is a part of the WAT training sector and refers to the trading of water and understanding of water entitlements that are attached to parcels of land. This includes carryover water and buying and selling water on approved platforms as well as private sales.

Wool harvesting (including shearing, crutching, handling and wool classing)

Duties in the wool industry include shearing and crutching, wool handling – such as board duties, penning, wool pressing – wool classing, wool buying and wool broking.

Professional shearers and wool handlers work as tradespeople within the wool harvesting industry sector. Regardless of level they are required to be physically fit, work efficiently and consistently with their hands, work confidently with sheep and work as part of a team.

Wool Classers normally work in shearing sheds as a member of a wool harvesting and preparation team. Some work as wool valuers and assess the value of the wool on behalf of buyers, brokers and domestic and overseas woollen mills or in wool rehandling facilities.

Occupational outcomes of qualifications

The units of competency, skill sets and qualifications in the *AHC Agriculture, Horticulture and Conservation and Land Management Training Package* cover a diverse range of work activities within the industry. The following table lists the qualifications and provides an overview of occupational outcomes for each qualification.

Qualification	Overview of occupational outcomes
Graduate Diploma AHC80120 Graduate Diploma of Arboriculture	The Graduate Diploma reflects the role of advanced practitioners who require high-level knowledge in a range of contexts to carry out highly skilled/specialist work, including research. It is also a pathway to further learning.
Advanced Diploma AHC60319 Advanced Diploma of Agribusiness Management	The Advanced Diploma reflects the role of managers, consultants and leaders who are required to apply specialised knowledge in

Qualification	Overview of occupational outcomes
AHC60422 Advanced Diploma of Conservation and Ecosystem Management AHC60524 Advanced Diploma of Arboriculture	a range of contexts and undertake advanced skilled or paraprofessional work. The Advanced Diploma serves also as a pathway for further learning.
Diploma AHC50122 Diploma of Agriculture AHC50324 Diploma of Production Horticulture AHC50422 Diploma of Horticulture Management AHC50524 Diploma of Arboriculture AHC50621 Diploma of Landscape Design AHC50820 Diploma of Nursery Management AHC51024 Diploma of Sports Turf Management AHC51120 Diploma of Conservation and Ecosystem Management AHC51222 Diploma of Community Coordination and Facilitation AHC51324 Diploma of Pest Management AHC51422 Diploma of Agribusiness Management AHC51524 Diploma of Viticulture AHC51624 Diploma of Irrigation Design AHC51920 Diploma of Applied Agronomy AHC50624 Diploma of Landscape Design AHC52021 Diploma of Landscape Construction Management AHC52122 Diploma of Permaculture	The Diploma qualification reflects the role of individuals who apply integrated technical and theoretical concepts in a broad range of contexts and undertake skilled or paraprofessional work. The Diploma is suitable for supervisors, managers, consultants and specialist job roles. The Diploma serves also as a pathway for further learning.
Certificate IV AHC40122 Certificate IV in Agriculture AHC40224 Certificate IV in Protected Horticulture AHC40324 Certificate IV in Production Horticulture AHC40422 Certificate IV in Horticulture AHC40624 Certificate IV in Nursery Operations AHC40924 Certificate IV in Conservation and Ecosystem Management AHC41024 Certificate IV in Agribusiness AHC41124 Certificate IV in Irrigation Management AHC41325 Certificate IV in Wool Classing	The Certificate IV qualification reflects the role of individuals to undertake work in varied contexts using a broad range of specialised knowledge and skills. Certificate IV is suitable for senior workers and technicians who supervise or lead teams. Certificate IV also serves as a pathway for further learning.

Qualification	Overview of occupational outcomes
AHC41724 Certificate IV in Pest Management AHC42021 Certificate IV in Landscape Construction Management AHC42122 Certificate IV in Permaculture AHC42324 Certificate IV in Medicinal Cannabis Cultivation and Production AHC42421 Certificate IV in Landscape Design	
Certificate III AHC30122 Certificate III in Agriculture AHC30224 Certificate III in Dairy Production AHC30324 Certificate III in Rural and Environmental Pest Management AHC30422 Certificate III in Pork Production AHC30522 Certificate III in Poultry Production AHC30624 Certificate III in Production Horticulture AHC30722 Certificate III in Horticulture AHC30824 Certificate III in Arboriculture AHC30921 Certificate III in Landscape Construction AHC31024 Certificate III in Parks and Gardens AHC31124 Certificate III in Nursery Operations AHC31324 Certificate III in Sports Turf Management AHC31424 Certificate III in Conservation and Ecosystem Management AHC31522 Certificate III in On Country Management AHC31824 Certificate III in Beekeeping AHC32424 Certificate III in Irrigation Technology AHC32522 Certificate III in Cultural Sites Work AHC32724 Certificate III in Rural Merchandising AHC32822 Certificate III in Rural Operations AHC32925 Certificate III in Shearing AHC33025 Certificate III in Wool Clip Preparation AHC33125 Certificate III in Advanced Wool Handling AHC33325 Certificate III in Feedlot Operations AHC33722 Certificate III in Protected Horticulture AHC33822 Certificate III in Permaculture	The Certificate III qualification reflects the role of individuals required to apply a broad range of knowledge and skills in varied contexts and undertake skilled work. Certificate III is suitable for experienced operators, technicians and trades workers. Certificate III serves also as a pathway for further learning.

Qualification	Overview of occupational outcomes
AHC33924 Certificate III in Medicinal Cannabis Cultivation and Production	
Certificate II AHC20122 Certificate II in Agriculture AHC20324 Certificate II in Production Horticulture AHC20422 Certificate II in Horticulture AHC20520 Certificate II in Arboriculture AHC20624 Certificate II in Parks and Gardens AHC20724 Certificate II in Nursery Operations AHC20919 Certificate II in Sports Turf Management AHC21024 Certificate II in Conservation and Ecosystem Management AHC21124 Certificate II in Irrigation AHC21227 Certificate II in Primary Industries and Rural Operations AHC21325 Certificate II in Shearing AHC21425 Certificate II in Wool Handling AHC21624 Certificate II in Landscaping AHC21722 Certificate II in Permaculture AHC21824 Certificate II in Protected Horticulture	The Certificate II qualification reflects the role of individuals who undertake mainly routine work. Generally, Certificate II is used as an induction into the industry and is aligned to operator, production and assistant roles. Certificate II serves also to offer a pathway for further learning.
Certificate I AHC10124 Certificate I in Conservation and Ecosystem Management AHC10222 Certificate I in Agriculture AHC10322 Certificate I in Horticulture AHC10422 Certificate I in Permaculture	The purpose of Certificate I qualifications is to provide individuals with basic functional knowledge and skills to undertake work, further learning, and community involvement in the industry. Certificate I may be used as an induction into the industry.

Occupational outcomes for industry sectors

The following tables provide typical occupational outcomes of each AQF qualification in each industry sector.[10]

Agribusiness

Qualification	Typical occupational outcomes
AHC41024 Certificate IV in Agribusiness	• *Agribusiness team leader/supervisor* • *Agribusiness administrator*
AHC51422 Diploma of Agribusiness Management	• *Farm manager/administrator* • *Production unit manager/administrator* • *Station/property manager* • *Agribusiness manager/administrator* • *Horticulture production manager*
AHC60319 Advanced Diploma of Agribusiness Management	• *Rural and regional agribusiness manager or advisor (including lending managers, insurance brokers, machinery dealers, chemical resellers, stock agents, grain marketers)* • *Agribusiness advisor/consultant* • *Agriculture enterprise business manager* • *Production horticulture enterprise business manager*

Agronomy

Qualification	Typical occupational outcomes
AHC51920 Diploma of Applied Agronomy	• *Agronomist*

[10] Information provided as a guide only. Some information is sourced from The Australian Apprenticeships & Traineeships Information Service <http://aapathways.com.au/jpc>is funded by the Australian Government Department of Education and Training. Information in the tables is based on <http://www.aapathways.com.au/Career-Resources/Job-Pathway-Charts-Link/Job-Pathways-Charts-PDF>.

Animal and other livestock production

Qualification	Typical occupational outcomes
AHC20122 Certificate II in Agriculture	• *Assistant animal attendant/stockperson* • *Assistant farm or station hand/worker/labourer* • *Assistant farm fencing contractor* • *Farm machinery worker* • *Jillaroo/Jackaroo* • *Saleyard livestock worker*
AHC30122 Certificate III in Agriculture	• *Farm or station hand* • *Farm or station worker* • *Livestock transport driver*
AHC31824 Certificate III in Beekeeping	• *Beekeeper*
AHC30224 Certificate III in Dairy Production	• *Dairy farmhand*
AHC30422 Certificate III in Pork Production	• *Piggery attendant* • *Pork stock person*
AHC30522 Certificate III in Poultry Production	• *Poultry farm technician* • *Poultry breeding technician* • *Egg grading technician* • *Poultry services provider* • *Hatchery technician*
AHC33325 Certificate III in Feedlot Operations	• *Feedlot maintenance worker* • *Feedlot hand* • *Feed mill operator* • *Feed mill hand* • *Livestock farm worker* • *Livestock hand* • *Pen rider* • *Feedlot administration worker*
AHC40122 Certificate IV in Agriculture	• *Dairy farm supervisor* • *Farm supervisor (sheep)* • *Head stockperson (beef cattle)* • *Stud farm supervisor/manager*
AHC50122 Diploma of Agriculture	• *Farm production manager (beef cattle)*

Qualification	Typical occupational outcomes
	• *Station manager (sheep and grain)*
AHC60319 Advanced Diploma of Agribusiness Management	• *Agribusiness enterprise business manager*

Arboriculture

Qualification	Typical occupational outcomes
AHC20520 Certificate II in Arboriculture	• *Ground-based tree worker*
AHC30824 Certificate III in Arboriculture	• *Climbing arborist* • *Elevated work platform arborist* • *Crane specialist arborist* • *Environmental arborist* • *Arborist works coordinator*
AHC50524 Diploma of Arboriculture	• *Tree manager* • *Consulting arborist*
AHC60524 Advanced Diploma of Arboriculture	• *Consulting arborist* • *Specialist consulting arborist* • *Senior tree manager*
AHC80120 Graduate Diploma of Arboriculture	• *Senior consulting arborist* • *Specialist consulting arborist* • *Senior tree manager* • *Senior technical/research arborist*

Conservation and ecosystem management

Qualification	Typical occupational outcomes
AHC21024 Certificate II in Conservation and Ecosystem Management	• *Conservation worker – land management* • *Conservation worker – parks and wildlife* • *Earthworks conservation worker*
AHC30324 Certificate III in Rural and Environmental Pest Management	• *Pest management field officer* • *Pest management contracting* • *Vertebrate pest management field officer*

Qualification	Typical occupational outcomes
	• *Weed management field officer in the pest management industry*
AHC31424 Certificate III in Conservation and Ecosystem Management	• *Land rehabilitation worker* • *National parks worker* • *Revegetation worker* • *National parks ranger* • *Earthworks conservation technician* • *Rehabilitation of mined land worker*
AHC40924 Certificate IV in Conservation and Ecosystem Management	• *Senior conservation worker*
AHC41724 Certificate IV in Pest Management	• *Senior field officer – pest management* • *Supervisor – pest management*
AHC51120 Diploma of Conservation and Ecosystem Management	• *Senior park ranger*
AHC51222 Diploma of Community Group Coordination and Facilitation	• *Community project coordinator (land care)*
AHC51324 Diploma of Pest Management	• *Senior officer – pest management* • *Manager – pest management*
AHC60422 Advanced Diploma of Conservation and Ecosystem Management	• *Regional and senior management roles in conservation and ecosystem management*

Dairy

Qualification	Typical occupational outcomes
AHC30224 Certificate III in Dairy Production	• *Dairy worker*

Gardening

Qualification	Typical occupational outcomes
AHC20624 Certificate II in Parks and Gardens	• *Park and gardens assistant*
AHC20919 Certificate II in Sports Turf Management	• *Sports turf support person* • *Sports turf volunteer*
AHC21624 Certificate II in Landscaping	• *Landscaping assistant*

Qualification	Typical occupational outcomes
AHC30921 Certificate III in Landscape Construction	• *Landscape gardener*
AHC31021 Certificate III in Parks and Gardens	• *Parks and gardens tradesperson*
AHC31324 Certificate III in Sports Turf Management	• *Sports turf tradesperson, including green keeper and grounds person*
AHC42021 Certificate IV in Landscape Construction Management	• *Landscape contractor supervisor*
AHC42421 Certificate IV in Landscape Design	• *Landscape designer*
AHC50422 Diploma of Horticulture Management	• *Management job roles in the horticulture industry*
AHC50621 Diploma of Landscape Design	• *Landscape designer*
AHC51024 Diploma of Sports Turf Management	• *Sports turf manager, including golf course superintendent, grounds manager, golf course curator, head bowling greenkeeper, racetrack manager* • *Sports turf management consultant*
AHC52021 Diploma of Landscape Construction Management	• *Landscape project manager*

Grain production

Qualification	Typical occupational outcomes
AHC10222 Certificate I in Agriculture	• *Entry level roles in the agriculture and conservation and ecosystem management industries*
AHC30122 Certificate III in Agriculture	• *Farmhand (grain)* • *Station hand (sheep and wheat)*
AHC40122 Certificate IV in Agriculture	• *Farm supervisor (grain)*
AHC50122 Diploma of Agriculture	• *Farm manager (rice)* • *Station manager (sheep and grain)*
AHC60319 Advanced Diploma of Agribusiness Management	• *Agribusiness enterprise business manager*

Horticulture

Qualification	Typical occupational outcomes
AHC10322 Certificate I in Horticulture	• *Entry level job roles in the horticulture industry*
AHC20422 Certificate II in Horticulture	• *Horticulture assistant*
AHC30722 Certificate III in Horticulture	• *Horticulturalist*
AHC40422 Certificate IV in Horticulture	• *Horticulture team leader*
AHC50422 Diploma of Horticulture Management	• *Horticultural manager*

Irrigation

Qualification	Typical occupational outcomes
AHC21124 Certificate II in Irrigation	• *Irrigation installation assistant*
AHC32424 Certificate III in Irrigation Technology	• *Irrigation installer* • *Irrigation maintainer*
AHC41124 Certificate IV in Irrigation Management	• *Irrigation installation supervisor* • *Irrigation installation site manager* • *Irrigation manager* • *Irrigation sales management*
AHC51624 Diploma of Irrigation Design	• *Irrigation system designer* • *Irrigation business manager* • *Irrigation system assessor*

Medicinal cannabis

Qualification	Typical occupational outcomes
AHC33924 Certificate III in Medicinal Cannabis Cultivation and Production	• *Cultivation technician*
AHC42324 Certificate IV in Medicinal Cannabis Cultivation and Production	• *Cultivation supervisor/manager*

On Country Management

Qualification	Typical occupational outcomes
AHC21024 Certificate II in Conservation and Ecosystem Management	• *Conservation worker* • *Indigenous land management*

Qualification	Typical occupational outcomes
AHC31522 Certificate III in On Country Management	• *Rangers (Park, On Country, Discovery)* • *Tour guides* • *Council workers* • *Land management corporations' employees* • *Bushland management officers* • *Aboriginal and Torres Strait Islander Cultural and Heritage officers*
AHC32522 Certificate III in Aboriginal and/or Torres Strait Islander Cultural Sites Work	• *Rangers (National Park, Discovery, On Country)* • *Tour guides* • *Rural fire service field officers* • *Aboriginal and/or Torres Strait Islander cultural sites officers* • *Local authorities' and/or services' employees* • *Bushland management officers* • *Cultural heritage officers* • *Aboriginal and/or Torres Strait Islander Land council workers*
AHC40924 Certificate IV in Conservation and Ecosystem Management	• *Senior conservation worker*
AHC51120 Diploma of Conservation and Ecosystem Management	• *Aboriginal and/or Torres Strait Islander land manager*

Permaculture

Qualification	Typical occupational outcomes

AHC10422 Certificate I in Permaculture	• *Permaculture assistants:*
	  ○ *permaculture farm hand*
	  ○ *nursery worker in a community nursery*
	  ○ *recycling centre helper*
	  ○ *helper in a community or school garden*
	  ○ *teacher's assistant*

Qualification	Typical occupational outcomes

AHC21722 Certificate II in Permaculture	• *Permaculture support workers:*
	  ○ *urban food growing assistant*
	  ○ *permaculture farmworker/field worker*
	  ○ *community nursery worker*
	  ○ *waste management worker*
	  ○ *school garden assistant*

AHC33822 Certificate III in Permaculture	• *Permaculture farm hand*
	• *Permaculture system coordinators:*
	  ○ *permaculture urban garden worker*
	  ○ *permaculture farm worker*
	  ○ *worker in a permaculture enterprise*
	  ○ *small business owner/operator*
	  ○ *community support*

AHC42122 Certificate IV in Permaculture	• *Permaculture project supervisor*
	• *Permaculture project supervisors and/or designers:*
	  ○ *supervisor of a food growing enterprise*
	  ○ *school or community garden supervisor*
	  ○ *developer and supervisor of sustainability projects, including overseas aid projects*
	  ○ *permaculture trainers*
	  ○ *community support*
	  ○ *small business owner/operator*

AHC52122 Diploma of Permaculture	• *Permaculture specialist*
	• *Permaculture project managers, consultants and designers:*
	  ○ *sustainability officer in an organisation, school, local government office or NGO*
	  ○ *sustainable education manager*
	  ○ *design manager on large permaculture projects or developments*

Qualification	Typical occupational outcomes
	○ *designer or manager of local government sustainability projects* ○ *designer or manager of workplace change for sustainability* ○ *trainer in permaculture or sustainability* ○ *overseas aid and development officer*

Production horticulture

Qualification	Typical occupational outcomes
AHC20122 Certificate II in Agriculture	• *Assistant grain farmhand* • *Assistant horticultural crop farmhand*
AHC20324 Certificate II in Production Horticulture	• *Field worker* • *Picker* • *Pruner* • *Packer*
AHC20724 Certificate II in Nursery Operations	• *Production nursery assistant*
AHC21824 Certificate II in Protected Horticulture	• *Supervised picker* • *Production nursery worker* • *Retail nursery sales assistant* • *Retail nursery maintainer*
AHC30624 Certificate III in Production Horticulture	• *Field worker* • *Seeding person* • *Operator* • *Irrigation maintainer* • *Machinery maintainer* • *Leading hand vegetable grower*
AHC31124 Certificate III in Nursery Operations	• *Trade level roles in the nursery production and retail nursery industry*
AHC33722 Certificate III in Protected Horticulture	• *Picker* • *Packer* • *Crop worker*

Qualification	Typical occupational outcomes
	• *Nursery assistant*
AHC40122 Certificate IV in Agriculture	• *Cotton farm supervisor*
AHC40224 Certificate IV in Protected Horticulture	• *Leading hand/Coordinator* • *Supervisor* • *Trainer*

AHC40324 Certificate IV in Production Horticulture	• *Production horticulture:*
	  ○ *Grower*
	  ○ *Field manager*
	  ○ *Supervisor*
	  ○ *Crop grower*
	  ○ *Plant manager*
	  ○ *Integrated pest manager*
	  ○ *Quality assurance*
	  ○ *Compliance manager*
	• *Human resources manager*

AHC40624 Certificate IV in Nursery Operations	• *Integrated pest manager*
	• *Production nursery:*
	  ○ *Irrigation manager*
	  ○ *Dispatch manager*
	  ○ *Head grower*
	  ○ *Sales manager*
	  ○ *Site manager*
	  ○ *Quality assurance manager*
	• *Retail nursery:*
	  ○ *Stock supervisor*
	  ○ *Sales manager*
	  ○ *Green life buyer*
	  ○ *Nursery manager*
	• *Merchandiser*

AHC50324 Diploma of Production Horticulture	• *Owner*
	• *Farm manager*
	• *Production horticulture:*
	  ○ *Head grower*
	  ○ *Crop manager*
	  ○ *Section manager*
	  ○ *Dispatch manager*
	  ○ *Sales manager*

Qualification	Typical occupational outcomes
	○ *Marketing manager* • *Specialist consultants*
AHC50820 Diploma of Nursery Management	• *Owner* • *Farm manager* • *Production or retail nursery:* ○ *Head grower* ○ *Crop manager* ○ *Sales manager* ○ *Marketing manager* • *Specialist consultants*
AHC51524 Diploma of Viticulture	• *Viticulturalist* • *Vineyard manager* • *Foliage manager* • *Irrigation manager* • *Sprayer/chemical manager*
AHC60319 Advanced Diploma of Agribusiness Management	• *Agribusiness enterprise business manager*

Rural and general operations

Qualification	Typical occupational outcomes
AHC21227 Certificate II in Primary Industries and Rural Operations	• *Ranger* • *Land care worker* • *On Country ranger* • *Local government/local community maintenance worker* • *Station worker* • *Agriculture worker:* ○ *Livestock production* ○ *Broadacre cropping* ○ *Dairy production* ○ *Apiary* • *Aquaculture worker/technician* • *Metal fabrication worker* • *Tour guide* • *Hospitality worker* • *Building and Construction worker*

	• *Native Forestry/Agroforestry entry level worker* • *Stock and delivery worker* • *Parks and Gardens worker* • *Groundskeeper and Landscaping worker* • *Community services worker*
AHC32724 Certificate III in Rural Merchandising	• *Rural merchandiser* • *Rural sales assistant*
AHC32822 Certificate III in Rural Operations	• *Senior rural operations farmhand*
AHC41024 Certificate IV in Agribusiness	• *Agribusiness administrator*
AHC51422 Diploma of Agribusiness Management	• *Agribusiness manager*
AHC60319 Advanced Diploma of Agribusiness Management	• *Agribusiness enterprise business manager*

Shearing/Wool harvesting and handling

Qualification	Typical occupational outcomes
AHC21325 Certificate II in Shearing	• *Shearer novice level* • *Crutcher*
AHC21425 Certificate II in Wool Handling	• *Wool handling assistant* • *Wool handler* • *Wool presser*
AHC32925 Certificate III in Shearing	• *Professional shearer*
AHC33025 Certificate III in Wool Clip Preparation	• *Owner Wool Classer*
AHC33125 Certificate III in Advanced Wool Handling	• *Professional wool handler* • *Wool presser*
AHC41325 Certificate IV in Wool Classing	• *Professional Wool Classer*

Key features of the training package and the industry that will impact on the selection of training pathways

A pathway is the route or course of action taken to get to a destination. A training pathway describes learning activities or experiences used to attain the competencies needed to achieve career goals.

AQF Qualifications Pathways Policy requirements

The AQF Qualifications Pathways Policy, as part of the Australian Qualifications Framework, supports students' lifelong learning by aiming to:

- *recognise the multiple pathways that students take to gain AQF qualifications, and that learning can be formal and informal*
- *enhance student progression into and between AQF qualifications, both horizontally (across AQF qualifications at the same level) and vertically (between qualifications at different levels)*
- *support the development of clear pathways in the design of qualifications.*

Multiple pathways to gain qualifications

In line with requirements of the AQF Pathways Policy, the *AHC Agriculture, Horticulture and Conservation and Land Management Training Package* allows for individuals to follow a training and assessment pathway, or recognition of prior learning (RPL) pathway (or combinations of each pathway) to complete the units of competency needed to be awarded a qualification. These pathways are shown in the following diagram.



Training and assessment pathway

Training and assessment pathways usually incorporate a mix of formal, structured training and workplace experience to build skills and knowledge, together with formative and summative assessment activities through which individuals can demonstrate their skills and knowledge. Structured training and assessment courses may be conducted:

- *face-to-face*
- *by distance or e-learning*
- *in the workplace*
- *by combining face-to-face, distance, e-learning and/or workplace delivery.*

The AQF Qualifications Pathways Policy is available to download form the Australian Qualifications Framework website: <https://www.aqf.edu.au/publication/aqf-qualifications-pathways-policy>

RPL pathway

RPL acknowledges that individuals may already have the skills and knowledge required for all or part of a qualification. Individuals can gain credit towards a qualification by providing evidence of their current competency, which may have been gained through formal or informal learning, work experience or general life experience.

Australian apprenticeships/traineeships

Apprenticeships and traineeships are legally binding training arrangements, between an employer and employee, which combine training with paid employment. Australian Apprenticeships are delivered through a cooperative arrangement between the Australian Government, state and territory governments, industry employers and RTOs. Each State or Territory Training Authority (STA/TTA) is responsible for apprenticeships and traineeships in its jurisdiction.

RTOs should contact relevant jurisdictional agencies to clarify available support for implementation of particular qualifications.

The Australian Apprenticeships website has information about traineeships and apprenticeships. Visit <www.australianapprenticeships.gov.au> for more information. STA contact details are provided in the Links section of this Implementation Guide.

VET for secondary students

Vocational Education and Training (VET) programs enable students to acquire workplace skills and knowledge while they are still at school. Successful completion of a VET program provides a student with a nationally recognised AQF qualification (or particular units of competency), usually as part of a senior secondary certificate. VET programs are packaged and delivered in various ways across Australia. The three main delivery arrangements used are:

- *schools hold RTO status*
- *school sectoral bodies (such as Boards of Studies or regional offices) hold RTO status on behalf of a group of schools*
- *schools work in partnership with RTOs.*

The following qualifications may be suitable for delivery to secondary students:

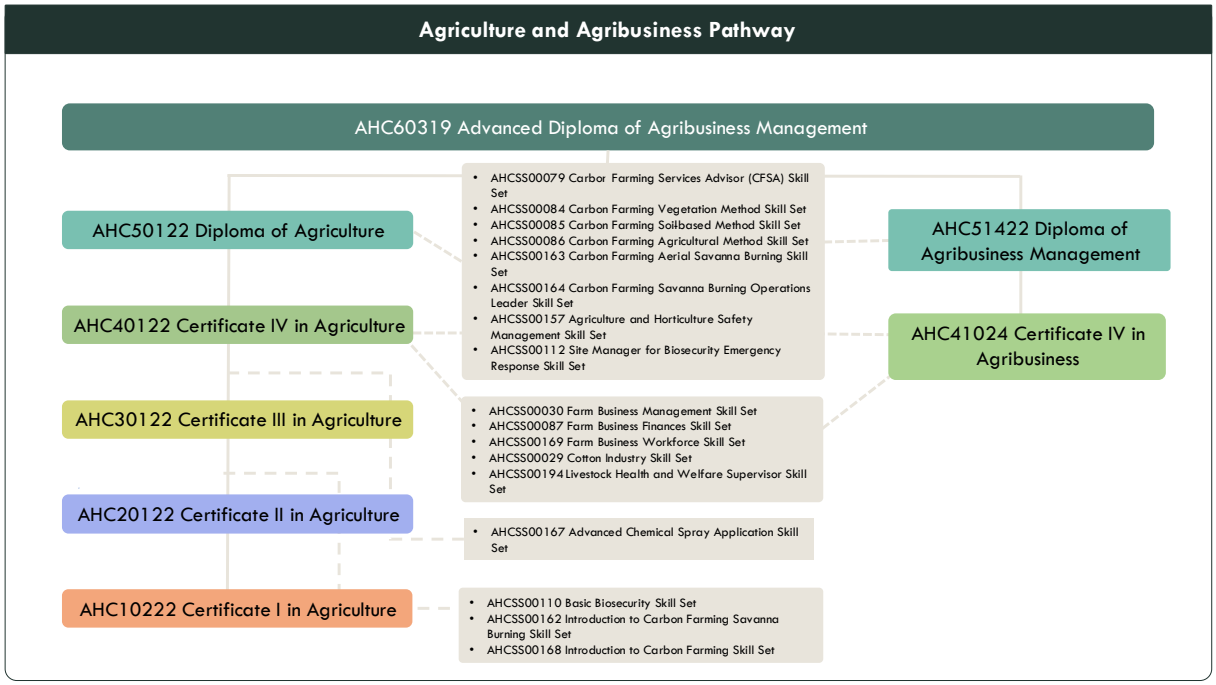
- *Certificate I in Agriculture*
- *Certificate I in Conservation and Ecosystem Management*
- *Certificate I in Horticulture*
- *Certificate I in Permaculture*
- *Certificate II in Agriculture*
- *Certificate II in Arboriculture*
- *Certificate II in Conservation and Ecosystem Management*

- *Certificate II in Horticulture*
- *Certificate II in Irrigation*
- *Certificate II in Landscaping*
- *Certificate II in Parks and Gardens*
- *Certificate II in Permaculture*
- *Certificate II in Production Horticulture*
- *Certificate II in Nursery Operations*
- *Certificate II in Primary Industries and Rural Operations*
- *Certificate II in Protected Horticulture*
- *Certificate II in Shearing*
- *Certificate II in Sports Turf Management*
- *Certificate II in Wool Handling*
- *Certificate III Beekeeping*
- *Certificate III in Conservation and Ecosystem Management*
- *Certificate III in Aboriginal and/or Torres Strait Islander Cultural Sites Work*
- *Certificate III in On Country Management.*

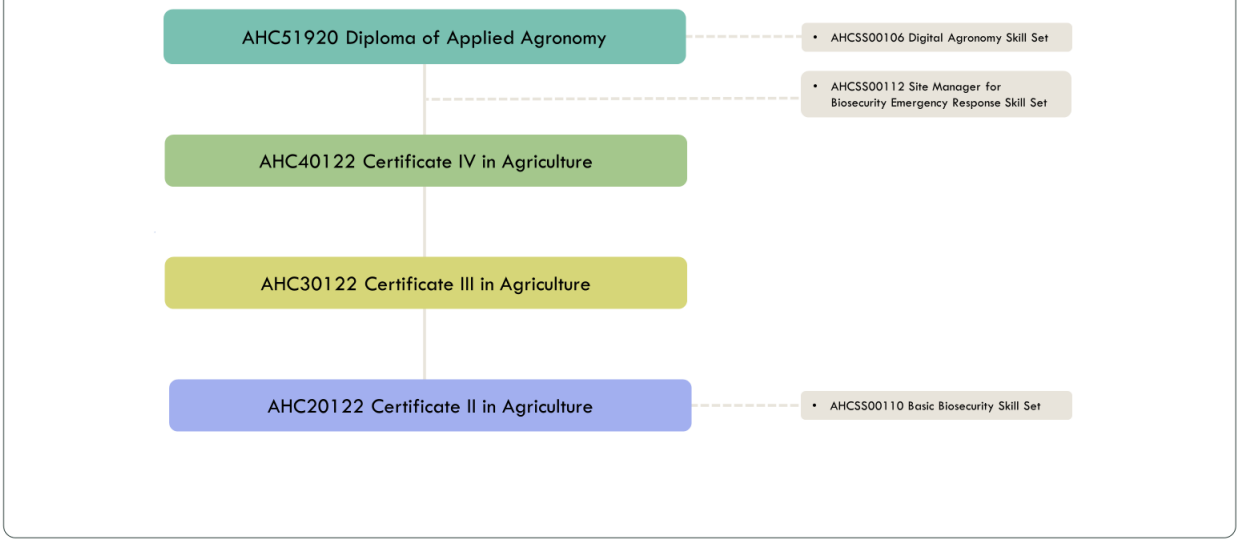
Pathways charts – progression between qualifications

Qualifications have been designed to allow learners to progress into and between qualifications. The following diagram shows the various options for movement into and between qualifications in the *AHC Agriculture, Horticulture and Conservation and Land Management Training Package*.

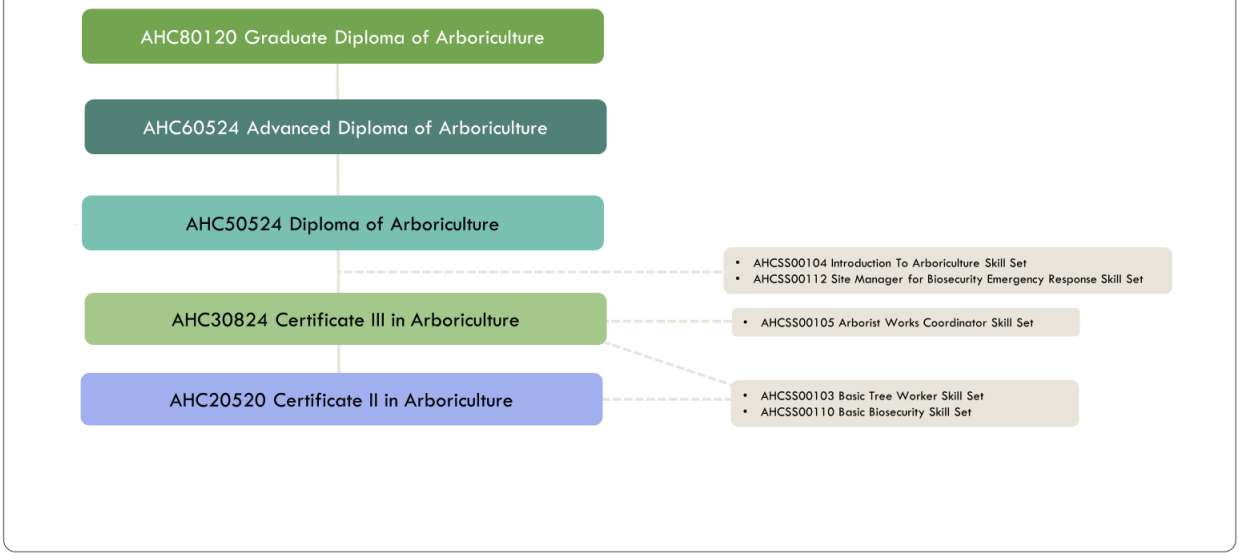
Please note: The qualifications and skill set codes listed on each pathways chart are current for Release 12.0 of AHC Agriculture, Horticulture and Conservation and Land Management Training Package.



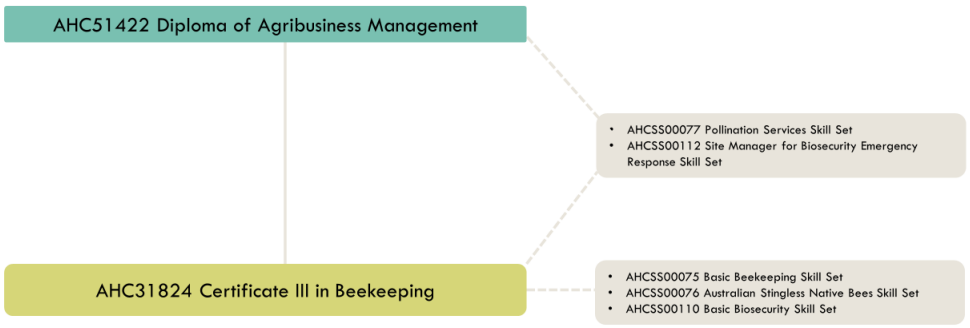
Agronomy Pathway



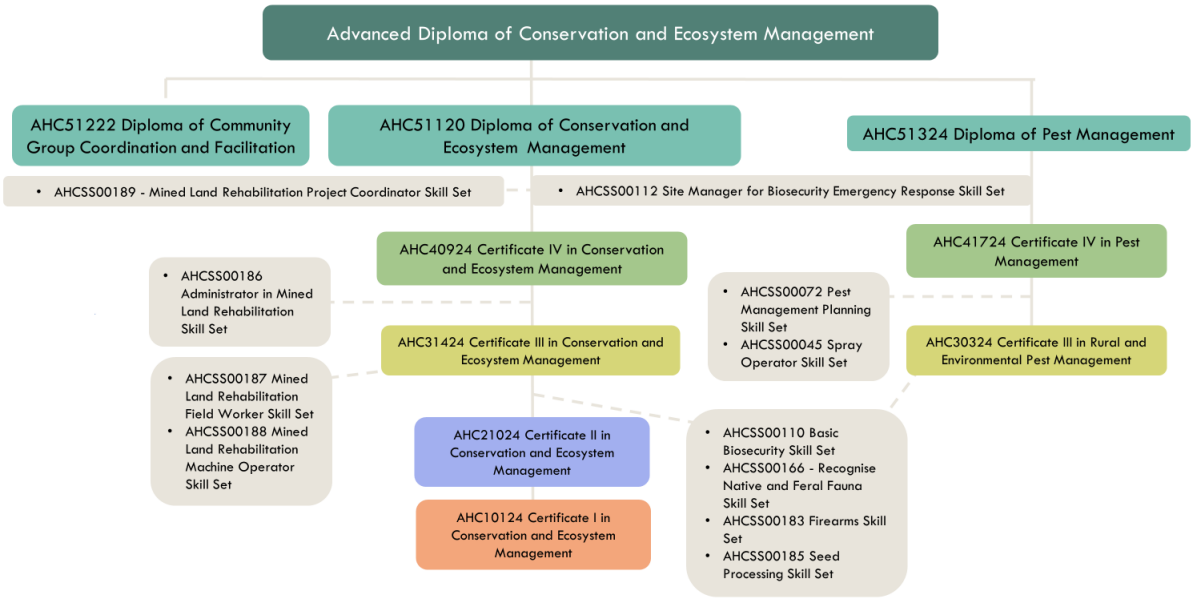
Arboriculture Pathway

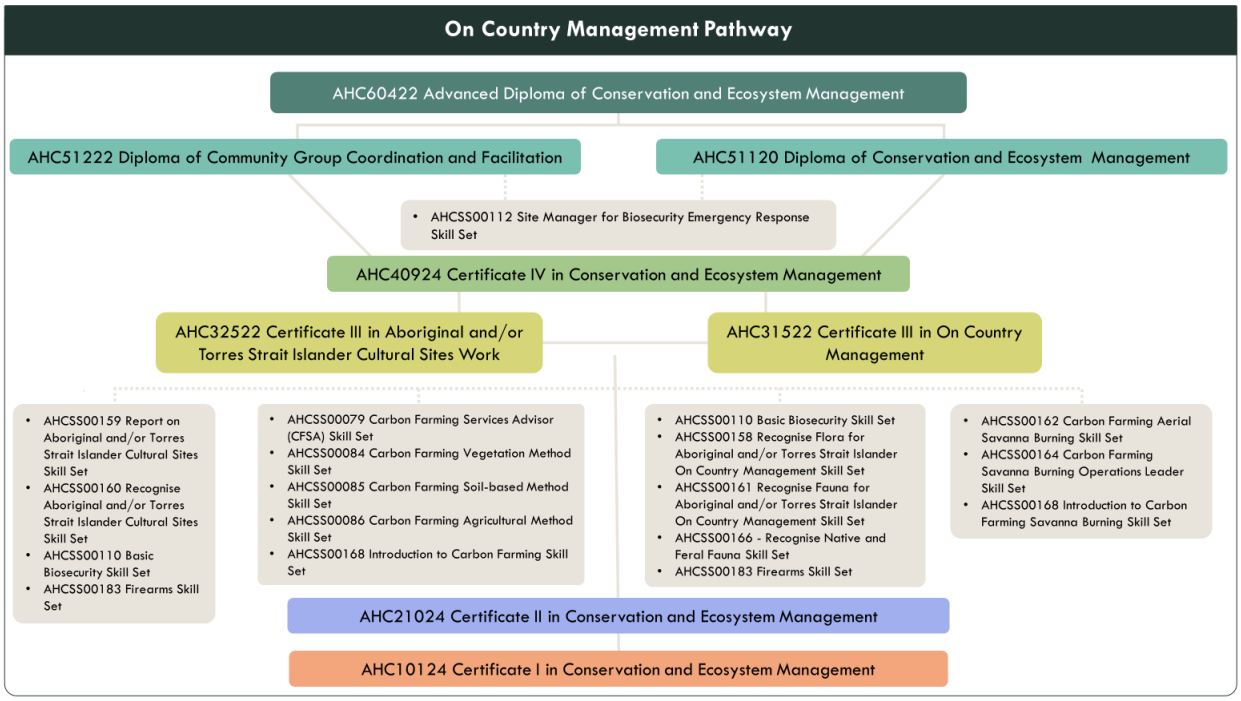


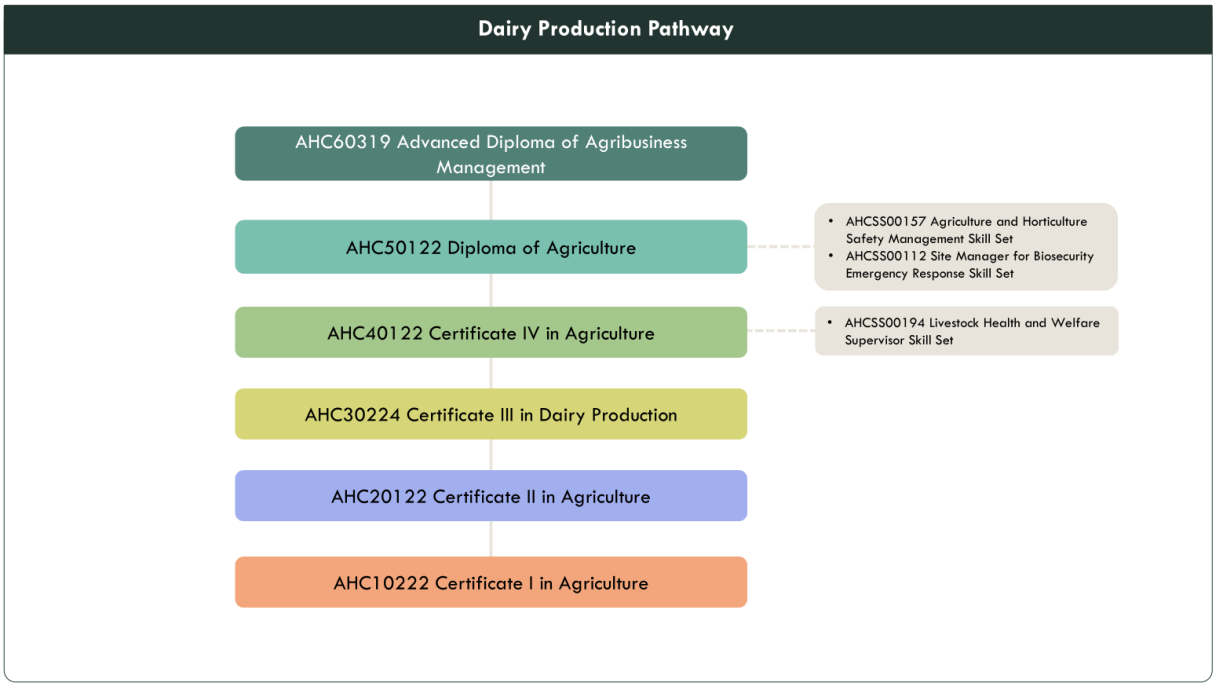
Beekeeping Pathway

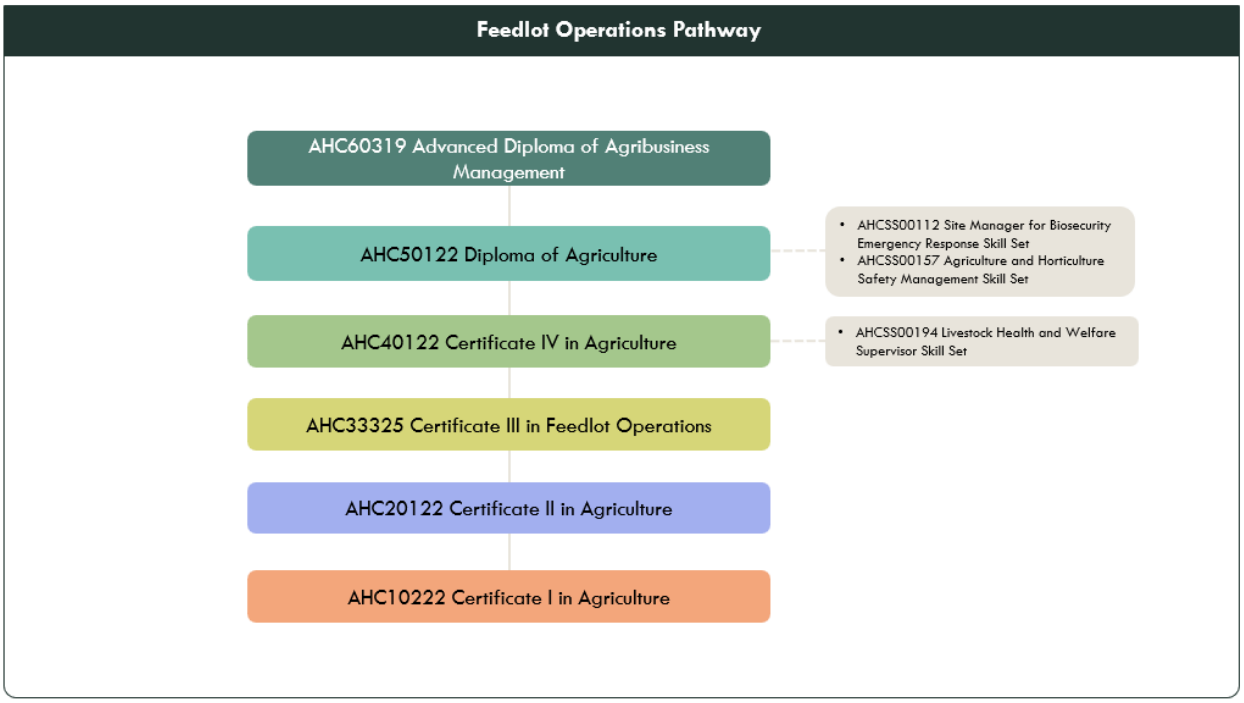


Conservation and Land Management Pathway




On Country Management Pathway
AHC60422 Advanced Diploma of Conservation and Ecosystem Management
AHC51222 Diploma of Community Group Coordination and Facilitation
AHC51120 Diploma of Conservation and Ecosystem Management
AHCSS00112 Site Manager for Biosecurity Emergency Response Skill Set
AHC40924 Certificate IV in Conservation and Ecosystem Management
AHC32522 Certificate III in Aboriginal and/or Torres Strait Islander Cultural Sites Work
AHC31522 Certificate III in On Country Management
AHCSS00159 Report on Aboriginal and/or Torres Strait Islander Cultural Sites Skill Set
AHCSS00160 Recognise Aboriginal and/or Torres Strait Islander Cultural Sites Skill Set
AHCSS00110 Basic Biosecurity Skill Set
AHCSS00183 Firearms Skill Set
AHCSS00079 Carbon Farming Services Advisor (CFSA) Skill Set
AHCSS00084 Carbon Farming Vegetation Method Skill Set
AHCSS00085 Carbon Farming Soil-based Method Skill Set
AHCSS00086 Carbon Farming Agricultural Method Skill Set
AHCSS00168 Introduction to Carbon Farming Skill Set
AHCSS00110 Basic Biosecurity Skill Set
AHCSS00158 Recognise Flora for Aboriginal and/or Torres Strait Islander On Country Management Skill Set
AHCSS00161 Recognise Fauna for Aboriginal and/or Torres Strait Islander On Country Management Skill Set
AHCSS00166 - Recognise Native and Feral Fauna Skill Set
AHCSS00183 Firearms Skill Set
AHCSS00162 Carbon Farming Aerial Savanna Burning Skill Set
AHCSS00164 Carbon Farming Savanna Burning Operations Leader Skill Set
AHCSS00168 Introduction to Carbon Farming Savanna Burning Skill Set
AHC21024 Certificate II in Conservation and Ecosystem Management
AHC10124 Certificate I in Conservation and Ecosystem Management


Dairy Production Pathway
AHC60319 Advanced Diploma of Agribusiness Management
AHC50122 Diploma of Agriculture
AHCSS00157 Agriculture and Horticulture Safety Management Skill Set
AHCSS00112 Site Manager for Biosecurity Emergency Response Skill Set
AHC40122 Certificate IV in Agriculture
AHCSS00194 Livestock Health and Welfare Supervisor Skill Set
AHC30224 Certificate III in Dairy Production
AHC20122 Certificate II in Agriculture
AHC10222 Certificate I in Agriculture


Feedlot Operations Pathway
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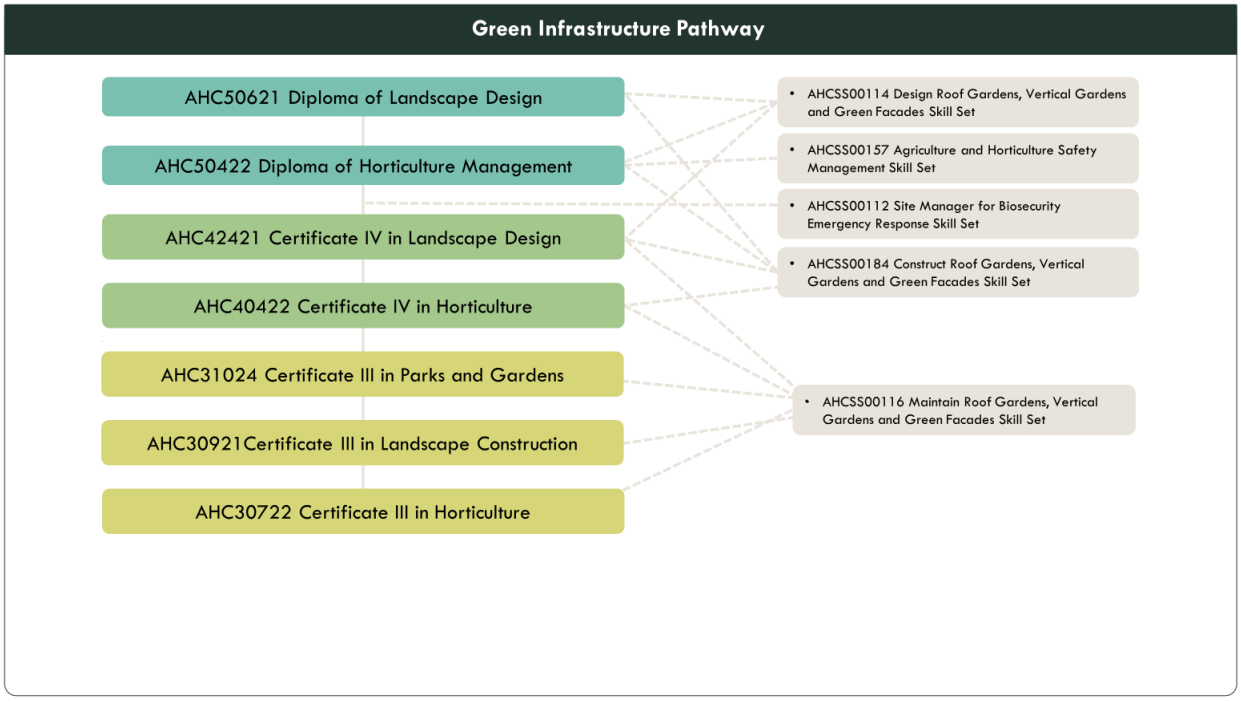
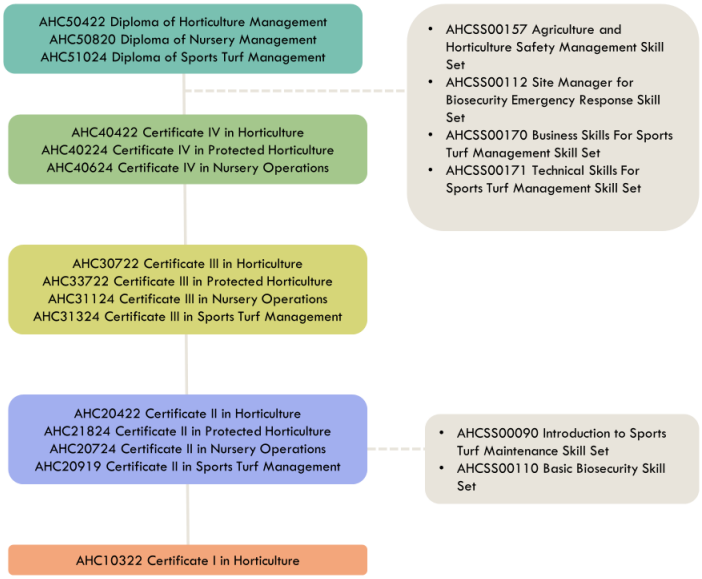
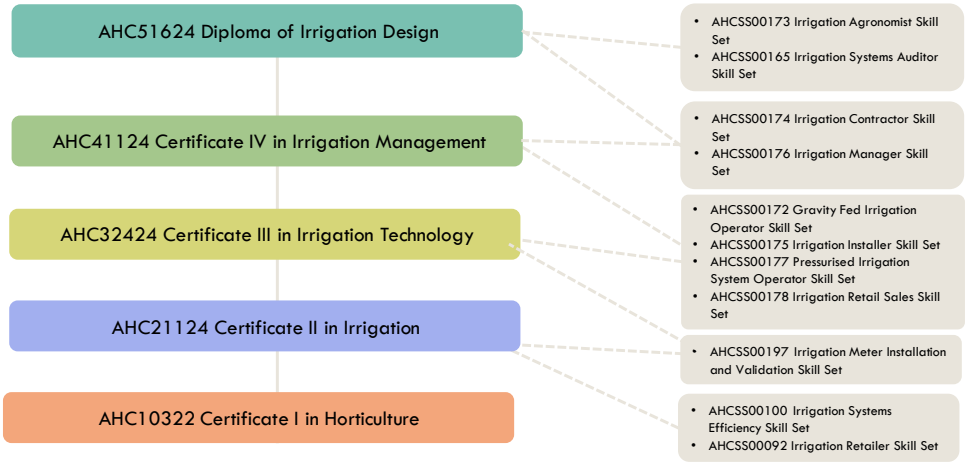
AHC50122 Diploma of Agriculture
AHC40122 Certificate IV in Agriculture
AHC33325 Certificate III in Feedlot Operations
AHC20122 Certificate II in Agriculture
AHC10222 Certificate I in Agriculture
AHCSS00112 Site Manager for Biosecurity Emergency Response Skill Set
AHCSS00157 Agriculture and Horticulture Safety Management Skill Set
AHCSS00194 Livestock Health and Welfare Supervisor Skill Set


Green Infrastructure Pathway
AHC50621 Diploma of Landscape Design
AHC50422 Diploma of Horticulture Management
AHC42421 Certificate IV in Landscape Design
AHC40422 Certificate IV in Horticulture
AHC31024 Certificate III in Parks and Gardens
AHC30921Certificate III in Landscape Construction
AHC30722 Certificate III in Horticulture
AHCSS00114 Design Roof Gardens, Vertical Gardens and Green Facades Skill Set
AHCSS00157 Agriculture and Horticulture Safety Management Skill Set
AHCSS00112 Site Manager for Biosecurity Emergency Response Skill Set
AHCSS00184 Construct Roof Gardens, Vertical Gardens and Green Facades Skill Set
AHCSS00116 Maintain Roof Gardens, Vertical Gardens and Green Facades Skill Set

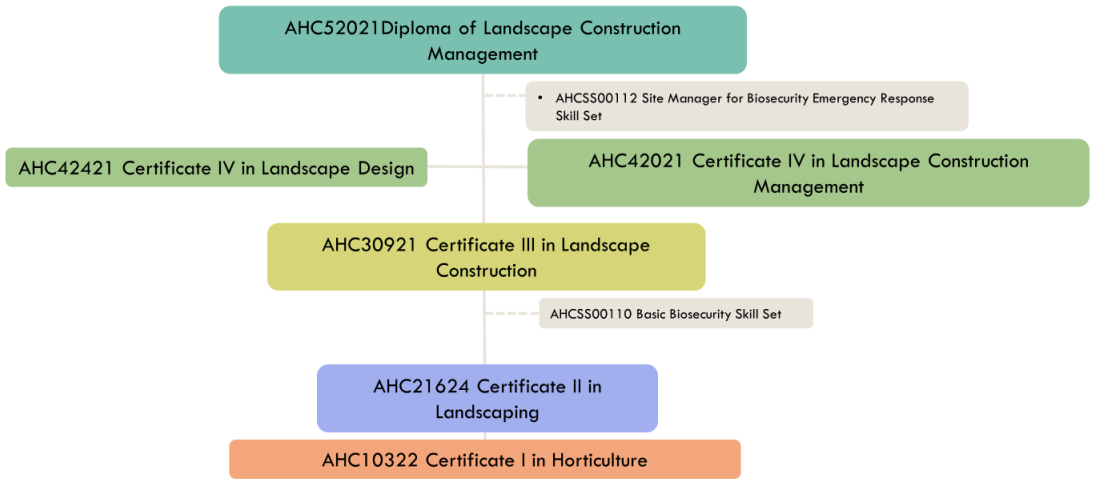
Horticulture, Nursery and Sports Turf Pathway



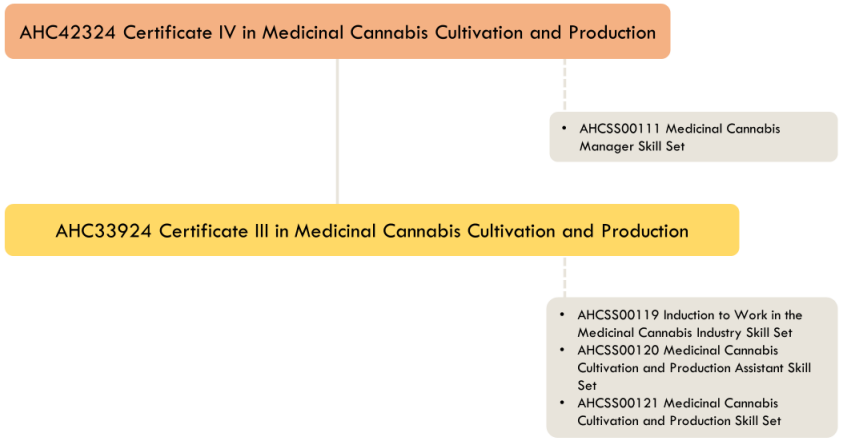
Irrigation Pathway

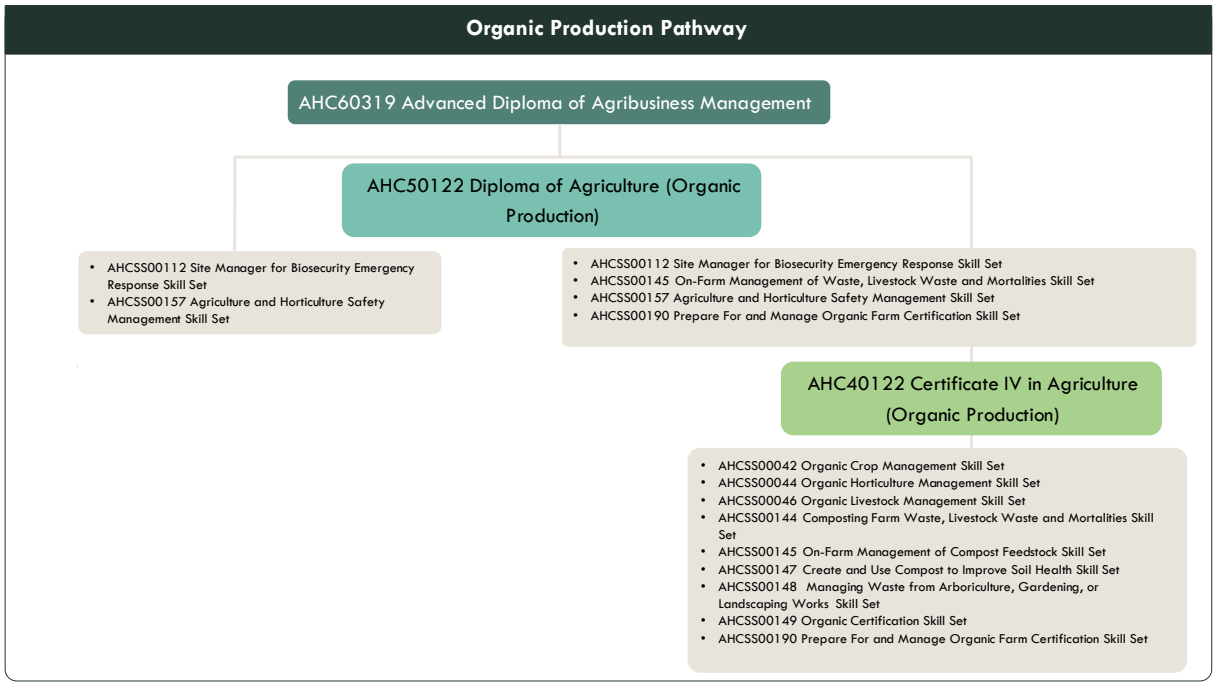


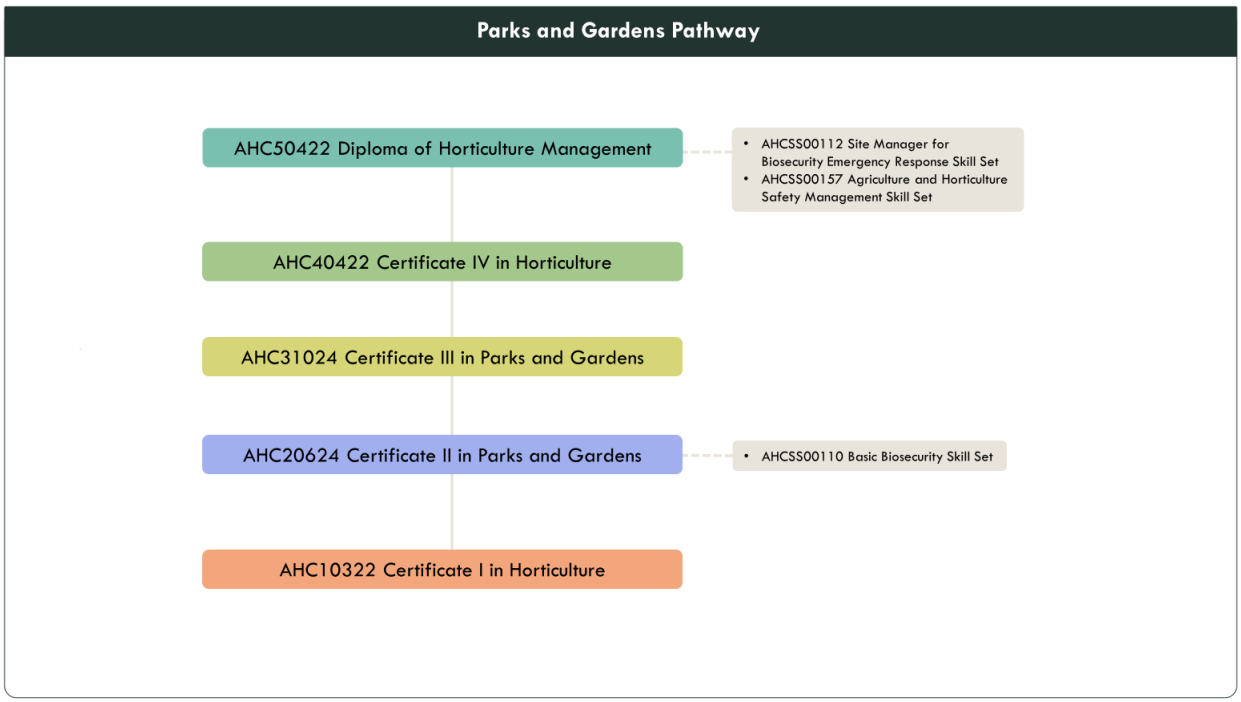
Landscaping Pathway

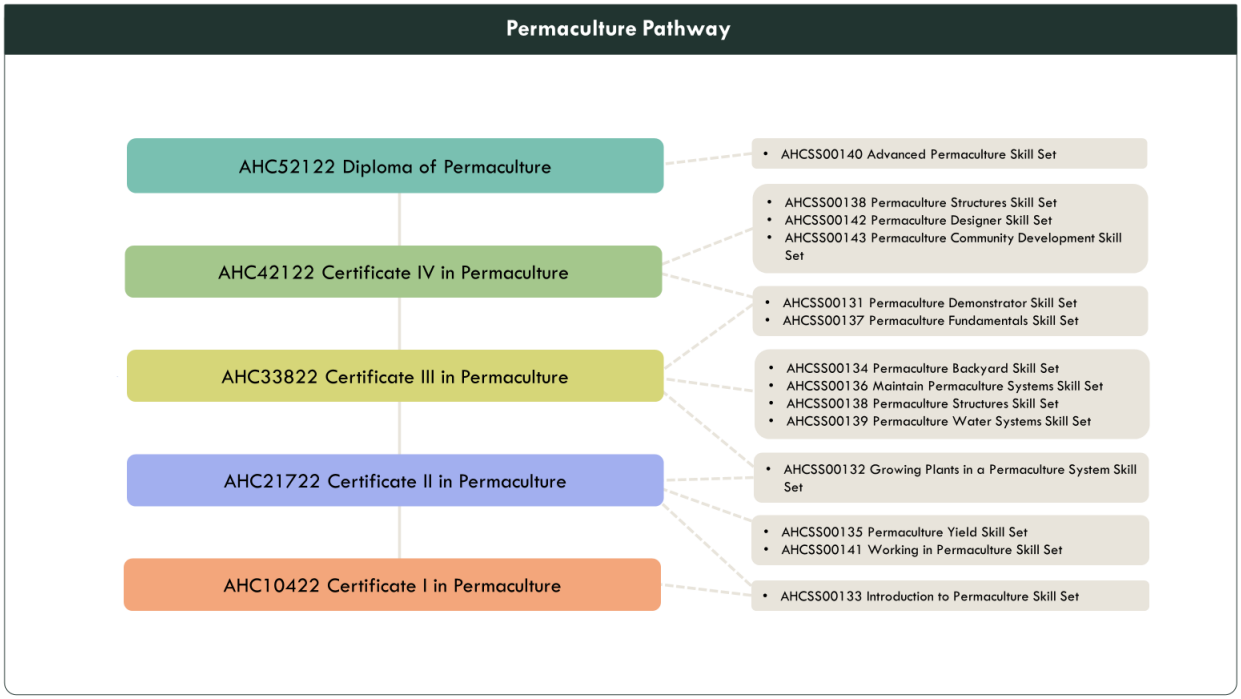


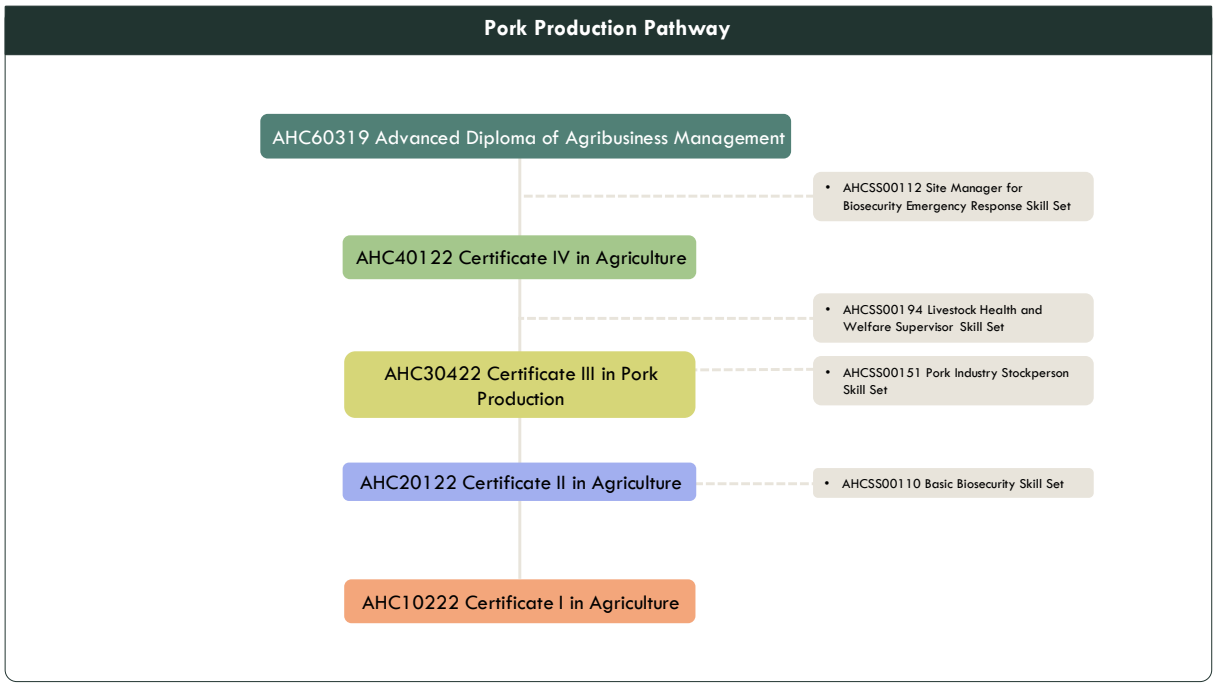
Medicinal Cannabis Cultivation and Production Pathway

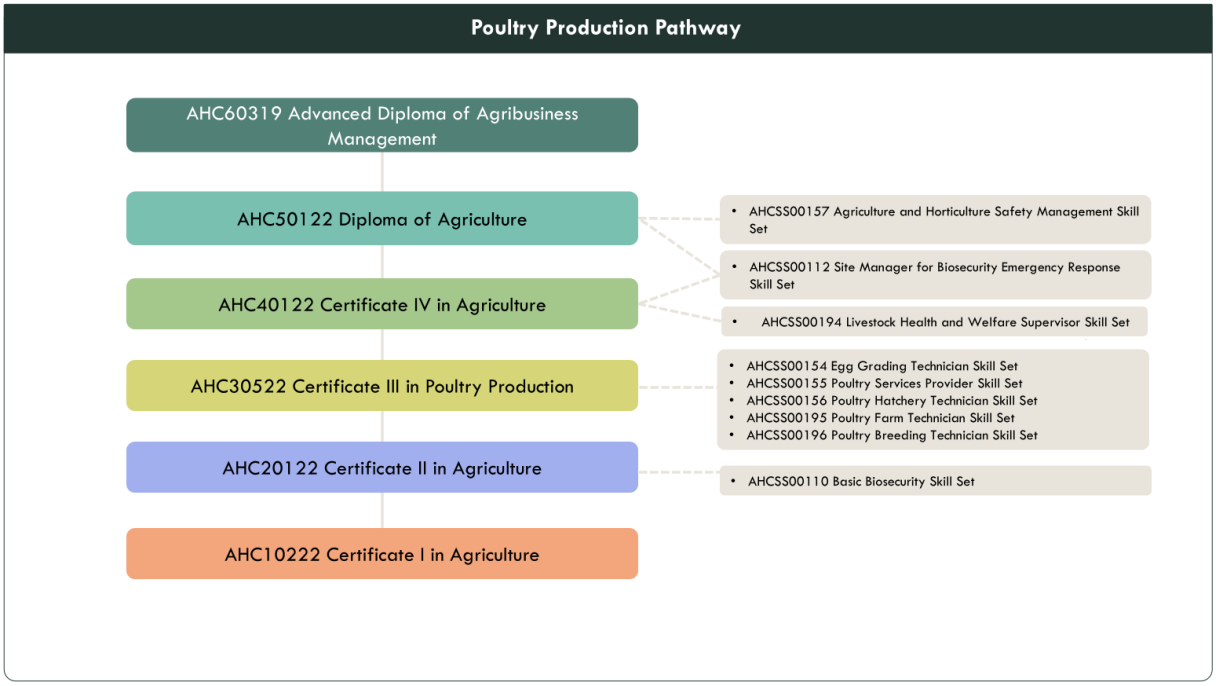


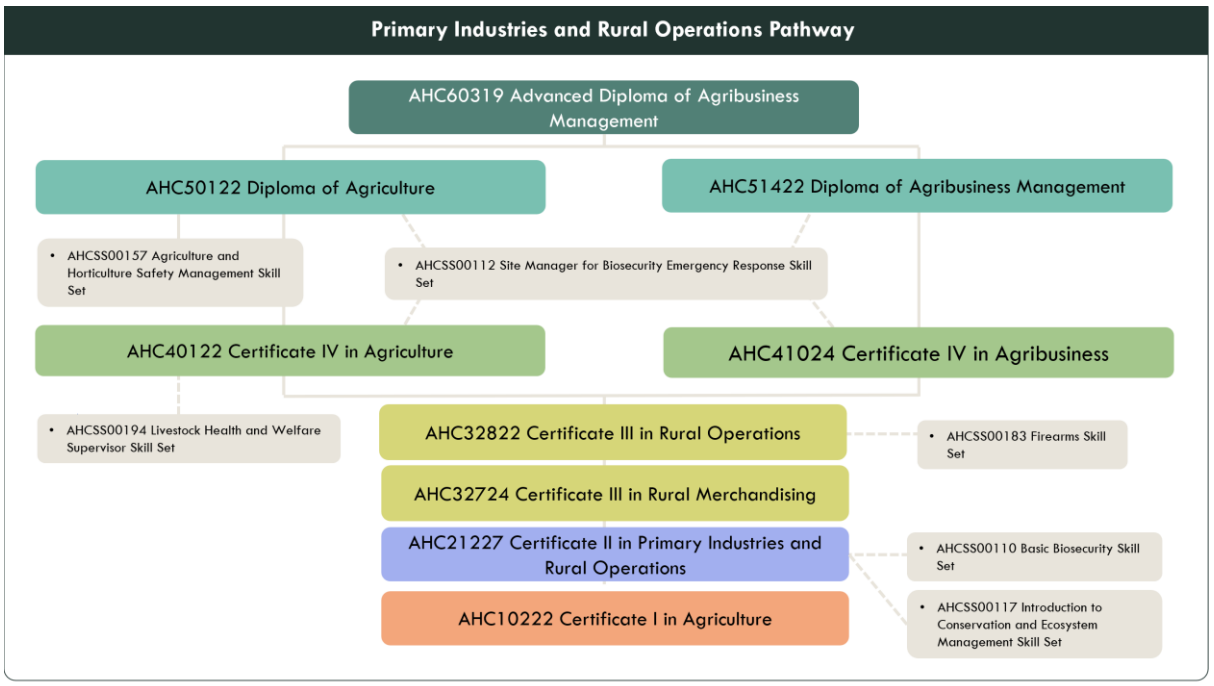

Organic Production Pathway
AHC60319 Advanced Diploma of Agribusiness Management
AHC50122 Diploma of Agriculture (Organic Production)
AHCSS00112 Site Manager for Biosecurity Emergency Response Skill Set
AHCSS00157 Agriculture and Horticulture Safety Management Skill Set
AHCSS00112 Site Manager for Biosecurity Emergency Response Skill Set
AHCSS00145 On-Farm Management of Waste, Livestock Waste and Mortalities Skill Set
AHCSS00157 Agriculture and Horticulture Safety Management Skill Set
AHCSS00190 Prepare For and Manage Organic Farm Certification Skill Set
AHC40122 Certificate IV in Agriculture (Organic Production)
AHCSS00042 Organic Crop Management Skill Set
AHCSS00044 Organic Horticulture Management Skill Set
AHCSS00046 Organic Livestock Management Skill Set
AHCSS00144 Composting Farm Waste, Livestock Waste and Mortalities Skill Set
AHCSS00145 On-Farm Management of Compost Feedstock Skill Set
AHCSS00147 Create and Use Compost to Improve Soil Health Skill Set
AHCSS00148 Managing Waste from Arboriculture, Gardening, or Landscaping Works Skill Set
AHCSS00149 Organic Certification Skill Set
AHCSS00190 Prepare For and Manage Organic Farm Certification Skill Set

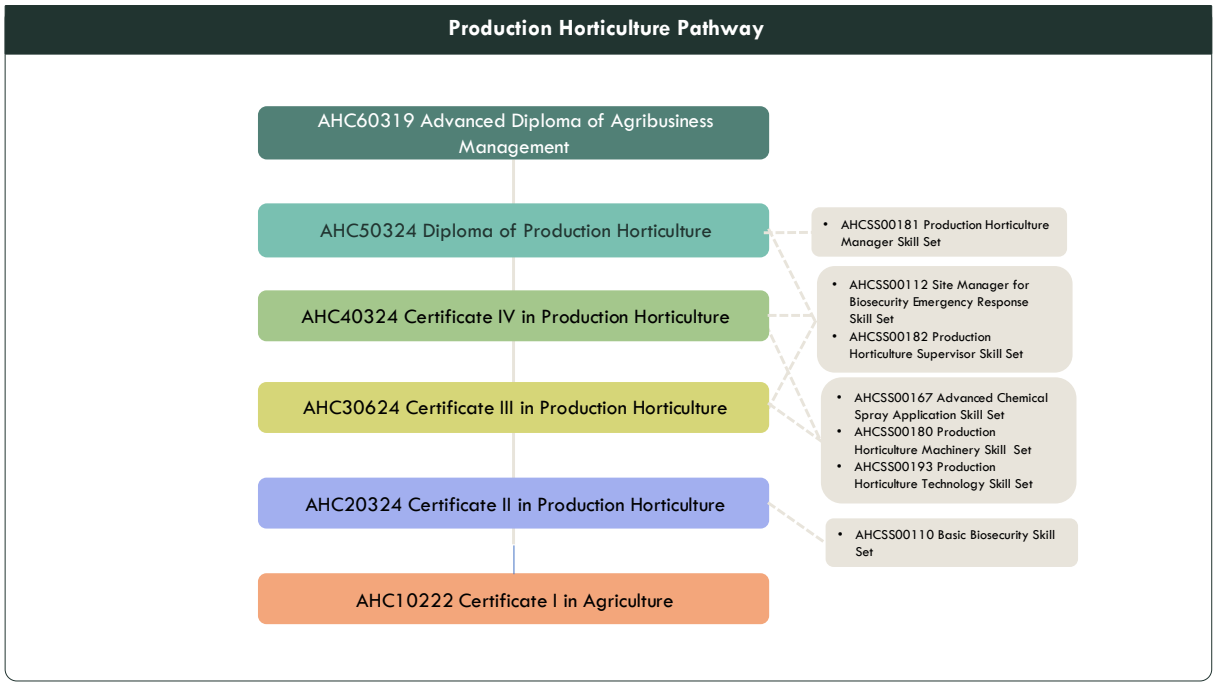

Parks and Gardens Pathway
AHC50422 Diploma of Horticulture Management
AHCSS00112 Site Manager for Biosecurity Emergency Response Skill Set
AHCSS00157 Agriculture and Horticulture Safety Management Skill Set
AHC40422 Certificate IV in Horticulture
AHC31024 Certificate III in Parks and Gardens
AHC20624 Certificate II in Parks and Gardens
AHCSS00110 Basic Biosecurity Skill Set
AHC10322 Certificate I in Horticulture

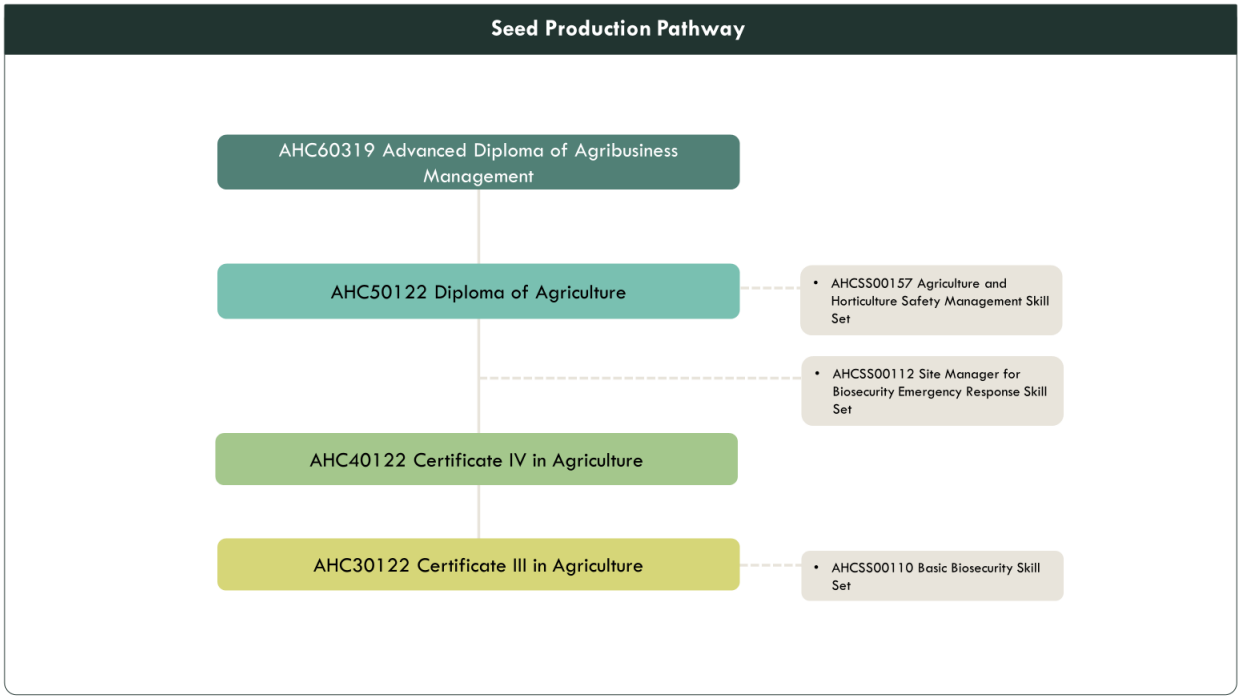

Permaculture Pathway
AHC52122 Diploma of Permaculture
AHC42122 Certificate IV in Permaculture
AHC33822 Certificate III in Permaculture
AHC21722 Certificate II in Permaculture
AHC10422 Certificate I in Permaculture
AHCSS00140 Advanced Permaculture Skill Set
AHCSS00138 Permaculture Structures Skill Set
AHCSS00142 Permaculture Designer Skill Set
AHCSS00143 Permaculture Community Development Skill Set
AHCSS00131 Permaculture Demonstrator Skill Set
AHCSS00137 Permaculture Fundamentals Skill Set
AHCSS00134 Permaculture Backyard Skill Set
AHCSS00136 Maintain Permaculture Systems Skill Set
AHCSS00138 Permaculture Structures Skill Set
AHCSS00139 Permaculture Water Systems Skill Set
AHCSS00132 Growing Plants in a Permaculture System Skill Set
AHCSS00135 Permaculture Yield Skill Set
AHCSS00141 Working in Permaculture Skill Set
AHCSS00133 Introduction to Permaculture Skill Set

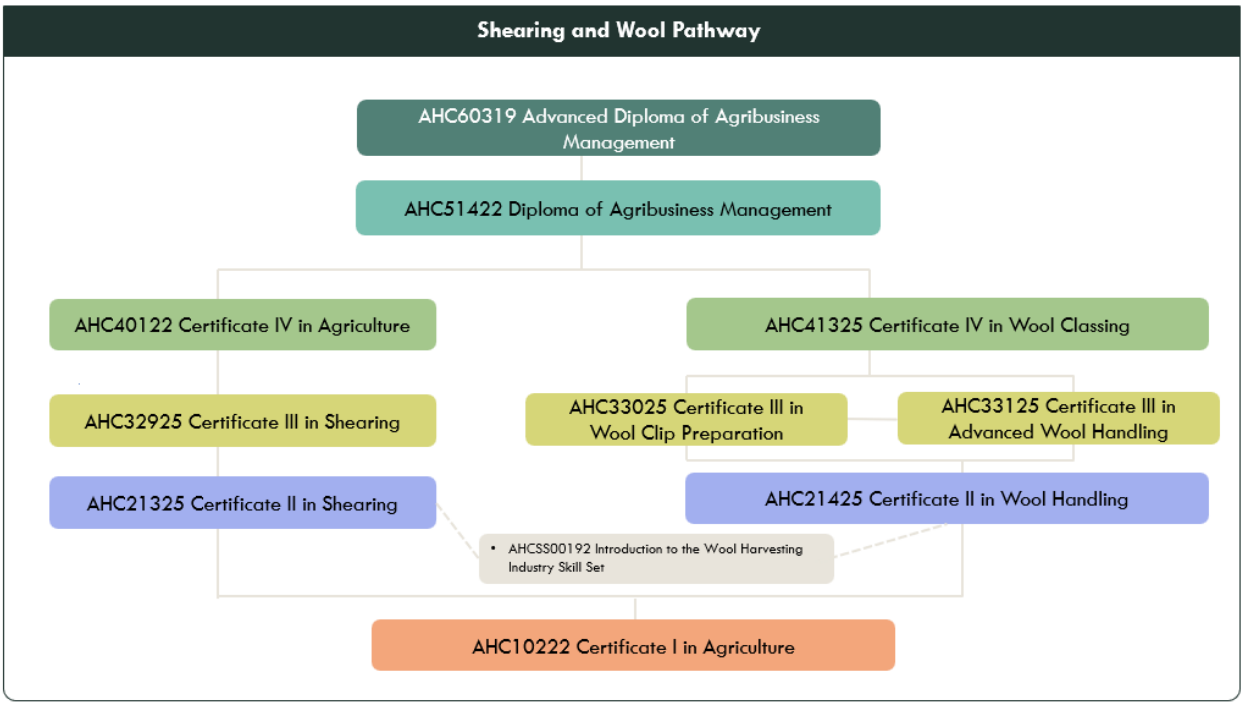

Pork Production Pathway
AHC60319 Advanced Diploma of Agribusiness Management
AHC40122 Certificate IV in Agriculture
AHC30422 Certificate III in Pork Production
AHC20122 Certificate II in Agriculture
AHC10222 Certificate I in Agriculture
AHCSS00112 Site Manager for Biosecurity Emergency Response Skill Set
AHCSS00194 Livestock Health and Welfare Supervisor Skill Set
AHCSS00151 Pork Industry Stockperson Skill Set
AHCSS00110 Basic Biosecurity Skill Set

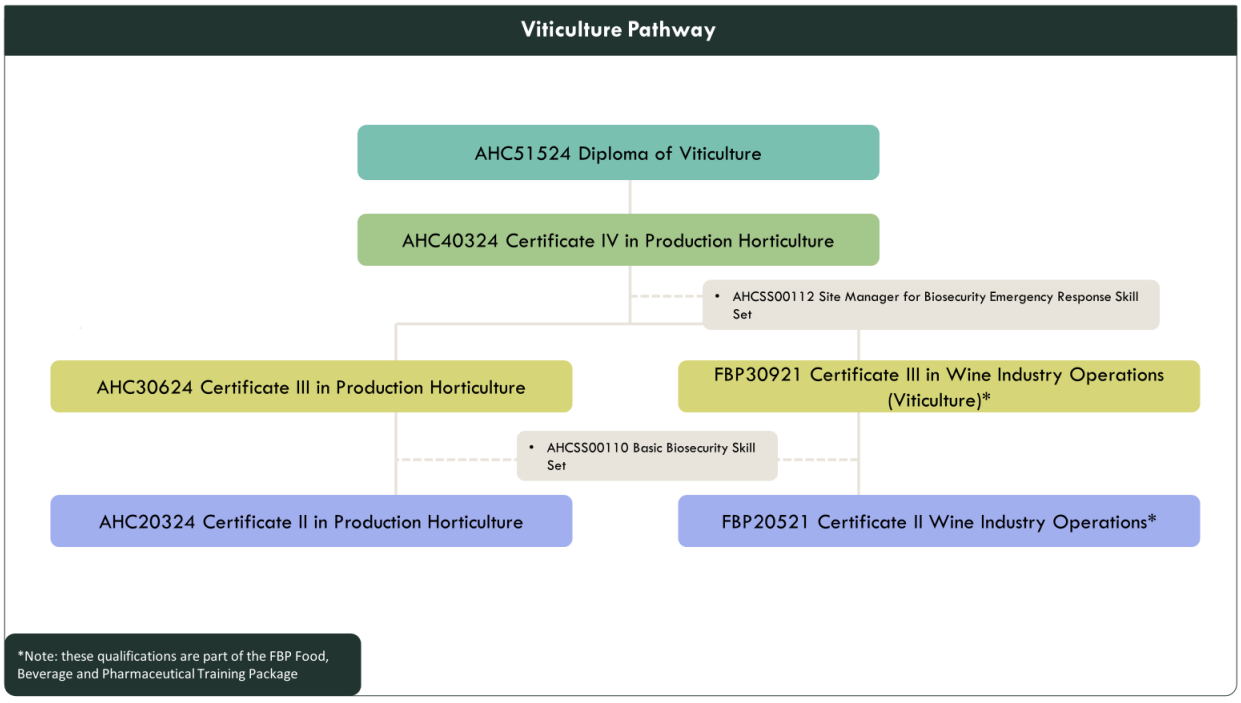

Poultry Production Pathway
AHC60319 Advanced Diploma of Agribusiness Management
AHC50122 Diploma of Agriculture
AHC40122 Certificate IV in Agriculture
AHC30522 Certificate III in Poultry Production
AHC20122 Certificate II in Agriculture
AHC10222 Certificate I in Agriculture
AHCSS00157 Agriculture and Horticulture Safety Management Skill Set
AHCSS00112 Site Manager for Biosecurity Emergency Response Skill Set
AHCSS00194 Livestock Health and Welfare Supervisor Skill Set
AHCSS00154 Egg Grading Technician Skill Set
AHCSS00155 Poultry Services Provider Skill Set
AHCSS00156 Poultry Hatchery Technician Skill Set
AHCSS00195 Poultry Farm Technician Skill Set
AHCSS00196 Poultry Breeding Technician Skill Set
AHCSS00110 Basic Biosecurity Skill Set


Primary Industries and Rural Operations Pathway
AHC60319 Advanced Diploma of Agribusiness Management
AHC50122 Diploma of Agriculture
AHC51422 Diploma of Agribusiness Management
AHCSS00157 Agriculture and Horticulture Safety Management Skill Set
AHCSS00112 Site Manager for Biosecurity Emergency Response Skill Set
AHC40122 Certificate IV in Agriculture
AHC41024 Certificate IV in Agribusiness
AHCSS00194 Livestock Health and Welfare Supervisor Skill Set
AHC32822 Certificate III in Rural Operations
AHCSS00183 Firearms Skill Set
AHC32724 Certificate III in Rural Merchandising
AHC21227 Certificate II in Primary Industries and Rural Operations
AHCSS00110 Basic Biosecurity Skill Set
AHC10222 Certificate I in Agriculture
AHCSS00117 Introduction to Conservation and Ecosystem Management Skill Set


Production Horticulture Pathway
AHC60319 Advanced Diploma of Agribusiness Management
AHC50324 Diploma of Production Horticulture
AHC40324 Certificate IV in Production Horticulture
AHC30624 Certificate III in Production Horticulture
AHC20324 Certificate II in Production Horticulture
AHC10222 Certificate I in Agriculture
AHCSS00181 Production Horticulture Manager Skill Set
AHCSS00112 Site Manager for Biosecurity Emergency Response Skill Set
AHCSS00182 Production Horticulture Supervisor Skill Set
AHCSS00167 Advanced Chemical Spray Application Skill Set
AHCSS00180 Production Horticulture Machinery Skill Set
AHCSS00193 Production Horticulture Technology Skill Set
AHCSS00110 Basic Biosecurity Skill Set


Seed Production Pathway
AHC60319 Advanced Diploma of Agribusiness Management
AHC50122 Diploma of Agriculture
AHC40122 Certificate IV in Agriculture
AHC30122 Certificate III in Agriculture
AHCSS00157 Agriculture and Horticulture Safety Management Skill Set
AHCSS00112 Site Manager for Biosecurity Emergency Response Skill Set
AHCSS00110 Basic Biosecurity Skill Set


Shearing and Wool Pathway
AHC60319 Advanced Diploma of Agribusiness Management
AHC51422 Diploma of Agribusiness Management
AHC40122 Certificate IV in Agriculture
AHC41325 Certificate IV in Wool Classing
AHC32925 Certificate III in Shearing
AHC33025 Certificate III in Wool Clip Preparation
AHC33125 Certificate III in Advanced Wool Handling
AHC21325 Certificate II in Shearing
AHC21425 Certificate II in Wool Handling
AHCSS00192 Introduction to the Wool Harvesting Industry Skill Set
AHC10222 Certificate I in Agriculture


Viticulture Pathway
AHC51524 Diploma of Viticulture
AHC40324 Certificate IV in Production Horticulture
AHCSS00112 Site Manager for Biosecurity Emergency Response Skill Set
AHC30624 Certificate III in Production Horticulture
FBP30921 Certificate III in Wine Industry Operations (Viticulture)*
AHCSS00110 Basic Biosecurity Skill Set
AHC20324 Certificate II in Production Horticulture
FBP20521 Certificate II Wine Industry Operations*
*Note: these qualifications are part of the FBP Food, Beverage and Pharmaceutical Training Package

Entry requirements for qualifications

Any specific entry requirements for qualifications in the *AHC Agriculture, Horticulture and Conservation and Land Management Training Package* are included in each qualification. The entry requirements ensure an individual has the skills and knowledge required to undertake the qualification.

Qualification code and title	Entry requirements
AHC32925 Certificate III in Shearing	Prior to commencing this qualification, individuals must have the skills and knowledge to: • *shear sheep to novice level* • *work independently and within a team in wool harvesting* • *make judgements on the selection of equipment, techniques and contingency measures relating to safe work practices and animal welfare principles* • *apply and communicate solutions to predictable situations in an animal care workplace.* These skills and knowledge may have been acquired through completion of a Certificate II in Shearing or through industry shearing experience.
AHC51024 Diploma of Sports Turf Management	To commence this qualification, an individual must have: • *completed a Certificate III in Sports Turf Management or an equivalent turf management trade level qualification* or • *a Certificate III-level qualification in amenity horticulture combined with two years current work experience in a trade level role at a sports turf facility.*

Qualification code and title	Entry requirements
AHC50524 Diploma of Arboriculture	To commence this qualification, an individual must have achieved the following units of competency or their equivalent: • *AHCARB314 Implement a tree maintenance program* • *AHCARB316 Perform pruning operations* • *AHCARB323 Identify trees.*
AHC60524 Advanced Diploma of Arboriculture	Prior to commencing this qualification, an individual must have: • *a Diploma of Arboriculture* or • a Diploma or higher qualification in a field related to arboriculture* plus 2 years current work experience as a *consulting arborist or a municipal tree manager.*
AHC80120 Graduate Diploma of Arboriculture	Prior to commencing this qualification, an individual must have: • *an Advanced Diploma of Arboriculture* or • an Advanced Diploma or higher qualification in a field related to arboriculture* plus 3 years current work experience as a consulting arborist or a municipal tree *manager.*
AHC40624 Certificate IV in Nursery Operations	To commence this qualification, individuals must demonstrate they have skills and knowledge in the application of: • *cultivating, growing and harvesting/production skills for a variety of plant types, including pest and disease control* • *technology and equipment that apply in a production nursery or retail nursery workplace*

Qualification code and title	Entry requirements
	• *health and safety, pest management and biosecurity processes and regulations that apply in a production nursery or retail nursery workplace.* The skills and knowledge may have been acquired through completion of a Certificate III or higher qualification relating to nursery or horticulture, or industry experience.

AHC50422 Diploma of Horticulture Management	Prior to commencing this qualification, an individual must:
	
	• *have completed the following units of competency (or equivalent):*
	  ○ *AHCCHM304 Transport and store chemicals*
	  ○ *AHCCHM307 Prepare and apply chemicals to control pest, weeds and diseases*
	  ○ *AHCPCM308 Identify and select plants*
	  ○ *AHCPMG301 Control weeds*
	  ○ *AHCPMG302 Control plant pests, diseases and disorders*
	  ○ *AHCSOL304 Implement soil improvements for garden and turf areas*
	  ○ *AHCWHS302 Contribute to workplace health and safety processes*
	
	or
	
	• *have relevant equivalent skills and knowledge acquired through participation in the horticulture industry.*

AHC50820 Diploma of Nursery Management	To commence this qualification, individuals must demonstrate they have skills and knowledge in the application of: • *cultivating, growing and harvesting/production skills for a variety of plant types, including pest and disease control*

Qualification code and title	Entry requirements
	• *technology and equipment that apply in a production nursery or retail nursery workplace* • *health and safety, pest management and biosecurity processes and regulations that apply in a production nursery or retail nursery workplace* The skills and knowledge may have been acquired through completion of a Certificate III or higher qualification relating to nursery or horticulture, or industry experience.

Entry requirements for the Certificate III in Shearing

Given that the Certificate III in Shearing entails use of shearing equipment at operator level, learners entering this qualification must be proficient in the above-mentioned skills and knowledge to ensure safety to self and animals.

Entry requirements for the post-trade qualifications in Arboriculture

Diploma of Arboriculture

The entry requirements for *AHC50524 Diploma of Arboriculture* are three units from the Certificate III that provide a foundation of arborist skills and knowledge. The entry requirement has been added to ensure that prospective learners can successfully complete the Diploma. Industry experts advised that individuals must have attained enough practical tree skills and knowledge for them to be able to provide sound advice when employed as a Consultant or Tree Manager. This concern was also reflected in the Case for Change that states, 'arborists are not regulated, and so certified companies are losing business to inadequately qualified traders, whose lack of knowledge undermines the industry and can be harmful to trees, plants and the wider environment.'

The industry is keen to attract people from related sectors such as Amenity Horticulture and Forestry, and industry experts warned of the dangers of allowing people without sufficient tree care experience to complete a Diploma and become self-employed consultants.

The experts agreed that the following entry requirement would be sufficient to provide a sound foundation of arborist skills and knowledge prior to commencing the revised Diploma:

> To commence this qualification an individual must have achieved the following units of competency or their equivalent:
>
> - *AHCARB314 Implement a tree maintenance program*
> - *AHCARB316 Perform pruning operations*
> - *AHCARB323 Identify trees.*

It should be noted that the three units above are in the core of the revised Certificate III and have also been packaged in to the new *AHCSS00104 Introduction to Arboriculture Skill Set*. People undertaking this skill set from non-arboriculture backgrounds may choose to enrol in the Diploma or decide to complete the Certificate III prior to embarking on the Diploma. Whichever pathway an individual decides to take, industry will have the confidence that these individuals have the necessary skills and experience to be competent consultants or tree managers.

Advanced Diploma of Arboriculture and Graduate Diploma of Arboriculture

These qualifications build on specialist skills and knowledge acquired through learning and experience from working in the arboriculture industry. Without this knowledge and experience the prospective student would not have sufficient understanding of the complexities of arboriculture work to complete this qualification.

As of July 2019, there have been no enrolments in the existing *AHC60524 Advanced Diploma of Arboriculture* and *AHC80116 Graduate Diploma of Arboriculture* since their release in 2016, largely due to the restrictive structure and rigid wording of the entry requirement in each qualification. Industry experts advised that industry practitioners have expressed a need for these qualifications. For example, the University of Melbourne offers a Graduate Certificate in Arboriculture that has been running successfully for almost a decade, with at least 35 enrolments per year. In comparison to the AHC level 6 and 8 arboriculture qualifications, the entry requirements for the university's Graduate Certificate in Arboriculture are very flexible.

Therefore, a major change to the revised Advanced Diploma of Arboriculture and Graduate Diploma of Arboriculture has been to make the entry requirements more flexible. As advised by the industry experts, the entry requirements for the revised Advanced Diploma are:

- *a Diploma of Arboriculture*

or

- *a Diploma or higher qualification in a field related to arboriculture, plus 2 years current work experience as a consulting arborist or a municipal tree manager.*

As advised by the SMEs, the entry requirements for the revised Graduate Diploma are:

- *an Advanced Diploma of Arboriculture*

or

- *an Advanced Diploma or higher qualification in a field related to arboriculture, plus 3 years current work experience as a consulting arborist or a municipal tree manager.*

* A field related to arboriculture, for the purpose of the entry requirements of both qualifications, includes, but is not limited to: agronomy, arboriculture, biology, biomechanics, botany, conservation and land management, ecology, economics, engineering, entomology, environmental science, forestry, landscape architecture, mycology and soil science.

Entry requirements for the Diploma of Sports Turf Management

The sports turf industry is a specialised sector of the horticulture industry. Prior to commencing the Diploma, industry expects individuals to possess practical understanding of working safely with sports turf machinery, tools and equipment, as well as experience in the application of the science

of horticulture at a technical level for growing and maintaining sports turf. This prior knowledge and experience will help ensure individuals enrolling in the Diploma are able to transition and extend these applied skills and knowledge into the effective design and development of sports turf management activities.

In recognition of various pathways to competence, the entry requirements in AHC51024 Diploma of Sports Turf Management have been relaxed to allow entry to individuals with:

> '*a Certificate III-level qualification in amenity horticulture combined with two years current work experience in a trade level role at a sports turf facility*'.

The following qualifications do not have entry requirements but do have recommendations:

Qualification code and title	Entry requirements
Certificate III in Cultural Sites Work	It is recommended that applicants should seek the endorsement of their local Aboriginal and/or Torres Strait Islander Community and local Aboriginal and/or Torres Strait Islander leadership when enrolling in this Qualification.
Certificate III in Seed Testing	It is recommended that applicants should be working under supervision in a seed testing laboratory.

Entry requirements for the Certificate IV in Nursery Operations

The job roles for this qualification require an individual to be able to provide technical support and supervise technical staff. This requires the individual to have underpinning technical skills in order to successfully undertake the qualification. As such, it is critical that an individual has the skills and knowledge in the application of:

- *cultivating, growing and harvesting/production skills for a variety of plant types, including pest and disease control*
- *technology and equipment that apply in a production nursery or retail nursery workplace*
- *health and safety, pest management and biosecurity processes and regulations that apply in a production nursery or retail nursery workplace.*

The skills and knowledge may have been acquired through completion of a Certificate III or higher qualification relating to nursery or horticulture, or industry experience.

Entry requirements for the Diploma of Horticulture Management

The job roles for this qualification require an individual to be able to provide technical support and manage technical staff. This requires the individual to have underpinning technical skills in order to successfully undertake the qualification. As such, it is critical that an individual has either completed the listed units of competency or have relevant equivalent skills and knowledge acquired through participation in the horticulture industry.

Entry requirements for the Diploma of Nursery Management

The job roles for this qualification require an individual to be able to provide technical support and manage technical staff. This requires the individual to have underpinning technical skills in order to successfully undertake the qualification. As such, it is critical that an individual has the skills and knowledge in the application of:

- *cultivating, growing and harvesting/production skills for a variety of plant types, including pest and disease control*
- *technology and equipment that apply in a production nursery or retail nursery workplace*
- *health and safety, pest management and biosecurity processes and regulations that apply in a production nursery or retail nursery workplace*.

The skills and knowledge may have been acquired through completion of a Certificate III or higher qualification relating to nursery or horticulture, or industry experience.

Selecting electives to enable different occupational outcomes

Qualifications include elective units that should be selected according to the needs of the learner. The choice of elective units may be negotiated between the learner and/or employer, and the RTO conducting the training program.

Some qualifications allow electives to be selected from within the training package, and also from other training packages and accredited courses. Wherever they are selected from, elective units should provide a vocational focus for the qualification and be relevant to the:

- *AQF qualification level*
- *job role*
- *work outcomes*
- *local industry needs*
- *area of specialisation (if required)*.

Choosing electives

Electives should be chosen through collaboration with the learner, the RTO and the employer to suit current or future employment needs. The packaging rules must always be followed, but within the rules there may be flexibility to choose electives from beyond the electives listed and outside of the qualification and the *AHC Agriculture, Horticulture and Conservation and Land Management Training Package*. However, the electives chosen must always be relevant to the overall vocational outcome of the qualification, and unless it is stated otherwise, it is possible to select units with an AQF identifier within one AQF level, up or down, of the qualification being undertaken.

Mandatory electives

The following qualifications do not have specialisations; however, to ensure the relevance and integrity of the qualifications, mandatory electives have been identified and grouped. They are as follows:

Qualification	Mandatory elective choices
AHC31522 Certificate III in Aboriginal and/or Torres Strait Islander Cultural Sites Work	**An asterisk (*) next to the unit code indicates that there are pre-requisite requirements which must be met when packaging the qualification.** **4 units must be selected from Group A Cultural Sites Work** • *AHCCSW302 * Relate Aboriginal and/or Torres Strait Islander culture to sites work* • *AHCCSW303 * Identify and record sites, objects and cultural landscapes on Country* • *AHCCSW304 * Identify Aboriginal and/or Torres Strait Islander culturally significant plants* • *AHCCSW305 * Work with Aboriginal and/or Torres Strait Islander ceremonial and sacred materials* • *AHCCSW306 * Use technology in Aboriginal and/or Torres Strait Islander sites work* • *AHCCSW307 * Support the documentation of Aboriginal and/or Torres Strait Islander cultural landscapes* • *AHCCSW308 * Apply cultural significance to Aboriginal and/or Torres Strait Islander sites and landscapes* • *AHCCSW309 * Interpret Aboriginal and/or Torres Strait Islander cultural landscapes* • *AHCCSW310 * Move and store Aboriginal and/or Torres Strait Islander cultural material* • *AHCCSW311 * Maintain an Aboriginal and/or Torres Strait Islander cultural site* • *AHCCSW312 Apply knowledge of relevant legislation to Aboriginal and/or Torres Strait Islander sites work* • *AHCCSW401 Contribute to the development of cultural safety processes*
AHC32522 Certificate III in On Country Management	**An asterisk (*) next to the unit code indicates that there are pre-requisite requirements which must be met when packaging the qualification.** **4 units must be selected from Group A On Country Management** • *AHCOCM201 Maintain cultural sites* • *AHCOCM202 Observe and report plants or animals* • *AHCOCM203 Record information about Country*

- *AHCOCM301 Provide information on Aboriginal and/or Torres Strait Islander Peoples' cultural practice*
- *AHCOCM302 * Work with an Aboriginal and/or Torres Strait Islander Community or organisation*
- *AHCOCM304 * Implement cultural burning practices on Country*
- *AHCOCM305 Identify traditional customs and land rights for an Aboriginal and/or Torres Strait Islander Community*
- *AHCOCM401 Protect places of cultural significance*
- *AHCOCM402 Report on place of potential cultural significance*
- *AHCOCM403 Contribute to a proposal for a negotiated outcome related to Country*
- *AHCOCM404 Record and document Aboriginal and/or Torres Strait Islander Community history*
- *AHCOCM405 Develop work practices to accommodate cultural identity*

Mandatory requirements for specialisations

Some qualifications in the *Agriculture, Horticulture and Conservation and Land Management Training Package* have been designed to allow specialisations. The area of specialisation can be included on a testamur to certify attainment of an AQF qualification as shown in the example.

This is to certify that

John Smith

has fulfilled the requirements for

AHC30318 Certificate III in Rural and Environmental Pest Management

(Weed Controller)

Choosing electives for specialisations

Qualification	Specialisation	Mandatory elective choices
AHC30324 Certificate III in Rural and Environmental Pest Management	Pest animal controller	• *AHCFAU202 Recognise fauna* • *AHCPMG304 Use firearms to humanely destroy animals* • *AHCPMG307 Apply animal trapping techniques*

Qualification	Specialisation	Mandatory elective choices
		• *AHCPMG309 Apply pest animal control techniques* • *AHCPMG312 Apply poison baits for vertebrate pest control in rural and environmental landscapes,* plus • *1 unit from elective groups C or E* plus • *2 units from electives in groups C and E or any currently endorsed Training Package or accredited course packaged at Certificate II, III or IV*
AHC30324 Certificate III in Rural and Environmental Pest Management	Weed controller	• *AHCPCM303 Identify plant specimens* • *AHCPMG301 Control weeds* plus • *3 units must be selected from the elective group D or E* plus • *2 units must be selected from remaining group D or E or any currently endorsed Training Package or accredited course packaged at Certificate II, III or IV*
AHC30522 Certificate III in Poultry Production	Poultry farm technician	• *AHCPLY303 Maintain health and welfare of poultry* • *AHCPLY311 Clean and disinfect poultry production sheds* Plus at least 2 of the following: • *AHCLSK304 Carry out post-mortem examination of livestock*

Qualification	Specialisation	Mandatory elective choices
		• *AHCLSK307 Euthanase livestock* • *AHCLSK310 Implement feeding plans for intensive production* • *AHCLSK313 Monitor livestock production growing environments* • *AHCPLY210 Catch and load poultry* • *AHCPLY309 Brood poultry* • *AHCPMG308 Implement pest management strategies*
	Poultry breeding technician	• *AHCLSK313 Monitor livestock production growing environments* • *AHCPLY210 Catch and load poultry* • *AHCPLY211 Collect, store and handle eggs from breeder flocks* • *AHCPLY303 Maintain health and welfare of poultry* Plus at least 1 of the following: • *AHCAIS304 Artificially inseminate livestock* • *AHCLSK304 Carry out post-mortem examination of livestock* • *AHCLSK307 Euthanase livestock* • *AHCPLY209 Grade and pack eggs for human consumption* • *AHCPLY309 Brood poultry* • *AHCPLY311 Clean and disinfect poultry production sheds* • *AHCPMG308 Implement pest management strategies*

Qualification	Specialisation	Mandatory elective choices
	Egg grading technician	• *AHCPLY209 Grade and pack eggs for human consumption* • *FBPEGG2004 Operate egg grading and packing floor equipment* • *FBPFSY2002 Apply food safety procedures*
	Poultry services provider	• *AHCCHM304 Transport and store chemicals* • *AHCCHM307 Prepare and apply chemicals to control pest, weeds and diseases* • *AHCPLY210 Catch and load poultry* • *AHCPLY311 Clean and disinfect poultry production sheds* Plus at least 1 of the following: • *AHCLSK301 Administer medication to livestock* • *AHCAIS304 Artificially inseminate livestock* • *AHCLSK307 Euthanase livestock* • *AHCPMG409 Implement a pest management plan* • *AHCPMG412 Develop a pest management plan* • *BSBWHS411 Implement and monitor WHS policies, procedures and programs* • *BSBWHS431 Develop processes and procedures for controlling hazardous chemicals in the workplace*
	Hatchery technician	• *AHCPLY210 Catch and load poultry* • *AHCPLY303 Maintain health and welfare of poultry*

Qualification	Specialisation	Mandatory elective choices
		• *AHCLSK307 Euthanase livestock* • *AHCPLY310 Incubate eggs* Plus at least 1 of the following: • *AHCCHM304 Transport and store chemicals* • *AHCCHM307 Prepare and apply chemicals to control pest, weeds and diseases* • *AHCLSK304 Carry out post-mortem examination of livestock* • *AHCLSK301 Administer medication to livestock* • *AHCPLY309 Brood poultry* • *AHCPMG308 Implement pest management strategies*
AHC30824 Certificate III in Arboriculture	Climbing specialist	• *AHCARB317 Dismantle trees* • *AHCARB318 Undertake aerial rescue* • *AHCARB319 Use arborist climbing techniques*
AHC30824 Certificate III in Arboriculture	Crane specialist	• *AHCARB317 Dismantle trees* • *AHCARB319 Use arborist climbing techniques* • *AHCARB324 Use cranes to access and dismantle trees* • *CPCCDO3011A* Perform dogging*
AHC30824 Certificate III in Arboriculture	Elevated work platform specialist	• *AHCARB317 Dismantle trees* • *TLILIC0005 Licence to operate a boom-type elevating work platform (boom length 11 metres or more)*

Qualification	Specialisation	Mandatory elective choices
		• *UETDRMP004* Perform elevated work platform controlled descent escape* • *UETDRMP005* Perform elevated work platform rescue*
AHC30824 Certificate III in Arboriculture	Environmental arborist (habitat protection and creation)	• *AHCARB325 Manage trees to create and maintain habitat refuges* • *AHCFAU202 Recognise fauna* • *AHCLPW312 Carry out inspection of designated area* • *AHCECR202 Maintain wildlife habitat refuges*
AHC30820 Certificate III in Arboriculture	Arborist works coordinator	• *AHCARB407 Supervise and audit tree operations* • *AHCARB408 Perform a ground-based tree defect evaluation* • *AHCARB409 Conduct a safety audit*

Qualification	Specialisation	Mandatory elective choices
AHC20320 Certificate II in Production Horticulture	Horticulture	At least 3 of the following: • *AHCCHM201 Apply chemicals under supervision* • *AHCMOM203 Operate basic machinery and equipment* • *AHCPHT214 Support horticultural crop harvesting* • *AHCPHT215 Plant horticultural crops* • *AHCPHT218 Carry out post-harvest operations* • *AHCSOL203 Assist with soil or growing media sampling and testing* • *AHCWRK211 Participate in environmentally sustainable work practices* • *FBPFSY2002 Apply food safety procedures*
	Floriculture	At least 3 of the following: • *AHCNSY205 Pot up plants* • *AHCNSY206 Care for nursery plants* • *AHCNSY207 Undertake propagation activities* • *AHCPCM204 Recognise plants* • *AHCPHT214 Support horticultural crop harvesting* • *AHCPHT215 Plant horticultural crops* • *AHCPHT217 Undertake field budding and grafting* • *AHCPHT218 Carry out post-harvest operations* • *AHCSOL203 Assist with soil or growing media sampling and testing*

Qualification	Specialisation	Mandatory elective choices
		• *AHCWRK211 Participate in environmentally sustainable work practices*
AHC20720 Certificate II in Nursery Operations	Nursery production	At least 4 of the following: • *AHCCHM201 Apply chemicals under supervision* • *AHCIRG221 Assist with pressurised irrigation operations* • *AHCNSY205 Pot up plants* • *AHCNSY207 Undertake propagation activities* • *AHCPMG201 Treat weeds* • *AHCPMG202 Treat plant pests, diseases and disorders* • *AHCSOL203 Assist with soil or growing media sampling and testing* • *AHCWRK215 Collect and record production data*
	Retail nursery	At least 4 of the following: • *AHCNSY208 Maintain indoor plants* • *AHCPGD208 Prepare and maintain plant displays* • *SIRRINV001 Receive and handle retail stock* • *SIRXIND002 Organise and maintain the store environment* • *SIRXSLS001 Sell to the retail customer*

Qualification	Specialisation	Mandatory elective choices
AHC30620 Certificate III in Production Horticulture	Horticulture	At least 3 of the following: • *AHCBIO301 Identify and report unusual disease or plant pest signs* • *AHCIRG346 Operate pressurised irrigation systems* • *AHCMOM304 Operate machinery and equipment* • *AHCPHT313 Implement a post-harvest program* • *AHCPHT314 Harvest horticultural crops mechanically* • *AHCPHT315 Establish horticultural crops* • *AHCPHT317 Coordinate horticultural crop harvesting* • *AHCWRK320 Apply environmentally sustainable work practices*
	Floriculture	At least 3 of the following: • *AHCBIO301 Identify and report unusual disease or plant pest signs* • *AHCNSY308 Maintain nursery plants* • *AHCNSY309 Receive and dispatch nursery products* • *AHCPCM305 Implement a plant nutrition program* • *AHCPCM306 Provide information on plants and their culture* • *AHCSOL305 Prepare growing media*

Qualification	Specialisation	Mandatory elective choices
AHC31120 Certificate III in Nursery Operations	Nursery production	All 4 of the following: • *AHCBIO303 Apply biosecurity measures* • *AHCIRG347 Maintain pressurised irrigation systems* • *AHCNSY309 Receive and dispatch nursery products* • *AHCNSY313 Implement a propagation plan*
	Retail nursery	All 4 of the following: • *AHCPCM303 Identify plant specimens* • *BSBMKG434 Promote products and services* • *SIRRMER001 Produce visual merchandising displays* • *SIRXCEG001 Engage the customer*
AHC31421 Certificate III in Conservation and Ecosystem Management	Indigenous Land Management	• *AHCECR301 Maintain native ecosystem area* • *AHCFIR301* Undertake burning for fuel, ecological and cultural management* • *AHCOCM301 Provide information on Aboriginal and/or Torres Strait Islander Peoples' cultural practice* • *AHCOCN302* Work with an Aboriginal and/or Torres Strait Islander Community or organisation* • *AHCOCM303 Follow Aboriginal and/or Torres Strait Islander cultural protocols* • *AHCOCM304* Implement cultural burning practices on Country*

Qualification	Specialisation	Mandatory elective choices
		• *AHCOCM305 Identify customs and land rights for an Aboriginal and/or Torres Strait Islander Community* • *AHCWRK323 Operate in isolated and remote situations* • *SITTGDE013 Interpret aspects of local Australian Indigenous culture*
	Ecological restoration	• *AHCECR203 Perform basic ecological restoration works* • *AHCECR301 Maintain native ecosystem areas* • *AHCECR302 Collect and preserve biological samples* • *AHCECR304 Undertake direct seeding* • *AHCECR305 Collect native seed* • *AHCECR307 Read and interpret maps* • *AHCECR310 Implement assisted regeneration works* • *AHCECR311 Implement ecosystem reconstruction works* • *AHCLPW302 Implement a biodiversity monitoring plan* • *AHCPCM302 Provide information on plants and their culture* • *AHCPMG301 Control weeds* • *AHCPMG302 Control plant pests, diseases and disorders* • *AHCSAW202 Recognise landforms and soil types*

Qualification	Specialisation	Mandatory elective choices
	Land, parks and wildlife	• *AHCECR301 Maintain native ecosystem* • *AHCECR307 Read and interpret maps* • *AHCFAU302 Identify fauna in the field* • *AHCINF301 Implement property improvement, construction and repair* • *AHCINF307 Plan and construct conventional fencing* • *AHCLPW302 Implement a biodiversity monitoring plan* • *AHCLPW308 Coordinate and report on data collection* • *AHCLPW310 Supervise park visitor activities* • *AHCLPW311 Construct access tracks* • *AHCLPW312 Carry out inspection of designated area* • *AHCPCM303 Identify plant specimens* • *AHCWRK317 Coordinate work site activities* • *AHCWRK320 Apply environmentally sustainable work practices* • *FWPCOT3202 Navigate in remote or trackless areas*
	Conservation earth works	• *AHCBIO303 Apply biosecurity measures* • *AHCLPW311 Construct access tracks* • *AHCMOM302 Perform machinery maintenance* • *AHCMOM304 Operate machinery and equipment*

Qualification	Specialisation	Mandatory elective choices
		• *AHCMOM314 Transport machinery* • *AHCPCM204 Recognise plants* • *AHCSAW202 Recognise landforms and soil types* • *AHCSAW303 Construct conservation earthworks* • *AHCSAW304 Implement erosion and sediment control measures* • *AHCSAW402 Set out conservation earthworks* • *AHCWRK322 Conduct site inspections* • *FWPCOT3314 Comply with soil and water protection*
	Pest controller	• *AHCPMG301 Control weeds* • *AHCPMG302 Control plant pests, diseases and disorders* • *AHCPMG304 Use firearms to humanely destroy animals* • *AHCPMG305 Survey pests* • *AHCPMG306 Determine pest control techniques* • *AHCPMG307 Apply animal trapping techniques* • *AHCPMG308 Implement pest management strategies* • *AHCPMG312 Apply poison baits for vertebrate pest control in rural and environmental landscapes* • *AHCPMG402 Ensure compliance with pest legislation*

Qualification	Specialisation	Mandatory elective choices
		• *AHCPMG403 Apply predator trapping techniques*
	Marine	• *AHCMAR301 Conduct a subtidal marine monitoring operation from a vessel or platform* • *AHCMAR302 Conduct intertidal marine monitoring* • *AHCMAR303 Coordinate marine conservation activities on small vessels* • *AHCMAR304 Identify and collect marine life* • *AHCMAR305 Monitor ocean conditions and marine environmental quality* • *MARC037 Operate inboard and outboard motors* • *MARF027 Apply basic survival skills in the event of vessel abandonment* • *MARF028 Follow procedures to minimise and fight fires on board a vessel* • *MARF030 Survive at sea using survival craft* • *MARN008 Apply seamanship skills aboard a vessel up to 12 metres*
	Fire	• *AHCFIR301* Undertake burning for fuel, ecological and cultural resource management* • *AHCMOM304 Operate machinery and equipment* • *AHCOCM304* Implement cultural burning practices on Country*

Qualification	Specialisation	Mandatory elective choices
		• *AHCWRK314 Monitor weather conditions* • *FWPCOT3325 Operate four wheel drive vehicle on unsealed roads* • *PUAFIR008* Operate aerial ignition equipment in an aircraft* • *PUAFIR204* Respond to wildfire* • *PUAFIR210 Prevent injury* • *PUAFIR303* Suppress wildfire* • *PUAFIR310 Operate specialist appliance*
	Mined land rehabilitation	• *AHCECR301 Maintain native ecosystem areas* • *AHCECR304 Undertake direct seeding* • *AHCECR308 Conduct a site inspection for ecological restoration* • *AHCECR310 Implement assisted regeneration works* • *AHCFAU302 Identify fauna in the field* • *AHCMOM304 Operate machinery and equipment* • *AHCMOM315 Operate chemical application machinery and equipment* • *AHCOCM302 Work with an Aboriginal and/or Torres Strait Islander Community or organisations* • *AHCPCM204 Recognise plants* • *AHCPCM303 Identify plant specimens*

Qualification	Specialisation	Mandatory elective choices
		• *CPCWHS1001 Prepare to work safely in the construction industry* • *CPPWMT3004 Comply with environmental protection requirements when transporting waste* • *RIICAR302D Rehabilitate small mine site*
AHC33325 Certificate III in Feedlot Operations	Feedlot maintenance	At least 8 units from elective group A: • *AHCCHM201 Apply chemicals under supervision* • *AHCCHM304 Transport and store chemicals* • *AHCCHM307 Prepare and apply chemicals to control pest, weeds and diseases* • *AHCINF208 Fabricate and repair metal or plastic structures* • *AHCINF305 Implement property improvement, construction and repair* • *AHCLSK233 Clean and maintain livestock pens* • *AHCLSK347 Maintain livestock water supplies* • *AHCLSK367 Remove and facilitate reuse of effluent and manure from an intensive production system* • *AHCMOM301 Coordinate machinery and equipment maintenance and repair*

Qualification	Specialisation	Mandatory elective choices
		• *AHCPHT302 Prepare raw materials and compost the feedstock*
	Feeding and milling	At least 8 units from elective group B: • *AHCBAC208 Prepare grain storages* • *AHCBAC314 Prepare to receive grains and seeds* • *AHCLSK352 Implement feeding plans for intensive livestock production* • *AHCLSK362 Maintain and monitor feed stocks* • *AHCLSK365 Mix and mill standard stockfeed* • *AHCLSK370 Monitor pen condition and ration suitability* • *AHCMOM302 Perform machinery maintenance* • *AHCWRK319 Handle bulk materials in a storage area* • *FBPGRA3022 Confirm feed product meets animal nutrition requirements* • *FBPOPR2085 Operate a grinding process*
	Livestock handling	At least 8 units from elective group C: • *AHCLSK224 Handle livestock using basic techniques* • *AHCLSK226 Load and unload livestock* • *AHCLSK227 Monitor water supplies* • *AHC235 Ride educated horses to carry out basic stock work* • *AHCLSK236 Handle horses safely for stock work*

Qualification	Specialisation	Mandatory elective choices
		• *AHCLSK344 Administer treatments to livestock* • *AHCLSK346 Carry out post-mortem examination of livestock* • *AHCLSK349 Euthanase livestock* • *AHCLSK350 Identify and draft livestock* • *AHCLSK351 Implement animal health control programs* • *AHCLSK369 Monitor animals in intensive production systems* • *AHCLSK370 Monitor pen condition and ration suitability* • *AHCLSK372 Train, care for and ride horses for stock work*
AHC33722 Certificate III in Protected Horticulture	Picking	At least 3 of the following: • *AHCBIO203 Inspect and clean machinery, tools and equipment to preserve biosecurity* • *AHCBIO301 Identify and report signs of unusual disease or plant pest* • *AHCPHT214 Support horticultural crop harvesting* • *AHCPHT317 Coordinate horticultural crop harvesting*

Qualification	Specialisation	Mandatory elective choices
	Packing	At least 3 of the following: • *AHCWRK215 Collect and record production data* • *FBPBPG2002 Operate the carton erection process* • *FBPBPG2004 Operate the palletising process* • *FBPBPG2008 Perform basic packaging tests and inspections* • *FBPBPG3002 Operate the labelling process* • *FBPOPR2068 Operate a process control interface* • *FBPOPR3004 Set up a production or packaging line for operation* • *FBPOPR3019 Operate and monitor interrelated processes in a production or packaging system* • *FBPTEC4002 Apply principles of food packaging* • *SIRRINV002 Control stock* • *TLIA0015 Organise receival and despatch operations* • *TLIA2014 Use product knowledge to complete work operations* • *TLIX0004X Administer inventory systems* • *TLIX0013X Maintain stock control and receivals*

Qualification	Specialisation	Mandatory elective choices
	Crop work	At least 3 of the following: • *AHCBIO301 Identify and report signs of unusual disease or plant pest* • *AHCHYD301 Implement a maintenance program for hydroponic systems* • *AHCHYD302 Install hydroponic systems* • *AHCHYD401 Establish and monitor hydroponic crops* • *AHCNSY314 Operate fertigation equipment* • *AHCPCM305 Implement a plant nutrition program* • *AHCPHT211 Maintain crop* • *AHCPHT212 Perform manual pollination of crops* • *AHCPHT311 Install and maintain vertical hanging trellis* • *AHCPHT312 Implement a crop regulation program* • *AHCPHT315 Establish horticultural crops* • *AHCPMG302 Control plant pests, diseases and disorders*
	Nursery	At least 3 of the following: • *AHCBIO301 Identify and report signs of unusual disease or plant pest* • *AHCNSY207 Undertake propagation activities* • *AHCNSY308 Maintain nursery plants* • *AHCNSY314 Operate fertigation equipment* • *AHCPCM305 Implement a plant nutrition program*

Qualification	Specialisation	Mandatory elective choices
		• *AHCPHT213 Perform plant blocking on* • *AHCPHT217 Undertake field budding and grafting* • *AHCPMG302 Control plant pests, diseases and disorders* • *FBPVIT2001 Bench graft vines*
AHC40122 Certificate IV in Agriculture	Organic production	4 units from the following: • *AHCORG401 Manage biodynamic production* • *AHCORG402 Manage organic livestock production* • *AHCORG403 Manage organic soil improvement* • *AHCORG404 Arrange selling through community based marketing* • *AHCORG405 Implement sustainable practices in the organic farm based business* • *AHCORG406 Oversee compliance with an organic certification scheme* • *AHCORG408 Manage on farm composting*
AHC40624 Certificate IV in Nursery Operations	Retail nursery	At least 4 of the following: • *AHCMER408 Coordinate customer service and networking activities* • *AHCPCM404 Recommend plants and cultural practices* • *AHCPGD403 Design plant displays* • *AHCSOL405 Provide information on fertilisers and soil ameliorants* • *SIRRINV002 Control stock*

Qualification	Specialisation	Mandatory elective choices
AHC50122 Diploma of Agriculture	Organic production	4 units from the following (one of which must be AHCORG506 Manage an agroecology production system): • *AHCORG503 Design and document an organic farm landscape* • *AHCORG504 Develop and manage a community based marketing supply chain* • *AHCORG505 Develop and monitor a sustainable production plan* • *AHCORG506 Manage an agroecology production system* • *AHCORG507 Develop an organic or biodynamic management plan* • *AHCORG509 Prepare and manage organic or biodynamic certification*

Training package delivery and assessment

RTOs must ensure that both training and assessment complies with the relevant standards[11]. In general terms, training and assessment must be conducted by individuals who:

- *have the necessary training and assessment competencies*
- *have the relevant vocational competencies at least to the level being delivered or assessed*
- *can demonstrate current industry skills directly relevant to the training/assessment being delivered*
- *continue to develop their VET knowledge and skills, industry currency and trainer/assessor competence.*

Assessors of some units of competency may have to meet requirements in addition to those of the *Standards for Registered Training Organisations (RTOs) 2015*/AQTF requirements for assessors.

[11] RTOs regulated by Australian Skills Quality Authority (ASQA) must comply with the Standards for Registered Training Organisations (RTOs) 2015. RTOs regulated by the Western Australian Training Accreditation Council (WA TAC) or the Victorian Registration and Qualifications Authority (VRQA) must check with their regulator for current requirements.

Check the *Assessment Conditions* section (provided in the assessment requirements that accompany each unit of competency) for specific assessor requirements.

Information relevant to training delivery in AHC21227 Certificate II in Primary Industries and Rural Operations can be found in the separate User Guide. Some specific considerations in relation to the *AHC Agriculture, Horticulture and Conservation and Land Management Training Package* are summarised below.

Amount of training and volume of learning

RTOs must create a training and assessment strategy for delivery of AQF qualifications that reflects the complexity required of that qualification. An essential consideration in the training and assessment strategy is to ensure the amount of training provided is sufficient so that the learner can:

- *meet the requirements of each qualification*
- *gain the skills and knowledge specified in the units of competency.*

The amount of training involves all the formal learning activities provided to a learner; for example, classes, tutorials, field-work, lectures, online or self-paced study, as well as workplace learning.

Training should take into account the need to allow learners to reflect on and absorb the knowledge, to practise the skills in different contexts and to learn to apply the skills and knowledge in the varied environments that the 'real world' offers before being assessed.

AQF qualifications differ in terms of their complexity. The complexity of a qualification is defined by:

- *the breadth and depth of the knowledge*
- *skills required*
- *application of knowledge and skills, and*
- *the AQF volume of learning.*

The AQF volume of learning describes how long a learner, without any competencies identified in the qualification, would normally take to develop all the required skills and knowledge at that qualification level. The volume of learning includes all teaching, learning and assessment activities that are undertaken by the typical student to achieve the learning outcomes of the particular qualification.[12]

[12] Information sourced from Australian Government, ASQA, *Fact Sheet: Determining the amount of training*, <https://www.asqa.gov.au/news-publications/publications/fact-sheets/amount-training> viewed April 2018:

Access and equity considerations

Training and assessment practices should minimise any barriers to training and assessment by considering the individual needs of learners. Some needs that could affect an individual's participation in training and assessment include:

- *age*
- *gender*
- *cultural or ethnic background*
- *disability*
- *sexuality*
- *language, literacy or numeracy skills*
- *employment status*
- *geographical location.*

While the design and content of this training package supports equitable access and progression for all learners, it is the responsibility of the RTO delivering and assessing qualifications to:

- *ensure that training and assessment processes and methods do not disadvantage individual learners*
- *determine the needs of individual learners and provide access to any educational and support services necessary.*

Some practical ways that access and equity issues could be addressed include:

- *modifying assessment processes for learners who are located at a distance from a campus location*
- *checking that materials are culturally appropriate for learners and amending, as necessary*
- *making sure that activities and assessments are suitable for the language, literacy and numeracy skill levels of learners (while meeting the requirements of the unit of competency).*

Reasonable adjustment for learners with disabilities

A legislative framework underpins and supports the delivery of vocational education and training across Australia. Under this framework, RTOs must take steps to provide enrolled learners with recognised disabilities access to same training as learners without disabilities.

In some cases, 'reasonable adjustments' are made to the training environment, training delivery, learning resources and/or assessment tasks to meet the needs of a learner with a disability. An adjustment is 'reasonable' if it can accommodate the learner's particular needs, while also taking into account factors such as:

- *the views of the learner*
- *the potential effects of the adjustment on the learner and others*
- *the costs and benefits of making the adjustment to the RTO.*

Adjustments must:

- *be discussed and agreed to by the learner with a disability*
- *benefit the learner with a disability*
- *maintain the competency standards*
- *be reasonable to expect in a workplace.*[13]

[13] The *Disability Standards for Education, 2005* and accompanying guidance notes can be downloaded at <https://www.education.gov.au/disability-standards-education-2005>.

Foundation skills in units of competency

Foundation skills are the 'non-technical skills' that individuals need so they can participate effectively in workplaces, in education and training, and in their communities.

Under the *Standards for Training Packages 2022,* training package developers must include foundation skills in units of competency; however, the method and format for doing this has not been prescribed.

In the *AHC Agriculture, Horticulture and Conservation and Land Management Training Package* (and all training packages developed by Skills Insight) the foundation skills are shown in a table format as shown in the following example.

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	• *Interpret information in workplace procedures and legislative documents*
Writing	• *Record data and observations about livestock in workplace forms accurately and legibly*
Oral communication	• *Use open and closed questions to gather information* • *Interpret verbal and non-verbal communication*
Numeracy	• *Make calculations, including distance, area, volume and ratio*

Frameworks used

The foundation skills are derived from two national frameworks:

- *The* Australian Core Skills Framework *(ACSF) is used to identify learning, language, literacy and numeracy (LLN) skills.*
- *The* Core Skills for Work Developmental Framework *(CSfW) is used to identify employability/employment skills.*

The skills included in these two frameworks are summarised in the table below.

ACSF	CSfW	
Skills	Skills clusters	Skills or focus area
• *Learning* • *Reading*	Navigate the world of work	• *Managing one's own career and work life*

• *Writing* • *Oral Communication* • *Numeracy*		• *Understanding one's own work role, and the associated rights and obligations*
	Interact with others	• *Communicating in the workplace* • *Connecting and working with others* • *Recognising, respecting and using diverse perspectives*
	Get the work done	• *Planning and organising workplace tasks* • *Making decisions* • *Identifying and solving problems* • *Being creative and innovative* • *Working with digital systems/technologies*

The five skills from the ACSF are identified separately with descriptions explaining how the skill underpins the performance criteria. The three skill clusters from the CSfW are identified with descriptions explaining how the respective skill or focus area(s) underpin the performance criteria.

The foundation skills table in each unit:

- *identifies applicable underpinning skills*
- *describes the application of each skill in the context of the performance criteria.*

Only those foundation skills that ARE NOT **explicit in the performance criteria appear in the foundation skills mapping table.**

The foundation skills are an integrated part of the unit for training and assessment purposes. Therefore, it is important that users look closely at both the foundation skills and the performance criteria, to make sure that all **foundation skills are considered during delivery and assessment.**

Key legislative implications for implementation

Regulatory or licensing requirements are identified in the *Application* field of units of competency and the *Qualification description* field in qualifications. If there are no particular requirements, then the statement 'No occupational licensing, legislative or certification requirements apply to this unit/qualification at the time of publication' will appear.

Health and safety requirements

In general, health and safety requirements are addressed in specific work health and safety units of competency or embedded in particular units of competency in the *AHC Agriculture, Horticulture and Conservation and Land Management Training Package*.

RTOs must make sure that delivery of health and safety content is contextualised to comply with the relevant legislation in the state/territory in which they are training. Details of state and territory regulators, together with some useful workplace health and safety organisations, have been included in the following tables.

State/Territory regulators

State/Territory	Regulating body	Website
Australian Capital Territory	WorkSafe ACT	http://www.worksafe.act.gov.au
New South Wales	SafeWork NSW	http://www.safework.nsw.gov.au
Northern Territory	NT WorkSafe	http://www.worksafe.nt.gov.au
Queensland	Workplace Health and Safety Queensland (WHSQ)	http://www.worksafe.qld.gov.au
South Australia	SafeWork SA	http://www.safework.sa.gov.au
Tasmania	WorkSafe Tasmania	http://worksafe.tas.gov.au
Victoria	WorkSafe Victoria	http://www.worksafe.vic.gov.au
Western Australia	WorkSafe WA	http://www.commerce.wa.gov.au/WorkSafe

National organisations

Name	Function	Website
Safe Work Australia	Leads the development of national policy to improve work health and safety and workers' compensation arrangements across Australia.	http://www.safeworkaustralia.gov.au
Comcare	The Comcare scheme provides rehabilitation and workers' compensation and occupational health and safety arrangements for Australian Government employees and for the employees of organisations which self-insure under the scheme.	http://www.comcare.gov.au
Australian Industrial Chemicals Introduction Scheme (AICIS)	AICIS is the Australian Government regulator of industrial chemicals. AICIS is responsible for: • *providing a national notification and assessment scheme to protect the health of the public, workers and the environment from the harmful effect of industrial chemicals, and* • *assessing all chemicals new to Australia and those chemicals already used (existing chemicals) on a priority basis, in response to concerns about their safety on health and environmental grounds.*	https://www.industrialchemicals.gov.au

Other legislative requirements

The industry operates under a range of Acts, Regulations and standards. Following is a summary of key requirements; however, users of this Implementation Guide are advised to check with the relevant regulatory authority as legislation is subject to change.

Industry regulations and standards

Arboriculture

The following statement is included in all the arboriculture qualifications and some arboriculture units of competency; 'Legislation, regulations and by-laws relating to the treatment and removal of trees apply in some states and territories'. RTOs should check with the local regulatory bodies before undertaking tree work or tree removal.

The following is an example of a statement contained within the application of one of the arboriculture units of competency whereby, 'The arboriculture industry requires that all tree work operations are undertaken according to preferred industry practices (as outlined in the Companion Volume).'

The industry defines 'preferred industry practices' as documented methods or techniques that have been generally accepted as superior to alternatives because they produce outcomes that are more effective while maintaining high standards of safety and care, and as a result, have become a standard way of undertaking work. They will often have undergone a complete current industry validation process and have a system and process in place for regular reviews to be conducted.

One method of ascertaining current best industry practices is to utilise published standards from reputable government and industry sources.

An example of a reputable published standard, which was examined and considered in the drafting of the Arboriculture qualifications and units, is the Minimum Industry Standard produced by the national peak industry body, Arboriculture Australia Ltd. This body has worked with industry organisations and experts in each state and territory to create and maintain current industry best practices, known as Minimum Industry Standards (MIS) for arboriculture industry work tasks and/or processes.

These MIS have been through an industry validation process involving review by subject matter experts and state and territory industry bodies and are an accurate representation of the minimum standard expected for a task. RTOs should ensure that their training and assessment strategies meet or exceed the level described in these standards, and that terminology and practices align with those described in the relevant MIS. These standards are a great educational resource for RTOs to develop training materials. More information is provided about the MIS in the Companion Volume User Guide: Arboriculture.

In addition, numerous federal, state and territory bodies publish standards covering arboriculture, and these should be examined at a local level. Safe Work Australia have published the Guide to Managing Risks of Tree Trimming and Removal Work. Some states and territories have bodies that have also published relevant standards. Where appropriate, Australian Standards have been referenced by their code in selected units of competency.

Permaculture

Licensing, legislative or certification requirements may apply to units *AHCPER218 Prepare and store products from a permaculture system* and *AHCPER329 Coordinate preparation and storage of produce from a permaculture system*, where handling, processing and distribution of permaculture products are used for human consumption. Users are advised to check with relevant regulatory authority for the units.

Legislation, regulations and by-laws may apply to the units *AHCPER216 Harvest and store seed* and *AHCPER416 Manage a seed bank* for the collection and removal of plant materials from public and private land both nationally and in some states, territories and jurisdictions. Users are advised to check with the local relevant authority for training delivery of these units.

Regulation of genetically modified crops

Genetically modified (GM) crops in Australia, including seeds, are regulated under the Gene Technology Act 2000 (Cth.) through the Office of the Gene Technology Regulator. The regulatory policy seeks to protect the health and safety of both people and the environment. The regulator identifies risks posed by, or posed as a result of, gene technology, and manages these risks. This Act regulates all dealings with live and viable genetically modified organisms (GMOs) in Australia, including research, manufacture, import, production, propagation, transport and disposal of GMOs. There is also corresponding legislation in each state and territory.

Environmental regulations

Most horticultural production systems are highly reliant on irrigation, fertilisers and pesticides. Laws governing environmental protection and management by horticultural producers include numerous federal, state and local Acts and Regulations. Generally, these Regulations relate to fertiliser and pesticide supply, handling, usage and storage; disposal of empty chemical containers and contaminated wastes; water usage; wastewater generation and the treatment of waste arising from production; biodiversity; and land and soil management.

National environmental legislation and regulations relevant to the industry include:[14]

- *Environment Protection and Biodiversity Conservation Act 1999 (Cth.)*
- *Hazardous Waste (Regulation of Exports and Imports) Act 1989 (Cth.)*
- *Ozone Protection and Synthetic Greenhouse Gas Management Act 1989 (Cth.)*
- *Water Act 2007, Water Amendment Act 2008 (Cth.) and associated water regulations*
- *National Water Quality Management Strategy*
- *National Environment Protection (Assessment of Site Contamination) Measure*
- *Australian and New Zealand Guidelines for Fresh and Marine Water Quality (2000)*
- *Australian Drinking Water Guidelines (2011)*
- *Australia New Zealand Food Standards Code*
- *National Residue Survey*
- *National Environment Protection (Air Toxics) Measure.*

[14] Horticulture for Tomorrow and Horticulture Australia Limited, 2014, Guidelines for Environmental Assurance in Australian Horticulture, viewed February 2025, <http://hoho3216.staging-cloud.netregistry.net/manage/wp-content/uploads/2014/05/Environmental-Assurance-Guidelines-2014-full-version-2.pdf>.

State/territory government agencies regulate water usage via the allocation of water licences and dam management. They also decide on the timing and amount of water able to be accessed by irrigators. Water legislation focuses on developing efficient water usage for agriculture while limiting its environmental effect, particularly in the Murray–Darling Basin, which supports a large proportion of Australia's fruit and vegetable crops.

Food regulations

Food Standards Australia New Zealand (FSANZ) establish standards relevant to the agriculture industry, particularly for poultry, meat, dairy, eggs and egg products, and seed sprout. FSANZ aims to strengthen food safety by reducing the incidence of foodborne illness associated with seed sprouts and eggs or egg products. In addition, dairy standards outline the implementation of documented food safety programs for primary dairy production and for the collection, transportation and processing of raw milk, as designed to protect public health across all jurisdictions.

The majority of fresh horticultural produce in Australia is grown under industry-based food safety schemes.[15] These schemes, and several state/territory regulations and guidelines, work to minimise risks linked to microbiological, chemical and physical factors that may be present in fresh produce for sale in Australia.

State/territory government regulations and guidelines follow.

- *The Food (Plant Products Food Safety Scheme) Regulation (2005) (NSW) provides specific control measures to manage the safe production and supply of seed sprouts, fresh-cut fruit and vegetables, and juices.*
- *The Food Production (Safety) Regulation (2014) (QLD) sets out requirements for the transport and processing of fresh primary produce.*
- *The NSW Food Authority's Industry Guide for the Development of a Food Safety Program (High Priority Plant Products Industry) (2005) covers seed sprouts, fresh-cut fruits and vegetables, unpasteurised juice, and vegetables in oil.*
- *Guidelines for On-Farm Food Safety for Fresh Produce (2004) was published by the Australian Government Department of Agriculture, Fisheries and Forestry, now the Federal Department of Agriculture and Water Resources.*

Industry food safety schemes in Australia include:

- *HACCP Australia*
- *Freshcare*
- *GlobalGAP*
- *supermarket quality and food safety schemes.*

Landscape construction and design, including green infrastructure

Licencing requirements for approval of designs and specifications and landscape construction work depending on the value of the work, and certification requirements of operators using specific plant and equipment vary across state and territory jurisdictions. For example, not all green

[15] Food Standards Australia New Zealand, 2014, 'Horticulture', viewed February 2025, <https://www.foodstandards.gov.au/sites/default/files/2024-10/Safe%20Horticulture%20Australia%20-%20web.pdf>

infrastructure work, construction or maintenance will require use of high-risk work equipment (such as working at heights, using elevating work platforms or scissor lifts) or be on a construction site requiring a White Card.

As these requirements will vary nationwide, a general licensing statement was placed in the skill sets and units stating the following:

> '*Licensing, legislative or certification requirements may apply to the work undertaken in this [unit/skill set] in some jurisdictions. Users are advised to check with the relevant regulatory authorities.*'

This statement meets the need to satisfy any possible future regulatory/licencing changes.

Grape growing legislation

The Australian viticulture sub-sector is subject to a number of federal and state/territory laws and regulations, including the *Australian Grape and Wine Authority Act 2013* (Cth.) and the *Australian Grape and Wine Authority Regulations 1981* (Cth.). These Acts provide for, among other things, the Label Integrity Program and the Register of Protected Geographical Indications and Other Terms.

Animal reproduction

RTOs are advised to check the legislative and regulatory requirements for units related to artificial insemination/animal reproduction. These units include statements such as the following from *AHCLSK338 Conduct dropped ovary technique procedures for spaying cattle*:

> '*Regulatory requirements apply in some jurisdictions restricting the conduct of the DOT procedure to registered veterinarians. Users are advised to check with the relevant state or territory regulatory authority.*'

Note: A lay spaying accreditation scheme (https://www.agforceqld.org.au/knowledgebase/article/AGF-01872) for cattle spayers has been developed by the beef cattle industry, including Cattle Australia, Meat and Livestock Australia and AgForce. This accreditation scheme may impact the regulatory requirements of units related to artificial insemination/animal reproduction.

Livestock management legislation

The Department of Agriculture and Water Resources (DAWR) provides policies and legislation concerning aspects of livestock management and biosecurity, including live exports and supply of agricultural chemicals. DAWR is responsible for Australia's livestock export licences, and regularly carries out inspections to ensure that biosecurity, traceability and animal welfare requirements are being met for both export-licensing and importing countries. DAWR also manages quarantine controls at borders and provides import and export inspection and certification.

In addition, state/territory governments are responsible for livestock management, disease response and welfare arrangements within their jurisdictions, in terms of both enforcing national standards and agreements and administering state/territory legislation.

Legislation relating to livestock management includes:[16]

- *Agricultural and Veterinary Chemicals (Control of Use) Act 1992 (IC)*
- *Agricultural and Veterinary Chemicals (Control of Use) Regulations 2007 (VIC)*
- *Impounding of Livestock Act 1994 (VIC)*
- *Impounding of Livestock Regulations 2008 (VIC)*
- *Livestock Disease Control Act 1994 (VIC)*
- *Livestock Disease Control Regulations 2006 (VIC)*
- *Livestock Management Act 2010 (VIC)*
- *Livestock Management Regulations 2011 (VIC).*

Australian ruminant feed ban

Australia has an inclusive ban on the feeding of restricted animal material (RAM), including meat and bone meal (MBM) derived from all vertebrates, including fish and birds, to all ruminant animals. An enforceable ban seeks to minimise the risk of spreading the infectious agent in mad cow disease, in the unlikely event that it is introduced to Australia. The ruminant feed ban is nationally coordinated by Animal Health Australia (AHA) and is part of a comprehensive national TSE Freedom Assurance Project. The prohibition and the program target livestock producers and other end users of manufactured stockfeed, retailers of manufactured stockfeed, and stockfeed manufacturers. Each Australian state/territory adopted the ruminant feed ban in legislation, indicating feeding prohibition and requirements for labelling and RAM content.

In addition, the industry implements the FeedSafe accreditation program through the Stock Feed Manufacturers' Council of Australia (SFMCA). To achieve FeedSafe accreditation, feed manufacturing sites are required to address the elements of the Code of Good Manufacturing Practice for the Feed Milling Industry, particularly methods to ensure effective cleaning, flushing and sequencing between different types of stockfeed, to minimise the possibility of cross-contamination.

Biosecurity legislation

The Department of Agriculture and Water Resources is responsible for developing and reviewing biosecurity policies for the safe importation of animals and animal products. The Department will co-administer the new Biosecurity Act 2015 (Cth.) with the Department of Health from 16 June 2016, replacing the Quarantine Act 1908 (Cth.).

In addition, state/territory biosecurity agencies develop policy, standards, delivery systems and services that reduce the threat of invasive plants and animals to agriculture and the natural environment; protect animals and plants from pests and diseases; enhance food safety; ensure minimal and effective chemical use; protect the welfare of animals; and preserve and expand market access for primary industries.

[16] Agriculture Victoria, 2020, 'Livestock management', viewed February 2025, <https://agriculture.vic.gov.au/livestock-and-animals/animal-welfare-victoria/livestock-management-and-welfare/livestock-management-legislation-and-regulations#h2-0>

Live-animal export legislation

Two bills were enforced in Australia to amend the Australian Meat and Live-stock Industry Act 1997 (Cth.) and Export Control Act 1982 (Cth.) in response to animal welfare concerns in the live-cattle export trade.

The Live Animal Export Prohibition (Ending Cruelty) Bill 2014 (Cth.) and the Live Animal Export (Slaughter) Prohibition Bill 2014 (Cth.) were introduced to prohibit the export of livestock for slaughter on or after 1 July 2017, and to compel export licence holders to ensure all livestock are treated satisfactorily prior to slaughter.

Conservation legislation

Government-managed nature reserves, including marine reserves, and conservation parks are licensed and regulated by federal, state and territory environment and conservation departments under the Environment Protection and Biodiversity Conservation Act 1999 (Cth.) (EPBC) and the National Parks and Wildlife Act 1975 (Cth.). The EPBC Act contains an extensive regimen for the conservation of biodiversity.

Legislation relevant to agricultural chemical use

Context	Legislation
Commonwealth Government	Agricultural and Veterinary Chemicals Code Act 1994
Australian Capital Territory	Environment Protection Act 1997
New South Wales	Environmentally Hazardous Chemicals Act 1985
Northern Territory	Agricultural and Veterinary Chemicals (Control of Use) Act
Queensland	Chemical Usage (Agricultural and Veterinary) Control Act 1988
South Australia	Agricultural and Veterinary Chemicals (South Australia) Act 1994
	Tasmania
Tasmania	Agricultural and Veterinary Chemicals Code Act 1994
Victoria	Agricultural and Veterinary Chemicals (Control of Use) Act 1992
	Agricultural and Veterinary Chemicals (Control of Use) Regulations 2017
	Agricultural and Veterinary Chemicals (Control of Use) (Fertilisers) Regulations 2013
Western Australia	Agricultural and Veterinary Chemicals (WA) Act 1995

Legislation for beekeeping

Context	Legislation
Australian Capital Territory	Animal Diseases Act 2005 of the Australian Capital Territory Animal Diseases (Beekeeping) Amendment Act 2015
New South Wales	Apiaries Act 1985
Northern Territory	Livestock Act of the Northern Territory
Queensland	Apiaries Act 1982
South Australia	Livestock Act 1997 Apiaries Act 1931
Tasmania	Animal Health Act 1995
Victoria	Livestock Disease Control Act 1994
Western Australia	Beekeepers Act 1963 Biosecurity and Agriculture Management (Identification and Movement of Stock and Apiaries) Regulations 2013

Legislation for pest animals and weeds

Context	Legislation
Commonwealth Government	Agricultural and Veterinary Chemicals Code Act 1994 Biological Control Act 1984 Environment Quarantine Act 1908 Environmental Protection and Biodiversity Conservation Act 1999
Australian Capital Territory	Pesticides Act 1989 under the Agricultural and Veterinary Chemicals (Administration) Act 1992 and Agricultural and Veterinary Chemicals (Code) Act 1994 Pest Plants and Animals Act 2005 Nature Conservation Act 2014 Animal Welfare Act 1992 Prohibited Weapons Act 1996 Firearms Act 1996 Environment Protection Act 1997
New South Wales	Biosecurity Act 2015 Game and Feral Animal Control Act 2002 Local Land Services Act 2013 National Parks and Wildlife Act 1974 Noxious Weeds Act 1993 Pesticides Act 1999

Context	Legislation
	Pesticides Act 1999
	Prevention of Cruelty to Animals Act 1979
	Threatened Species Conservation Act 1995
	Wild Dog Destruction Act 1921
Northern Territory	Territory Parks and Wildlife Conservation Act 2006
	Animal Welfare Act
	Weeds Management Act
Queensland	Land Protection (Pest and Stock Route Management) Act 2002
	Animal Care and Protection Act 2001
	Nature Conservation Act 1992
	Biosecurity Act 2014
South Australia	Animal Welfare Act 1985
	Dog Fence Act 1946
	National Parks and Wildlife Act 1972
	Natural Resources Management Act 2004
Tasmania	Agricultural and Veterinary Chemical (Control of Use) Act 1995
	Animal Welfare Act 1993
	Cat Management Act 2009
	Nature Conservation Act 2002
	Poisons Act 1971
	Vermin Control Act 2000
	Weed Management Act 1999
Victoria	Agricultural and Veterinary Chemicals (Control of Use) Act 1992
	Agricultural and Veterinary Chemicals (Control of Use) Act 1992
	Catchment and Land Protections Act 1994
	Drugs, Poisons and Controlled Substances Act 1981
	Firearms Act 1996
	Flora and Fauna Guarantee Act 1988
	National Parks Act 1975
	Prevention of Cruelty to Animals Act 1986 (POCTA)
	Public Health and Wellbeing Act 2008
	Wildlife Act 1975
Western Australia	Agriculture and Related Resources Protection Act 1976
	Animal Welfare Act 2002

Context	Legislation
	Biological Control Act 1986
	Biosecurity and Agriculture Management Act 2007
	Poisons Act 1964
	Wildlife Conservation Act 1950

Grain trade standards and legislation

Grain Trade Australia oversees standards for wheat and coarse grain trade in the domestic and international markets.

Wool harvesting industry

Wool Classer registration and quality standards

To be registered with the Australian Wool Exchange (AWEX) a Wool Classer must have completed and passed a recognised training course in wool classing/wool preparation (Certificate III in Wool Clip Preparation or Certificate IV in Wool Classing).

By registering with AWEX the Wool Classer is agreeing to abide by the Rules of Registration. Bales bearing a registered Wool Classer's stencil are declared by the Wool Classer to be prepared to the Standard declared in the Wool Classers' Code of Practice.

A registered AW Wool Classer is recognised **as being competent to class any wool in Australia to the Code of Practice.** An AW stencil may only be applied by the registered person on wool that has been classed by them, on farm. AW stencils are not to be applied to Classing House or off-farm preparation environments.

For the Code of Practice for the Preparation of Australian Wool Clips See AWEX's guide on the following link: Standards | we know wool (awex.com.au)

For information on the Australian Wool Sustainability Scheme (AWSS) see AWEX's website: Home | we know wool (awex.com.au)

Wool harvesting industry – Wool testing

The Australian Wool Testing Authority (AWTA) submits its technical performance to external monitoring through an annual publication of Independent Laboratories Round Trials (ILRT) group performance to the International Wool Textile Organisation (IWTO) and through participation in interlaboratory trials for Fibre Diameter and Fibre Length in wool tops conducted by Interwoollabs.

The International Wool Textile Organisation or IWTO (also known as the Federation Laniere Internationale) was established in 1928 and plays a central role in fostering the development of internationally accepted Test Specifications for raw wool, wool sliver, yarns and fabrics. These include the standards and regulations under which AWTA delivers its services and the independent guarantees given to our certified testing.

AWTA through its membership of the Federation of Australian Wool Industries (FAWO) is an active member of the IWTO Committees responsible for the governance of the following primary objectives:

- *to maintain a permanent connection between the Wool Textile Organisations of member countries*
- *to represent the Wool Textile Trade and Industry in all branches of economic activity*
- *to promote, support or oppose measures or activities affecting the trade and industry*
- *to promote the study and solution of economic and commercial questions affecting the trade and industry*
- *to ensure the functioning of the International Arbitration Agreement in the Wool Textile Trade and Industry*
- *to collect and disseminate statistical and other information of interest to the Trade and Industry*
- *to develop and maintain International Standards and Regulations for objectively measuring the characteristics of raw wool, wool sliver, yarns and fabrics.*[17]

AWTA Raw Wool provides independent and objective wool certification services. AWTA Raw Wool's major services are sampling, testing and certifying the yield, fibre diameter, vegetable matter content, staple length and staple strength of greasy wool before it is sold. AWTA Raw Wool operates two laboratories, one located in Melbourne (servicing clients in Victoria, New South Wales, Queensland, South Australia and Tasmania) and the other in Perth (servicing clients in Western Australia). It is the largest division within the AWTA Ltd group and is comprised of Sampling Operations Australia-wide, Raw Wool Laboratories, Data Processing Operations, Technical and Quality Control and a dedicated Research and Development team.[18] For more information see: AWTA Ltd – Agricultural, Horticultural & Materials Testing

International regulations and access to markets

To ensure access to European markets, Australian beef producers must follow a series of European Union regulations, laws and other rules governing beef cattle farming. These measures take the form of chain-of-custody certification involving cattle properties, feedlots and processors, and integrate the National Livestock Identification Scheme, which allows for the permanent identification of cattle using electronic microchips.

Industry certification programs

The industry has developed and implemented integrity systems to verify and assure food safety and other quality attributes of livestock. Examples of industry certification programs include:

- *Livestock Production Assurance, an on-farm food safety certification program for cattle, sheep and goats*
- *National Feedlot Accreditation Scheme, which encompasses animal health and welfare, environmental conservation, food safety and product integrity*
- *Australian Dairy Food Safety Scheme, which monitors compliance with food standards to ensure the integrity of the dairy supply chain*
- *Australian Pork Industry Quality Assurance Program, which provides standards for Australian pig producers*

[17] AWTA Wool Testing – Accreditation

[18] AWTA Wool Testing – About

- *Egg Corp Assured, a quality assurance program administered by the National Egg Corporation*
- *Q-Alpaca, a quality assurance program for voluntary use by Australian alpaca breeders and owners*
- *B-Qual, a voluntary program for apiarists and honey-processing businesses that ensures that the honey bee industry's standards meet best practice, and domestic and international market demands*
- *FeedSafe, the quality assurance program for the Australian stockfeed industry*
- *Freshcare, the largest on-farm HACCP assurance program.*

Regulated occupations in the industry

Regulated occupations are bound by legal (or industry) requirements or restrictions to perform the work. Regulated occupations require a licence from, or registration by, a professional association or occupational licensing authority.

The industry does not have any specific trade-licensed occupations. However, it involves different professional accreditation structures overseen by industry bodies. For example, in Victoria, landscapers are required by the Domestic Building Contracts Act 1995 (Vic) to be registered with the state Building Practitioners Board in order to carry out large-scale structural landscaping. Qualifications include completion of Certificate III courses in landscape construction or horticulture.

Similarly, arborists do not need a licence to practise arboriculture in Australia, yet WorkCover, the Tree Contractors Association of Australia, Arboriculture Australia and the Local Government Tree Resources Association recommend that professional arborists meet several requirements. Arborists practising in Australia should represent a professional business, hold proper worker's compensation insurance, and have minimum qualifications of Certificate II in Horticulture (Arboriculture) for carrying out ground and climbing work, and Certificate III in Horticulture (Arboriculture) for supervising climbing work.

Industry codes of practice

A number of codes of practice have been developed across the industry sub-sectors to set out industry standards of conduct, including the following:

- *Horticulture Code of Conduct*
- *Growing Australian Grain*
- *Mandatory Port Access Code of Conduct for Grain Export Terminals*
- *Food and Grocery Code of Conduct*
- *The Animal Welfare Codes of Practice*
- *Australian Animal Welfare Standards and Guidelines (for cattle and sheep)*
- *RSPCA Approved Farming Scheme*
- *Australian Wine Industry Code of Conduct*
- *Code of Good Manufacturing Practice for the Feed Milling Industry*
- *The Australian Aquaculture Code of Conduct*
- *Code of Practice: Amenity Tree Industry (WorkCover)*
- *Model Code of Practice for the Welfare of Animals – Domestic Poultry*
- *National Farm Biosecurity Manual – Poultry Production*

- *Farm Biosecurity Manual for the Duck Meat Industry*
- *National Standard for Organic and Bio-Dynamic Produce*
- *The Code of Practice for the Preparation of Australian Wool Clips.*

Codes of practice relevant to agriculture chemical use

Context	Code
Commonwealth Government	Managing risks of hazardous chemicals in the workplace – code of practice
Australian Capital Territory	Agricultural and Veterinary Chemicals Code – Australian Capital Territory
New South Wales	Code of practice managing risks of hazardous chemicals in the workplace
Northern Territory	Code of practice for handling pesticides
Queensland	Managing risks of hazardous chemicals in the workplace Code of Practice 2013
South Australia	Managing Risks of Hazardous Chemicals in the Workplace
Tasmania	Code of Practice for Aerial Spraying Code of Practice for Ground Spraying Code of Practice for Spraying in Public Places Code of Practice for Spraying in Public Places by means other than aerial spraying. Code of Practice for the Use of 1080 Poison
Victoria	AgVet Code of Victoria
Western Australia	Code of practice: use of agricultural and veterinary chemicals in WA

Codes of practice for beekeeping

Context	Code
Commonwealth Government	The Australian honey bee industry biosecurity code of practice
Australian Capital Territory	Code of Practice for Beekeeping in Residential Areas of the ACT – 2016
New South Wales	Bee Biosecurity Code of Practice
Northern Territory	Northern Territory beekeepers biosecurity manual – Northern Territory Government
Queensland	Code of Practice for Urban Beekeeping in Queensland
South Australia	CFS Code of Practice – Apiary fire Safety (Draft for comment)
Tasmania	Code of Practice for Urban Beekeeping in Southern Tasmania Code of Practice Honey Bees and Pollination

Victoria	Apiary code of practice – Department of Planning and Community Development Victoria

Codes of practice for pest animals and weeds

Context	Code
New South Wales	Humane pest animal control: Code of Practice and Standard Operating Procedures
Tasmania	Code of Practice for Ground Spraying
Victoria	Victorian Codes of Practice for Animal Welfare
Western Australia	Code of practice for the use of agricultural and veterinary chemicals in Western Australia

Training and assessing environments

The Assessment Conditions section of the Assessment Requirements states whether assessment must take place in a real workplace or whether an environment that 'accurately represents workplace conditions' can be used.

An environment that accurately represents workplace conditions is one that offers real life working conditions with the actual characteristics of that working environment, including equipment, interactions with other people and completion of tasks within timeframes, if these are requirements of the working environment.

Sometimes conducting training and assessment in a real workplace is not possible or practical. If conducting training and assessment in a non-workplace environment, trainers and assessors must make sure that learners have opportunities to complete tasks:

- *to the quality standards, and within the acceptable timeframes, required by the industry*
- *in a manner that meets the industry's safety standards.*

Training and assessment environments for Pork sector units

Mandatory Workplace Requirements

Mandatory Workplace Requirements (MWR) are defined as those 'assessment components that must be completed in a workplace and cannot be achieved in a simulated environment'. (Source: Mandatory Workplace Requirements: On the Mark: 5 Good Practice Principles).

The following units of competency released with AHC Version 9.0 include Mandatory Workplace Requirements that state the Performance Evidence must be demonstrated in a pork production site:

- *AHCPRK202 Move and handle pigs*
- *AHCPRK311 Care for health and welfare of pigs*
- *AHCPRK312 Care for weaner pigs*
- *AHCPRK313 Treat rectal prolapse in pigs*
- *AHCPRK314 Care for grower and finisher pigs*
- *AHCPRK315 Care for sows prior, during and after farrowing*
- *AHCPRK403 Implement a feeding plan for pig production.*

To alert users of MWR, the Application of these units includes the statement, 'Mandatory workplace requirements apply to the assessment of this unit.'

MWR have been clearly articulated in the Performance Evidence and Assessment Conditions of each of these units of competency. The Performance Evidence states that 'All performance evidence specified above must be demonstrated in a pork production site'. The Assessment Conditions state, 'Assessment of the skills in the unit must take place on a pork production site'. Italicised text is used to clearly show the parts of Assessment Conditions that are MWR. The Assessment Conditions below for *AHCPRK202 Move and handle pigs* are shown as an example.

Assessment Conditions

Assessment of the skills in this unit of competency must take place under the following conditions:

Physical conditions

- *a pork production site*

Resources, equipment and materials:

- *live pigs specified in performance evidence*
- *materials, resources, passageways, tools and equipment, including PPE, specified in the performance evidence*

Specifications:

- *enterprise procedures for pig handling, movement and care, worker health and safety, and biosecurity activities specified in the performance evidence.*

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Mandatory workplace requirements

Mandatory workplace requirements are shown in *italic text*. Refer to the Companion Volume Implementation Guide for further information.

AHC30422 Certificate III in Pork Production includes units of competency with MWR. To alert users to these units, the Packaging Rules of the qualification includes a visual indicator – a hash (#) has been inserted beside the code of any unit with MWR, and an instruction for users to refer to the individual unit of competency for further information.

AHCSS00151 Pork Industry Stockperson Skill Set includes two units with MWR. To alert users to these units, Skill Set Requirements includes a visual indicator – a hash (#) has been inserted beside the code of any unit with MWR, and an instruction for users to refer to the individual unit of competency for further information.

The Performance Evidence and Assessment Conditions (including the MWR) were developed with industry and RTO advice to allow them to be contextualised across a range of pork production sites, without compromising the skill outcomes and the biosecurity status of these sites. The Performance Evidence and Assessment Conditions can be implemented using:

- *a variety of pig breeds and life stages*
- *breeder and/or grower farms and facilities*
- *indoor and outdoor production systems*
- *small, medium and large enterprises.*

MWR are necessary because the Performance Evidence includes holistic tasks that require the application of knowledge, judgement and skills when handling and caring for live pigs according to enterprise procedures. Experience has shown employers that people trained and assessed

without live animals increase both worker and pig safety and welfare risks. The work environment is highly controlled and plays a critical role in the undertaking of these tasks, and it cannot be simulated to the standard required by the industry. Biosecurity, animal welfare, worker health and safety, and public health are better protected when the Performance Evidence is undertaken on a pork production site, because pork production enterprises apply regulations, codes, procedures, equipment and other resources to control and minimise risks. These typically include controlling the movement of people, pigs, other animals, pests, vehicles, equipment, feed, water, bedding and other materials that can harbour pathogens, and isolation/removal of pathogens where appropriate.

Employers and RTOs strongly support MWR for the assessment of the Performance Evidence on pork production sites, because it:

- *Ensure graduates are competent to work safely and productively with live animals in commercial production environments*
- *Reduces worker health and safety, animal health and welfare and biosecurity risks, all of which are critical to the viability of the pork industry, and in turn the RTOs that service this industry*
- *Reduces costs for RTOs related to the provision of animals, materials and farming infrastructure and equipment*
- *Reduces RTO costs related to animal welfare compliance in jurisdictions that require Animal Ethics Committee for animal husbandry tasks, when these tasks are performed outside of a pig farm*
- *Reduces productivity losses by getting production tasks completed, and preventing down time due to quarantine requirements (between 24 to 72 hours) if workers come into contact with pigs outside their own farm*
- *Assists with completion of qualifications, especially as the employer is paying for the training and worker's time.*

MWR does not mean that an assessor must be physically present at all times during the demonstration of the Performance Evidence. For example, RTOs and assessors can also collect 'live evidence of skills in real time' using video technology, as well as observation by third parties such as the employee's supervisor.

Australian Pork Limited (APL) is willing to facilitate introductions for RTOs to farmers that can provide access to their worksites for delivery of the revised units. APL's website has a resource library (including pig health and welfare, and a pig farming glossary) and other resources related to training and development, including accredited training.

Other pork industry advice

In response to stakeholder questions during the development of the pork sector products released with AHC Version 9.0, the following additional advice has been added to this guide.

Performance Evidence and pig requirements

The Performance Evidence in some revised AHCRRK units requires care for a number of different groups of pigs. For example, in *AHCPRK311 Care for health and welfare of pigs*, it states that 'the individual has safely and effectively cared for at least four different groups of pigs over a period of at least five days. Each group must include at least three pigs'. This means that a total of at

least 12 pigs are required (4 groups with 3 pigs in each group). It does not mean the 12 pigs need to be of different from each other in terms of breed, sex or life stage. For example, all 12 pigs can be weaners if that is what is available on the farm. The number of groups and group sizes are expressed as 'at least' which means the evidence can be collected with more groups and more pigs in each group if that is more convenient on the farm where the evidence is being demonstrated. The Assessment Conditions also make it clear that the 'the five days specified in the performance evidence can be consecutive or non-consecutive', which means the evidence collection can be spread over several weeks if required.

Industry encourages using different types of pigs in the demonstration of the Performance Evidence, if different pig types (breed, sex, and life stage) are available on the pig farm where the individual is being assessed. For example, the Performance Evidence in *AHCPRK202 Move and handle pigs* requires '*the individual has safely, efficiently and calmly moved pigs from one location to another, including at least:*

- *four groups of pigs, with each group to include at least three pigs*
- *an individual pig.*'

While it is compliant to demonstrate the Performance Evidence of AHCPRK202 with only one type of pig, it is better to demonstrate competency in these skills with more than one type, if these are available on the farm, because pig behaviour varies across these types. The following types have been suggested by industry stakeholders as suitable for this unit:

- *gilts*
- *sows (farrowed, gestating, oestrus)*
- *boars*
- *weaners*
- *growers*
- *finishers*

Selection of electives in Certificate III in Pork Production

In response to industry feedback, the revised *AHC30422 Certificate III in Pork Production* is designed to promote the achievement of more Pork sector units (coded AHCPRK), as these units provide the breadth and depth of knowledge and skills required by a piggery attendant or stock person. The Core has two AHCPRK units and nine AHCPRK units have been listed in Group A – Pork Production. Elective Group B Livestock Husbandry lists several generic livestock sector units (coded AHCLSK) that also provide relevant knowledge and skills required by workers on some pork production sites. The Packaging Rules of this qualification require 11 elective units to be achieve, as follows:

- *at least 2 units must be from elective group A*
- *at least 5 units must be from elective group B*
- *the remaining units may be selected from Groups A, B or C*
- *1 unit may be selected from any currently endorsed Training Package or accredited course*

While it is possible to select a total of seven electives from Groups A and B, industry strongly recommends individuals select as many as possible from these two groups, as these units reflect the knowledge and skills required on pork production sites.

Training and assessment environments for Poultry sector units

Industry experts strongly recommend the skills in the revised Poultry Sector units (released with AHC Version 9.0) be trained and assessed in a commercial poultry production site. The units were created with robust consultation with industry and RTO representatives and designed to ensure graduates are competent to work safely and productively in the commercial poultry production, noting that 'Competency is the consistent application of knowledge and skill to the standard of performance required in the workplace. It embodies the ability to transfer and apply skills and knowledge to new situations and environments'. (ASQA Glossary)

The Performance Evidence in these units includes holistic tasks that require the application of knowledge and judgement when performing skills with live poultry. The work environment plays a critical role in the undertaking of these tasks. Whether the assessment environment is a commercial poultry production site or a simulated site, the resources specified in the Assessment Conditions, including live poultry, are critical to the demonstration of skills to the level of competency required by industry.

The revised poultry units typically cover poultry husbandry activities that are covered by animal welfare legislation, regulations and state or territory regulated codes of practice. When these units are trained on a commercial poultry production site, the animal welfare requirements are covered by the current edition of the poultry industry code of practice, which these farms are required to follow. RTOs seeking to train and assess the poultry units may approach commercial poultry producers in their area to create partnerships to train and assess workers on a farm site. Australian Eggs has links to all known Australian egg farmers and is willing to assist RTOs seeking to contact local poultry farmers.

When live animals are used in the training and assessment of these (and other livestock) units outside of a commercial primary production site, RTOs will need to consider animal welfare requirements. More information on animal welfare requirements can be obtained from state and territory animal welfare authorities.

Legal considerations for learners in the workplace/on placements

Legal requirements that apply to specific sectors covered by this Training Package vary across each state and territory and can change from time to time. Contact the relevant state or territory authorities to check. STA contact details are provided in the Links section of this Implementation Guide. The Fair Work Ombudsman has some general guidelines and fact sheets about unpaid work.[19]

Work placements should always involve the appropriate supervision and guidance from individuals in the workplace and trainers and assessors from the RTO and must adhere to required legislation that applies in the jurisdiction; e.g., learners must be supplied with the appropriate personal protective equipment (PPE) and training on how to use the PPE effectively prior to undertaking tasks that include health and safety risks.

[19] Fair Work Ombudsman: https://www.fairwork.gov.au

Resources and equipment lists

RTOs must make sure that all resources and equipment required to train and assess units of competency are available. Details of specific resources, including equipment and materials essential for assessment, are listed in the Assessment Conditions sections of Assessment Requirements documents. Where units of competency require assessment in the workplace, the workplace must include the full range of equipment required to do the task, as listed in the Assessment Conditions.

Other information relevant to the implementation of the training package

General assessment conditions

Language used in the Assessment Requirements of most units is 'singular' (i.e. 'a work environment' or 'an environment that…'). However, it should be noted that in some instances it may be relevant or necessary for both 'a' workplace and 'an environment that…', or multiple workplaces be utilised where the range of work or resources to access may be limited.

Machinery operation and maintenance units

Industry has provided the following advice for RTOs that deliver AHC31024 Certificate III in Parks and Gardens with regard to machinery operation and maintenance.

> The use of equipment with two stroke engines for assessment of engine oil in *AHCMOM304 Operate machinery and equipment*.

The Range Statement requires that engine oil must be checked as part of the pre-operational checks. While two-stroke engines do not generally have a sump containing engine oil, the fuel mixture does contain an amount of oil required to lubricate the engine. In order to comply with the range statement, it is essential that the individual being assessed should check that the oil and fuel mixture are correct according to the ratios specified in the manufacturer manual for the equipment.

It should also be noted that if only one piece of equipment is to be used for assessment and this equipment has a two-stroke motor, that in order to comply with the Range Statement the two-stroke engine must be used on one of the types of machinery/equipment listed.

Machinery without an internal combustion engine for *AHCMOM203 Operate basic machinery and equipment* and *AHCMOM304 Operate machinery and equipment assessment*.

Equipment that does not use an internal combustion engine such as power take off, pneumatic, electrical or battery-operated machinery, won't meet all of the assessment requirements for pre-operational checks listed in the Range Statement. Additional equipment will be required to address those pre-operational check items not assessed.

Note: The unit Application explicitly states that 'This unit does not apply to chainsaws, tractors, vehicles, and earth moving equipment' as these types of equipment are deemed more specialised and are addressed in specific units of competency.

Green infrastructure

It is envisaged that units of competency *AHCGRI501 Design roof gardens, AHCGRI502 Design vertical walls and green facades, AHCGRI401 Construct roof gardens and AHCGRI402 Construct vertical gardens* and *green facades* and the related skill sets are undertaken by persons with experience in landscaping work, landscape design, horticulture and/or building and construction.

Individuals must effectively communicate/consult with clients and relevant industry experts such as contractors, architects, engineers, growing media specialists and suppliers to determine such things as design and regulatory requirements for green infrastructure.

Agronomy

It is envisaged that AHC51920 Diploma of Applied Agronomy would be delivered either on or off the job with access to the types of resources, machinery and equipment that are present in the typical agronomy workplace.

Assessment requirements for Agribusiness and Business sectors

Prior to the release of AHC Version 4, the assessment requirements of several units of competency in the Agribusiness sector (coded AHCAGB) and Business sector (coded AHCBUS) lacked specificity regarding the volume and frequency of performance evidence. The release of AHC Version 4 has addressed this issue, by updating and clarifying the detail in the Performance Evidence of all AHCAGB and AHCBUS units. The Performance Evidence of some revised units include details about the number of times tasks should be performed, and other units specify the requirement to use records from a period of time, such as a financial quarter or a production period. Industry considered this to be an important part of the revised units, to ensure quality assessment outcomes specific to the work for job roles targeted at AQF levels 4, 5 and 6. Training organisations will need to ensure their assessments are updated to incorporate these requirements.

> **Note:** Time periods specified relate to the type of work or activities that would be carried out in a business within that timeframe. They do not require the assessment to cover the actual time.

For example, the performance evidence of *AHCBUS406 Administer finance, insurance and legal requirements* requires evidence that the individual has administered the finance, insurance and legal requirements of a business covering a period of at least six months. The assessment for this unit should incorporate performance of tasks that utilise business data and activity for a six-month period.

The assessment task does not need to cover six months of actual time. If this assessment is not carried out in a real workplace, the business data and activities should accurately represent real workplace data and records.

Precision Agriculture terminology

Precision Agriculture is an emerging terminology that broadly refers to agriculture technologies that previously had been referred to individually (e.g. use of GNSS to monitor crop, or use of

laser grids to uncovers pests within crop). The use of Precision Agriculture seeks to unify technology terminology under one banner.

Sport Turf Management

It is envisaged that training and assessment of many of the Sports Turf Management units (coded AHCTRF) will occur in the workplace, as these units require access to resources, materials and equipment that are present in a typical sports turf facility. The Assessment Conditions in the Assessment Requirements for each of these units of competency specifies these requirements. Due to the variety of subsectors in the industry, an individual undertaking the Certificate III in Sports Turf Management will need access to a variety of sports turf surfaces.

Arboriculture

It is envisaged that training and assessment of many of the Arboriculture units (coded AHCARB) will occur in the workplace, as these units require access to resources, materials and equipment that are present in an arboriculture worksite. The Assessment Conditions in the Assessment Requirements for each of these units of competency specifies these requirements. More information is provided in the *Companion Volume User Guide: Arboriculture*.

Diploma of Pest Management

Industry has provided the following advice for RTOs that deliver the *AHC51324 Diploma of Pest Management* concerning the selection of elective units.

Imported units:

- For agency staff and contractors who carry out Biosecurity Surveillance, it is highly recommended that the RTO imports *AHCBER402 Carry out field surveillance for a specific emergency disease or plant pest* from the AHC41724 Certificate IV in Pest Management as part of the elective option to meet the needs of this group.
- For agency pest and weed officers who are authorised under legislation to enforce legislation such as the *Biosecurity Act 2015*, it is highly recommended that *AHCNRM512 Investigate suspected breaches of natural resource management legislation* is imported from the AHC51120 Diploma of Conservation and Ecosystem Management.

It is also highly recommended that the following Group B units are selected:

- *AHCPMG413 Define the pest problem*, as defining the pest problem is core to developing a pest management plan
- *AHCCCF505 Contribute to regional planning process*, as pest managers are required to engage in regional planning processes.

AHCNRM605 Develop a monitoring, evaluation and reporting program and *AHCNRM603 Implement a monitoring, evaluation and reporting program* from Group A are not deemed by industry as essential knowledge for pest managers, and therefore other Group A units should be considered before the selection of these two units.

Aboriginal and/or Torres Strait Islander Cultural Sites Work and On Country Management

Industry has provided the following mandatory requirement for all RTOs assessing units in the Cultural Sites Work (CSW) and On Country Management (OCM) sectors:

Assessment must be undertaken by a workplace assessor who has expertise in this unit of competency and who is:

- *an Aboriginal and/or Torres Strait Islander Elder and/or Custodian*

or:

- *accompanied by, and/or in communication with, an Aboriginal and/or Torres Strait Islander person who is a recognised member of the community with experience and knowledge of local cultural protocols.*

This information is found in the Assessment Conditions for each unit and is additional to the requirement for assessors satisfying requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

In addition to the additional Assessment Conditions, there are terms that have been included in some units referring to the concepts of law and lore. In Aboriginal and/or Torres Strait Islander culture, law refers to the legal systems and practices unique to Aboriginal and/or Torres Strait Islander Peoples. Lore is the passing down of knowledge and traditions, a way of life.

The word 'law' may not be as widely used across Australia in these modern times; however, it is important to remember that it is still referred to in some cultures today.

Assessing 'respect' and 'acknowledgement'

Several units in Cultural Sites Work and On Country Management include Performance Criteria where an individual is required to 'respect' or 'acknowledge'. For example, the unit *AHCOCM303 Follow Aboriginal and/or Torres Strait Islander cultural protocols,* refers to 'Acknowledge the rights of individuals' or 'Acknowledge and respect traditional knowledge', etc. Difficulties may arise when considering how these might be assessed; however, acknowledgement and respect are an integral part of showing support for Aboriginal and/or Torres Strait Islander culture and can be demonstrated in the way an individual interacts with local Community members or Cultural Authorities. It can also be demonstrated through showing support for decisions being made by Aboriginal and/or Torres Strait Islander Peoples or groups and complying with those decisions.

Choosing electives

When choosing electives for the qualification AHC31522 Certificate III in Aboriginal and/or Torres Strait Islander Cultural Sites Work, consideration should be given to the selection of the following units of competency as they may be determined to be too closely related to each other if chosen together:

- *AHCCSW401 Contribute to the development of cultural safety processes* (Group A Cultural Sites Work)

and

- *CHCDIV002 Promote Aboriginal and/or Torres Strait Islander cultural safety* (Group B General electives).

Implementation notes for wool harvesting (SHG and WOL) units of competency

The following table outlines performance evidence for shearing tasks and units of competency.

Shearer – duties and level descriptions	Performance evidence (output required)
Novice shearer Unit: AHCSHG213 Shear sheep to novice level	• *shorn and tallied a minimum of 40 adult merino sheep or 50 adult crossbred sheep per eight-hour day to industry standards* • *communicated workplace issues on at least two occasions.*
Improver shearer Unit: AHCSHG214 Shear sheep to improver level	• *shorn and tallied a minimum of 80 adult merino sheep or 100 adult crossbred sheep per eight-hour day to industry standards* • *communicated workplace issues on at least four occasions.*
Professional shearer Unit: AHCSHG311 Shear sheep to professional level	• *shorn and tallied a minimum of 120 adult merino sheep or 140 adult crossbred sheep per eight-hour day to industry standards* • *communicated workplace issues on at least four occasions.*
Shearing consistently Unit: AHCSHG312 Maintain consistent shearing performance	• *prepared and set the equipment correctly and maintained control, coordination, rhythm, optimum shearing output, speed and accuracy over an eight-hour day on two occasions.*
Crutcher Unit: AHCSHG211 Crutch sheep	• *crutched and tallied sheep at a rate that is equivalent to 40 sheep over a 2-hour period in a safe manner that complies with animal welfare, work health and safety (WHS) and industry standards.*

The following table summarises performance evidence for wool (WOL) and shearing (SHG) units of competency specifying equipment use.

Units specifying equipment use	Performance evidence (output required)
AHCSHG215 Grind combs and cutters for machine shearing	• *determined the need for sharpening combs and cutters on one occasion*

	• *prepared the grinder and pendulum on one occasion* • *grinded a minimum of five combs and five cutters for machine shearing to industry standards.*

AHCSHG216 Prepare handpieces and downtubes for machine shearing	• *prepared, lubricated and maintained five of each of the following on at least one model for shearing:*
	  ○ *combs*
	  ○ *cutters*
	  ○ *handpieces*
	  ○ *downtubes*
	• *carried out minor maintenance or adjustments on handpieces and downtubes on two occasions.*

AHCSHG309 Prepare combs and cutters for machine shearing	• *determined the need for sharpening combs and cutters on two occasions* • *determined the need for dressing combs and cutters on two occasions* • *prepared the grinder and pendulum for use on one occasion* • *carried out grinding on one occasion* • *set, stored and cared for grinding papers on one occasion* • *dressed ten combs, including selecting bevels, teeth thinning and polishing.*
AHCSHG310 Maintain and service shearing handpieces	• *identified worn and faulty handpiece components on two occasions* • *installed minor repair kit components on one occasion* • *maintained and serviced two handpieces.*
AHCWOL207 Carry out wool pressing	• *operated one wool press under supervision and conducted the following on two occasions:* • *operated scales and manual handling devices under supervision* • *maintained uniform bale weights for each line* • *branded bales clearly and accurately* • *handled wool bales efficiently and without risk to self, other people or machinery*

	• *recorded bale information correctly and legibly for the use of Wool Classer and grower/manager at the time of pressing each bale.*
AHCWOL317 Press wool for a clip	• *has used a wool press to press, brand and document two bales proficiently and met the pressing requirements of the industry code of practice.*

Explanation of terms used in Shearing (SHG) and Wool (WOL) units follows.

Terms used in wool harvesting units of competency	Specifically refers to
Appraisal of non-measured characteristics	'AWEX-ID'
Digital wool clip documentation	'WoolClip'
Industry wool declaration	'National Wool Declaration'
Industry code of practice	'Code of Practice for the Preparation of Australian Wool Clips'

The following table provides additional detail for terms as applied in the wool harvesting industry.

Terms used in wool harvesting units of competency	Detail, as applied to the wool harvesting industry, includes:
Biosecurity	• reducing the risk of wool harvesting staff's exposure to contamination during wool harvesting process, product and animals • ensuring that any pest or disease affecting sheep or present on wool within a facility is not spread further, particularly to susceptible livestock (pests such as sheep lice are a real risk of spreading between mobs on farm by the wool or between properties by shed staff) • utilising sound traceability procedures to clearly document and isolate contaminated animals in the supply chain

	• reducing the risk of soil pathogens and weed seeds on shoes and vehicles and visiting animals. For this reason, a workplace biosecurity policy usually includes staff not bringing animals onsite, sticking to marked roads and carparks, arriving in clean clothes • maintaining, cleaning and disinfecting all equipment and clothing when working between different flocks and especially farms. Useful links for biosecurity: • See vehicle/people movement https://www.mla.com.au/research-and-development/biosecurity/farm-biosecurity/ • https://www.farmbiosecurity.com.au/

Contamination	• types of wool contamination and their sources, including:
	  ○ urine stain
	  ○ pigmented and medullated fibres and other animal fibres
	  ○ baling twine
	  ○ fertiliser bags
	• possible fleece contaminants and types of pigmentation faults, including:
	  ○ pigmented fibre contamination
	  ○ chemical and brands contaminants
	  ○ non-wool contaminants (baling twine, wire)
	  ○ heavy urine and faecal stains
	  ○ mixed sheep breeds present
	  ○ moisture levels caused by climate

Features of fleece parts	• skirtings • locks • crutchings • wool faults • impurities • contamination and urine stain • their impact on processing
Fleece assessment factors	• style

	• colour • type of vegetable matter (VM) fault • degree of urine stain and faults • defects
Industry standards for wool bales	• weight • length of bales • fastening methods • type of pack • bale branding • pressing bulk class bales
Livestock nutritional and hygiene requirements	• fresh, clean water • appropriate pasture • assessing if supplement feed is required • access to salt and mineral blocks • observing behaviour and physical condition of sheep • checking for signs of illness or injury and taking appropriate preventative action • suitable shelter
Oddments	• pieces • skirtings • bellies • locks • crutchings

Sheep diseases	• zoonotic, e.g.:
	  ○ rabies
	  ○ contagious ecthyma
	  ○ ringworm
	  ○ chlamydiosis
	  ○ campylobacteriosis
	  ○ listeriosis
	  ○ salmonella
	  ○ Q fever

	○ hydatids ○ anthrax ○ scabby mouth • parasitic, e.g.: ○ lung worms ○ stomach worms ○ liver flukes ○ coccidia ○ lice • other, e.g.: ○ skin cancer ○ fly strike ○ footrot
Traceability	• standard of sheep shearing • reporting of sheep injury, disease or illness • reporting of black and coloured wool • other fleece faults • transition between classes of sheep • bale traceability requirements, including: ○ industry digital wool clip documentation ○ individual bale numbering and bale labels ○ property identification code (PIC)
Wool characteristics	• non-measured/visual assessment: ○ quality count/character or crimp definition ○ length and strength ○ colour ○ vegetable matter (VM) type ○ curvature ○ comfort factor • measured: ○ fibre diameter ○ yield

Wool clip differences	• differences may refer to:
	  ○ different breeds of sheep
	  ○ different classes of animal
	  ○ wool clips prepared on different occasions
	  ○ wool clips from different locations, including different properties

Wool faults	• impurities • contamination • urine stain • tenderness/breaking point
Workplace policies	• biosecurity • environmental • employment and work health and safety legislation • animal welfare standards and codes of practice • shed quality standards • federal and/or state shearing awards and agreements associated with shearing sheep

Job role requirements in the wool harvesting industry

Some of the role requirements as detailed by AWEX are as follows:

Shearer

- Follow all Australian Animal Welfare Standards and Guidelines for Sheep
- Take sheep from catching pens and shear the fleece in one piece, avoiding second cuts
- Select shearing combs to suit the type of sheep and wool
- Treat any severe skin cuts
- Call to wool handlers to raddle fly struck sheep for treatment outside the shed
- Call to wool handlers (or the Wool Classer) when a sheep with black wool is being shorn or when a black spot is identified during shearing. This allows shed staff to remove the entire fleece to prevent the contamination of white wool fleeces
- Only commence shearing a new mob after a cut-out when the Wool Classer has given the OK
- Return shorn sheep to let-out pens for counting and checking
- Clean and sharpen combs and cutters.[20]

[20] AWEX publication Publications | we know wool (awex.com.au)

Wool Classer

The Wool Classer works in a challenging, ever-changing but rewarding work environment. While technical knowledge and wool classing skills are core to the role, a significant proportion of the Wool Classer's time is spent managing or supervising shed staff and overseeing their output.

The Wool Classer's role requires many attributes: planning and preparation, communication and negotiation, staff supervision, time management, responding to expected and unexpected events, strategic thinking, understanding quality assurance concepts, good wool technical knowledge and practical skills, and the ability to build a team and to lead by example.

The shearing shed is a busy workplace, which is most effective and functional when all staff work as a team. A functional team needs:

- a common set of goals (clearly expressed),
- a desire by everyone to work towards and achieve these goals,
- clear job descriptions so everyone knows their role, and
- recognition that whilst roles may be different, all are important.

At the start of shearing, the Wool Classer should assess the experience and capabilities of (new) staff to perform their duties. Staff may be rotated to maximise efficiencies within the shed; however, care needs to be taken to ensure that staff workloads are equal. [21]

Wool handler

Wool handlers, as directed by the Wool Classer, are likely to be asked to perform any of the following duties:

Board duties

- Set up the wool preparation area according to instructions from the Wool Classer
- Separate any urine stain wool from the fleece while on the board before the fleece is thrown onto the table. Place it in the correct bin/butt
- If present, remove urine stain from the belly wool of wether or ram mobs, identify and remove coloured/cotted briskets and place in the correct bin/butt
- Remove fly-blown wool and place in the correct bin/butt. Raddle the nose of the sheep for treatment outside the shed
- Identify and separate out hard/matted shanks and place into the appropriate bin/butt
- Sweep the board of locks and check for non-matching wool type(s) and place them into the appropriate bins/butts
- Sweep locks from under the wool table, check for non-matching wool type(s) and place them into the appropriate bins/butts
- Follow the correct procedure when black wool is identified by a shearer
- Where a mulesed sheep is identified in a non mulesed mob, isolate the fleece and inform the Wool Classer

[21] Ibid

- Pick up and throw the fleece flat and evenly across the wool table to allow for its thorough inspection and effective skirting.

Table duties

- Remove brands and sheep marking substances before skirting begins
- Locate and check the breech area of the fleece for faults, e.g., dag and/or urine stain in ewe mobs
- Follow directions from the Wool Classer as to the level of skirting and the faults to be removed. Some clips require little skirting, while others require additional skirting practices, e.g., removal of backs
- Skirt effectively and efficiently from the hind legs towards the neck and only remove portions that do not meet the uniformity of the bulk of the fleece. Take care not to remove fleece wool.
    - Remove skin pieces from fleece wool and place in the correct bin/butt.
    - Roll the fleece consistently and check for faults such as water colour.

During and at the end of each run

- Maintain a clean wool preparation area
- Check non fleece lines to ensure the contents are correct, and reallocate wool to the correct line
- Tramp bins/butts and square off wool bins
- Close and change butts when full or at cut-outs, and clearly label them for the wool presser
- Empty contamination and rubbish bins into designated containers.

Cut-out

- Close off open bales and bins/butts
- Perform shed cut-out or end of week duties such as taking down butts, pressing up, raking count-out pens and washing the board.

Working around shearers

- Take care when working around shearers and always be aware of the location of the handpiece and the shearer's position when they are dragging, shearing or releasing sheep
- Be prepared to pull the machine out of gear if a shearer calls for assistance when a sheep kicks badly, i.e., when it is not safe for the shearer to let go of the handpiece
- To prevent fleece contamination, separate urine stain and/or short wool from the breech region whilst shearing is in progress, provided:
    - The shearer approves of this intervention
    - It is done safely using a broom or paddle, i.e., keeping hands and face away
    - Limited, if any, contact is made with the sheep by the broom or paddle
    - It is timed so it **does not** interfere with the shearing rhythm or endanger the shearer.

- Urine stain that was missed earlier in the shearing pattern can be removed on the board just prior to gathering the fleece
- If a wool handler is not able to return to sweep up before the next sheep is on the stand, sweep around the sheep without causing interference to the shearer.

Penning up

- Correct animal welfare and handling practices must be followed
- The shearer will usually call out when the catching pen requires filling
- The penner up must notify the Wool Classer and the shearers when the cut-out of a mob is about to occur
- The person penning up must ensure mobs are not mixed (boxed) in the pens of the wool shed by properly securing the gates
- Take advice from the owner/manager or contractor on the best way to take sheep from the wool shed entrance through to the catching pens.[22]

Wool presser

- Follow the Wool Classer's directions when scanning and recording the QR code for each bale using the WoolClip App
- Check there are adequate supplies for the job; namely, wool packs or ePacks, fasteners, stencil ink, stencils, stencil brush, permanent markers, bale hooks and newspaper (for BC bales)
- Check the press is safe to use and the accuracy of scales (on the press or separate weighing equipment) against a known weight prior to pressing bales
- Prior to use, shake out each wool pack away from the wool preparation area, and check and remove contaminants or faults
- Apply the Wool Classer ID to bales as directed by the Wool Classer.
- Liaise with the Wool Classer regarding wool to be pressed and become familiar with the bale branding descriptions and Bin Codes, and correctly brand and mark the bales
- Identify wool to be pressed and manage workflow to prevent wool build up. Manage wool cut outs to prevent over- or under-weight bales
- Ensure no errors (e.g. mixed wool types) by carefully monitoring/checking the contents and labelling for bins and butts
- Record the bale description, Bin Code (if used), and bale number in the Wool Book. Once pressed, record the weight in the Wool Book, or Scan QR code and record bale details and weight in the WoolClip app
- Close off bales to ensure the bale label is easy to read and the head of the bale is flat. [23]

Organisations and their resources

For information on shearing shed safety and legal duties of persons involved in shearing see AWI's guide on the following link: https://wasia.com.au/wp-content/uploads/2020/11/SafeSheds-The-Guide.pdf

[22] Ibid

[23] Ibid

For more information about wool harvest terms see the Australian Wool Test Authority Glossary of Terms link: AWTA Wool Testing – Wool Industry Terms – Z

Organisations that represent interests in the Australian Wool Industry include Australian Wool Innovation, Australian Wool Exchange, Australian Superfine Wool Growers' Association Inc, Wool Producers Australia, Australian Woolgrowers Association, Australian Wool Testing Authority. [24]

Australian Wool Exchange (AWEX) is the industry body in Australia for managing:

- the maintenance and improvement of the quality of the Australian wool clip; and
- compliance monitoring on behalf of the wool industry.

AWEX is responsible for those functions that relate to:

- facilitating the efficient marketing of wool; and
- adopting measures to improve and safeguard the quality of the Australian wool clip.[25]

For more information, see: Home | we know wool (awex.com.au)

Australian Wool Innovation (AWI) is an industry services body for the Australian wool industry. It is a not-for-profit company that invests in research, development, marketing and promotion for the wool industry to increase the long-term profitability of Australian woolgrowers. AWI is funded by farmer levies, with matching research and development funds from the Australian Government.[26]

For more information, see: Australian Wool Innovation

Australian Superfine Wool Growers' Association Inc (ASWGA) is Australia's peak body representing the Australian superfine wool industry. ASWGA is an international association of superfine wool growers and processors founded to promote and further the development and marketing of superfine wool. Superfine wool is the 'flagship' of the world's wool industry and leads the industry in the highest standards of wool production, manufacture and promotion. ASWGA undertakes activities to further the interests of all its members, through representation and by linking global stakeholders in the supply chain. ASWGA liaises closely with other peak industry bodies and research institutes to ensure superfine representation and to provide education and advice to the superfine wool industry on superfine raw wool production trends and consumer demand.[27]

For more information, see: Australian Superfine Wool Growers Association (aswga.com)

Wool Producers Australia (WPA) is the peak national body for the wool producing industry in Australia, representing farmers who have an interest in growing wool. WPA advocate the industry's interests to the Federal Government and internationally, enabling woolgrowers to determine policy and drive change in their industry. WPA'S membership is comprised of the industry's commercial, superfine and stud breeding sectors.[28]

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[24] Australian Government Department of Agriculture, Fisheries and Forestry Wool – DAFF (agriculture.gov.au)

[25] awx-cop-2021-rules-of-registration_web.pdf (awex.com.au)

[26] Ibid

[27] About ASWGA — Australian Superfine Wool Growers Association

[28] About | Wool Producers Australia

For more information see: Wool Growers | Wool Producers Australia

Australian Woolgrowers Association (AWGA) was formed in 1997 and is an independent voice for Australian wool growers. It works closely with AWI and other industry bodies through its membership on AWI's Wool Industry Consultative Panel (the WICP) and various animal welfare committees. Through these channels, AWGA represents the views of wool growers across the breadth of the industry and work to effect change that will see a stronger future for the Australian wool industry.[29]

For more information see: Australian Wool Growers' Association (auswoolgrowers.com.au)

Australian Wool Testing Authority (AWTA) is:

- licensed by International Wool Textile Organisation (IWTO) to issue IWTO test certificates
- accredited by NATA to the international standard for laboratory performance, ISO 17025
- a participant in the interlaboratory round trials organised by the ILRT. This is the only significant trial of its kind that monitors the performance of test houses that issue IWTO certificates for raw wool
- accredited by Interwoollabs – measurement of Fibre Diameter and Fibre Length in tops.

For more information, see:
https://www.awtawooltesting.com.au/index.php/en/about/accreditation

Training and assessment notes for wool and shearing components

For Certificate II and Certificate III level qualifications most of the task-related training will occur in the workplace, as part of the daily work schedule. This is often the case in the shearing shed where training will be supported by the supervisor or another skilled worker who has been tasked with providing guidance, direction and training of the learner as they work.

The size of an organisation in which the individual is undertaking training may have an impact on training delivery, especially if the organisation is particularly large or small. While the job roles and processes might be the same, they might be carried out in a different order of operations. This may mean that the order of the delivery and assessment performance criteria or other parts of a unit of competency might need to be rearranged to suit a particular workplace. As long as the entire unit is covered by the training and assessment processes overall, then that is acceptable to do.

Some parts of the theory training are likely to occur in the training outlet, facilitated by an RTO trainer. This training may be incorporated into the learner's induction process and involve presentations from several people, including industry personnel. It may occur as a block of up-front training before the learner goes onto the workplace, or it may be a series of short sessions intermixed with work on the production line.

Training may also include self-paced online or printed training programs addressing theory components, viewing short videos, or completing online quizzes.

In some cases, learners may be given reference materials and/or small research assignments to complete – this is more likely to occur at Certificate IV level.

[29] WHO WE ARE (auswoolgrowers.com.au)

Some methods a trainer can use to monitor the quality and consistency of the training support provided by a supervisor or another skilled worker include:

- regularly reviewing the learner's performance and progress with the supervisor or work colleague
- observing the learner's progress during regular visits to the workplace
- regular conversation with the learner, either on or off the job as appropriate, to discuss their progress and confidence in the quality of training provided.

In cases where training and assessment in a real workplace is not possible or practical, trainers and assessors must make sure learners have opportunity to complete tasks:

- to the quality standards, and within the acceptable timeframes, required by the industry
- in a manner that meets the industry's safety standards.

Assessment Guidance for wool harvesting units of competency

RTOs can determine which assessment methods are used to assess the content of the unit. However, assessment of units must be robust and meet best practice standards for assessment, including meeting the Principles for Assessment and the Rules of Evidence, as outlined in the *Standards for RTOs 2015*.

On-the-job demonstration

On-the-job demonstration with assessor observation can be used to assess both skills and knowledge. It enables assessment within the context of the work instruction, regulatory requirements, chain speed, etc. The assessor is expected to discuss performance with and debrief the learner.

Workplace projects

Workplace projects are often used where a real-time workplace activity is not available.

Workplace projects enable application of knowledge to the workplace context. They encourage use of the equipment and systems used in the workplace as well as analysis and problem solving which will benefit the workplace.

For example, assessment for *AHCWOL409 Manage wool harvesting staff* may include a workplace project that entails addressing common staffing and resource issues and a role-play on motivating and performance managing a work team.

Assessment for *AHCWOL206 Perform board duties* may include identifying and removing potential contaminants in a shed.

Assessment for *AHCWOL314 Prepare skirtings and oddments* may include assessment using different sheep breeds, different locations/sheds, and fine/superfine or medium/strong or crossbred wool clips.

Knowledge tests

Knowledge tests can be used to check understanding of the underpinning knowledge. These are questions an auditor/overseeing reviewer might expect a worker to answer during a workplace audit.

Knowledge tests are expected to reflect language and literacy requirements of the workplace. This means they can be administered either orally or in writing, and may allow the use of reference material, depending on the requirements of the job.

Workplace referees

Workplace referees are expected to be well briefed by the assessor, including the legal implications of any statements they are signing. Suitable referees are usually an immediate supervisor or experienced work colleague who has ample opportunity to observe the learner's performance.

Their key role is to testify to consistency of performance over a period of time. Therefore, they must view the learner working long enough for them to confidently say the learner can work at production speed and at a level of accuracy and efficiency expected in the workplace.

They are expected to make notes and comments to support their assessment of the learner's work. A workplace referee can be more than one person.

Simulated assessment methods

Suggested simulated assessment methods include the following:

- role-play
- virtual methods
- use of 'like' or duplicated products (e.g., use of the same wool bale for pressing several times) to display process
- knowledge testing (for knowledge evidence)
- clustering skill and knowledge requirements (note that while you can conduct assessment in a clustered manner, you still need to record assessment results separately for each unit).

Assessment requirements for units are specified in their 'Assessment Conditions'. All wool harvesting units state the following: '*Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards*'.

The following units have the assessment extra AWEX registration requirement: 'Assessors must be currently registered with the Australian Wool Exchange as Australian Wool Classers':

- AHCWOL302 Appraise wool using industry descriptions
- AHCWOL309 Prepare wool based on its characteristics
- AHCWOL315 Supervise clip preparation
- AHCWOL406 Determine wool classing strategies
- AHCWOL407 Use individual fleece measurements to prepare wool for sale
- AHCWOL408 Plan, implement and review wool harvesting and clip preparation
- AHCWOL409 Manage wool harvesting staff
- AHCWOL405 Class fleece wool
- AHCWOL411 Document a wool clip

Assessment requirements for *AHCSHG218 Maintain own health to promote wellbeing in the wool harvesting industry*

Assessment for *AHCSHG218 Maintain own health to promote wellbeing in the wool the wool harvesting industry* is the same as all the other wool harvesting units: '*Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards*'.

Assessment for this unit is on the basis of supplying information and seeking learners' understanding about substance misuse and gambling harm risk. Assessors of this unit do not require counselling, social work or psychological qualifications.

Resources for delivery of AHCSHG218 Maintain own health to promote wellbeing in the wool harvesting industry

For information that may assist in the delivery and assessment of this unit see the following links:

Online Alcohol & Drug Counselling (lifeline.org.au) Gambling Help Online | Gambling Help Online

Drugs and alcohol | healthdirect

Gambling in Australia – Australian Institute of Health and Welfare (aihw.gov.au)

BetStop https://www.betstop.gov.au/

Beyond Blue (2024). Website *Look after your mental health and wellbeing*

Victorian Responsible Gambling Foundation (2024). Website *Types of gambling harms*

Victorian Responsible Gambling Foundation (2024). Website *Glossary*

Department of Health and Aged care, (2024). Website Positive Choices, *Influences and Reasons for Drug Use: Class Activity*

Department of Health and Aged Care (2024). Website Drug information

Black Dog Institute (2024). Website, Resources and support, Wellbeing & Workplace Wellbeing

Black Dog Institute (2024). Website, Fact Sheet on Workplace Wellbeing

Safe Work Australia (2024) – Mental Health

Department of Health (2024). Website Mental Health

Better Health Channel (2024). Website Wellbeing

Links

Agronomy

Organisation	Detail	Contact
Ag Excellence Alliance (Ag Ex)	Ag Ex was established in 2005 to help increase the viability of South Australian farmers through providing leadership and effective linkages between grower groups and key stakeholders.	https://agex.org.au
Australian Industry Group	A peak body representing employer organisations in traditional, innovative and emerging industry sectors.	http://www.aigroup.com.au
Australian Society of Agronomy	The Australian Society of Agronomy Inc. is the professional body for agronomists in Australia and New Zealand.	https://www.agronomyaustralia.org
Australian Sports Turf Managers Association (formerly the Australian Golf Course Superintendents' Association [AGCSA]).	The Australian Sports Turf Managers Association is a not-for-profit industry association, committed to the ongoing education, development and support of all professionals involved in Turf Management.	https://www.astma.com.au
Australian Workers Union (AWU)	The AWU represents blue-collar workers in the manufacturing, steel, aluminium, glass, oil & gas, aviation, agriculture, construction, state public services, local government, health, plastics, hospitality, food, paper, resources, aquaculture, events and racing industries.	https://www.awu.net.au
Birchip Cropping Group (BCG)	BCG is a not-for-profit agricultural research and extension organisation led by farmers from the Wimmera and Mallee regions of Victoria. BCG's research and communication activities provide evidence, support and tools for improving farm management practices and profitability.	https://www.bcg.org.au
Cotton Australia	Cotton Australia is the peak body for Australia's cotton producers, supporting more than 1200 cotton farming families in NSW, Queensland and now into Victoria.	https://cottonaustralia.com.au
Crop Consultants Australia (CCA)	CCA is primarily an association for those that provide agronomic advice to cotton, grains, pulse and oilseed producers in Australia.	https://cropconsultants.com.au

Organisation	Detail	Contact
FarmLink Research Limited (FarmLink)	FarmLink is a not-for-profit agricultural research and extension organisation in southern NSW owned by growers and involving advisers and researchers. FarmLink's main objective is to coordinate and communicate private, public and grower group funded research and development activities within the region.	http://www.farmlink.com.au
Grain Producers Australia (GPA)	GPA represents Australia's broadacre, grain, pulse and oilseed producers at the national level. Broadly stated, GPA was created to foster a strong, innovative, profitable, globally competitive and environmentally sustainable grains industry in Australia.	https://www.grainproducers.com.au
Hart Field-Site Group (Hart)	Hart is South Australia's premier agronomic field site, managed by farmers to provide independent information and skills to the broadacre cropping industry.	http://www.hartfieldsite.org.au
National Farmers' Federation (NFF)	A peak body representing farmers, and more broadly, agriculture across Australia.	http://www.nff.org.au
National Parks Australia Council (NPAC)	The NPAC are a national body that coordinates and represents the view of a range of state and territory non-government organisations concerned with protecting the natural environment and furthering national parks.	https://npac.org.au
United Workers Union (UWU)	The UWU empowers all workers to stand together – casual, permanent, part time or contract – and unite to improve their working lives and build stronger communities that can prioritise people and planet.	https://unitedworkers.org.au
NT WorkSafe	The work health and safety, dangerous goods, electrical safety, and rehabilitation and workers compensation division of the Northern Territory government.	http://www.worksafe.nt.gov.au
Parks and Leisure Australia (PLA)	PLA are the leading industry association for professionals in the sector. Their aim is to build, serve and develop a strong and united parks and leisure industry in Australia.	https://www.parksleisure.com.au

Organisation	Detail	Contact
RMCG	RMCG is an environmental and agricultural consultancy, providing advice to government agencies, water authorities, institutions and private sector clients in the fields of environment, water, agriculture, economics and communities.	http://www.rmcg.com.au
SafeWork NSW	The New South Wales workplace health and safety regulator.	http://www.safework.nsw.gov.au
SafeWork SA	The South Australian work health and safety, public safety and worker relations regulator.	http://www.safework.sa.gov.au
Society of Precision Agriculture Australia (SPAA)	SPAA is Australia's leading independent precision agriculture research, development and extension organisation.	https://spaa.com.au
Tasmanian Agricultural Productivity Group (TAPG)	TAPG was established in 1989 to provide advocacy around responsible regulation of pesticides in the agricultural sector. TAPG is in a unique position to address issues that are of common concern to primary, secondary and service levels of Tasmanian agriculture.	https://tapg.net
Thomas Elder Institute (TEI)	TEI is Elders' research and development arm, comprising of key partnerships with industry bodies and education institutions. TEI aims to drive greater productivity for clients and the industry by bridging disconnect between research findings and practical application on-farm.	https://eldersrural.com.au/tech-services/thomas-elder-institute
Workplace Health and Safety Queensland (WHSQ)	The Queensland work health and safety regulator.	http://www.worksafe.qld.gov.au
WorkSafe ACT	The Australian Capital Territory's health and safety and workers' compensation regulator.	http://www.worksafe.act.gov.au
WorkSafe Tasmania	The Tasmanian workplace safety, health and return to work regulator.	http://worksafe.tas.gov.au
WorkSafe Victoria	The Victorian occupational health and safety regulator.	http://www.worksafe.vic.gov.au

Organisation	Detail	Contact
WorkSafe WA	The Western Australia occupational safety and health regulator.	https://www.commerce.wa.gov.au/worksafe

Green Infrastructure

Organisation	Detail	Contact
Australian Institute of Horticulture Inc	A peak body representing horticulturalists in Australia and Southeast Asia.	https://aih.org.au
CFMEU	The main trade union representing workers in the construction, forestry, mining and energy industries.	https://cg.cfmeu.org
Greenlife Industry Australia	Greenlife Industry Australia is the peak industry body for businesses and organisations that provide products and services for greenlife production; produce, supply and retail greenlife; or promote the benefits of and share greenlife with the community.	https://www.greenlifeindustry.com.au
Landscape Association	A peak body representing landscaping professionals in NSW and the ACT.	https://www.landscapeassociation.com.au
Landscape Industries Association WA	A not-for-profit membership association representing those involved in the landscape industry in WA.	https://landscaping.net.au
Landscape Queensland	A peak industry body that represents the interests of Queensland's landscape and garden maintenance contractors, designers and suppliers of products and services.	https://www.landscapequeensland.com.au
Landscaping Victoria Master Landscapers	A professional association of commercial and residential landscape contractors, landscape designers, students, educators and landscape service and product suppliers.	https://www.landscapingvictoria.com.au
Master Builders Australia (MBA)	A peak body representing the building and construction industry.	http://www.masterbuilders.com.au

Arboriculture

Organisation	Detail	Contact
Arboriculture Australia	National peak body representing a broad spectrum of arborists across all states of Australia.	http://arboriculture.org.au
Arboriculture Association of Western Australia (formerly The Tree Guild Western Australia)	The collective voice of the arboriculture industry in WA, supported by individual members with the purpose of educating and sharing leading edge information and worldwide best practices: to promote and preserve tree canopy cover, to enhance ecological communities, and to ensure a healthy co-existence with people and nature for the sustainability of future generations.	https://www.arbwest.com.au
Australian Capital Tree Community	Peak body for Arborists in ACT.	https://arboriculture.org.au/about-us/committees/australian-capital-tree-community
Institute of Australian Consulting Arborists (IACA)	IACA a national organisation for professional Consulting Arborists.	https://www.iaca.org.au
Northern Territory Arboriculture Association	Established to promote professional arboriculture and tree management throughout the Northern Territory.	https://ntaa.net.au
Queensland Arboricultural Association Inc	An organisation representing arborists in Queensland with an aim to preserve, protect, maintain and enhance the value of trees.	https://qaa.net.au
Safe Work Australia (SWA)	SWA provides a guide on managing risks of tree trimming and removal work.	https://www.safeworkaustralia.gov.au/doc/guide-managing-risks-tree-trimming-and-removal-work
Society of Municipal Arborists	A peak body representing municipal arborists.	https://www.urban-forestry.com
South Australia Society of Arboriculture	SASA is a non-for-profit organisation of professional arborists.	https://www.facebook.com/pg/South-Australian-Society-of-Arboriculture-407411203421891/about/?ref=page_internal

Tasmanian Association of Arboriculture	Peak body for Arborists in Tasmania.	https://www.facebook.com/TasArbOrg/
Tree Contractors Association of Australia	A peak body representing tree contractors whose mission is to promote professional tree services of safety, experience and trust.	https://www.tcaa.com.au
Utility Arborist Association Australia	A peak body for the utility arborists structured to represent utility arborists and vegetation managers.	https://www.gotouaa.org
Women in Arboriculture	Founded in 1999 as a sub-committee of the International Society of Arboriculture Australia (ISAAC).	https://www.trees.org.uk/Careers/Women-in-Arboriculture

Beekeeping

Organisation	Detail	Contact
Australian Honey Bee Industry Council (AHBIC)	The main role of the AHBIC is to protect and promote the Australian honey bee industry. Its members are made up of representatives of various sections of the beekeeping industry in Australia.	https://honeybee.org.au
Amateur Beekeepers Association of NSW	The ABA has 20 clubs/branches throughout NSW, providing information and support to over 1,600 amateur beekeepers. The support includes access to training, equipment and books.	https://www.beekeepers.asn.au
BeeAware	BeeAware is a website that provides information on beekeeping in Australia, and links to several state-based beekeeping associations located in NSW, QLD, SA, TAS, VIC and WA.	http://beeaware.org.au/industry/beekeeping-associations

Carbon Farming

Organisation	Detail	Contact
Carbon Market Institute (CMI)	Carbon farming professional association.	http://carbonmarketinstitute.org/about
Clean Energy Regulator	The Clean Energy Regulator was established in 2012 as an independent statutory authority by the Clean Energy Regulator Act 2011 and operates as part of the Environment portfolio.	http://www.cleanenergyregulator.gov.au
Emissions Reduction Fund	Through the Emissions Reduction Fund, the Australian Government will purchase lowest cost abatement (in the form of Australian carbon credit units).	http://www.cleanenergyregulator.gov.au/ERF

Composting, Organic Production and Permaculture

Organisation	Detail	Contact
AORA – Australian Organics Recycling Association	The Australian Organics Recycling Association Limited (AORA) works with stakeholders to facilitate the conditions through which surplus organic material can be sustainably and cost-effectively recycled. They also promote the beneficial use of compost, soil conditioners and mulches in primary industries.	https://www.aora.org.au
Australian Organic Farmers	A collaboration between organic farmers around Australia with the aim to grow, package and distribute fresh produce nationwide. They also facilitate the building of relationships and share their learning for better organic production.	https://www.australianorganicfarmers.com.au/
Australian Organic Limited (AOL)	Australian Organic Limited is the leading peak industry body engaging with government and industry to promote the commercial and social interests of those who are certified and protect the integrity of the certified industry.	https://austorganic.com
Ballarat Permaculture Guild	The purpose of the association is to protect and enhance the natural environment through the promotion and application of permaculture ethics, design principles and associated practices.	https://ballaratpermaculturguild.org

Organisation	Detail	Contact
Centre for Organic Research and Education (CORE)	CORE is a collaborative network supporting and promoting the beneficial reuse of recovered organic resources. CORE encourages and facilitates the highest sustainable reuse of recovered resources, to minimise disposal of precious resources while maximising beneficial reuse.	https://core.asn.au
CERES	CERES is an environmental education centre, community garden, urban farm and social enterprise hub spread across four locations in Melbourne.	https://ceres.org.au
Community Gardens Australia	Community Gardens Australia is a networking organisation connecting community gardeners in each of the states and territories around Australia.	https://www.communitygarden.org.au
Compost Connect	Compost Connect helps Australian and New Zealand businesses and individuals to access composting services for their compostable food packaging and food waste with an aim to reduce organic waste from entering landfill and to minimise the effect of waste on our environment.	https://www.compostconnect.org
Compost Revolution	A non-government organisation working with local government across Australia to inspire, educate and equip households to recover and convert their food waste to reduce the burden on landfill.	https://compostrevolution.com.au
NASAA Certified Organic (NCO)	NCO is Australia's pre-eminent organic certification organisation that enables and supports global market access. They maintain and deliver organic certification services and maintain accreditations and a credible reputation as a leading Australian organic certifier.	https://ncocertifiedorganic.com.au
National Association for Sustainable Agriculture Australia (NASAA)	NASAA supports and promotes the adoption of sustainable agricultural practices that lead to safer and more sustainable food production systems. The association supports the development and education of the organic industry and consumers about organic, biodynamic and sustainable agricultural practices.	https://nasaaorganic.org.au

Organisation	Detail	Contact
National Farmers Federation (NFF)	The National Farmers Federation is the peak national body representing and advocating for farmers and, more broadly, agriculture across Australia. They have a broad industry membership, including organic farming organisations.	https://nff.org.au
Permaculture South Australia	An association of like-minded people in South Australia's permaculture sector offering training, workshops, information and resources to lead a more sustainable lifestyle.	https://permaculturesa.org.au
Permaculture Australia	Permaculture Australia (PA) is a registered charity and environmental organisation, responsible for the management of the Permafund grants and supporting Vocational Training in Permaculture. PA also has a key role in informing society about the value of permaculture.	https://permacultureaustralia.org.au
Permaculture Research Institute	The Permaculture Research Institute is a not-for-profit organisation located on a Permaculture demonstration site in NSW. They specialise in education and training and provide permaculture news and information.	https://www.permaculturenews.org
Permaculture Victoria Inc.	Permaculture Victoria is a member-based non-profit association, established in 1981 as Permaculture Melbourne Inc. They promote and support sustainable development in Victoria and are an umbrella organisation supporting local and special interest groups across Victoria.	https://www.permaculturevictoria.org.au
Urban Food Garden	The aim of this website is to help and encourage people to grow their own food.	https://urbanfoodgarden.org
WWOOF Australia	WWOOF is a worldwide network linking volunteers with organic producers to promote cultural and educational experience and help to build a sustainable global community.	https://wwoof.com.au/

Livestock and Feedlot

Organisation	Detail	Contact
Australian Lot Feeders' Association (ALFA)	ALFA is the peak national body representing the Australian cattle feedlot industry. ALFA membership represents 90% of Australian cattle feedlots, in terms of number of cattle on feed.	https://www.feedlots.com.au
Farmsafe Australia	Our mission is to improve the wellbeing and productivity of Australian agriculture through enhanced health and safety awareness and practices.	https://farmsafe.org.au
FutureBeef	FutureBeef is an ally for the north Australian beef industry, sharing the latest practical tools, scientific insights, and relevant, timely advice.	https://futurebeef.com.au/resources/handling-cattle
Low Stress Stockhandling	Low Stress Stockhandling places the emphasis on mutually beneficial outcomes for stock and handlers regardless of yard design.	https://lss.net.au
Meat and Livestock Australia (sheep feedlotting)	This site provides information about the growing number of sheep or lamb feedlots in Australia.	https://www.mla.com.au/research-and-development/reports/2020/Sheep-feedlotting-and-containment-management-guidelines-update
National Stockyard Systems	Australia's Best Stock Yards, designed by stockmen for stock handlers.	https://www.nationalstockyards.com.au/
Northern Territory Government	Information on branding regulations in the Northern Territory.	https://nt.gov.au/industry/agriculture/livestock-and-animals/brand-and-identify-livestock
Queensland Government	Information on branding regulations in Queensland.	https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/animal/move/brand-earmark/cattle-horse
Western Australian Government	Information on branding regulations in Western Australia.	https://www.agric.wa.gov.au/livestock-movement-identification/changes

Medicinal Cannabis

Organisation	Detail	Contact
Medicinal Cannabis Industry Australia	The peak industry organisation for Australia's licensed medicinal cannabis industry.	https://mcia.org.au

Nursery Production and Production Horticulture

Organisation	Detail	Contact
Ag Excellence Alliance (Ag Ex)	Ag Ex was established in 2005 to help increase the viability of South Australian farmers through providing leadership and effective linkages between grower groups and key stakeholders.	https://agex.org.au
Australian Industry Group	A peak body representing employer organisations in traditional, innovative and emerging industry sectors.	http://www.aigroup.com.au
Australian Society of Agronomy	The Australian Society of Agronomy Inc. is the professional body for agronomists in Australia and New Zealand.	https://www.agronomyaustralia.org
Australian Workers Union (AWU)	The AWU represents blue-collar workers in the manufacturing, steel, aluminium, glass, oil & gas, aviation, agriculture, construction, state public services, local government, health, plastics, hospitality, food, paper, resources, aquaculture, events and racing industries.	https://www.awu.net.au
Birchip Cropping Group (BCG)	BCG is a not-for-profit agricultural research and extension organisation led by farmers from the Wimmera and Mallee regions of Victoria. BCG's research and communication activities provide evidence, support and tools for improving farm management practices and profitability.	https://www.bcg.org.au
Bowen Gumlu Growers Association	The Bowen Gumlu Growers Association represents Australia's largest winter vegetable growing region, located in the Whitsunday region of North Queensland.	https://www.bowengumlugrowers.com.au

Organisation	Detail	Contact
Cotton Australia	Cotton Australia is the peak body for Australia's cotton producers, supporting more than 1200 cotton farming families in NSW, Queensland and now into Victoria.	https://cottonaustralia.com.au
Crop Consultants Australia (CCA)	CCA is primarily an association for those that provide agronomic advice to cotton, grains, pulse and oilseed producers in Australia.	https://cropconsultants.com.au
FarmLink Research Limited (FarmLink)	FarmLink is a not-for-profit agricultural research and extension organisation in southern NSW owned by growers and involving advisers and researchers. FarmLink's main objective is to coordinate and communicate private, public and grower group funded research and development activities within in the region.	http://www.farmlink.com.au
Farm Machinery and Industry Association of WA (FMIA)	FMIA represents the farm mechanisation industry in Western Australia.	http://www.fmia.org.au
Greenlife Industry Australia (formerly NGIA)	Greenlife Industry Australia is the peak industry body for businesses and organisations that provide products and services for greenlife production; produce, supply and retail greenlife; or promote the benefits of and share greenlife with the community.	https://www.greenlifeindustry.com.au/
Grain Producers Australia (GPA)	GPA represents Australia's broadacre, grain, pulse and oilseed producers at the national level. Broadly stated, GPA was created to foster a strong, innovative, profitable, globally competitive and environmentally sustainable grains industry in Australia.	https://www.grainproducers.com.au
Hart Field Site Group (Hart)	Hart is South Australia's premier agronomic field site, managed by farmers to provide independent information and skills to the broad-acre cropping industry.	http://www.hartfieldsite.org.au
Hort Innovation	A grower-owned, not-for-profit research and development corporation for Australia's horticulture industry, Hort Innovation's primary function is creating value for horticulture growers and those across the horticulture supply chain.	https://www.horticulture.com.au

Organisation	Detail	Contact
Irrigated Cropping Council (ICC)	ICC is a not-for-profit organisation established in 1999. The constitutional objectives of the entity are focused on advancing the understanding of the mixed farming sector and commitment to innovative research.	https://www.irrigatedcroppingcouncil.com.au https://extensionaus.com.au/irrigatingag/tag/irrigated-cropping-council/
Irrigation Australia (IAL)	IAL is the peak national organisation representing the Australian irrigation industry in all sectors, from water users, consultants, designers and installers through to educational institutions, government, manufacturers and retailers. IAL is also the Australian representative body of the International Commission on Irrigation and Drainage (ICID).	https://www.irrigationaustralia.com.au
Irrigation Research and Extension Committee	The Irrigation Research and Extension Committee (IREC) facilitates cross-industry collaboration and cooperation between all those connected with irrigated agriculture in the Murrumbidgee Valley – irrigators, researchers, industry, agencies and government.	https://irec.org.au
National Farmers Federation (NFF)	A peak body representing farmers, and more broadly, agriculture across Australia.	http://www.nff.org.au
National Irrigators' Council (NIC)	NIC is the voice of irrigators across Australia. The NIC was created in 2008 to represent the interests of irrigation entitlement holders across Australia.	https://www.irrigators.org.au
National Vegetable Extension Network (VegNET)	The aim of VegNET is to effectively communicate information to growers through 10 regionally-based extension projects, with coordination and support provided by Applied Horticultural Research.	http://ahr.com.au
NT WorkSafe	The work health and safety, dangerous goods, electrical safety, and rehabilitation and workers compensation division of the Northern Territory government.	http://www.worksafe.nt.gov.au
Protected Cropping Australia (PCA)	PCA is the peak industry body representing commercial hydroponic and greenhouse growers Australia-wide.	https://protectedcropping.net.au

Organisation	Detail	Contact
Raspberries and Blackberries Australia (RABA)	RABA is a non-profit, incorporated association that represents all members nationally and aims to foster the continued innovation and development of skills to the advantage of all growers.	https://berries.net.au
Ricegrowers' Association of Australia (RGA)	The RGA represents farmers in the main rice growing areas of New South Wales and Victoria.	http://www.rga.org.au
RMCG	RMCG is an environmental and agricultural consultancy, providing advice to government agencies, water authorities, institutions and private sector clients in the fields of environment, water, agriculture, economics and communities.	http://www.rmcg.com.au
SafeWork NSW	The New South Wales workplace health and safety regulator.	http://www.safework.nsw.gov.au
SafeWork SA	The South Australian work health and safety, public safety and worker relations regulator.	http://www.safework.sa.gov.au
Society of Precision Agriculture Australia (SPAA)	SPAA is Australia's leading independent precision agriculture research, development and extension organisation.	https://spaa.com.au
Tasmanian Agricultural Productivity Group (TAPG)	TAPG was established in 1989 to provide advocacy around responsible regulation of pesticides in the agricultural sector. TAPG is in a unique position to address issues that are of common concern to primary, secondary and service levels of Tasmanian agriculture.	https://tapg.net
Thomas Elder Institute (TEI)	TEI is Elders' research and development arm, comprising of key partnerships with industry bodies and education institutions. TEI aims to drive greater productivity for clients and the industry by bridging disconnect between research findings and practical application on-farm.	https://eldersrural.com.au/tech-services/thomas-elder-institute
United Workers Union (UWU)	The UWU empowers all workers to stand together – casual, permanent, part time or contract – and unite to improve their working lives and build stronger communities that can prioritise people and planet.	https://unitedworkers.org.au

Organisation	Detail	Contact
VegetablesWA	VegetablesWA purpose is to assist vegetable growers, industry and government to maintain a profitable and sustainable vegetable industry.	https://www.vegetableswa.com.au
Workplace Health and Safety Queensland (WHSQ)	The Queensland work health and safety regulator.	http://www.worksafe.qld.gov.au
WorkSafe ACT	The Australian Capital Territory's health and safety and workers' compensation regulator.	http://www.worksafe.act.gov.au
WorkSafe Tasmania	The Tasmanian workplace safety, health and return to work regulator.	http://worksafe.tas.gov.au
WorkSafe Victoria	The Victorian occupational health and safety regulator.	http://www.worksafe.vic.gov.au
WorkSafe WA	The Western Australia occupational safety and health regulator.	https://www.commerce.wa.gov.au/worksafe

On Country Management

Organisation	Detail	Contact
Central Land Council	A council of 90 Aboriginal women and men elected by their communities in Central Australia to represent them.	https://www.clc.org.au
Centrefarm Aboriginal Horticulture	Centrefarm is a company established to provide benefit to Aboriginal Landowners in the NT through driving the commercial and sustainable development of their lands.	https://centrefarm.com
Country Needs People	Country Needs People is an alliance of over 41 Aboriginal and Torres Strait Islander land and sea management organisations.	https://www.countryneedspeople.org.au
Kanyirninpa Jukurrpa (KJ)	KJ is a Martu organisation that was established in 2005 to work with Martu to build strong, sustainable communities.	https://www.kj.org.au

Organisation	Detail	Contact
Indigenous Land and Sea Corporation (ILSC)	The Indigenous Land and Sea Corporation (ILSC) is a corporate Commonwealth entity established under the *Aboriginal and Torres Strait Islander Act 2005* (*ATSI Act*). The ILSC aims to support Aboriginal and Torres Strait Islander people to enjoy the rightful entitlements, opportunities and benefits that the return of country and its management brings.	https://www.ilsc.gov.au
New South Wales Aboriginal Land Council	The peak representative body in Aboriginal Affairs, it aims to protect the interests and further the aspirations of its members and the broader Aboriginal community.	https://alc.org.au
NSW National Parks & Wildlife Service (NWPS)	NPWS manages more than 9 per cent of the land area in NSW.	https://www.nationalparks.nsw.gov.au
Noongar Land Enterprise Group WA	A leading Aboriginal grower group, developing commercially viable, land-based businesses.	https://www.noongarlandenterprise.com.au
Northern Land Council (NLC)	The NLC is an independent statutory authority of the Commonwealth. It is responsible for assisting Aboriginal peoples in the Top End of the Northern Territory to acquire and manage their traditional lands and seas.	https://www.nlc.org.au
North Australian Indigenous Land & Sea Management Alliance Ltd	NAILSMA supports Indigenous Land and Sea Managers across north Australia through the delivery of small and large scale projects across a diverse range of issues affecting Indigenous communities.	https://nailsma.org.au
Northern Australia Indigenous Reference Group	The Northern Australia Indigenous Reference Group (IRG) advises the Australian Government on northern development, maximising benefits and implementation outcomes for Indigenous Australians.	https://www.infrastructure.gov.au/territories-regions-cities/regional-australia/office-northern-australia/northern-australia-indigenous-reference-group
Nyamba Buru Yawuru	Nyamba Buru Yawuru Limited (NBY) is Yawuru's development and investment company and is charged with the responsibility to generate long term income for the Yawuru community.	http://www.yawuru.org.au

Organisation	Detail	Contact
Parks & Wildlife Commission NT	The Parks and Wildlife Commission of the Northern Territory (Parks and Wildlife) manages 85 areas as parks and reserves. Of these, 33 are subject to formal joint management with Aboriginal traditional owners.	https://depws.nt.gov.au/parks-and-wildlife-commission/park-management-strategies/joint-management
South East Tasmania Aboriginal Corporation	The South East Tasmanian Aboriginal Corporation (SETAC) exists to facilitate the empowerment of the Aboriginal people of South East Tasmania.	https://setac.org.au
Torres Strait Island Regional Council	The Torres Strait Island Regional Council is Australia's most northernly municipality, representing 15 unique island communities, spread across 42,000km^2 of sea, and an international border with Papua New Guinea.	https://www.tsirc.qld.gov.au
Victorian Aboriginal Heritage Council	The Victorian Aboriginal Heritage Council was created to ensure the preservation and protection of Victoria's Aboriginal Cultural Heritage. With important decision-making responsibilities and entirely Victorian Traditional Owner membership, the Council is the only statutory body of its kind in Australia.	https://www.aboriginalheritagecouncil.vic.gov.au

Pork and Poultry

Organisation	Detail	Contact
Australian Pork Limited (APL)	A producer owned industry body. It conducts research to innovate sustainable practices, markets Australian pork and develops strategic policy. APL's website has a range of useful resources for pork producers and RTOs.	https://www.australianpork.com.au/ https://australianpork.com.au/about-pig-farming/glossary
Australian Eggs	A member owned not-for-profit company providing marketing and research & development (R&D) services for the benefit of Australian egg farmers. It services all known Australian egg farmers irrespective of their size, location or farming system. The website includes teaching resources for secondary schools.	https://www.australianeggs.org.au/

Sales and Merchandising

Organisation	Detail	Contact
Australian Industry Group	A peak body representing employer organisations in traditional, innovative and emerging industry sectors.	http://www.aigroup.com.au
Australian Workers Union (AWU)	The AWU represents blue-collar workers in the manufacturing, steel, aluminium, glass, oil & gas, aviation, agriculture, construction, state public services, local government, health, plastics, hospitality, food, paper, resources, aquaculture, events and racing industries.	https://www.awu.net.au
Farm Machinery and Industry Association of WA (FMIA)	FMIA represents the farm mechanisation industry in Western Australia.	http://www.fmia.org.au
Irrigation Australia (IAL)	IAL is the peak national organisation representing the Australian irrigation industry in all sectors, from water users, consultants, designers and installers through to educational institutions, government, manufacturers and retailers. IAL is also the Australian representative body of the International Commission on Irrigation and Drainage (ICID).	https://www.irrigationaustralia.com.au
National Farmers Federation (NFF)	A peak body representing farmers, and more broadly, agriculture across Australia.	http://www.nff.org.au
NT WorkSafe	The work health and safety, dangerous goods, electrical safety, and rehabilitation and workers compensation division of the Northern Territory government.	http://www.worksafe.nt.gov.au
Rural Skills Australia (RSA)	RSA is a not-for-profit organisation that has worked over many years in conjunction with the National Farmers' Federation and its member bodies, and related industry bodies to foster improved rural and related industry involvement in structured education and training, with a view to enhancing the skills and capabilities of new entrants, existing workers and primary producers alike.	http://www.ruralskills.com.au
SafeWork NSW	The New South Wales workplace health and safety regulator.	http://www.safework.nsw.gov.au

Organisation	Detail	Contact
SafeWork SA	The South Australian work health and safety, public safety and worker relations regulator.	http://www.safework.sa.gov.au
United Workers Union (UWU)	The UWU empowers all workers to stand together – casual, permanent, part time or contract – and unite to improve their working lives and build stronger communities that can prioritise people and planet.	http://unitedworkers.org.au
Workplace Health and Safety Queensland (WHSQ)	The Queensland work health and safety regulator.	http://www.worksafe.qld.gov.au
WorkSafe ACT	The Australian Capital Territory's health and safety and workers' compensation regulator.	http://www.worksafe.act.gov.au
WorkSafe Tasmania	The Tasmanian workplace safety, health and return to work regulator.	http://worksafe.tas.gov.au
WorkSafe Victoria	The Victorian occupational health and safety regulator.	http://www.worksafe.vic.gov.au
WorkSafe WA	The Western Australia occupational safety and health regulator.	https://www.commerce.wa.gov.au/worksafe

Sports Turf Management

Organisation	Detail	Contact
Australian Golf Course Superintendents Association (AGCSA)	AGCSA was formed in 1981 to further the profession of Golf Course and Sports Field Management in Australia and the Pacific Region.	http://www.agcsa.com.au
Cricket Australia	The national governing body for professional and amateur cricket in Australia.	https://www.cricketaustralia.com.au
Golf Course Superintendents Association of Western Australia (GCSAWA)	The GCSAWA is the professional association for those involved in the golf course maintenance industry in WA.	http://gcsawa.com

Organisation	Detail	Contact
New South Wales Golf Course Superintendents Association	The Association is a fraternal conglomerate of Professional Turf Managers, their assistants and a wide range of other turf-related specialists who have a direct connection with the Golf Course industry.	http://www.nswgcsa.com.au/
Golf Course Superintendents Association of Queensland (GCSAQ)	GCSAQ are a supporting association of the golf course industry.	https://gcsaq.com.au
Turf Management South Australia	Turf Management SA (TMSA) was formed in 2022 with the joining together of two associations, Sports Turf SA and the South Australian Golf Course Superintendents Association.	http://turfmanagementsa.com.au
Tasmanian Sports Turf Managers Association	The professional association of Golf Course and Sports Field Management in Tasmania.	http://tstma.com.au
Victorian Golf Course Superintendents Association	The Victorian Golf Course Superintendents Association (VGCSA) provides training and education services to members throughout Victoria.	https://www.vgcsa.com.au/

Viticulture

Organisation	Detail	Contact
Australian Grape and Wine	A peak body representing Australia's grape and wine producers.	https://www.agw.org.au
New South Wales Wine Industry Association (NSWWIA)	A peak body representing the New South Wales wine industry.	https://www.nswwine.com.au
Queensland Wine Industry Association (QWIA)	A peak body representing Queensland wine businesses.	https://queenslandwine.com.au
South Australia Wine Industry Association (SAWIA)	A peak body representing the viticultural and winemaking interests of South Australia.	https://www.winesa.asn.au/

Organisation	Detail	Contact
Wine Australia	An Australian Government statutory authority governed by the Wine Australia Act 2013.	https://www.wineaustralia.com
Wine Grape Council of South Australia (WGCSA)	A peak body representing South Australian grape growers.	https://www.wgcsa.com.au/
Wine Tasmania	A peak body representing Tasmanian grape growers and winemakers.	http://winetasmania.com.au
Wine Victoria	A peak body representing the Victorian wine industry.	https://www.winevictoria.org.au/
Wines of Western Australia	A peak body representing the Western Australia wine industry.	https://www.winewa.asn.au

Water Trading

Organisation	Detail	Contact
Bureau of Meteorology	Australian government agency that provides climate, weather and water information, including historical data and forecasts, including the Australian Water Outlook.	http://www.bom.gov.au http://www.bom.gov.au/water//water/ https://awo.bom.gov.au/products/historical/soilMoisture-rootZone/4,-25.125,137.505/riv,-25.609,134.362/r/d/2022-03-16
Access Canberra – Water resources licensing	This ACT Government website provides information on water legislation, water licences, entitlements, and other topics related to accessing and trading water, including groundwater.	https://www.accesscanberra.act.gov.au/city-services/water-resource-management
Business Queensland – Water Allocations Register	This is an accurate and secure register that records water allocation ownership and other attributes of water allocations, provided by the Queensland Government.	https://www.business.qld.gov.au/industries/mining-energy-water/water/water-markets/register

Organisation	Detail	Contact
Murray–Darling Basin Authority (MDBA)	Under the Commonwealth Water Act 2007, the MDBA was established as an independent expertise-based statutory agency. It has several functions, including providing water rights information to facilitate water trading across the Basin.	https://www.mdba.gov.au/about-us
WaterNSW	Operates the state's rivers and water supply systems in accordance with the rules set out by regulators.	https://www.waternsw.com.au
NSW Water Register	NSW Water Register provides public access to information about water licences, approvals, water trading, water dealings, environmental water and other matters related to water entitlements in NSW.	
Northern Territory – Water Website and Trade Register produced by the Dept of Lands, Planning and Environment	A government website that has information on water, including resources, legislation, permits and licences, water allocations and a register of trades in the Northern Territory.	https://depws.nt.gov.au/water
South Australian Water Register	South Australia's Water Register records relevant information about water licences, water access entitlements and forest water licences.	https://www.environment.sa.gov.au/topics/water/water-markets-and-trade/water-register
Tasmanian Irrigation and the Water Entitlements Register	A state-owned company, Tasmanian Irrigation owns, operates, designs and develops irrigation schemes to deliver high-surety irrigation water to Tasmanian landowners. It also manages the Water Entitlement Register.	https://www.tasmanianirrigation.com.au/water-entitlement-register
Victorian Water Register, produced by Department of Environment, Land, Water and Planning	A public register of water-related entitlements. The website includes data, resources and tools to help people to trade water in Victoria, including a water dictionary.	https://www.waterregister.vic.gov.au/
Western Australian Water Register, produced by the Dept of Water and Environment Regulation	The Water Register is a web-based application that allows you to search, view and print information about water availability and licences, free of charge.	https://www.water.wa.gov.au/maps-and-data/maps/water-register

Wool Harvesting (including shearing, crutching, handling and wool classing)

Organisation	Detail	Contact
Australian Wool Exchange Ltd (AWEX)	The industry body in Australia for managing: • the maintenance and improvement of the quality of the Australian wool clip; and • compliance monitoring on behalf of the wool industry.	https://www.awex.com.au
Australian Wool Innovation (AWI)	An industry services body for the Australian wool industry. It is a not-for-profit company that invests in research, development, marketing and promotion for the wool industry.	https://www.wool.com
The Australian Wool Testing Authority (AWTA)	AWTA Raw Wool provides independent and objective wool certification services.	https://awtawooltesting.com.au

State and Territory Training Authorities

Organisation	Website
Australian Capital Territory	https://www.education.act.gov.au
New South Wales	https://www.education.nsw.gov.au
Northern Territory	http://www.education.nt.gov.au
Queensland	https://desbt.qld.gov.au/training
South Australia	http://www.education.sa.gov.au
Tasmania	http://www.skills.tas.gov.au
Victoria	http://www.education.vic.gov.au
Western Australia	http://www.dtwd.wa.gov.au

General

Organisation/Resource	Details	Website
Australian Apprenticeships	Quick and easy access to information about Australian apprenticeships.	https://www.apprenticeships.gov.au
Australian Industry Group	A peak body representing employer organisations in traditional, innovative and emerging industry sectors.	http://www.aigroup.com.au
Australian Qualifications Framework	National policy for regulated qualifications in Australian education and training.	http://www.aqf.edu.au
Australian Skills Quality Authority (ASQA)	National regulator for Australia's vocational education and training sector.	http://www.asqa.gov.au
Australian Workers' Union (AWU)	The AWU represents blue-collar workers in the manufacturing, steel, aluminium, glass, oil & gas, aviation, agriculture, construction, state public services, local government, health, plastics, hospitality, food, paper, resources, aquaculture, events and racing industries.	https://www.awu.net.au
National Farmers Federation (NFF)	A peak body representing farmers, and more broadly, agriculture across Australia.	http://www.nff.org.au
United Workers Union (UWU)	The UWU empowers all workers to stand together – casual, permanent, part time or contract – and unite to improve their working lives and build stronger communities that can prioritise people and planet.	https://unitedworkers.org.au
Safe Work Australia	Leads the development of national policy to improve work health and safety and workers' compensation arrangements.	http://www.safeworkaustralia.gov.au
Training Accreditation Council Western Australia (WA TAC)	Regulates vocational education and training in WA.	http://www.tac.wa.gov.au
Training.gov.au	National register of training packages.	http://www.training.gov.au
Victorian Registration and Qualifications Authority (VRQA)	Regulates vocational education and training, apprenticeships and traineeships in Victoria.	http://www.vrqa.vic.gov.au