



# **Primary Industries Curriculum Framework**

## **Stage 6 Syllabus Part A**

for implementation from 2004

Primary Industries (120 indicative hours)  
Primary Industries (240 indicative hours)  
Primary Industries Specialisation Study (60 or 120 or 180 indicative hours)  
Primary Industries Extension (60 or 120 indicative hours)

2003

### **PLEASE NOTE**

The HSC examination specifications detailed in this syllabus refer to the 2009 HSC examination. New HSC examination specifications will apply for the 2010 HSC examination and beyond.

**Original published version updated:**  
May 2006 – BoS Job Number # 2006245

© 2003 Copyright Board of Studies NSW for and on behalf of the Crown in right of the State of New South Wales.

This document contains Material prepared by the Board of Studies NSW for and on behalf of the State of New South Wales. The Material is protected by Crown copyright.

All rights reserved. No part of the Material may be reproduced in Australia or in any other country by any process, electronic or otherwise, in any material form or transmitted to any other person or stored electronically in any form without the prior written permission of the Board of Studies NSW, except as permitted by the *Copyright Act 1968*. School students in NSW and teachers in schools in NSW may copy reasonable portions of the Material for the purposes of bona fide research or study. Teachers in schools in NSW may make multiple copies, where appropriate, of sections of the HSC papers for classroom use under the provisions of the school's Copyright Agency Limited (CAL) licence.

When you access the Material you agree:

- to use the Material for information purposes only
- to reproduce a single copy for personal bona fide study use only and not to reproduce any major extract or the entire Material without the prior permission of the Board of Studies NSW
- to acknowledge that the Material is provided by the Board of Studies NSW
- not to make any charge for providing the Material or any part of the Material to another person or in any way make commercial use of the Material without the prior written consent of the Board of Studies NSW and payment of the appropriate copyright fee
- to include this copyright notice in any copy made
- not to modify the Material or any part of the Material without the express prior written permission of the Board of Studies NSW.

The Material may contain third party copyright materials such as photos, diagrams, quotations, cartoons and artworks. These materials are protected by Australian and international copyright laws and may not be reproduced or transmitted in any format without the copyright owner's specific permission. Unauthorised reproduction, transmission or commercial use of such copyright materials may result in prosecution.

The Board of Studies has made all reasonable attempts to locate owners of third party copyright material and invites anyone from whom permission has not been sought to contact the Copyright Officer, ph (02) 9367 8289, fax (02) 9279 1482.

Published by  
Board of Studies NSW  
GPO Box 5300  
Sydney NSW 2001  
Australia

Tel: (02) 9367 8111  
Fax: (02) 9367 8484  
Internet: <http://www.boardofstudies.nsw.edu.au>

August 2003

ISBN 1 7409 9828 6

2006245

# Contents

1	Introduction to Industry Curriculum Frameworks.....	5
2	Documents Associated with Industry Curriculum Frameworks .....	6
	2.1 Industry Curriculum Framework documentation .....	6
3	The Higher School Certificate Program of Study.....	7
4	Vocational Education and Training (VET) in the NSW HSC .....	8
	4.1 The National Training Framework.....	8
	4.2 Industry curriculum frameworks .....	8
	4.3 Determination of VET qualifications for HSC students.....	9
5	Rationale .....	10
6	Aim .....	11
7	Primary Industries Curriculum Framework.....	12
	7.1 Training Package qualifications .....	12
	7.2 Qualifications available in the Primary Industries Curriculum Framework .....	13
8	Course Structures.....	14
	8.1 Courses within the Primary Industries Curriculum Framework.....	14
	8.2 Allocation of HSC indicative hours of credit .....	15
	8.3 Primary Industries (120 indicative hours) .....	16
	8.4 Primary Industries (240 indicative hours) .....	17
	8.5 Primary Industries Specialisation Study (60 or 120 or 180 indicative hours)....	20
	8.6 Primary Industries Extension (60 or 120 indicative hours).....	23
9	Outcomes and Content.....	27
	9.1 Units of competency.....	27
	9.2 Course delivery.....	28
	9.3 Animal care and ethics .....	28
10	Work Placement.....	30
11	Assessment Requirements and Advice .....	31
	11.1 Competency-based assessment.....	31
	11.2 Training Package requirements .....	32
	11.3 The competency record book .....	34
	11.4 HSC Examination: Primary Industries (240 indicative hours).....	34
	11.5 HSC Examination specifications .....	34

12	HSC Requirements and Certification .....	36
12.1	Course completion requirements .....	36
12.2	Preliminary and HSC unit credit .....	36
12.3	HSC Record of Achievement .....	36
12.4	AQF qualifications .....	36
13	Other Information .....	39
13.1	Providing for all students.....	39
13.2	Key competencies.....	41
13.3	Links between the Primary Industries Curriculum Framework and other HSC courses .....	42
13.4	Articulation to further training .....	42
14	AQF Level .....	43
15	Minimum Requirements for AQF Qualifications.....	45
16	Glossary .....	76

## **1 Introduction to Industry Curriculum Frameworks**

Industry curriculum frameworks give students the opportunity to gain credit towards the NSW Higher School Certificate and credit towards national vocational qualifications under the Australian Qualifications Framework (AQF).

Industry curriculum frameworks are based on nationally endorsed Training Packages. They specify the range of industry-developed units of competency from the relevant Training Packages which are suitable for the HSC. They also define how units of competency are arranged in HSC Vocational Education and Training (VET) courses to gain unit credit for the HSC. Wherever possible, VET courses in industry curriculum frameworks are aligned to national Training Package qualifications.

This industry curriculum framework document contains the HSC Primary Industries VET courses to be delivered for the Higher School Certificate by schools, TAFE colleges and other Registered Training Organisations (RTOs) on behalf of schools or TAFE colleges.

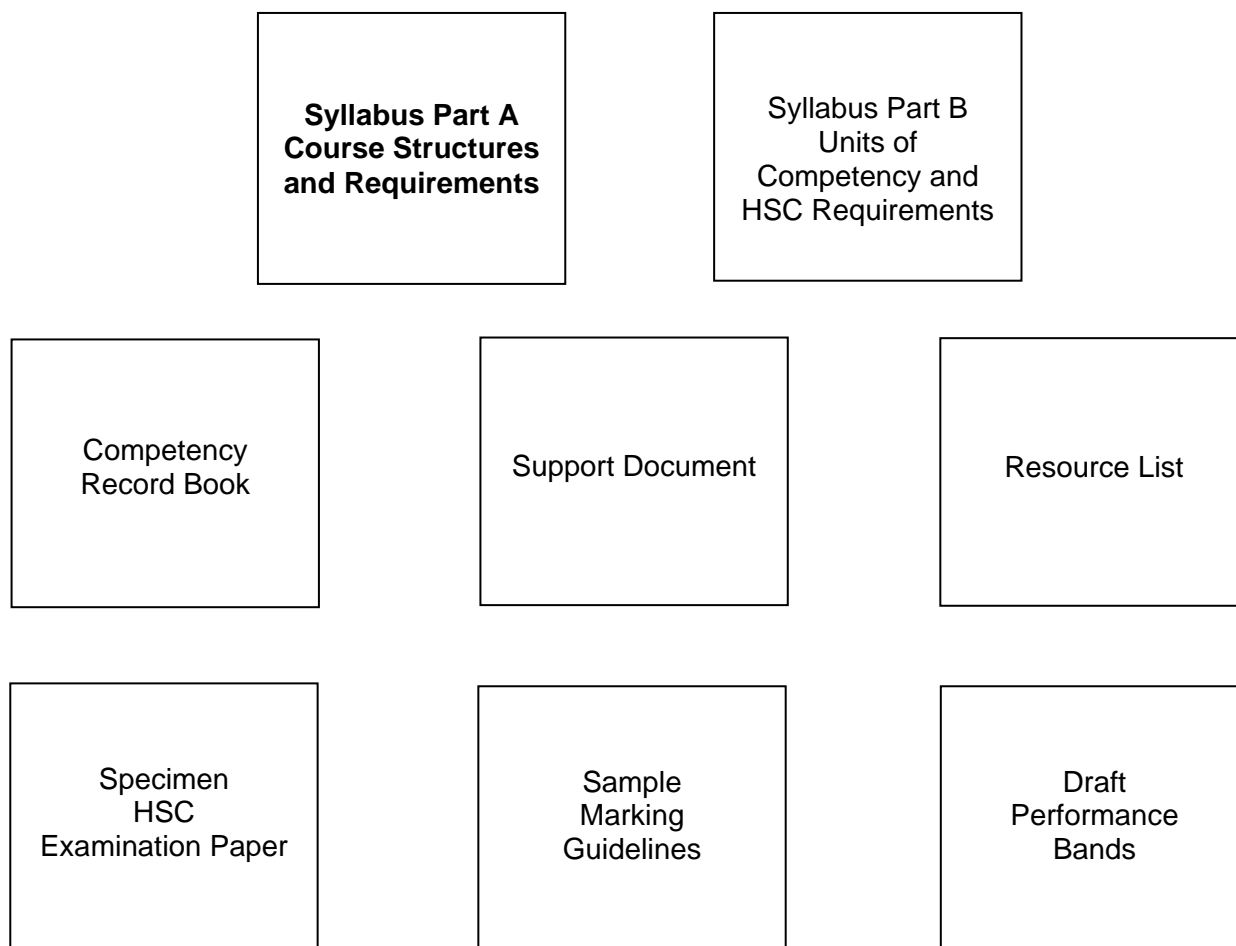
## 2 Documents Associated with Industry Curriculum Frameworks

The purpose of the industry curriculum framework documents is to assist teachers and trainers develop teaching and assessment programs, and to help manage competency achievement by Higher School Certificate candidates.

Part A of the *Primary Industries Curriculum Framework Stage 6 Syllabus* describes how students may achieve unit credit towards the HSC and credit towards a vocational qualification. It contains general advice about the Primary Industries Curriculum Framework and describes course structures and requirements, including work placement. This document should be used as the first reference when planning to implement VET courses for the HSC.

The set of documents associated with the curriculum framework is shown below.

### 2.1 Industry Curriculum Framework documentation



### **3 The Higher School Certificate Program of Study**

The purpose of the Higher School Certificate program of study is to:

- provide a curriculum structure which encourages students to complete secondary education
- foster the intellectual, social and moral development of students, in particular developing their:
  - knowledge, skills, understanding and attitudes in the fields of study they choose
  - capacity to manage their own learning
  - desire to continue learning in formal or informal settings after school
  - capacity to work with others
  - respect for the cultural diversity of Australian society
- provide a flexible structure within which students can prepare for:
  - further education and training
  - employment
  - full and active participation as citizens
- provide formal assessment and certification of students' achievements
- provide a context within which schools also have the opportunity to foster students' physical and spiritual development.

## 4 Vocational Education and Training (VET) in the NSW HSC

### 4.1 The National Training Framework

All accredited VET programs, including those for HSC students, must meet the requirements of the National Training Framework (NTF).

The key components of the National Training Framework are:

- **The Australian Qualifications Framework (AQF)**  
Under the AQF, VET qualifications in each industry area are standard across Australia. To facilitate this, the award of a particular AQF Diploma, Certificate or Statement of Attainment depends on the person who seeks a qualification meeting specified industry competency standards. Competency standards have been developed by industry to reflect the real requirements for employment and effective work performance in the relevant industry and are contained in national industry Training Packages.
- **National Training Packages**  
All Training Packages contain three mandatory or ‘endorsed’ components on which AQF VET qualifications in the relevant industry are based:
  - *units of competency* which express the industry competency standards and include elements of competency, performance criteria, a range of variables and an evidence guide
  - *assessment guidelines* which set out conditions for establishing that competency has been met
  - *qualifications* which explain the qualifications and relationships between them.

Training Packages may also contain a range of materials designed to assist with training and assessment. These are not mandatory and are known as ‘non-endorsed components’.

- **The Australian Quality Training Framework (AQTF)**  
Because Training Packages and AQF qualifications are standardised across Australia, they are recognised in all parts of Australia. This is assured by the AQTF, which ensures that the quality of training and assessment is consistent and reliable.

Under the AQTF, an organisation wishing to provide training, assess competencies and issue VET qualifications under the AQF must be a Registered Training Organisation (RTO). It is the responsibility of an RTO, whether it is a school or school system, a TAFE college or other training provider, to meet quality assurance requirements. These requirements include access to adequate resources and appropriately qualified staff in order to deliver and/or assess training programs leading to qualifications or individual units of competency identified in the RTO’s scope of registration. As part of its registration, each RTO must agree to recognise AQF qualifications issued by any other RTO. This process is called mutual recognition.

### 4.2 Industry curriculum frameworks

Industry curriculum frameworks have been developed to satisfy the requirements of the National Training Framework and the purposes of the NSW Higher School Certificate.

An industry curriculum framework describes the range of units of competency from the relevant Training Package that is endorsed by the Board of Studies for inclusion in the NSW Higher School Certificate.

It also describes the groupings of units of competency that define specific HSC VET courses. These are determined largely by the qualifications available in the relevant Training Package and their suitability for school students attempting the HSC. An industry curriculum framework must also meet a set of criteria developed to promote the quality of VET in the HSC.

Units of competency are the components against which assessment and reporting occur for the purpose of gaining credit towards an AQF qualification. They are also the focus of courses within an industry curriculum framework. In this sense, the elements of competency, which collectively define the outcomes of each unit of competency, also define the outcomes and determine the content of HSC VET courses within each framework.

An optional HSC examination is attached to the 240 indicative hour course. The examination mark may be included for UAI calculation purposes.

### **4.3 Determination of VET qualifications for HSC students**

The HSC VET curriculum frameworks are based on units of competency and qualifications contained in nationally endorsed Training Packages. These qualifications are determined by the qualification rules for each Training Package, referred to as qualification packaging rules. The rules describe the number and range of units of competency required for qualifications eligibility.

Course structures for the HSC are described in each VET Curriculum Framework syllabus. In order to have satisfactorily completed a framework course, students must follow the course structure, attempt the required units of competency with diligence and sustained effort, and fulfil work placement requirements.

The rules and structure of HSC VET courses are not always identical to the qualification packaging rules. In some cases more units of competency are required for the HSC course than are required for successful completion of the qualification.

In some HSC courses, students might not achieve all of the specified units of competency for the purposes of the HSC, but may still be eligible for the qualification as a result of meeting the requirements of the packaging rules for that qualification.

Sections 8.3, 8.4, 8.5 and 8.6 outline the Primary Industries course structures within the Primary Industries Curriculum Framework.

Section 15 outlines the qualification packaging rules for each qualification available through the 240-hour course within the Primary Industries Curriculum Framework and should be consulted when selecting units of competency.

## **5 Rationale**

The primary industries sector provides products and services in response to the demand not only for food and fibre but also for conservation and land management. Primary industries products and services influence the daily lives of all members of society and conservation and land management issues are the subject of regular debate in the community.

HSC courses within the Primary Industries Curriculum Framework provide an opportunity for students to gain nationally recognised qualifications developed by industry. Learning in each course provides opportunities for students to develop relevant technical, vocational and interpersonal competencies suitable for employment and further training in the industry.

Units of competency in the national Conservation and Land Management Training Package (RTD02), Amenity Horticulture Training Package (RTF03), Rural Production Training Package (RTE03) and Food Processing Training Package (FDF03) have been included in the Primary Industries Curriculum Framework. Qualifications available to students who achieve appropriate units of competency in this industry curriculum framework are at AQF Certificate II and III level. Students may be eligible for Certificate II specialising in a range of industry sectors through the completion of the 240-hour course or a Specialisation Study. Students may also be eligible for a Statement of Attainment towards a Certificate III through the completion of an Extension Course.

The Primary Industries Curriculum Framework also provides an opportunity for students to develop an awareness of occupational health and safety, welfare, ethical and legal issues related to working with animals and plants. Opportunities are also provided for students to consider issues related to environmental responsibility for a sustainable future.

The study of Primary Industries can lead to career pathways in a range of occupations in the rural sector and provides an opportunity for the development of a range of skills, knowledge and experiences that are transferable across other industry areas.

## **6 Aim**

The Primary Industries Curriculum Framework is designed to enable students to acquire a range of technical, practical, personal and organisational skills valued both within and beyond the workplace. They will also acquire underpinning skills and knowledge related to work, employment and further training within the primary industries sector. Through study of this subject, students will gain experiences that can be applied to a range of contexts, including work, study and leisure and which can assist them in making informed career choices.

## **7 Primary Industries Curriculum Framework**

### **7.1 Training Package qualifications**

**The Primary Industries Curriculum Framework is based on the national Conservation and Land Management Training Package (RTD02), Amenity Horticulture Training Package (RTF03) and the Rural Production Training Package (RTE03).**

General qualification structures for Training Packages under the AQF within Primary Industries include:

- Advanced Diploma
- Diploma
- Certificate IV
- Certificate III
- Certificate II
- Certificate I.

The Conservation and Land Management Training Package incorporates six nationally recognised qualification levels ranging from AQF Certificate I to Advanced Diploma of Conservation and Land Management, based on the national Conservation and Land Management competency standards. The sector specialisations or occupational streams within this Training Package include General Land Management, Conservation Earthworks, Community Coordination and Facilitation, Indigenous Land Management, Lands, Parks and Wildlife, Natural Area Restorations, Weed Management and Vertebrate Pest Management.

The Amenity Horticulture Training Package incorporates six nationally recognised qualification levels ranging from AQF Certificate I to Advanced Diploma in Horticulture with seven specialisations available from Certificate II to Diploma in the areas of Arboriculture, Floriculture, Landscape, Retail Nursery, Wholesale Nursery, Parks and Gardens, and Turf.

The Rural Production Training Package incorporates six nationally recognised qualification levels ranging from AQF Certificate I to Advanced Diploma. Qualifications available through the Training Package include:

- Certificate I to III in Rural Operations
- Certificate II to Advanced Diploma in Agriculture with the possibility of gaining specialisations in eleven areas (Beef Production, Cotton Production, Dairy Production, Goat Production, Grain Production, Horse Breeding, Milk Harvesting, Pig Production, Poultry Production, Sheep and Wool Production, and Sugar Production) with specialist qualifications available at Certificate III
- Certificate II to Diploma of Irrigation
- Certificates II to IV in Shearing
- Certificate II in Crutching
- Certificate II to Diploma of Production Horticulture
- Certificate II in Wool Handling, Certificate III in Wool Clip Preparation, Certificate III in Advanced Wool Handling and Certificate IV in Wool Classing
- Certificates III and IV in Rural Business, Certificate III in Rural Merchandising, Diploma and Advanced Diploma of Rural Business Management.

Packaging requirements for the general qualifications and specialisations available from the 120-hour and 240-hour HSC courses within the Primary Industries Curriculum Framework are reproduced in section 15.

## 7.2 Qualifications available in the Primary Industries Curriculum Framework

- Certificate II in Conservation and Land Management (RTD20102)
- Certificate II in Rural Operations (RTE20703)
- Certificate II in Agriculture (RTE20103)
- Certificate II in Horticulture (RTF20103)
- Certificate II in Agriculture *specialising in* Beef Production, Dairy Production, Goat Production, Horse Breeding, Pig Production, Poultry Production, Sheep and Wool Production, Grain Production, Cotton Production or Sugar Production (RTE20103)
- Certificate II in Irrigation (RTE20203)
- Certificate II in Production Horticulture (RTE20603)
- Certificate II in Crutching (RTE20503)
- Certificate II in Shearing (RTE20403)
- Certificate II in Wool Handling (RTE20303).

If a qualification is only partly achieved, a Statement of Attainment can be issued for successful achievement of single or multiple units of competency. At a later date, a person can undertake further skill development or training and be assessed against additional competencies until they have achieved all the competencies required for a full qualification. RTOs must recognise and give credit for the competencies that have been recorded on a Statement of Attainment.

Students undertaking the extension course may achieve a:

- Certificate III in Advanced Wool Handling (RTE32003)
- Statement of Attainment towards Certificate III in Conservation and Land Management (RTD30102)
- Statement of Attainment towards Certificate III in Rural Operations (RTE31903)
- Statement of Attainment towards Certificate III in Agriculture (RTE30103)
- Statement of Attainment towards Certificate III in Agriculture (Beef Production) (RTE30203)
- Statement of Attainment towards Certificate III in Agriculture (Cotton Production) (RTE30303)
- Statement of Attainment towards Certificate III in Agriculture (Dairy Production) (RTE30403)
- Statement of Attainment towards Certificate III in Agriculture (Goat Production) (RTE30503)
- Statement of Attainment towards Certificate III in Agriculture (Grain Production) (RTE30603)
- Statement of Attainment towards Certificate III in Agriculture (Horse Breeding) (RTE30703)
- Statement of Attainment towards Certificate III in Agriculture (Pig Production) (RTE30903)
- Statement of Attainment towards Certificate III in Agriculture (Poultry Production) (RTE31003)
- Statement of Attainment towards Certificate III in Agriculture (Sheep and Wool Production) (RTE31103)
- Statement of Attainment towards Certificate III in Agriculture (Sugar Production) (RTE31203)
- Statement of Attainment towards Certificate III in Production Horticulture (RTE31603)
- Statement of Attainment towards Certificate III in Irrigation (RTE31303)
- Statement of Attainment towards Certificate III in Horticulture (RTF30103)
- Statement of Attainment towards Certificate III in Wool Clip Preparation (RTE31403).

## 8 Course Structures

### 8.1 Courses within the Primary Industries Curriculum Framework

An industry curriculum framework describes the units of competency that have been identified as being suitable for the purposes of the Higher School Certificate. Units of competency in the Primary Industries Curriculum Framework are detailed in sections 8.3, 8.4, 8.5 and 8.6.

Each course in a framework describes how the available units of competency can be grouped to gain units of credit towards the Higher School Certificate.

The Primary Industries Curriculum Framework includes the following courses:

- Primary Industries (120 indicative hours)
- Primary Industries (240 indicative hours)
- Primary Industries Specialisation Study (60 indicative hours)
- Primary Industries Specialisation Study (120 indicative hours)
- Primary Industries Specialisation Study (180 indicative hours)
- Primary Industries Extension (60 indicative hours)
- Primary Industries Extension (120 indicative hours).

The maximum number of Preliminary and/or HSC units available from this framework is nine units. That is, courses can total up to 540 hours. In addition to courses within the framework students may undertake locally designed Board Endorsed VET courses drawing from the Conservation and Land Management (RTD02), Amenity Horticulture (RTF03) and/or Rural Production (RTE03) Training Packages. Such courses may provide additional HSC credit for part-time school-based trainees.

The selection of units of competency within course structures should provide the opportunity for students to be eligible for a qualification. Section 15 provides the qualification packaging rules for each qualification contained within the 120- and 240-hour courses in the Primary Industries Curriculum Framework. This information is reproduced from the Training Packages and should be consulted when selecting units of competency.

**Mandatory** units of competency are those that all students must attempt in their study of the HSC course (refer to Table 1 and 2). **Compulsory** units of competency are those required by the **national Training Package** in order to be eligible for the vocational qualification (refer to section 15).

## **8.2 Allocation of HSC indicative hours of credit**

Units of competency drawn from Training Packages are not defined in terms of duration. The amount of time required by individual students to achieve competency will vary according to their aptitude and experience. Where a training program is designed for delivery by an RTO, the RTO will specify the length of the training program according to the curriculum resources/delivery strategies chosen.

However, for the purposes of the Higher School Certificate, courses must be described in terms of their indicative hours: 60 indicative hour courses (in the case of specialisation studies and extension), 120 indicative hour courses, 180 indicative hour courses (in the case of specialisation studies) or 240 indicative hour courses.

For this reason, indicative hours for unit credit towards the Higher School Certificate have been assigned to each unit of competency within the framework. It is emphasised that the assignment of indicative hours does not imply that all students will fulfil all requirements of a unit of competency within these hours. RTOs may determine that additional or fewer hours are required for the achievement of particular competencies. However this does not alter the indicative hours allocated, only the delivery hours. It is also expected that students will need to spend additional time in practising skills in a work environment and in completing projects and assignments, in order to fulfil industry assessment requirements.

Tables 1, 2, 3 and 4 list the indicative hours assigned to each unit of competency included in the Primary Industries Curriculum Framework for the purpose of unit credit towards the Higher School Certificate.

### 8.3 Primary Industries (120 indicative hours)

#### Purpose

The purpose of this course is to provide students with general skills and knowledge as part of their preparation for entry-level employment in a primary industries environment.

#### Course structure

This course comprises five mandatory units of competency and the selection of other units of competency from the 240 indicative hour course.

120 indicative hour courses are accredited for a total of two units at the Preliminary and/or HSC level.

#### Course requirements

Students must undertake **ALL** mandatory units of competency **plus** a selection of elective units of competency from the 240 indicative hour course which have not already been undertaken to a minimum value of 50 indicative hours.

Students must complete a minimum of 35 hours of mandatory work placement.

**Table 1 Primary Industries (120 indicative hours)**

<b>MANDATORY Attempt ALL units</b>		
<b>Unit code</b>	<b>Unit title</b>	<b>HSC indicative hours of credit</b>
RTC2701A	Follow OHS Procedures	20
RTC2702A	Observe environmental work practices	15
RTC2704A	Provide basic first aid	10
RTC2705A	Work effectively in the industry	15
RTC2801A	Participate in workplace communications	10

<b>ELECTIVE UNITS Attempt units to a minimum value of 50 indicative hours</b>	
Elective units may include any unit from the 240 indicative hour course which has not already been undertaken.	

Depending on the selection and achievement of units of competency, the possible qualification outcome is:

- Statement of Attainment towards Certificate II in Conservation and Land Management (RTD20102)
- Statement of Attainment towards Certificate II in Rural Operations (RTE20703)
- Statement of Attainment towards Certificate II in Agriculture (RTE20103)
- Statement of Attainment towards Certificate II in Horticulture (RTF20103).

#### Qualifications

To receive AQF qualifications, students must meet the assessment requirements of the Conservation and Land Management Training Package (RTD02), the Amenity Horticulture Training Package (RTF03) or the Rural Production Training Package (RTE03). A qualified assessor must conduct assessment.

Qualification rules are contained in section 15 of Part A of this syllabus.

Further information on assessment is included in section 11 of Part A of this syllabus.

## 8.4 Primary Industries (240 indicative hours)

### Purpose

The purpose of this course is to provide students with the opportunity to gain a range of general skills and knowledge suitable for employment in a primary industries environment.

### Course structure

This course comprises 9 mandatory units of competency and an elective pool containing 49 units of competency.

Section 15 outlines the qualification packaging rules for each qualification available through the 240 indicative hour course within the Primary Industries Industry Curriculum Framework. This section should guide the selection of elective units of competency to meet qualification requirements.

240 indicative hour courses are accredited for a total of four units at the Preliminary and/or HSC level.

### Course requirements

- Students must attempt:
  - **ALL** mandatory units of competency
  - **AND** a selection of units of competency to a minimum value of 110 indicative hours from the elective pool.
- Students must complete a minimum of 70 hours of mandatory work placement.

An external written Higher School Certificate examination will be conducted for this course. This examination is optional. Students undertaking the course will nominate during their HSC year whether or not they elect to undertake the external written examination.

Students with RPL for specific units of competency in the 240-hour course who are unable to meet the indicative hours requirements for this course may make application to the Office of the Board of Studies for approval to import units of competency from the specialisation study in order to meet the 240 indicative hours required. Such applications should specify both the units of competency the student has achieved by RPL and the units of competency to be undertaken to fulfil the course requirements.

**Table 2 Primary Industries (240 indicative hours)**

<b>MANDATORY Attempt ALL units</b>		
<b>Unit code</b>	<b>Unit title</b>	<b>HSC indicative hours of credit</b>
RTC2209A	Install, maintain and repair fencing	15
RTC2401A	Treat weeds	10
RTC2701A	Follow OHS Procedures	20
RTC2702A	Observe environmental work practices	15
RTC2704A	Provide basic first aid	10
RTC2705A	Work effectively in the industry	15
RTC2706A	Apply chemicals under supervision	25
RTC2801A	Participate in workplace communications	10
RTE2503A	Observe and report on weather	10

<b>ELECTIVE POOL Attempt units to a minimum value of 110 indicative hours</b>		
<b>Unit code</b>	<b>Unit title</b>	<b>HSC indicative hours of credit</b>
<b>General</b>		
RTC2210A	Maintain properties and structures	20
RTC2301A	Undertake operational maintenance of machinery	10
RTC2307A	Operate machinery and equipment	20
RTC2309A	Operate tractors	30
RTD2202A	Conduct erosion and sediment control activities	10
RTD2313A	Clean machinery of plant, animal and soil material	10
RTD2803A	Observe and report plants and/or animals	10
RTE2201A	Carry out basic electric fencing operations	15
RTE2308A	Operate ride-on vehicles	15
RTE2603A	Lay irrigation and/or drainage pipes	15
RTE2804A	Provide information on products and services	15
RTE2902A	Collect and record production data	10
<b>Livestock</b>		
RTE1105A	Undertake basic shearing and crutching	20
RTE2110A	Maintain livestock water supplies	15
RTE2113A	Monitor livestock to parturition	10
RTE2114A	Monitor water supplies	15
RTE2115A	Muster and move livestock	10
RTE2117A	Pen sheep	15
RTE2118A	Handle livestock using basic techniques	15
RTE2124A	Carry out birthing duties	10
RTE2128A	Provide feed for livestock	15
RTE2134A	Assist with feeding in an intensive production system	10
RTE2136A	Load and unload livestock	10
RTE2144A	Carry out regular livestock observation	10
RTE2216A	Assist in preparing for shearing and crutching	15
RTE3133A	Prepare livestock for competition	20
<b>Plants</b>		
RTC2012A	Plant trees and shrubs	15
RTC2016A	Recognise plants	10
RTC2026A	Undertake propagation activities	20
RTC2404A	Treat plant pests, diseases and disorders	15
RTD2004A	Collect, prepare and preserve plant specimens	15
RTF2013A	Pot-on plants	5
RTF2014A	Prepare and maintain plant displays	20
RTF2017A	Prune shrubs and small trees	10
RTF2024A	Tend nursery plants	10
RTF2025A	Transplant small trees	10
RTF2504A	Determine basic properties of soil/growing media	10

Unit code	Unit title	HSC indicative hours of credit
RTE2010A	Establish horticultural crops	15
RTE2011A	Assist agricultural crop establishment	15
RTE2021A	Support horticultural crop harvesting	15
RTE2029A	Assist agricultural crop maintenance	10
RTE2030A	Assist agricultural crop harvesting	15

**Additional electives for Primary Industries (240 indicative hours) – for study from 2006**

As a result of a minor update to the Primary Industries Curriculum Framework in November 2005, the following units of competency are available for selection as electives. These additional units of competency are particularly appropriate for those who wish to focus on conservation and land management.

Details of the units of competency are available in the relevant Training Package or at [www.ntis.gov.au](http://www.ntis.gov.au).

Unit code	Unit title	HSC indicative hours of credit
<b>General</b>		
FPIFGM162A	Collect, treat and store seed	15
RTC1301A	Operate basic machinery and equipment	10
RTD2022A	Carry out natural area restoration works	25
RTD2126A	Recognise animals	10
RTD2206A	Install aggregate paths	15
RTD2501A	Maintain cultural places	20
RTD2502A	Maintain wildlife habitat refuges	15

Depending on the selection and achievement of units of competency, the possible qualification outcome is:

- Certificate II in Conservation and Land Management (RTD20102)
- Certificate II in Rural Operations (RTE20703)
- Certificate II in Agriculture (RTE20103)
- Certificate II in Horticulture (RTF20103)
- Certificate II in Agriculture *specialising in* Beef Production, Goat Production, Pig Production, Sheep and Wool Production or Grain Production (RTE20103)
- Certificate II in Production Horticulture (RTE20603).

**Qualifications**

To receive AQF qualifications, students must meet the assessment requirements of the Conservation and Land Management Training Package (RTD02), the Amenity Horticulture Training Package (RTF03) or the Rural Production Training Package (RTE03). A qualified assessor must conduct assessment.

Qualification rules are outlined in section 15 of Part A of this syllabus.

Further information on assessment is included in section 11 of Part A of this syllabus.

## 8.5 Primary Industries Specialisation Study (60 or 120 or 180 indicative hours)

### Purpose

The purpose of the specialisation study is to provide students with the opportunity to gain credit towards a specialisation within Primary Industries. They are available to all students undertaking Primary Industries (240 indicative hours) but are intended specifically for students with a particular interest and aptitude within a specialised sector of this industry area.

The maximum number of Preliminary and/or HSC units available from this framework is nine units. That is, courses can total up to 540 hours. Students are excluded from studying more than one specialisation study. In addition to courses within the framework students may undertake locally designed Board Endorsed VET courses drawing from the Conservation and Land Management (RTD02), Amenity Horticulture (RTF03) and/or Rural Production (RTE03) Training Packages. Such courses may provide additional HSC credit for part-time school-based trainees.

Prior to offering specialisation studies, schools should ensure that the RTO undertaking delivery has scope to deliver the relevant qualification.

### Course structure

The specialisation study can consist of units of competency drawn from Primary Industries (240-hour course) not previously attempted by students and/or from the pool of 52 additional units of competency listed in Table 3. Details of the units of competency listed in Table 3 are available in the relevant Training Package or at [www.ntis.gov.au](http://www.ntis.gov.au).

The Training Packages for each industry area contain the qualification packaging rules and a relationship matrix for specialist qualifications. The rules and relationship matrix should be consulted when selecting units of competency for the specialisation study. The qualification packaging rules are available in the relevant Training Package or at [www.ntis.gov.au](http://www.ntis.gov.au).

It is recommended that the combination of units of competency should be chosen to focus on an occupational outcome.

The 60 indicative hour course is accredited for a total of one unit at the Preliminary or HSC level. The 120 indicative hour course is accredited for a total of two units at the Preliminary and/or HSC level. The 180 indicative hour course is accredited for a total of three units at the Preliminary and/or HSC level.

### Course requirements

Students may only elect to study specialisation studies if they are currently enrolled in, or have completed, the Primary Industries (240-hour) course.

#### *60 indicative hour course:*

- Units should be selected to a minimum of 60 indicative hours.
- Students must complete a minimum of 14 additional hours of mandatory work placement.

#### *120 indicative hour course:*

- Units should be selected to a minimum of 120 indicative hours.
- Students must complete a minimum of 35 additional hours of mandatory work placement.

*180 indicative hour course:*

- Units should be selected to a minimum of 180 indicative hours.
- Students must complete a minimum of 49 additional hours of mandatory work placement.

**Table 3 Specialisation Study pool of additional units of competency**

Unit code	Unit title	HSC indicative hours of credit
RTC2306A	Operate vehicles	20
RTD2312A	Inspect machinery for plant, animal and soil material	10
RTF2001A	Apply a range of treatments to trees	15
RTF2008A	Maintain indoor plants	15
RTF2204A	Construct low-profile timber or modular retaining walls	15
RTF2208A	Lay paving	15
RTF2215A	Assist with landscape construction work	15
RTE1106A	Shear sheep to novice level	40
RTE2003A	Carry out postharvest operations	20
RTE2006A	Carry out canopy maintenance	10
RTE2018A	Regulate crops	15
RTE2028A	Undertake field budding and grafting	20
RTE2102A	Brood poultry	15
RTE2103A	Carry out milking shed routines	20
RTE2104A	Carry out regular horse observation	15
RTE2106A	Care for and train working dogs	20
RTE2107A	Crutch sheep	15
RTE2109A	Incubate eggs	15
RTE2111A	Identify and mark livestock	20
RTE2112A	Milk livestock	15
RTE2119A	Perform board duties	25
RTE2120A	Assist with pressing wool	20
RTE2121A	Provide daily care for horses	25
RTE2129A	Move and handle pigs	10
RTE2130A	Ride horses and care for equipment	25
RTE2131A	Care for health and welfare of livestock	30
RTE2138A	Shear goats	30
RTE2140A	Maintain health and welfare of poultry	20
RTE2141A	Set up shed for placement of day-old chickens	15
RTE2142A	Collect and pack eggs for human consumption	10
RTE2145A	Care for weaner and grower pigs	15
RTE2149A	Shear sheep to improver level	60
RTE2150A	Maintain intensive production growing environments	15
RTE2205A	Fabricate and repair metal or plastic structures	20
RTE2212A	Prepare grain storages	10
RTE2214A	Clean out intensive production sheds	15

Unit code	Unit title	HSC indicative hours of credit
RTE2302A	Grind combs and cutters for machine shearing	10
RTE2310A	Prepare handpiece and downtube for machine shearing	10
RTE2314A	Mechanically test milking machines	10
RTE2601A	Assist with the operation of gravity fed irrigation	20
RTE2602A	Assist with the operation of pressurised irrigation	20
RTE2604A	Maintain drainage systems	20
RTE2605A	Maintain gravity-fed irrigation systems	15
RTE2606A	Maintain pressurised irrigation systems	15
RTE2707A	Follow site quarantine procedures	15
RTE2901A	Observe enterprise quality assurance procedures	20
FDFWGGHPVB	Hand prune vines	15
FDFWGGMVTB	Install and maintain vine trellis	15
FDFWGGPGHB	Pick grapes by hand	15
FDFWGGPVHB	Plant vines by hand	15
FDFWGGTVB	Train vines	15
FDFWGGVCB	Take vine cuttings	15

Depending on the selection and achievement of units of competency, the possible qualification outcome is:

- Certificate II in Conservation and Land Management (RTD20102)
- Certificate II in Rural Operations (RTE20703)
- Certificate II in Agriculture (RTE20103)
- Certificate II in Horticulture (RTF20103)
- Certificate II in Agriculture *specialising in* Beef Production, Dairy Production, Goat Production, Horse Breeding, Pig Production, Poultry Production, Sheep and Wool Production, Grain Production, Cotton Production or Sugar Production (RTE20103)
- Certificate II in Irrigation (RTE20203)
- Certificate II in Production Horticulture (RTE20603)
- Certificate II in Crutching (RTE20503)
- Certificate II in Shearing (RTE20403)
- Certificate II in Wool Handling (RTE20303).

### Qualifications

To receive AQF qualifications, students must meet the assessment requirements of the Conservation and Land Management Training Package (RTD02), Amenity Horticulture Training Package (RTF03), Rural Production Training Package (RTE03) and the Food Processing Training Package (FDF03). A qualified assessor must conduct assessment.

Qualification rules are available in the relevant Training Package or at [www.ntis.gov.au](http://www.ntis.gov.au).

Further information on assessment is included in section 11 of Part A of this syllabus.

## 8.6 Primary Industries Extension (60 or 120 indicative hours)

### Purpose

The purpose of the extension is to provide students with the opportunity to gain credit towards Certificate III qualifications within Primary Industries. They are available to all students undertaking Primary Industries (240 indicative hours) but are intended specifically for students with a particular interest and aptitude within the industry.

The maximum number of Preliminary and/or HSC units available from this framework is nine units. That is, courses can total up to 540 hours. Students are excluded from studying both the 60-hour and 120-hour extension. In addition to courses within the framework students may undertake locally designed Board Endorsed VET courses drawing from the Conservation and Land Management (RTD02), Amenity Horticulture (RTF03) and/or Rural Production (RTE03) Training Packages. Such courses may provide additional HSC credit for part-time school-based trainees.

Prior to offering the extension, schools should ensure that the RTO undertaking delivery has scope to deliver the relevant qualification.

### Course structure

The extension draws from AQF level III units of competency contained in the Conservation and Land Management (RTD02), Amenity Horticulture (RTF03) and Rural Production (RTE03) Training Packages. The 55 units of competency available are listed in Table 4. Details of the units of competency listed in Table 4 are available in the relevant Training Package or at [www.ntis.com.au](http://www.ntis.com.au).

The Training Package for each industry area contains the qualification packaging rules and a relationship matrix for specialist qualifications. The rules and relationship matrix should be consulted when selecting units of competency from the extension. The qualification packaging rules are available in the relevant Training Package or at [www.ntis.com.au](http://www.ntis.com.au).

It is recommended that the combination of units of competency should be chosen to focus on an occupational outcome.

The 60 indicative hour course is accredited for a total of one unit at the Preliminary or HSC level. The 120 indicative hour course is accredited for a total of two units at the Preliminary and/or HSC level.

### Course requirements

Students may only elect to study an extension if they are currently enrolled in, or have completed, the Primary Industries (240-hour) course.

#### *60 indicative hour course:*

- Units should be selected to a minimum of 60 indicative hours.
- Students must complete a minimum of 14 additional hours of mandatory work placement.

#### *120 indicative hour course:*

- Units should be selected to a minimum of 120 indicative hours.
- Students must complete a minimum of 35 additional hours of mandatory work placement.

**Table 4 Extension units of competency**

Unit code	Unit title	HSC indicative hours of credit
RTC3209A	Plan and construct conventional fencing	20
RTC3310A	Operate specialised machinery and equipment	30
RTC3401A	Control weeds	20
RTC3404A	Control plant pests, diseases and disorders	20
RTC3701A	Respond to emergencies	20
RTD3507A	Undertake sampling and testing of water	20
RTF3012A	Implement a plant nutrition program	20
RTF3014A	Implement a propagation plan	20
RTF3033A	Implement a maintenance program for hydroponic systems	20
RTF3215A	Install hydroponic systems	20
RTF3503A	Sample soils and analyse results	20
RTF3510A	Design and prepare growing media	20
RTE3006A	Establish pastures and crops for livestock production	20
RTE3009A	Undertake agricultural crop harvesting activities	20
RTE3022A	Undertake agricultural crop maintenance activities	20
RTE3024A	Undertake preparation of land for agricultural crop production	20
RTE3029A	Establish agricultural crops	20
RTE3030A	Harvest horticultural crops mechanically	20
RTE3037A	Save, prepare and store agricultural seed	20
RTE3103A	Apply quality assurance procedures in wool preparation	20
RTE3107A	Carry out post-shearing procedures	20
RTE3108A	Class fleece wool	20
RTE3111A	Appraise wool using industry descriptions	20
RTE3113A	Identify and draft livestock	20
RTE3114A	Implement feeding plans for livestock	20
RTE3117A	Coordinate milking operations	20
RTE3118A	Implement feeding plans for intensive production	20
RTE3120A	Prepare facilities for shearing and crutching	20
RTE3122A	Prepare livestock for shearing	20
RTE3126A	Remove and facilitate reuse of effluent and manure from an intensive production system	20
RTE3136A	Comply with industry animal welfare requirements	20
RTE3141A	Prepare fleece wool for classing	20
RTE3142A	Prepare skirtings and oddments	20
RTE3143A	Monitor intensive livestock production growing environments	20
RTE3145A	Press wool	20
RTE3148A	Assess conformation of horses	20
RTE3210A	Plan and construct an electric fence	20
RTE3304A	Maintain and service shearing handpieces	20
RTE3313A	Monitor and provide advice on cleaning milking machines	20

Unit code	Unit title	HSC indicative hours of credit
RTE3317A	Carry out minor service of milking equipment	20
RTE3318A	Prepare combs and cutters for machine shearing	20
RTE3506A	Monitor weather conditions	20
RTE3604A	Troubleshoot drainage systems	20
RTE3605A	Troubleshoot irrigation systems	20
RTE3606A	Measure drainage system performance	20
RTE3607A	Measure irrigation delivery system performance	20
RTE3609A	Operate fertigation equipment	20
RTE3610A	Operate gravity-fed irrigation systems	20
RTE3612A	Implement a maintenance program for an irrigation system	20
RTE3713A	Carry out workplace OHS procedures	20
RTE3714A	Maintain and monitor environmental work practices	20
RTE3901A	Comply with industry quality assurance requirements	20
RTE3904A	Keep records for a primary production business	20
RTE3907A	Use hand held e-business tools	20
RTE3908A	Maintain and monitor feed stocks	20

Depending on the selection and achievement of units of competency, the possible qualification outcome is:

- Certificate III in Advanced Wool Handling (RTE32003)
- Statement of Attainment towards Certificate III in Conservation and Land Management (RTD30102)
- Statement of Attainment towards Certificate III in Rural Operations (RTE31903)
- Statement of Attainment towards Certificate III in Agriculture (RTE30103)
- Statement of Attainment towards Certificate III in Agriculture (Beef Production) (RTE30203)
- Statement of Attainment towards Certificate III in Agriculture (Cotton Production) (RTE30303)
- Statement of Attainment towards Certificate III in Agriculture (Dairy Production) (RTE30403)
- Statement of Attainment towards Certificate III in Agriculture (Goat Production) (RTE30503)
- Statement of Attainment towards Certificate III in Agriculture (Grain Production) (RTE30603)
- Statement of Attainment towards Certificate III in Agriculture (Horse Breeding) (RTE30703)
- Statement of Attainment towards Certificate III in Agriculture (Pig Production) (RTE30903)
- Statement of Attainment towards Certificate III in Agriculture (Poultry Production) (RTE31003)
- Statement of Attainment towards Certificate III in Agriculture (Sheep and Wool Production) (RTE31103)
- Statement of Attainment towards Certificate III in Agriculture (Sugar Production) (RTE31203)
- Statement of Attainment towards Certificate III in Horticulture (RTF30103)
- Statement of Attainment towards Certificate III in Production Horticulture (RTE31603)
- Statement of Attainment towards Certificate III in Irrigation (RTE31303)
- Statement of Attainment towards Certificate III in Wool Clip Preparation (RTE31403).

### **Qualifications**

To receive AQF qualifications, students must meet the assessment requirements of the Conservation and Land Management Training Package (RTD02), the Amenity Horticulture Training Package (RTF03) or the Rural Production Training Package (RTE03). A qualified assessor must conduct assessment.

Qualification rules are available in the relevant Training Package or at [www.ntis.gov.au](http://www.ntis.gov.au).

Further information on assessment is included in section 11 of this document.

## 9 Outcomes and Content

### 9.1 Units of competency

Details about individual units of competency included in the 240-hour course in the Primary Industries Curriculum Framework for the Higher School Certificate are contained in Part B of this syllabus. Part B details unit of competency content and HSC requirements and advice.

The text for each unit of competency in the Primary Industries Curriculum Framework is reproduced exactly from the Conservation and Land Management Training Package (RTD02), the Amenity Horticulture Training Package (RTF03) or the Rural Production Training Package (RTE03). Units of competency consist of:

- elements of competency
- performance criteria
- range of variables
- evidence guide, including:
  - what evidence is required to demonstrate competence for this standard as a whole?
  - what specific knowledge is needed to achieve the performance criteria?
  - what specific skills are needed to achieve the performance criteria?
  - are there any other competency standards that could be assessed with this one?
  - assessment guide
- what processes should be applied to this competency standard.

In addition, there is a column headed ‘HSC Requirements and Advice’ which prescribes the scope of learning and minimum experiences expected for each unit of competency. These must be addressed by all students studying Primary Industries courses.

**The units of competency to be delivered and assessed are determined by the scope of registration of each RTO and the qualifications of the teachers/trainer/assessor.** Teachers and trainers should check their RTO’s scope of registration before determining which units of competency are to be included in their teaching and assessment programs. School principals should seek documentary evidence of the scope of any external RTO delivering the HSC course. Scope of registration can be checked on the National Training Information Services (NTIS) website ([www.ntis.gov.au](http://www.ntis.gov.au)).

Information about the delivery of training programs by RTOs other than schools or TAFE colleges are contained in the Board of Studies *Assessment, Certification and Examination (ACE) Manual* or relevant Board of Studies Official Notices.

Units of competency contained/available in the specialisation studies and extension courses may be accessed from the national Conservation and Land Management Training Package (RTD02), Amenity Horticulture Training Package (RTF03), Rural Production Training Package (RTE03) and the Food Processing Training Package (FDF03) on the National Training Information Service (NTIS) website ([www.ntis.gov.au](http://www.ntis.gov.au)).

## 9.2 Course delivery

RTOs offering training programs which deliver HSC Primary Industries courses must take into consideration details provided in HSC Requirements and Advice (including key terms and concepts) as well as the following requirements for each unit of competency: the elements of competency, performance criteria, range of variables and all aspects of the evidence guide.

Within the evidence guide, particular attention should be given to details provided under *Are there other competency standards that could be assessed with this one?* (to ensure any prerequisite/corequisite requirements have been met), the *What specific knowledge is needed to achieve the performance criteria?*, the *What specific skills are needed to achieve the performance criteria?* and the *Range of Variables*. The Range of Variables frequently makes reference to ‘may include’. This has been clarified in the HSC Requirements and Advice column to prescribe what learning experiences **must** be included for the HSC. Where the Range of Variables states ‘must include’ it has not been repeated in the HSC column. As it is compulsory learning for the Training Package, it is therefore compulsory learning for the HSC.

It is the responsibility of the RTO to determine both the resources required for course delivery, and the qualifications required by teachers and trainers delivering courses within the Primary Industries Curriculum Framework on behalf of the RTO.

Separate advice on learning materials, resource requirements and teacher qualifications is available from school system authorities.

Further advice on curriculum materials that may be used to support the delivery of courses within the Primary Industries Curriculum Framework is contained in the Primary Industries Support Document and Resource List. This information is provided as a guide to RTOs delivering HSC courses within the curriculum framework. The use of the resources listed is not mandatory.

## 9.3 Animal care and ethics

The treatment and care of all animals in NSW is governed by the *Prevention of Cruelty to Animals Act 1979* (NSW), often referred to as POCTAA. This legislation is applicable to all people in NSW at all times and includes descriptions of the legal ages for some animal husbandry practices for particular species.

In addition to POCTAA, animals used for teaching and research are protected by the *Animal Research Act 1985* (NSW) and the *Animal Research Regulation 1995* (NSW). The Regulation incorporates the Australian code of practice for the care and use of animals for scientific purposes. These pieces of legislation aim to protect the welfare of vertebrate animals used in teaching and research by ensuring that their use is justified, humane and considerate of the animals’ needs.

The Animal Research Act makes it illegal for any animal to be used for teaching without prior approval of an Animal Ethics Committee. The Schools Animal Care and Ethics Committee (SACEC) has been established by and is accountable to the Department of Education and Training, the Catholic Education Commission and the Association of Independent Schools of

NSW on behalf of their participating schools, for monitoring the use of animals for teaching and research purposes in their schools.

The SACEC has produced the document *Animals in schools: Animal welfare guidelines for teachers* that provides five categories of approved activities involving animals. These guidelines specify who can use the animal and in what way, so that the welfare of the animal is protected.

Categories 1–3 activities may be carried out by students and teachers with the justification that they allow students to meet educational outcomes.

Categories 4 and 5 activities may be undertaken by students only if prior written approval from the SACEC has been obtained.

Before demonstrating to students a category 5 activity, the teacher must have written certification from the SACEC (a three-year certification).

*Animals in schools: Animal welfare guidelines for teachers* also contains a list of activities that are not permitted to be carried out by teachers or students, in the context of educational programs associated with the school, under any circumstances.

Similarly, TAFE NSW have guidelines that describe categories of activities and procedures for animal use within TAFE institutes. These can be accessed through the TAFE website ([www.tafe.nsw.edu.au](http://www.tafe.nsw.edu.au)).

Procedures approved by NSW Agriculture for the use of animals in teaching, research and extension are available in the publication *Animal Care*, and are available through the NSW Agriculture website ([www.agric.nsw.au](http://www.agric.nsw.au)).

## 10 Work Placement

**Work placement is a mandatory HSC requirement of each course within this framework and the required hours have been assigned to the work placement requirement for each course.**

Learning in the workplace will enable students to:

- progress towards the achievement of industry competencies
- develop appropriate attitudes towards work
- learn a range of behaviours appropriate to the industry
- practise skills acquired off the job in a classroom or workshop
- develop additional skills and knowledge, including the key competencies.

The mandatory work placement requirements for courses in this framework are not intended to indicate the time required for the achievement of units of competency. The amount of workplace learning required for competency achievement will vary from student to student. Assessment of the units of competency is to be undertaken by a qualified assessor(s) either in a work placement setting or through classroom delivery.

### **Work placement requirements**

Students must complete the following work placement for Primary Industries courses:

- (120 indicative hours) – a minimum of 35 hours in a workplace
- (240 indicative hours) – a minimum of 70 hours in a workplace
- Specialisation Study (60 indicative hours) – a minimum of 14 additional hours in a workplace
- Specialisation Study (120 indicative hours) – a minimum of 35 additional hours in a workplace
- Specialisation Study (180 indicative hours) – a minimum of 49 additional hours in a workplace
- Extension (60 indicative hours) – a minimum of 14 additional hours in a workplace
- Extension (120 indicative hours) – a minimum of 35 additional hours in a workplace.

It is the responsibility of the school or other RTO to determine how course outcomes are best achieved and to structure delivery accordingly. If additional work placement or classroom time is required to enable individual or class groups of students to achieve the competencies, this will be determined by the deliverer but does not affect the indicative HSC hours.

Further information and advice on the implementation of work placement are contained in policy statements or guidelines available from the relevant school system authority or the RTO.

### **Part-time work**

Under some circumstances, students' part-time work in an appropriate workplace may be used to fulfil work placement requirements. For further details, teachers and principals should consult the Board of Studies *Assessment, Certification and Examination (ACE) Manual* or relevant Board of Studies Official Notices.

## 11 Assessment Requirements and Advice

### PLEASE NOTE

The HSC examination specifications detailed in this syllabus refer to the 2009 HSC examination. New HSC examination specifications will apply for the 2010 HSC examination and beyond.

Assessment is the process of gathering information and making judgements about student achievement for a variety of purposes. In the Higher School Certificate, those purposes include:

- assisting student learning
- evaluating and improving teaching and learning programs
- certifying satisfactory achievement and completion of courses
- reporting achievement in the Higher School Certificate.

For VET courses, they also include assessment for the purpose of achieving AQF Certificates and Statements of Attainment.

The information in this section relates to the Board of Studies' requirements for assessing and reporting achievement in the Higher School Certificate. In this context, *assessing* refers to competency-based assessment and to external examinations. *Reporting* refers to the documents used by the Board of Studies NSW and RTOs to report both measures of achievement.

### 11.1 Competency-based assessment

The courses within the Primary Industries Curriculum Framework are competency-based courses. The Board of Studies and the Vocational Education and Training Accreditation Board (VETAB) require that a competency-based approach to assessment be used and that a record be held by the RTO of the competencies achieved.

In a competency-based course, assessment of competencies is standards-referenced. This means that a participant's performance is judged against a prescribed standard contained in each unit of competency, not against the performance of other participants.

The purpose of assessment is to judge competence on the basis of performance against the performance criteria set out under each element of competency. A participant is judged either 'competent' or 'not yet competent'. This judgement is made on the basis of a range of evidence, which may be in a variety of forms.

Competency-based assessment is based on the requirements of the workplace. Competence incorporates all aspects of work performance, including problem-solving and the capacity to apply skills and knowledge in both familiar and new situations. Assessment of competence involves the assessment of skills and knowledge combined.

It is not necessary, nor is it desirable, for individual performance criteria to be demonstrated separately for assessment purposes. Rather, assessors should adopt an integrated or holistic approach to assessment. This means that a number of elements of competency or even several units of competency are assessed together. This method of assessment is encouraged in line with the concept of competence as the integration of a wide range of skills, knowledge and attitudes.

## **11.2 Training Package requirements**

To achieve an AQF Certificate or Statement of Attainment, a student or worker must be assessed as competent according to the requirements set out in the national Training Package. A qualified assessor under the auspices of the RTO that is to issue the qualification must conduct the assessment.

### **Assessment guidelines**

The assessment guidelines of a Training Package are, along with qualifications and units of competency, one of the three endorsed components (mandatory components) of the package.

The role of the assessment guidelines is to provide the principles and guidance to ensure that assessment is fair, valid, consistent and to industry standard. Extracts from the assessment guidelines can be found in the Support Document for this syllabus.

The assessment guidelines in the Conservation and Land Management, Amenity Horticulture, Rural Production and the Food Processing Training Packages set out information on:

- the assessment system
- assessment principles and options
- assessor qualifications and using qualified assessors
- designing and conducting assessments
- recording and reporting of assessment outcomes
- appeal and reassessment processes
- assessment resources.

The full text of the assessment guidelines is included in the national Conservation and Land Management Training Package (RTD02), Amenity Horticulture Training Package (RTF03), Rural Production Training Package (RTE03) and the Food Processing Training Package (FDF03) and on the National Training Information Service (NTIS) website ([www.ntis.gov.au](http://www.ntis.gov.au)).

In addition to the assessment guidelines, the Conservation and Land Management, Amenity Horticulture and the Rural Production Training Packages contain an evidence guide for assessment of each unit of competency within the 240 indicative hour course. These requirements are set out within the text of each unit of competency in Part B of the syllabus.

### **Using qualified assessors**

The assessment guidelines in the Conservation and Land Management, Amenity Horticulture, Rural Production and Food Processing Training Packages specify that a qualified assessor must conduct assessment.

In general terms, there are two components of assessor qualifications:

- a minimum qualification as a workplace assessor
- a minimum level of technical competence based on current knowledge of and/or experience in industry.

It is important to note that one individual need not meet the two components of assessor qualification. The ‘qualified assessor’ might consist of an assessment team in which one partner has assessor qualifications and the other has industry knowledge.

All assessors who are engaged in assessing units of competency from the Conservation and Land Management, Amenity Horticulture, Rural Production or Food Processing Training Packages must be either:

- employed by an RTO, or
- acting under the registration of an RTO.

Assessors must have the following assessment units of competency from the Training Package for Assessment and Workplace Training, or must have demonstrated equivalent competencies:

- BSZ401A Plan assessment
- BSZ402A Conduct assessment
- BSZ403A Review assessment
- **plus** the relevant vocational competencies, at least to the level being assessed.

In addition to the above it is recommended that Assessors:

- demonstrate comprehensive current knowledge of the industry, industry practices, and the job or role against which performance is being assessed. This may be demonstrated through evidence of one or more of the items below:
  - relevant work experience
  - attendance at professional development/training and education activities focusing on good practice in the relevant industry competencies
  - participation in professional/industry networks.
- demonstrate current knowledge and skill in assessing units of competency from the Conservation and Land Management, Amenity Horticulture, Rural Production and the Food Processing Training Packages in a range of contexts. This may be demonstrated through at least one of the following:
  - familiarity with the competency standards in the relevant Training Package to be used by the candidate as a basis of assessment
  - recent planning, conduct and review of assessment and/or workplace training activities
  - participation in moderation/validation processes
  - attendance at professional development activities focusing on assessment and/or workplace training
  - understanding of the requisite Assessor qualifications within the relevant Training Package.
- demonstrate the necessary interpersonal and communication skills required in the assessment process. This may be demonstrated through evidence of one or more of the following:
  - attendance at professional development and/or training activities focusing on effective communication in assessment and/or workplace training contexts
  - knowledge of language, literacy and numeracy issues in the context of assessment and workplace training
  - recent assessment and/or workplace training activities.

For primary industries, competence in the relevant standards should ideally be complemented by three years' recent and relevant industry experience, including work experience in more than one enterprise. Supervisory and/or management experience may also be of benefit.

### **11.3 The competency record book**

The competency record book forms a permanent record of all units and elements of competency achieved by students undertaking courses within the Primary Industries Curriculum Framework.

Achievement of elements of competency and units of competency should be progressively recorded in the competency record book. It should be noted that:

- all performance criteria need to be met to demonstrate the achievement of an element of competency
- all elements of competency must be achieved in order to demonstrate the achievement of a unit of competency
- where the unit of competency is assessed within the context of a particular crop, animal or piece of equipment/machinery, the RTO may make a notation in the competency record book to indicate the context in which the unit was achieved.

As stated in section 11.1 of Part A of this syllabus it is emphasised that elements and performance criteria need not (and should not) be assessed individually.

### **11.4 HSC Examination: Primary Industries (240 indicative hours)**

The Higher School Certificate examination in Primary Industries is optional. It will consist of a written examination. Students will nominate during the HSC year whether they will undertake the optional examination. Students who undertake the examination can have their mark contribute to their UAI.

The examination is independent of the competency-based assessment undertaken during the course and has no impact on student eligibility for AQF qualifications.

### **11.5 HSC Examination specifications**

The examination in Primary Industries is a two-hour written paper worth 100 marks. The paper is marked out of 80. The total marks gained are then converted to a final mark out of 100.

The paper will be based on three areas:

- 1 Mandatory units of competency in Primary Industries (240 indicative hours) including:
  - elements of competency
  - performance criteria
  - range of variables
  - evidence guide, including:
    - what evidence is required to demonstrate competency for this standard as a whole?
    - what specific knowledge is needed to achieve the performance criteria?
    - what specific skills are needed to achieve the performance criteria?
    - what processes should be applied to this competency standard?

The mandatory units of competency are:

<b>Unit code</b>	<b>Unit title</b>
RTC2209A	Install, maintain and repair fencing
RTC2401A	Treat weeds
RTC2701A	Follow OHS procedures
RTC2702A	Observe environmental work practices
RTC2704A	Provide basic first aid
RTC2705A	Work effectively in the industry
RTC2706A	Apply chemicals under supervision
RTC2801A	Participate in workplace communications
RTE2503A	Observe and report on weather.

- 2 Minimum prescribed learning contained in the HSC requirements and advice for each mandatory unit of competency (see *Primary Industries Curriculum Framework Part B*), described as:
  - key terms and concepts, and
  - HSC requirements and advice.
- 3 Associated key competencies.

**The paper will consist of THREE sections:**

*Section I (15 marks)*

- There are 15 multiple-choice questions.
- All questions in this section are compulsory.
- All questions are of equal value.

*Section II (35 marks)*

- The questions in this section are short-response items, in parts.
- All questions in this section are compulsory.
- Question parts will range in value.

*Section III (30 marks)*

- The questions in this section are extended-response items.
- Students must attempt TWO questions.
- All questions are of equal value.

## 12 HSC Requirements and Certification

### 12.1 Course completion requirements

For a student to be considered to have satisfactorily completed a course within the Primary Industries Curriculum Framework there must be sufficient evidence that the student has:

- followed the course developed or endorsed by the Board
- applied themselves with diligence and sustained effort to the set tasks and experiences provided in the course by the school
- achieved some or all of the course outcomes
- undertaken the mandatory work placement.

### 12.2 Preliminary and HSC unit credit

To facilitate flexibility of VET in the Higher School Certificate, courses within the Primary Industries Curriculum Framework may be delivered as Preliminary units, as HSC units or as a combination of Preliminary and HSC units.

### 12.3 HSC Record of Achievement

Courses within the Primary Industries Curriculum Framework will be listed on the HSC Record of Achievement, together with the unit value of the course.

No mark will be listed for the achievement of competency but the Record of Achievement will refer to the AQF Certificates and Statements of Attainment, which will be issued separately.

For students enrolled in Primary Industries (240 indicative hours) and who undertake the written HSC examination, a scaled examination mark out of 100 will be recorded on the HSC Record of Achievement. No school-based assessment mark will be recorded.

### 12.4 AQF qualifications

When a student has been assessed they can receive formal recognition of their competencies. This formal recognition of competencies leads to a Statement of Attainment or a qualification.

To achieve a **qualification**, a person must achieve the full set of units of competency as specified in the Training Package qualification packaging rules.

If a qualification is only partly achieved, a **Statement of Attainment** can be issued for successful achievement of a single unit or for a group of units. At a later date, the person can undertake further skill development or training and be assessed against additional competencies until they have achieved all the competencies required for a full qualification. RTOs must recognise and give credit for the competencies that have been recorded on a Statement of Attainment.

Requirements for each qualification are outlined in section 15 of Part A of this syllabus.

Students who undertake the following HSC courses may be eligible for AQF certification as listed below.

- **Primary Industries (120 indicative hours)** [Refer to section 8.3]  
Depending on the selection and achievement of units of competency, possible qualification outcome:
  - Statement of Attainment towards Certificate II in Conservation and Land Management (RTD20102)
  - Statement of Attainment towards Certificate II in Agriculture (RTE20103)
  - Statement of Attainment towards Certificate II in Horticulture (RTF20103)
  - Statement of Attainment towards Certificate II in Rural Operations (RTE20703).
  
- **Primary Industries (240 indicative hours)** [Refer to section 8.4]  
Depending on the selection and achievement of units of competency, possible qualification outcome:
  - Certificate II in Conservation and Land Management (RTD20102)
  - Certificate II in Rural Operations (RTE20703)
  - Certificate II in Agriculture (RTE20103)
  - Certificate II in Horticulture (RTF20103)
  - Certificate II in Agriculture specialising in Beef Production, Goat Production, Pig Production, Sheep and Wool Production or Grain Production (RTE20103)
  - Certificate II in Production Horticulture (RTE20603).
  
- **Primary Industries Specialisation Study (60 or 120 or 180 indicative hours)** [Refer to section 8.5]  
Depending on the selection and achievement of units of competency, possible qualification outcome:
  - Certificate II in Conservation and Land Management (RTD20102)
  - Certificate II in Rural Operations (RTE20703)
  - Certificate II in Agriculture (RTE20103)
  - Certificate II in Horticulture (RTF20103)
  - Certificate II in Agriculture *specialising in* Beef Production, Dairy Production, Goat Production, Horse Breeding, Pig Production, Poultry Production, Sheep and Wool Production, Grain Production, Cotton Production or Sugar Production (RTE20103)
  - Certificate II in Irrigation (RTE20203)
  - Certificate II in Production Horticulture (RTE20603)
  - Certificate II in Crutching (RTE20503)
  - Certificate II in Shearing (RTE20403)
  - Certificate II in Wool Handling (RTE20303).
  
- **Primary Industries Extension (60 or 120 indicative hours)** [Refer to section 8.6]  
Depending on the selection and achievement of units of competency, possible qualification outcome:
  - Certificate III in Advanced Wool Handling (RTE32003)
  - Statement of Attainment towards Certificate III in Conservation and Land Management (RTD30102)
  - Statement of Attainment towards Certificate III in Rural Operations (RTE31903)
  - Statement of Attainment towards Certificate III in Agriculture (RTE30103)
  - Statement of Attainment towards Certificate III in Agriculture (Beef Production) (RTE30203)

- Statement of Attainment towards Certificate III in Agriculture (Cotton Production) (RTE30303)
- Statement of Attainment towards Certificate III in Agriculture (Dairy Production) (RTE30403)
- Statement of Attainment towards Certificate III in Agriculture (Goat Production) (RTE30503)
- Statement of Attainment towards Certificate III in Agriculture (Grain Production) (RTE30603)
- Statement of Attainment towards Certificate III in Agriculture (Horse Breeding) (RTE30703)
- Statement of Attainment towards Certificate III in Agriculture (Pig Production) (RTE30903)
- Statement of Attainment towards Certificate III in Agriculture (Poultry Production) (RTE31003)
- Statement of Attainment towards Certificate III in Agriculture (Sheep and Wool Production) (RTE31103)
- Statement of Attainment towards Certificate III in Agriculture (Sugar Production) (RTE31203)
- Statement of Attainment towards Certificate III in Production Horticulture (RTE31603)
- Statement of Attainment towards Certificate III in Irrigation (RTE31303)
- Statement of Attainment towards Certificate III in Horticulture (RTF30103)
- Statement of Attainment towards Certificate III in Wool Clip Preparation (RTE31403).

## 13 Other Information

### 13.1 Providing for all students

#### 13.1.1 Students with Special Education needs

Courses within the Primary Industries Curriculum Framework are available to all students.

Students with special education needs who meet the eligibility requirements for undertaking Stage 6 Life Skills courses may access:

- all courses within the Primary Industries Curriculum Framework under regular course arrangements
- OR**
- units of competency selected through the individual transition-planning process from the relevant course units of competency detailed in sections 8.3 and 8.4 of Part A of this syllabus.

The latter option recognises that students with special education needs may require additional time to demonstrate the required level of competence.

The appropriate units of competency will be selected through the individual transition-planning process and should be directed towards the achievement of an AQF Certificate.

It is recommended that the individual transition planning should prioritise the mandatory units of competency as they provide essential foundation skills for employment in the Primary Industries. Additional units of competency should then be selected according to the identified individual needs of the student.

Successful participation in courses within the Primary Industries Curriculum Framework for students with special education needs will require:

- transition planning to meet individual needs
- prevocational preparation
- appropriate methods for course delivery and assessment
- ongoing partnerships between schools, students, parents, teachers, employers and others in the community.

To develop skills and knowledge to industry standard, students with special education needs may require extended time and additional support off the job and in the workplace.

Further advice on the implementation of the Primary Industries Curriculum Framework for students with special education needs is contained in the *Stage 6 Industry Curriculum Framework Support Document for Students with Special Education Needs*. This document is available on the Board of Studies website.

#### **Work placement**

Students with special education needs must undertake the minimum work placement requirements for courses within the Primary Industries Curriculum Framework, detailed in the course requirements for each course and in section 10 in Part A of this syllabus.

### **Assessment**

Students with special education needs are subject to the assessment requirements detailed in section 11 of Part A of this syllabus.

### **AQF qualifications**

Eligibility for AQF qualifications is the same for all students. To receive AQF qualifications, students with special education needs must meet the assessment requirements of the Conservation and Land Management Training Package (RTD02), the Amenity Horticulture Training Package (RTF03) or the Rural Production Training Package (RTE03). A qualified assessor must conduct assessment.

### **Eligibility to enrol in Life Skills courses in Stage 6**

In general, students entering a Life Skills course in Stage 6 will have completed at least four Life Skills courses in Stage 5. In special circumstances, a student who has not undertaken at least four Life Skills courses in Stage 5 may wish to enrol in Life Skills courses in Stage 6.

These special circumstances might include situations where:

- a student has attempted regular syllabuses for the School Certificate but has experienced significant difficulty
- a student transfers from interstate or overseas
- a student has a deteriorating condition.

The completion of a transition-planning process for each student is a condition of access to Life Skills courses in Stage 6.

The Board expects that the majority of students who enrol in Life Skills courses in Stage 6 will be students with an intellectual disability.

#### **13.1.2 Gender and cultural considerations**

Industry curriculum frameworks have been developed to address the needs of a broad range of students. Teaching and assessment programs in the Primary Industries Curriculum Framework should be developed to minimise any gender or cultural bias. Case studies, illustrative examples and other materials used for teaching and assessment should be selected on the basis that they do not reinforce gender or cultural stereotypes.

#### **13.1.3 Part-time school-based trainees**

The Primary Industries Curriculum Framework includes provision for trainees to fulfil their requirements and gain an AQF qualification.

Trainees who are seeking credit towards the Higher School Certificate for their training should undertake Primary Industries (240 indicative hours). In addition students may undertake a 60 or 120 or 180 indicative hour specialisation study and a 60 or 120 indicative hour extension course. Additional HSC credit is available through the locally designed Board Endorsed Course process. Such courses may draw from units of competency in the Conservation and Land Management Training Package (RTD02), the Amenity Horticulture Training Package (RTF03), Rural Production Training Package (RTE03) or the Food Processing Training Package (FDF03), and can be tailored/customised to align to a student's training plan as included in their VTO.

Further information on requirements and arrangements for part-time traineeships in the area of primary industries is available from school system authorities, the Department of Education and Training and New Apprenticeship Centres.

## 13.2 Key competencies

The *key competencies* are competencies considered essential for effective participation in the emerging patterns of work and work organisations as well as in life generally. They focus on the capacity to apply knowledge and skills in an integrated way in work situations. Key competencies are generic in that they apply to work generally, rather than being specific to particular occupations or industries.

The key competencies referred to in this industry curriculum framework are:

- collecting, organising and analysing information
- communicating ideas and information
- planning and organising activities
- working with others and in teams
- using mathematical ideas and techniques
- solving problems
- using technology.

Each unit of competency included in this industry curriculum framework identifies the relationship between the unit and the key competencies. This relationship is represented by performance levels 1, 2 and 3. The following provides a brief description of the performance levels.

**Performance Level 1** describes the competence needed to undertake activities efficiently and with sufficient self-management to meet the explicit requirements of the activity and to make judgements about quality of outcome against established criteria.

**Performance Level 2** describes the competence needed to manage activities requiring the selection, application and integration of a number of elements, and to select from established criteria to judge quality of process and outcome.

**Performance Level 3** describes the competence needed to evaluate and reshape processes, to establish and use principles in order to determine appropriate ways of approaching activities, and to establish criteria for judging quality of process and outcome.

Key competencies are essential features of each of the units of competency and therefore consideration must be given to the ways in which they can be addressed when designing learning activities and assessment instruments.

### **13.3 Links between the Primary Industries Curriculum Framework and other HSC courses**

Students may draw on skills and knowledge acquired in the study of general education HSC subjects to develop competencies in Primary Industries. Learning in English, for example, will contribute to the development of communication and team competencies. Learning in Science subjects will contribute to competencies related to chemicals, soils, plants and animals, and learning in Agriculture to a range of competencies. Conversely, skills and knowledge acquired through learning and experience in Primary Industries courses may assist students in achieving the learning outcomes of general education HSC courses.

Where students are undertaking VET courses in more than one industry curriculum framework, similar competencies may be required. In these cases, learning in one area may contribute significantly to learning in another.

Where students apply for recognition of competencies achieved in other contexts, they will need to present evidence that is acceptable to, and judged by, a qualified assessor as part of a Primary Industries competency assessment. Students should be informed of the links between courses within the Primary Industries Curriculum Framework and other courses that they are studying, and of possible assessment opportunities.

Students may not claim HSC unit credit twice for the same unit of competency. Where a student is undertaking two VET courses involving common units of competency, additional units of competency will need to be included in the student's program of study in one of the industry areas to make up the indicative hour requirements for Higher School Certificate unit credit.

Further advice on these matters is contained in the Primary Industries Support Document and in the *Assessment, Certification and Examination (ACE) Manual* published by the Board of Studies ([www.boardofstudies.nsw.edu.au](http://www.boardofstudies.nsw.edu.au)).

### **13.4 Articulation to further training**

Students achieving units of competency in this industry curriculum framework can apply to have those units recognised in other endorsed Training Package qualifications which contain the same units of competency.

Students and teachers should study the qualifications within the Conservation and Land Management Training Package (RTD02), Amenity Horticulture Training Package (RTF03), Rural Production Training Package (RTE03) and the Food Processing Training Package (FDF03) to identify possible training pathways.

Students who proceed to higher-level courses at TAFE or through other RTOs may be eligible for advanced standing in related university courses under arrangements between RTOs and universities.

Students seeking to gain credit towards AQF qualifications in other industries may use the qualifications gained in Primary Industries as evidence of competency for related units of competency in any national Training Packages.

## 14 AQF Level

The various levels of AQF VET qualifications reflect levels of performance and degrees of responsibility for one's own output and the output of others in a workplace context. The level of a qualification thus provides an indication of the standard of achievement expected, which is comparable across industries and provides a context for assessment.

Industry curriculum frameworks relate to VET sector AQF Levels I to III. Brief descriptions of AQF Levels I, II and III, adapted from the *Australian Qualifications Framework Implementation Handbook*,<sup>1</sup> are provided below.

### AQF Level I

Work is likely to be carried out under direct supervision. Breadth, depth and complexity of knowledge and skills would prepare a person to perform a defined range of activities, most of which would be routine and predictable.

An individual demonstrating competencies at this level would be able to:

- demonstrate knowledge by recall in a narrow range of areas
- demonstrate basic practical skills, such as the use of relevant tools
- perform a sequence of routine tasks given clear direction
- receive and pass on messages/information.

### AQF Level II

Work is likely to be carried out under direct supervision. Breadth, depth and complexity of knowledge and skills would prepare a person to perform in a range of varied activities or knowledge application where there is a clearly defined range of contexts in which the choice of actions required is usually clear and there is limited complexity in the range of options to be applied.

An individual demonstrating competencies at this level would be able to:

- demonstrate basic operational knowledge in a moderate range of areas
- apply a defined range of skills
- apply known solutions to a limited range of predictable problems
- perform a range of tasks where choice is required between options within a limited range
- assess and record information from various sources
- take limited responsibility for one's own outputs in work and learning.

### AQF Level III

Breadth, depth and complexity of knowledge and competencies would cover the selecting, adapting and transferring of skills and knowledge to new environments, and providing technical advice and some leadership in the resolution of specific problems. This would be applied across a range of roles in a variety of contexts, with some complexity in the extent and choice of options available.

---

<sup>1</sup> Australian Qualifications Framework (AQF) Advisory Board, 2002, *Australian Qualifications Framework Implementation Handbook*, 3rd edn, Carlton, Vic.

An individual demonstrating these competencies would be able to:

- perform a defined range of skilled operations usually within a range of broader, related activities involving known routines, methods and procedures
- exercise some discretion and judgement in the selection of equipment, services or contingency measures
- operate within known time constraints
- take some responsibility for others
- participate in teams, including group or team coordination.

AQF Statements of Attainment and Certificates are ONLY issued on the basis of successful achievement of competency as determined by a qualified assessor.

## 15 Minimum Requirements for AQF Qualifications

The following pages outline the qualification packaging rules for the AQF qualifications available in this framework through the 120 and 240 indicative hour courses. This information is reproduced from the Conservation and Land Management Training Package (RTD02), Amenity Horticulture Training Package (RTF03) and the Rural Production Training Package (RTE03). It is included so that the minimum requirements for achieving the industry qualifications are clear. Students who meet these requirements will be eligible for the relevant AQF Certificate, whether or not they have met the additional requirements of the HSC course.

Units of competency within the Conservation and Land Management, Amenity Horticulture and Rural Production qualifications for Certificate I through to Advanced Diploma have been packaged together to form a meaningful work-related focus for key industry sectors or areas of specialisation.

The mechanism for accommodating each sector or area of specialisation qualification has been achieved by developing three lists of competency standards in each stream:

- Group A – these are the key technical work functions that have been designated for each sector specialisation. Standards that are compulsory for each qualification are shown in italics in the packaging rules for this group.
- Group B – these are the more generic work functions across a number of industry sectors.
- Group C – these include units of competency from the Training Package not listed in Groups A or B at that level, and relevant standards from other rural Training Packages and other nationally endorsed Training Packages.

A qualification is achieved by selecting units of competency from each of the categories as set out in the following qualification packaging rules.

<p><b>Please note:</b> Only the shaded units of competency are available in the Primary Industries Curriculum Framework.</p>
--

## RTD20102: Certificate II in Conservation and Land Management

A total of 15 units of competency must be completed.

- Complete the 5 compulsory units in Group A below.
- Select 8 additional units from group B below.
- Select 2 additional units from Group B and/or C below.

<b>Group A (*units in italics are compulsory)</b>	
RTC2701A	<i>Follow OHS procedures*</i>
RTC2702A	<i>Observe environmental work practices*</i>
RTC2704A	<i>Provide basic first aid*</i>
RTC2705A	<i>Work effectively in the industry*</i>
RTC2801A	<i>Participate in workplace communications*</i>

<b>Group B</b>	
<b>WORKING WITH PLANTS AND ANIMALS</b>	
RTD2004A	Collect, prepare and preserve plant specimens
RTC2005A	Fell small trees
RTC2012A	Plant trees and shrubs
RTC2016A	Recognise plants
RTD2022A	Carry out natural area restoration works
RTC2026A	Undertake propagation activities
FPIFGM023A	Store and dispatch seed
FPIFGM162A	Collect, treat and store seed
MNMOCC638A	Undertake direct seeding
<b>WORKING WITH ANIMALS</b>	
RTD2101A	Apply animal trapping techniques
RTD2116A	Muster pest animals
RTD2125A	Use firearms to humanely destroy animals
RTD2126A	Recognise animals
<b>CONSTRUCTION AND MAINTENANCE</b>	
RTD2202A	Conduct erosion and sediment control activities
RTC2203A	Conduct visual inspection of park facilities
RTD2206A	Install aggregate paths
RTC2209A	Install, maintain and repair fencing
RTC2210A	Maintain properties and structures
<b>MACHINERY AND EQUIPMENT</b>	
RTC2301A	Undertake operational maintenance of machinery
RTC2304A	Operate and maintain chainsaws
RTC2306A	Operate vehicles
RTC2307A	Operate machinery and equipment
RTC2309A	Operate tractors
RTD2312A	Inspect machinery for plant, animal and soil material
RTD2313A	Clean machinery of plant, animal and soil material

Select a maximum of two (2) of the following: (# see below)	
MNQ.OP/20.A	Conduct grader operations #
MNQ.OP/21.A	Conduct front end loader operations #
MNQ.OP/22.A	Conduct shovel/excavator operations #
MNQ.OP/23.A	Conduct haul truck operations #
MNQ.OP/24.A	Conduct dozer operations #
MNQ.OP/25.A	Conduct scraper operations #
FPIFGM139A	Operate 4x4 vehicles in off-road conditions
SFISHIP206A	Operate a small vessel
<b>PESTS AND DISEASES</b>	
RTC2401A	Treat weeds
RTD2402A	Clear features that harbour pest animals
RTD2403A	Conduct vertebrate pest activities from aircraft
RTC2404A	Treat plant pests, diseases and disorders
RTD2405A	Tag and locate judas animals
<b>RESOURCE MANAGEMENT</b>	
RTD2501A	Maintain cultural places
RTD2502A	Maintain wildlife habitat refuges
FPIL2191516A	Reduce wildfire hazards
PUAFIR204A	Respond to wildfire
<b>HEALTH AND SAFETY</b>	
RTD2703A	Operate in isolated and remote situations
RTC2706A	Apply chemicals under supervision
<b>WORKING WITH PEOPLE</b>	
RTD2802A	Record information about country
RTD2803A	Observe and report plants and/or animals
THTFAT01B	Provide on-site information and assistance
THTFTG01B	Work as a guide
<b>ADMINISTRATION AND BUSINESS</b>	
BSBCMN205A	Use business technology
BSBCMN206A	Process and maintain workplace information
PUALAW001A	Protect and preserve incident scene

**Group C**

This group includes other units of competency from Conservation and Land Management and/or other Training Packages at nominal AQF Levels 1, 2 and 3. These units must be relevant to work undertaken in Conservation and Land Management.

**Qualification rules**

For a Certificate II in Conservation and Land Management at least 12 of the units of competency presented for this qualification must relate to conservation and land management work procedures, activities or contexts.

# For this qualification a maximum of 2 units from the range MNQ.OP/20.A – MNQ.OP/25.A is allowed.

## RTE20703: Certificate II in Rural Operations

A total of 17 units of competency must be completed.

- Select 4 compulsory units from Group A below.
- Select 6 units from any rural training package listed below in Group B.
- Select 7 units from any training package.

Units should be selected from Group B in accordance with local work undertaken and local industry advice.

<b>Group A (*units in italics are compulsory)</b>	
RTC2701A	<i>Follow OHS procedures*</i>
RTC2702A	<i>Observe environmental work practices*</i>
RTC2705A	<i>Work effectively in the industry*</i>
RTC2801A	<i>Participate in workplace communications*</i>

<b>Group B</b>
This group includes other units of competency aligned to Certificate I, II or III outcomes from any rural training package, RTD02 Conservation and Land Management, RTE03 Rural Production or RTF03 Amenity Horticulture.

<b>Group C</b>
This group includes other units of competency from RTD02 Conservation and Land Management, RTE03 Rural Production, RTF03 Amenity Horticulture and/or other endorsed Training Packages.
Units selected must be aligned to Certificate I, II or III outcomes. These units must be relevant to work undertaken in the rural sector. Units selected as part of Group C may be selected from no more than three different training packages.

<b>Qualification rules</b>
For a Certificate II in Rural Operations at least 13 of the units of competency presented for this qualification must relate to rural work procedures, activities or contexts. In addition, at least 13 of the units selected to make up this qualification must be aligned clearly to Certificate II outcomes.

## RTE20103: Certificate II in Agriculture

A total of 17 units of competency must be completed.

- Complete the 4 designated compulsory units from Group A below.
- Select 10 additional units from Group B below.
- Select 3 additional units from Group B and/or C below.

Units should be selected from Group B in accordance with local work undertaken and local industry advice.

<b>Group A (*units in italics are compulsory)</b>	
RTE2701A	<i>Follow OHS procedures*</i>
RTE2702A	<i>Observe environmental work practices*</i>
RTE2705A	<i>Work effectively in the industry*</i>
RTE2801A	<i>Participate in workplace communications*</i>

<b>Group B</b>	
RTE2002A	Assist with prescribed burning
RTE2003A	Carry out postharvest operations
RTE2006A	Carry out basic canopy maintenance
RTE2010A	Establish horticultural crops
RTE2011A	Assist agricultural crop establishment
RTE2018A	Regulate crops
RTE2021A	Support horticultural crop harvesting
RTE2028A	Undertake field budding and grafting
RTE2029A	Assist agricultural crop maintenance
RTE2030A	Assist agricultural crop harvesting
RTE2102A	Brood poultry
RTE2103A	Carry out milking shed routines
RTE2104A	Carry out regular horse observation
RTE2105A	Collect, store and handle eggs from breeder flocks
RTE2106A	Care for and train working dogs
RTE2107A	Crutch sheep
RTE2108A	Identify and sex birds
RTE2109A	Incubate eggs
RTE2110A	Maintain livestock water supplies
RTE2111A	Identify and mark livestock
RTE2112A	Milk livestock
RTE2113A	Monitor livestock to parturition
RTE2114A	Monitor water supplies
RTE2115A	Muster and move livestock
RTE2117A	Pen sheep
RTE2118A	Handle livestock using basic techniques
RTE2119A	Perform board duties

RTE2120A	Assist with pressing wool
RTE2121A	Provide daily care for horses
RTE2123A	Collect semen
RTE2124A	Carry out birthing duties
RTE2127A	Castrate livestock
RTE2128A	Provide feed for livestock
RTE2129A	Move and handle pigs
RTE2130A	Ride horses and care for equipment
RTE2131A	Care for health and welfare of livestock
RTE2132A	Assist with artificial insemination procedures
RTE2133A	Artificially inseminate pigs
RTE2134A	Assist with feeding in an intensive production system
RTE2136A	Load and unload livestock
RTE2137A	Assist with natural mating procedures and parturition in horses
RTE2138A	Shear goats
RTE2140A	Maintain health and welfare of poultry
RTE2141A	Set up shed for placement of day-old chickens
RTE2142A	Collect and pack eggs for human consumption
RTE2143A	Mate pigs and monitor dry sow performance
RTE2144A	Carry out regular livestock observation
RTE2145A	Care for weaner and grower pigs
RTE2146A	Mix and mill standard stockfeed
RTE2147A	Beak trim chickens
RTE2148A	Handle young horses
RTE2149A	Shear sheep to improver level
RTE2150A	Maintain intensive production growing environments
RTE2151A	Care for health and welfare of pigs
RTE2201A	Carry out basic electric fencing operations
RTE2205A	Fabricate and repair metal or plastic structures
RTE2212A	Prepare grain storages
RTE2213A	Weld and fabricate stainless steel
RTE2214A	Clean out intensive production sheds
RTE2216A	Assist in preparing for shearing and crutching
RTE2302A	Grind combs and cutters for machine shearing
RTE2303A	Operate cane haulage vehicle
RTE2308A	Operate ride-on vehicles
RTE2310A	Prepare handpiece and downtube for machine shearing
RTE2314A	Mechanically test milking machines
RTE2503A	Observe and report on weather
RTE2601A	Assist with the operation of gravity fed irrigation
RTE2602A	Assist with the operation of pressurised irrigation
RTE2603A	Lay irrigation and/or drainage pipes
RTE2604A	Maintain drainage systems

RTE2605A	Maintain gravity-fed irrigation systems
RTE2606A	Maintain pressurised irrigation systems
RTE2607A	Install micro-irrigation systems
RTE2707A	Follow site quarantine procedures
RTE2804A	Provide information on products and services
RTE2901A	Observe enterprise quality assurance procedures
RTE2902A	Collect and record production data
RTC2016A	Recognise plants
RTC2026A	Undertake propagation activities
RTC2209A	Install, maintain and repair fencing
RTC2210A	Maintain properties and structures
RTC2301A	Undertake operational maintenance of machinery
RTC2306A	Operate vehicles
RTC2307A	Operate machinery and equipment
RTC2309A	Operate tractors
RTC2401A	Treat weeds
RTC2404A	Treat plant pests, diseases and disorders
RTC2704A	Provide basic first aid
RTC2706A	Apply chemicals under supervision
RTD2313A	Clean machinery of plant, animal and soil material
RTD2703A	Operate in isolated and remote situations
RTF2504A	Determine basic properties of soils/growing media
BCC2001A	Carry out basic site survey
BCC2003A	Assist with excavation and support installation
BCC2009A	Carry out concrete work
BSBCMN107A	Operate a personal computer
MEM2.1C12A	Apply quality systems
MEM5.7AA	Manual heating, thermal cutting and gouging
MEM9.1AA	Draw and interpret sketch
MEM9.2AA	Interpret technical drawings
MEM12.4AA	Precision electrical/electronic measurement
MEM18.3AA	Use tools for precision work
MNC.G25.A	Access, update and retrieve simple computerised information
MNC.G26.A	Operate a computer to produce documents
PUAFIR209A	Work safety around aircraft
RGR007A	Handle horses and greyhounds safely
UPTNEG090A	Weld using manual metal arc welding process
UPTNEG091A	Weld using gas metal arc welding process
UPTNEG092A	Weld using gas tungsten arc welding process
WRRCA1B	Operate retail equipment
WRRCA2B	Apply retail office procedures
WRRCS2B	Apply point of sale handling procedures
WRRS1B	Sell products and services

<b>Group C</b>
----------------

This group includes other units of competency from RTD02 Conservation and Land Management, RTE03 Rural Production, RTF03 Amenity Horticulture and/or other endorsed Training Packages.
--

Units selected must be aligned to Certificate I, II or III outcomes. These units must be relevant to work undertaken in the rural sector.
---

<b>Qualification rules</b>
----------------------------

For a Certificate II in Agriculture at least 13 units of competency presented for this qualification must relate to agricultural procedures, activities or contexts. In addition, at least 13 of the units selected to make up this qualification must be aligned clearly to Certificate II outcomes.
---

## RTF20103: Certificate II in Horticulture

A total of 17 units of competency must be completed.

- Complete the 4 designated compulsory units from Group A below.
- Select 10 additional units from Group B below.
- Select 3 additional units from Group B and/or C below.

Units should be selected from Group B in accordance with local work undertaken and local industry advice.

<b>Group A (*units in italics are compulsory)</b>	
RTC2701A	<i>Follow OHS procedures*</i>
RTC2702A	<i>Observe environmental work practices*</i>
RTC2705A	<i>Work effectively in the industry*</i>
RTC2801A	<i>Participate in workplace communications*</i>

<b>Group B</b>	
RTC2005A	Fell small trees
RTC2012A	Plant trees and shrubs
RTC2016A	Recognise plants
RTC2026A	Undertake propagation activities
RTC2203A	Conduct visual inspection of park facilities
RTC2209A	Install, maintain and repair fencing
RTC2210A	Maintain properties and structures
RTC2301A	Undertake operational maintenance of machinery
RTC2304A	Operate and maintain chainsaws
RTC2306A	Operate vehicles
RTC2307A	Operate machinery and equipment
RTC2309A	Operate tractors
RTC2401A	Treat weeds
RTC2404A	Treat plant pests, diseases and disorders
RTC2701A	Follow OHS procedures
RTC2702A	Observe environmental work practices
RTC2704A	Provide basic first aid
RTC2705A	Work effectively in the industry
RTC2706A	Apply chemicals under supervision
RTC2801A	Participate in workplace communications
RTD2022A	Carry out natural area restoration works
RTD2206A	Install aggregate paths
RTE2003A	Carry out postharvest operations
RTE2010A	Establish horticultural crops
RTE2018A	Regulate crops
RTE2021A	Support horticultural crop harvesting
RTE2028A	Undertake field budding and grafting
RTE2308A	Operate ride-on vehicles

RTE2503A	Observe and report on weather
RTE2601A	Assist with the operation of gravity fed irrigation
RTE2602A	Assist with the operation of pressurised irrigation
RTE2603A	Lay irrigation and/or drainage pipes
RTE2604A	Maintain drainage systems
RTE2605A	Maintain gravity-fed irrigation systems
RTE2606A	Maintain pressurised irrigation systems
RTE2607A	Install a micro-irrigation system
RTE2707A	Follow site quarantine procedures
RTE2902A	Collect and record production data
RTF2001A	Apply a range of treatments to trees
RTF2008A	Maintain indoor plants
RTF2009A	Perform above ground pruning
RTF2013A	Pot-on plants
RTF2014A	Prepare and maintain plant displays
RTF2015A	Prepare turf surfaces for play
RTF2017A	Prune shrubs and small trees
RTF2019A	Renovate grassed areas
RTF2020A	Assist with turf construction
RTF2023A	Support turf establishment
RTF2024A	Tend nursery plants
RTF2025A	Transplant small trees
RTF2027A	Undertake standard climbing techniques
RTF2204A	Construct low-profile timber or modular retaining walls
RTF2207A	Protect trees during construction work
RTF2211A	Prepare a gravesite
RTF2215A	Assist with landscape construction work
RTF2311A	Undertake stump removal
RTF2504A	Determine basic properties of soil/growing media
RTF2208A	Lay paving
WRRCA1B	Operate retail equipment
WRRCA2B	Apply retail office procedures
WRRCS2B	Apply point of sale handling procedures
WRRS1B	Sell products and services

### Group C

This group includes other units of competency from RTD02 Conservation and Land Management, RTE03 Rural Production, RTF03 Amenity Horticulture and/or other endorsed Training Packages.

Units selected must be aligned to Certificate I, II or III outcomes. These units must be relevant to work undertaken in the horticulture sector.

### Qualification Rules

For a Certificate II in Horticulture at least 13 of the units of competency presented for this qualification must relate to general horticultural procedures, activities or contexts. In addition, at least 13 of the units selected to make up this qualification must be clearly aligned to Certificate II outcomes.

## RTE20103: Certificate II in Agriculture specialising in Beef Production

A total of 17 units of competency must be completed.

- Select 9 units from Group A below (including the 4 designated compulsory units).
- Select 5 additional units from Group A and/or B below.
- Select 3 additional units from Group A, B and/or C below.

Units should be selected from Group A and Group B in accordance with local work undertaken and local industry advice.

<b>Group A (*units in italics are compulsory)</b>	
RTC2209A	Install, maintain and repair fencing
RTC2210A	Maintain properties and structures
RTC2306A	Operate vehicles
RTC2701A	<i>Follow OHS procedures*</i>
RTC2702A	<i>Observe environmental work practices*</i>
RTC2704A	Provide basic first aid
RTC2705A	<i>Work effectively in the industry*</i>
RTC2706A	Apply chemicals under supervision
RTC2801A	<i>Participate in workplace communications*</i>
RTE2113A	Monitor livestock to parturition
RTE2114A	Monitor water supplies
RTE2115A	Muster and move livestock
RTE2128A	Provide feed for livestock
RTE2131A	Care for health and welfare of livestock
RTE2901A	Observe enterprise quality assurance procedures

<b>Group B</b>	
RTC2016A	Recognise plants
RTC2301A	Undertake operational maintenance of machinery
RTC2309A	Operate tractors
RTD2703A	Operate in isolated and remote situations
RTE2106A	Care for and train working dogs
RTE2110A	Maintain livestock water supplies
RTE2111A	Identify and mark livestock
RTE2124A	Carry out birthing duties
RTE2127A	Castrate livestock
RTE2130A	Ride horses and care for equipment
RTE2132A	Assist with artificial insemination procedures
RTE2134A	Assist with feeding in an intensive production system
RTE2136A	Load and unload livestock
RTE2205A	Fabricate and repair metal or plastic structures
RTE2308A	Operate ride-on vehicles
RTE2503A	Observe and report on weather

RTE2601A	Assist with the operation of gravity fed irrigation
RTE2707A	Follow site quarantine procedures
RTF2504A	Determine basic properties of soil/growing media

### **Group C**

This group includes other units of competency from RTD02 Conservation and Land Management, RTE03 Rural Production, RTF03 Amenity Horticulture and/or other endorsed Training Packages.

Units selected must be aligned to Certificate I, II or III outcomes. These units must be relevant to work undertaken in the rural sector.

### **Qualification Rules**

For a Certificate II in Agriculture specialising in beef production at least 13 of the units of competency presented for this qualification must relate to beef production work procedures, activities or contexts. In addition, at least 13 of the units selected to make up this qualification must be clearly aligned to Certificate II outcomes.

## RTE20103: Certificate II in Agriculture specialising in Dairy Production

A total of 17 units of competency must be completed.

- Select 9 units from Group A below (including the 4 designated compulsory units).
- Select 5 additional units from Group A and/or B below.
- Select 3 additional units from Group A, B and/or C below.

Units should be selected from Group A and Group B in accordance with local work undertaken and local industry advice.

<b>Group A (*units in italics are compulsory)</b>	
RTC2701A	<i>Follow OHS procedures*</i>
RTC2702A	<i>Observe environmental work practices*</i>
RTC2704A	Provide basic first aid
RTC2705A	<i>Work effectively in the industry*</i>
RTC2801A	<i>Participate in workplace communications*</i>
RTE2103A	Carry out milking shed routines
RTE2112A	Milk livestock
RTE2128A	Provide feed for livestock
RTE2131A	Care for health and welfare of livestock
RTE2134A	Assist with feeding in an intensive production system
RTE2901A	Observe enterprise quality assurance procedures

<b>Group B</b>	
RTC2016A	Recognise plants
RTC2209A	Install, maintain and repair fencing
RTC2210A	Maintain properties and structures
RTC2301A	Undertake operational maintenance of machinery
RTC2306A	Operate vehicles
RTC2309A	Operate tractors
RTC2706A	Apply chemicals under supervision
RTE2110A	Maintain livestock water supplies
RTE2111A	Identify and mark livestock
RTE2113A	Monitor livestock to parturition
RTE2114A	Monitor water supplies
RTE2124A	Carry out birthing duties
RTE2132A	Assist with artificial insemination procedures
RTE2205A	Fabricate and repair metal or plastic structures
RTE2308A	Operate ride-on vehicles
RTE2601A	Assist with the operation of gravity fed irrigation
RTE2602A	Assist with the operation of pressurised irrigation
RTE2707A	Follow site quarantine procedures
RTE2504A	Determine basic properties of soil/growing media

<b>Group C</b>
----------------

This group includes other units of competency from RTD02 Conservation and Land Management, RTE03 Rural Production, RTF03 Amenity Horticulture and/or other endorsed Training Packages.
--

Units selected must be aligned to Certificate I, II or III outcomes. These units must be relevant to work undertaken in the rural sector.
---

<b>Qualification Rules</b>
----------------------------

For a Certificate II in Agriculture specialising in dairy production at least 13 of the units of competency presented for this qualification must relate to dairy production work procedures, activities or contexts. In addition, at least 13 of the units selected to make up this qualification must be clearly aligned to Certificate II outcomes.
--

## RTE20103: Certificate II in Agriculture specialising in Goat Production

A total of 17 units of competency must be completed.

- Select 9 units from Group A below (including the 4 designated compulsory units).
- Select 5 additional units from Group A and/or B below.
- Select 3 additional units from Group A, B and/or C below.

Units should be selected from Group A and Group B in accordance with local work undertaken and local industry advice.

<b>Group A (*units in italics are compulsory)</b>	
RTC2701A	<i>Follow OHS procedures*</i>
RTC2702A	<i>Observe environmental work practices*</i>
RTC2704A	Provide basic first aid
RTC2705A	<i>Work effectively in the industry*</i>
RTC2801A	<i>Participate in workplace communications*</i>
RTE2111A	Identify and mark livestock
RTE2113A	Monitor livestock to parturition
RTE2115A	Muster and move livestock
RTE2124A	Carry out birthing duties
RTE2127A	Castrate livestock
RTE2128A	Provide feed for livestock
RTE2131A	Care for health and welfare of livestock
RTE2136A	Load and unload livestock
RTE2138A	Shear goats

<b>Group B</b>	
RTC2209A	Install, maintain and repair fencing
RTC2210A	Maintain properties and structures
RTC2301A	Undertake operational maintenance of machinery
RTC2306A	Operate vehicles
RTC2706A	Apply chemicals under supervision
RTD2703A	Operate in isolated and remote situations
RTE2106A	Care for and train working dogs
RTE2110A	Maintain livestock water supplies
RTE2112A	Milk livestock
RTE2114A	Monitor water supplies
RTE2118A	Handle livestock using basic techniques
RTE2132A	Assist with artificial insemination procedures
RTE2205A	Fabricate and repair metal or plastic structures
RTE2503A	Observe and report on weather
RTE2707A	Follow site quarantine procedures
RTE2504A	Determine basic properties of soil/growing media

<b>Group C</b>
----------------

This group includes other units of competency from RTD02 Conservation and Land Management, RTE03 Rural Production, RTF03 Amenity Horticulture and/or other endorsed Training Packages.
--

Units selected must be aligned to Certificate I, II or III outcomes. These units must be relevant to work undertaken in the rural sector.
---

<b>Qualification Rules</b>
----------------------------

For a Certificate II in Agriculture specialising in goat production at least 13 of the units of competency presented for this qualification must relate to goat production work procedures, activities or contexts. In addition, at least 13 of the units selected to make up this qualification must be clearly aligned to Certificate II outcomes.
--

## RTE20103: Certificate II in Agriculture specialising in Pig Production

A total of 17 units of competency must be completed.

- Select 9 units from Group A below (including the 4 designated compulsory units).
- Select 5 additional units from Group A and/or B below.
- Select 3 additional units from Group A, B and/or C below.

Units should be selected from Group A and Group B in accordance with local work undertaken and local industry advice.

<b>Group A (*units in italics are compulsory)</b>	
RTC2701A	<i>Follow OHS procedures*</i>
RTC2702A	<i>Observe environmental work practices*</i>
RTC2704A	Provide basic first aid
RTC2705A	<i>Work effectively in the industry*</i>
RTC2801A	<i>Participate in workplace communications*</i>
RTE2111A	Identify and mark livestock
RTE2113A	Monitor livestock to parturition
RTE2114A	Monitor water supplies
RTE2123A	Collect semen
RTE2124A	Carry out birthing duties
RTE2127A	Castrate livestock
RTE2129A	Move and handle pigs
RTE2133A	Artificially inseminate pigs
RTE2134A	Assist with feeding in an intensive production system
RTE2136A	Load and unload livestock
RTE2143A	Mate pigs and monitor dry sow performance
RTE2144A	Carry out regular livestock observation
RTE2145A	Care for weaner and grower pigs
RTE2146A	Mix and mill standard stockfeed
RTE2150A	Maintain intensive production growing environments
RTE2151A	Care for health and welfare of pigs
RTE2214A	Clean out intensive production sheds
RTE2707A	Follow site quarantine procedures
RTE2901A	Observe enterprise quality assurance procedures
RTE2902A	Collect and record production data

<b>Group B</b>	
BSBCMN107A	Operate a personal computer
RTC2210A	Maintain properties and structures
RTC2301A	Undertake operational maintenance of machinery
RTC2306A	Operate vehicles
RTC2309A	Operate tractors
RTC2706A	Apply chemicals under supervision
RTE2205A	Fabricate and repair metal or plastic structures

<b>Group C</b>
----------------

This group includes other units of competency from RTD02 Conservation and Land Management, RTE03 Rural Production, RTF03 Amenity Horticulture and/or other endorsed Training Packages.
--

Units selected must be aligned to Certificate I, II or III outcomes. These units must be relevant to work undertaken in the rural sector.
---

<b>Qualification Rules</b>
----------------------------

For a Certificate II in Agriculture specialising in pig production at least 13 of the units of competency presented for this qualification must relate to pig production work procedures, activities or contexts. In addition, at least 13 of the units selected to make up this qualification must be clearly aligned to Certificate II outcomes.
--

## RTE20103: Certificate II in Agriculture specialising in Sheep and Wool Production

A total of 17 units of competency must be completed.

- Select 9 units from Group A below (including the 4 designated compulsory units).
- Select 5 additional units from Group A and/or B below.
- Select 3 additional units from Group A, B and/or C below.

Units should be selected from Group A and Group B in accordance with local work undertaken and local industry advice.

<b>Group A (*units in italics are compulsory)</b>	
RTC2701A	<i>Follow OHS procedures*</i>
RTC2702A	<i>Observe environmental work practices*</i>
RTC2704A	Provide basic first aid
RTC2705A	<i>Work effectively in the industry*</i>
RTC2801A	<i>Participate in workplace communications*</i>
RTE2111A	Identify and mark livestock
RTE2113A	Monitor livestock to parturition
RTE2115A	Muster and move livestock
RTE2124A	Carry out birthing duties
RTE2127A	Castrate livestock
RTE2128A	Provide feed for livestock
RTE2131A	Care for health and welfare of livestock
RTE2136A	Load and unload livestock
RTE2707A	Follow site quarantine procedures

<b>Group B</b>	
RTC2209A	Install, maintain and repair fencing
RTC2210A	Maintain properties and structures
RTC2301A	Undertake operational maintenance of machinery
RTC2306A	Operate vehicles
RTC2706A	Apply chemicals under supervision
RTD2703A	Operate in isolated and remote situations
RTE2106A	Care for and train working dogs
RTE2110A	Maintain livestock water supplies
RTE2112A	Milk livestock
RTE2114A	Monitor water supplies
RTE2117A	Pen sheep
RTE2130A	Ride horses and care for equipment
RTE2132A	Assist with artificial insemination procedures
RTE2205A	Fabricate and repair metal or plastic structures
RTE2308A	Operate ride-on vehicles
RTE2503A	Observe and report on weather
RTF2504A	Determine basic properties of soil/growing media

<b>Group C</b>
----------------

This group includes other units of competency from RTD02 Conservation and Land Management, RTE03 Rural Production, RTF03 Amenity Horticulture and/or other endorsed Training Packages.
--

Units selected must be aligned to Certificate I, II or III outcomes. These units must be relevant to work undertaken in the rural sector.
---

<b>Qualification Rules</b>
----------------------------

For a Certificate II in Agriculture specialising in sheep and wool production at least 13 of the units of competency presented for this qualification must relate to sheep and wool production work procedures, activities or contexts. In addition, at least 13 of the units selected to make up this qualification must be clearly aligned to Certificate II outcomes.
--

## RTE20103: Certificate II in Agriculture specialising in Grain Production

A total of 17 units of competency must be completed.

- Select 9 units from Group A below (including the 4 designated compulsory units).
- Select 5 additional units from Group A and/or B below.
- Select 3 additional units from Group A, B and/or C below.

Units should be selected from Group A and Group B in accordance with local work undertaken and local industry advice.

<b>Group A (*units in italics are compulsory)</b>	
RTC2301A	Undertake operational maintenance of machinery
RTC2306A	Operate vehicles
RTC2307A	Operate machinery and equipment
RTC2309A	Operate tractors
RTC2701A	<i>Follow OHS procedures*</i>
RTC2702A	<i>Observe environmental work practices*</i>
RTC2704A	Provide basic first aid
RTC2705A	<i>Work effectively in the industry*</i>
RTC2706A	Apply chemicals under supervision
RTC2801A	<i>Participate in workplace communications*</i>
RTE2011A	Assist agricultural crop establishment
RTE2029A	Assist agricultural crop maintenance
RTE2030A	Assist agricultural crop harvesting
RTF2504A	Determine basic properties of soil/growing media

<b>Group B</b>	
PUAFIR209A	Work safely around aircraft
RTC2210A	Maintain properties and structures
RTD2313A	Clean machinery of plant, animal and soil material
RTD2703A	Operate in isolated and remote situations
RTE2212A	Prepare grain storages
RTE2601A	Assist with the operation of gravity-fed irrigation
RTE2503A	Observe and report on weather
RTE2605A	Maintain gravity fed irrigation systems
RTE2707A	Follow site quarantine procedures

<b>Group C</b>
----------------

This group includes other units of competency from RTD02 Conservation and Land Management, RTE03 Rural Production, RTF03 Amenity Horticulture and/or other endorsed Training Packages.
--

Units selected must be aligned to Certificate I, II or III outcomes. These units must be relevant to work undertaken in the rural sector.
---

<b>Qualification Rules</b>
----------------------------

For a Certificate II in Agriculture specialising in grain production at least 13 of the units of competency presented for this qualification must relate to grain production work procedures, activities or contexts. In addition, at least 13 of the units selected to make up this qualification must be clearly aligned to Certificate II outcomes.
--

## RTE20103: Certificate II in Agriculture specialising in Sugar Production

A total of 17 units of competency must be completed.

- Select 9 units from Group A below (including the 4 designated compulsory units).
- Select 5 additional units from Group A and/or B below.
- Select 3 additional units from Group A, B and/or C below.

Units should be selected from Group A and Group B in accordance with local work undertaken and local industry advice.

<b>Group A (*units in italics are compulsory)</b>	
RTC2309A	Operate tractors
RTC2701A	<i>Follow OHS procedures*</i>
RTC2702A	<i>Observe environmental work practices*</i>
RTC2704A	Provide basic first aid
RTC2705A	<i>Work effectively in the industry*</i>
RTC2706A	Apply chemicals under supervision
RTC2801A	<i>Participate in workplace communications*</i>
RTE2011A	Assist agricultural crop establishment
RTE2029A	Assist agricultural crop maintenance
RTE2030A	Assist agricultural crop harvesting
RTE2303A	Operate cane haulage vehicle
RTE2604A	Maintain drainage systems
RTE2605A	Maintain gravity-fed irrigation delivery systems
RTE2606A	Maintain pressurised irrigation systems
RTE2504A	Determine basic properties of soil/growing media

<b>Group B</b>	
RTC2210A	Maintain properties and structures
RTC2301A	Undertake operational maintenance of machinery
RTC2306A	Operate vehicles
RTC2307A	Operate machinery and equipment
RTE2002A	Assist with prescribed burning
RTE2601A	Assist with the operation of gravity fed irrigation
RTE2602A	Assist with the operation of pressurised irrigation
RTE2707A	Follow site quarantine procedures

<b>Group C</b>
----------------

This group includes other units of competency from RTD02 Conservation and Land Management, RTE03 Rural Production, RTF03 Amenity Horticulture and/or other endorsed Training Packages.
--

Units selected must be aligned to Certificate I, II or III outcomes. These units must be relevant to work undertaken in the rural sector.
---

<b>Qualification Rules</b>
----------------------------

For a Certificate II in Agriculture specialising in sugar production at least 13 of the units of competency presented for this qualification must relate to sugar production work procedures, activities or contexts. In addition, at least 13 of the units selected to make up this qualification must be clearly aligned to Certificate II outcomes.
--

## RTE20603: Certificate II in Production Horticulture

A total of 17 units of competency must be completed.

- Select 9 units from Group A below (including the 4 designated compulsory units).
- Select 5 additional units from Group A and/or B below.
- Select 3 additional units from Group A, B and/or C below.

Units should be selected from Group A and Group B in accordance with local work undertaken and local industry advice.

<b>Group A (*units in italics are compulsory)</b>	
RTC2307A	Operate machinery and equipment
RTC2309A	Operate tractors
RTC2701A	<i>Follow OHS procedures*</i>
RTC2702A	<i>Observe environmental work practices*</i>
RTC2704A	Provide basic first aid
RTC2705A	<i>Work effectively in the industry*</i>
RTC2706A	Apply chemicals under supervision
RTC2801A	<i>Participate in workplace communications*</i>
RTE2003A	Carry out postharvest operations
RTE2006A	Carry out basic canopy maintenance
RTE2010A	Establish horticultural crops
RTE2021A	Support horticultural crop harvesting
RTE2602A	Assist with the operation of pressurised irrigation
RTE2707A	Follow site quarantine procedures
RTF2504A	Determine basic properties of soil/growing media

<b>Group B</b>	
RTC2026A	Undertake propagation activities
RTC2210A	Maintain properties and structures
RTC2301A	Undertake operational maintenance of machinery
RTC2401A	Treat weeds
RTC2404A	Treat plant pests, diseases and disorders
RTE2018A	Regulate crops
RTE2028A	Undertake field budding and grafting
RTE2503A	Observe and report on weather
RTE2601A	Assist with the operation of gravity fed irrigation
RTE2603A	Lay irrigation and/or drainage pipes
RTE2604A	Maintain drainage systems
RTE2605A	Maintain gravity-fed irrigation systems
RTE2606A	Maintain pressurised irrigation systems
RTE2902A	Collect and record production data

<b>Group C</b>
----------------

This group includes other units of competency from RTD02 Conservation and Land Management, RTE03 Rural Production, RTF03 Amenity Horticulture and/or other endorsed Training Packages.
--

Units selected must be aligned to Certificate I, II or III outcomes. These units must be relevant to work undertaken in the rural sector.
---

<b>Qualification Rules</b>
----------------------------

For a Certificate II in Production Horticulture at least 13 of the units of competency presented for this qualification must relate to production horticulture work procedures, activities or contexts. In addition, at least 13 of the units selected to make up this qualification must be clearly aligned to Certificate II outcomes.
--

The following table indicates the category status of each unit of competency available in the 240-hour HSC course. This information is provided to assist teachers when selecting elective units of competency to meet qualification packaging rules.

**Table 8 Units of competency by grouping in the Primary Industries Curriculum Framework**

General Qualifications available in the Primary Industries Curriculum Framework	Certificate II in Conservation and Land Management	Certificate II in Rural Operations	Certificate II in Agriculture	Certificate II in Horticulture
Qualification packaging rules	5 units – A (incl *) 8 units – B 2 units – B and/or C Total = 15 units	4 units – A (incl *) 6 units – B 7 additional units Total = 17 units	4 units – A (incl *) 10 units – B 3 units – B and/or C Total = 17 units	4 units – A (incl *) 10 units – B 3 units – B and/or C Total = 17 units
Units of competency available in the HSC 240-hour course	<b>Group A, B or C</b>			
<b>MANDATORY</b>				
RTC2209A Install, maintain and repair fencing	B	B	B	B
RTC2401A Treat weeds	B	B	B	B
RTC2701A Follow OHS procedures	A*	A*	A*	A*
RTC2702A Observe environmental work practices	A*	A*	A*	A*
RTC2704A Provide basic first aid	A*	B	B	B
RTC2705A Work effectively in the industry	A*	A*	A*	A*
RTC2706A Apply chemicals under supervision	B	B	B	B
RTC2801A Participate in workplace communications	A*	A*	A*	A*
RTE2503A Observe and report on weather	C	B	B	B

General Qualifications available in the Primary Industries Curriculum Framework	Certificate II in Conservation and Land Management	Certificate II in Rural Operations	Certificate II in Agriculture	Certificate II in Horticulture
<b>ELECTIVES – General</b>				
RTC2210A Maintain properties and structures	B	B	B	B
RTC2301A Undertake operational maintenance of machinery	B	B	B	B
RTC2307A Operate machinery and equipment	B	B	B	B
RTC2309A Operate tractors	B	B	B	B
RTD2202A Conduct erosion and sediment control activities	B	B	C	C
RTD2313A Clean machinery of plant, animal and soil material	B	B	B	C
RTD2803A Observe and report plants and/or animals	B	B	C	C
RTE2201A Carry out basic electric fencing operations	C	B	B	C
RTE2308A Operate ride-on vehicles	C	B	B	B
RTE2603A Lay irrigation and/or drainage pipes	C	B	B	B
RTE2804A Provide information on products and services	C	B	B	C
RTE2902A Collect and record production data	C	B	B	B

General Qualifications available in the Primary Industries Curriculum Framework	Certificate II in Conservation and Land Management	Certificate II in Rural Operations	Certificate II in Agriculture	Certificate II in Horticulture
<b>ELECTIVES – Livestock</b>				
RTE1105A Undertake basic shearing and crutching	C	B	C	C
RTE2110A Maintain livestock water supplies	C	B	B	C
RTE2113A Monitor livestock to parturition	C	B	B	C
RTE2114A Monitor water supplies	C	B	B	C
RTE2115A Muster and move livestock	C	B	B	C
RTE2117A Pen sheep	C	B	B	C
RTE2118A Handle livestock using basic techniques	C	B	B	C
RTE2124A Carry out birthing duties	C	B	B	C
RTE2128A Provide feed for livestock	C	B	B	C
RTE2134A Assist with feeding in an intensive production system	C	B	B	C
RTE2136A Load and unload livestock	C	B	B	C
RTE2144A Carry out regular livestock observation	C	B	B	C
RTE2216A Assist in preparing for shearing and crutching	C	B	B	C
RTE3133A Prepare livestock for competition	C	B	C	C

General Qualifications available in the Primary Industries Curriculum Framework	Certificate II in Conservation and Land Management	Certificate II in Rural Operations	Certificate II in Agriculture	Certificate II in Horticulture
<b>ELECTIVES – Plants</b>				
RTC2012A Plant trees and shrubs	B	B	C	B
RTC2016A Recognise plants	B	B	B	B
RTC2026A Undertake propagation activities	B	B	B	B
RTC2404A Treat plant pests, diseases and disorders	B	B	B	B
RTD2004A Collect, prepare and preserve plant specimens	B	B	C	C
RTF2013A Pot-on plants	C	B	C	B
RTF2014A Prepare and maintain plant displays	C	B	C	B
RTF2017A Prune shrubs and small trees	C	B	C	B
RTF2024A Tend nursery plants	C	B	C	B
RTF2025A Transplant small trees	C	B	C	B
RTF2504A Determine basic properties of soil/ growing media	C	B	B	B
RTE2010A Establish horticultural crops	C	B	B	B
RTE2011A Assist agricultural crop establishment	C	B	B	C
RTE2021A Support horticultural crop harvesting	C	B	B	B
RTE2029A Assist agricultural crop maintenance	C	B	B	C
RTE2030A Assist agricultural crop harvesting	C	B	B	C

General Qualifications available in the Primary Industries Curriculum Framework	Certificate II in Conservation and Land Management	Certificate II in Rural Operations	Certificate II in Agriculture	Certificate II in Horticulture
<b>Additional elective units</b>				
FPIFGM162A Collect, treat and store seed	B	B	C	C
RTC1301A Operate basic machinery and equipment	C	C	C	C
RTD2022A Carry out natural area restoration works	B	B	C	B
RTD2126A Recognise animals	B	B	C	C
RTD2206A Install aggregate paths	B	B	C	B
RTD2501A Maintain cultural places	B	B	C	C
RTD2502A Maintain wildlife habitat refuges	B	B	C	C

## 16 Glossary

ANTA	<b>Australian National Training Authority.</b>
AQF	<b>Australian Qualifications Framework.</b> The AQF is a comprehensive policy framework defining all qualifications recognised nationally in post-compulsory education and training in Australia. The qualification level depends on the depth, complexity and degree of autonomy involved in the work. The Australian Qualifications Framework comprises guidelines which define each qualification, together with principles and protocols covering articulation, issuing of a qualification, and transition arrangements.
AQTF	<b>Australian Quality Training Framework.</b> The AQTF is a comprehensive approach to national recognition of vocational education and training (VET). It is based on a quality-assured approach to the registration of providers that assess competency outcomes and issue qualifications. It includes mutual recognition, processes for registering training organisations, and quality assurance.
assessment guidelines	The requirements of the assessment system in the industry's Training Package. This component is mandatory and needs to be read in conjunction with the assessment requirements of each competency standard.
AVETMISS	<b>Australian Vocational Education and Training Management Information Statistical Standard.</b>
competency standards/units of competency	<p>The specification of knowledge and skill and the application of that knowledge and skill to the standards of performance required in the workplace, expressed as a competency standard. They provide a description of the skills, knowledge and attitudes required to perform particular kinds of work. Competency standards also define the outcomes for training delivery, assessment and the issuing of qualifications and Statements of Attainment under the Australian Qualifications Framework.</p> <p>Units of competency are composed of elements of competency. They include performance criteria (which specify the required level of performance), the range of variables (which indicates the context for performance) and the evidence guide (which indicates the context for assessment).</p> <p>Competencies are developed nationally as an endorsed component of Training Packages or, where no relevant Training Package exists, as the basis for defining the learning outcomes of an accredited course.</p>
compliance assessment	A systematic and independent external assessment administered by a State Training Authority/State Recognition Authority to determine whether a Registered Training Organisation is operating effectively within its registered scope.

core units of competency	Core units of competency are those required under the AQF to be eligible for the qualification.
elements of competency	The basic building blocks of the unit of competency. Elements of competency break down a unit of competency into workplace-related tasks.
ICFIP	<b>Industry Curriculum Framework Information Package.</b> A document produced by the school system authorities to provide schools with information on teacher qualifications and resource requirements that must be adhered to for the delivery of vocational courses. It also includes quality assurance checklists that must be completed each year to demonstrate compliance with the Australian Quality Training Framework.
ITAB	<b>Industry Training Advisory Body.</b> Independent incorporated associations or companies that assist with the development of training programs. The national ITABs are also concerned with the development of National Training Packages.
mandatory units of competency	Units that must be studied for the Higher School Certificate.
mutual recognition	This encompasses Registered Training Organisations, qualifications and training products: <ul style="list-style-type: none"><li>• Registered Training Organisations – acceptance by a State Recognition Authority/State Training Authority enabling a Registered Training Organisation to operate within its jurisdiction on the basis of its primary registration</li><li>• qualifications – acceptance by a Registered Training Organisation of the recognition decisions of other Registered Training Organisations/State Recognition Authorities relating to the issuing of qualifications and Statements of Attainment, enabling individuals to receive full recognition of their achievements, including credit transfer where appropriate</li><li>• training products – acceptance of recognised training products available in the training market. This includes endorsed Training Packages, training programs for packages, and accredited courses.</li></ul>
NTF	<b>National Training Framework.</b>
NTIS	<b>National Training Information Service.</b> A relational database that provides up-to-date information on recognised vocational education and training, including details of endorsed Training Packages and their components (competency standards, assessment guidelines and qualifications, and any non-endorsed components) together with details of Registered Training Organisations and their scope of registration. The NTIS web address is <a href="http://www.ntis.gov.au">www.ntis.gov.au</a>
OHS	<b>Occupational Health and Safety.</b>

QRRRC	<b>Qualifications, Recognition and Resource Requirements Committee.</b> Determines the teacher qualifications and resource requirements for the delivery of VET courses in NSW schools. Also has responsibility for recognising teacher qualifications and recommending appropriate professional development for VET teachers. The committee includes representatives from the school systems, industry, TAFE NSW and the Office of the Board of Studies.
qualification	The defined set of competencies that establishes a specified identifiable point of achievement, relevant to industry and community needs, expressed in accordance with the titles of the Australian Qualifications Framework and recognised through endorsement as part of a Training Package or through accreditation. The credential awarded by a Registered Training Organisation demonstrates the achievement of the defined set of competencies.
RTO	<b>Registered Training Organisation.</b> Any training organisation registered in accordance with the Australian Recognition Framework providing vocational education, training and/or assessment services. Includes TAFE colleges/institutes, private commercial providers, community providers, schools, higher education institutions, enterprises and firms, industry bodies and any other organisation that meets the requirements for registration.
scope of registration	Defines the parameters of recognition as a Registered Training Organisation in respect of the products and services offered and the range of areas in which the organisation operates. Scope establishes whether the organisation is registered for training delivery and/or skill recognition services and the qualifications and Statements of Attainment it has been granted authority to issue, identified by Training Packages or accredited courses.
Statement of Attainment	The formal certification issued by a relevant approved body (Registered Training Organisation or State Recognition Authority) in recognition that a person has achieved some of the competencies identified for a particular qualification (within a Training Package, accredited course or customised qualification).
Training Packages	Comprehensive, integrated products that provide national benchmarks and resources for delivery, assessment and qualifications in vocational education and training. Training Packages comprise endorsed components of national competency standards, assessment guidelines and qualifications, combined with non-endorsed components that may include learning strategies, assessment resources and professional development materials.
VET	<b>Vocational Education and Training.</b>
VETAB	<b>The Vocational Education and Training Accreditation Board.</b>