



CADET FORESTER PROJECT

CREATING PATHWAYS FOR PROFESSIONAL
CAREERS IN THE FOREST INDUSTRY



Cadet Forester Program

Project Background

The Tasmanian Forest Industry is experiencing a skills shortage in forest management and supervisory roles in all sectors of the industry. This skills shortage is projected to increase as data demonstrates a lack of engagement with formal qualification pathways and a marked decrease in enrolments in diploma level qualifications within the industry.

Through this project, Senior Managers in the Tasmanian forest industry will work together with key Vocational Education and Training agencies and providers, to create a clear training and pathway program that will address the serious shortfall of new entrants into forest management and supervisory roles in all industry sectors in Tasmania.

This project will provide a fit-for-purpose recruiting and training model in place and active by 2018.

This project will:

- Identify and engage with stakeholders to identify demand for a Cadet Forester graduate
- Identify and engage with stakeholders to identify options for inclusion in a career pathway model for a Cadet Forester
- Document a career progression pathway, with varied entry points, to forest management and supervisory roles, designed to attract, engage and retain new entrants to the industry
- Use schools-based apprenticeships and traditional traineeships
- Confirm industry demand and commitment to the model by all stakeholders

Objective

The objective of the Cadet Forester Pathway Program Project is to engage effectively with stakeholders to develop an industry-owned, demand-led workforce development model that will attract new entrants to the industry and engage them in learning and development; specifically, into forest management and supervision career pathways.

Entry Pathways

The Tasmanian Forest Industry, through the Board of the Arbre Forest Industries Training and Careers Hub have identified various resources for recruitment of trainees. Clear entry and exit levels have also been identified from Cert through to Advanced Diploma, as per the requirements of the individual employer, or company.



Cadet Forester Program

Entry point 1- Arbre Five + 5 pre-employment program

This program can cater for the interested job seeker through liaison with job active networks and labour hire companies. Depending on industry need, courses can be contextualised to suit the demand, then delivered at entry level through the Five + 5 program (*see attachment below*).

Depending on the skills and experience of the applicant, they can enter employment and training levels higher than Cert ^{II}. Throughout the course, the introduction and interview process can commence, with work placement and career pathways determined for possible completion of courses or an identified pathway for further work integrated learning.



Arbre_A5 booklet
v1.0_proof3.pdf

Entry point 2 – Australian Schools Based Apprenticeship (ASbA) Program

- Recruiting process - Collaboration between Arbre, UTAS, Beacon and My Education
- Entry level at start of year 12. Current Australian drivers licence required as a pre-requisite
- Potential to start at year 11 for future inductions
- # Forest Growing and Management
- Sustained in-house mentoring process throughout the training process

Career pathway options

There are 104 qualifications listed on the chart provided (*see attachment below*). Whilst we are focusing on one element of Forestry as a business with the Cadet Forester Project, there are many opportunities for trainees to advance their career within the 6 sectors of the Tasmanian Forest industry.

The portability of the training and skills displayed on the chart cannot be underestimated. The training and skills provided from Cert ^{II} through to advanced diploma will suit many other Primary Industry roles in Tasmania and nationally. Examples being fire services, agricultural businesses, both on land and managerial, mining, and civil construction.



Training Packages
Chart.PDF



Cadet Forester Program

Project Outcomes

1. *Identify and engage with key stakeholders in workforce development for the Tasmanian Forest Industry*

The Steering Committee for the Cadet Forest Project is Greg Hickey (S.S.T.), Darren Herd (Forico), Steve Brown and Brodie Frost (Timberlands Pacific) and Clive Woolridge (Technical Forest Services).

To attract and recruit for the Cadet Forester Project, the Arbre Hub has identified, engaged with and formed alliances with the following organisations and their representatives. Beacon Foundation, Ebony Bridle, My Education, Emma Dobson, UTAS, Nathan Kotlarewski, Forest Education Foundation, Darcy Vickers, Australian Schools Based Apprenticeship Unit, Bill Duhig, M.E.G.T Apprentice Network, Damien Pierce and Rob Rule, Timber Training Creswick (TTC).

2. *Negotiate and confirm a career pathway for new entrants to forest management and supervisor roles*

Discussion at the Steering Committee meetings has outlined the expectations of industry for suitable recruits for the role of a Cadet Forester. It is decided that the entrant must be commencing Year 12 and have a valid driver's licence.

In consultation with Timber Training Creswick, ASbA and M.E.G.T, a proposal has been created by Timber Training Creswick (See Below) and adopted as a guide by the Steering Committee. This proposal covers all entry points as well as course descriptions, qualifications, timeframes and requirements from Cert ^{II}@Forest Growing and Management through to Advanced Diploma of Forest Industry Sustainability.



Timber Training
Creswick LtdCFP2018C

3. *Consider and include and validate options for using ASbA,s and User Choice Traineeships and Apprenticeships*

In consultation with ASbA, a draft plan has been created as a pathway direction template for students interested in applying for and accepting a traineeship/apprenticeship starting at Cert ^{II}@Forest Growing and Management (See attachment below). For User Choice traineeships and apprenticeships, the Arbre Hubs



Cadet Forester Program

Five + 5 pre-employment program can be contextualised to suit job seekers and career change applicants to enter at the Cert II level for Forest Growing and Management, or higher if eligible through a recognised prior learning process.



Cert II FGM

4. Quantified commitment by industry stakeholders

In consultation with ASbA the Steering Committee have been advised that a suitable number to start of the Project would be approximately 4 entrants. Currently, as at January 2018, there have been requests for 4 students to take up Schools Based Apprenticeships starting at Cert II Forest Growing and Management. Forico have nominated for 1 student for a position on the North-West Coast stationed at the Ridgley Offices (Position description below). Sustainable Timber Tasmania [formerly Forestry Tasmania] have nominated for 3 students to be located state-wide at Derwent Park, Perth, and Camdale offices.



Cadet Forester
Position Description J.



FW Cadet Forester
Program.msg



FW Cadet
Forester.msg

Project Outputs

A documented career pathway plan has been created through negotiation with Industry representatives on the Steering Committee, Timber Training Creswick, Forestworks and our collaboration with ASbA and our Education Department colleagues. The TTC proposal adopted by the Steering Committee addresses the scope, the high-level requirements, the deliverables, the systems and business process needed, an implementation plan and suggestions for an on-going project team.



Timber Training
Creswick LtdCFP2018C



Cadet Forester Program

Communications and Promotional Material

The Arbre Hub have created a communications and promotional brochure that explains the intent of Cadet Forest Project, and the process for the FIVE + 5 training program. These brochures will be distributed throughout participating schools in the Arbre Hub's community engagement program and the Job Active network (See attachments).



Project findings

This project has been an invigorating process due to the commitment of the industry to recommit to the promotion of forestry as a career by being involved in creating a new avenue for recruiting and committing to adopting students as trainees for Forest Growing and Management with a view to commit to ongoing employment on completion of training.

We have learnt that there is a reluctance to commit to trainees in this area of Forestry by some agencies. It may be easier to poach than commit to training. But we see this project as a real opportunity for other agencies within the forest industry to commit to the Cadet Forester Project as the results of Forico's and SST's training programs bear fruit. Arbre will monitor the trainees throughout their course development and report progress through our Board members and industry channels.

Whilst the Cadet Forester Project is essentially targeted at Cert ^{III}@entry, through our stakeholder engagement process, we have been made aware of an ongoing shortage of Graduate Foresters and the potential loss of University courses that cater for higher level career options in the Forest Industry.

The Cadet Forester Project can promote higher learning opportunity as well as the courses and Universities that deliver such course, but we would need to understand the commitment from Industry to recruit the graduates. There is a significant gap between say a Cert ^{III}@ trainee finishing the course and a graduate competing a University degree in Forestry.

What the Cadet Forester Project does do is promote the ability to continue studies whilst completing the traineeship (work integrated learning) through career pathway plans developed by Forestworks and Timber Training Creswick and promoted through the Arbre Hubs Community Engagement program (Schools and Job Actives).



Cadet Forester Program

Ongoing processes. [May 2018 onwards]

To finalise this project, the Arbre Hub is currently involved in an Industry survey seeking possible further enrolments for the Cadets as well as what further training and education needs are desirable. There are 11 companies currently identified as potential hosts for Cadet Foresters, with potential for some of these businesses hosting the Cadet from another business for a time to complete training modules outside of the host businesses core business.

Through consultation with Skills Tasmania, there is an opportunity to engage with the University College in Launceston to create an Associate Degree in Forestry through the current Assoc. Degree - Agribusiness that is being delivered at the Launceston campus.

The Arbre Hub has hosted consultations with our partner R.T.O. in Timber Training Creswick to look at what an Associate Degree would look like using the current Diploma [Cert 5] and Advanced Diploma [Cert 6] courses available through T.T.C.

THE Arbre Hub will now look for consultations to commence on Friday the 1st of June with Linda McKay from the Uni college to start the process of creating the first Associate Degree – Agribusiness/ Forestry in conjunction and consultation with Timber Training Creswick and Industry leaders through the Board of the Arbre Hub.

There is considerable interest in the outcomes of these consultations to be able to create such a learning program for current employees with Forestry companies to be given an opportunity to be further educated in business management processes delivered in Tasmania pertinent to our Forest Industry as it is now and into the future.

This consultation process will fall outside the allotted time to complete this Skills Tasmania project, but will be reported on as required to Skills Tasmania in the desire that the Associated Degree becomes a reality.



Cadet Forester
Chart.pdf

EXPRESSION OF INTEREST

Please complete and return to Arbre.

Applicant information

Last name: _____ First name: _____ Date: ____/____/____

Street address: _____ Apartment/unit #: _____

City: _____ State: _____ Postcode: _____

Phone: _____ Email: _____

Date available: _____ Position applied for: _____

Are you an Australian citizen? Yes No If no, are you authorised to work in Australia? Yes No

Do you have a current Australian drivers license?* Yes No *Pre-requisite for ASBA traineeship - Please provide a photocopy

Are you committed to completing year 12?*** Yes No **Australian School Based Apprenticeship (ASBA) candidates only

Education

High School: _____ Address: _____

From: ____/____/____ To: ____/____/____ Did you graduate? Yes No Result: _____

College: _____ Address: _____

From: ____/____/____ To: ____/____/____ Did you graduate? Yes No Result: _____

Other: _____ Address: _____

From: ____/____/____ To: ____/____/____ Did you graduate? Yes No Qualification: _____

References (Please list three referees relevant to your circumstances)

Full name: _____ Relationship: _____

Company: _____ Phone: _____

Address: _____

Full name: _____ Relationship: _____

Company: _____ Phone: _____

Address: _____

Full name: _____ Relationship: _____

Company: _____ Phone: _____

Address: _____



CADET FORESTER PROJECT

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COURSE CONTENT

Cadet Forester program has been developed to overcome the shortfall of professional foresters currently needed to work in Tasmania's forest industry.

Trainees can commence on an Australian School Based Apprenticeship for year 12 students, or an adult traineeship for all other applicants. Trainees will be directly employed by individual companies, or by a group training organisation for shared work placements.

AUSTRALIAN SCHOOL BASED APPRENTICESHIP:

- Commence Certificate II in Forest Growing & Management
- Available for year 12 students
- Must have current Australian drivers licence

ADULT TRAINEES:

- Certificate III in Forest Growing & Management
- Options for direct employment or group training model
- Must have current Australian drivers licence

OUTCOMES

Commence as a Certificate II in Forest Growing & Management (ASBA) or Certificate III Forest Growing & Management (Adult Learner). Trainees will work towards achieving a Certificate IV in Forest Operations within four years of employment-subject to annual performance based reviews by respective employers and training providers.

Created by industry, and supported by Tasmania's largest forest growers and producers, Arbre has a clear mandate.

We promote career pathways, and offer linkages to industry for job seekers.



Contact Us

Arbre Forest Industries Training & Careers Hub



Address: 16 Hope St, Invermay TAS 7248



Email: hub@arbre.net.au

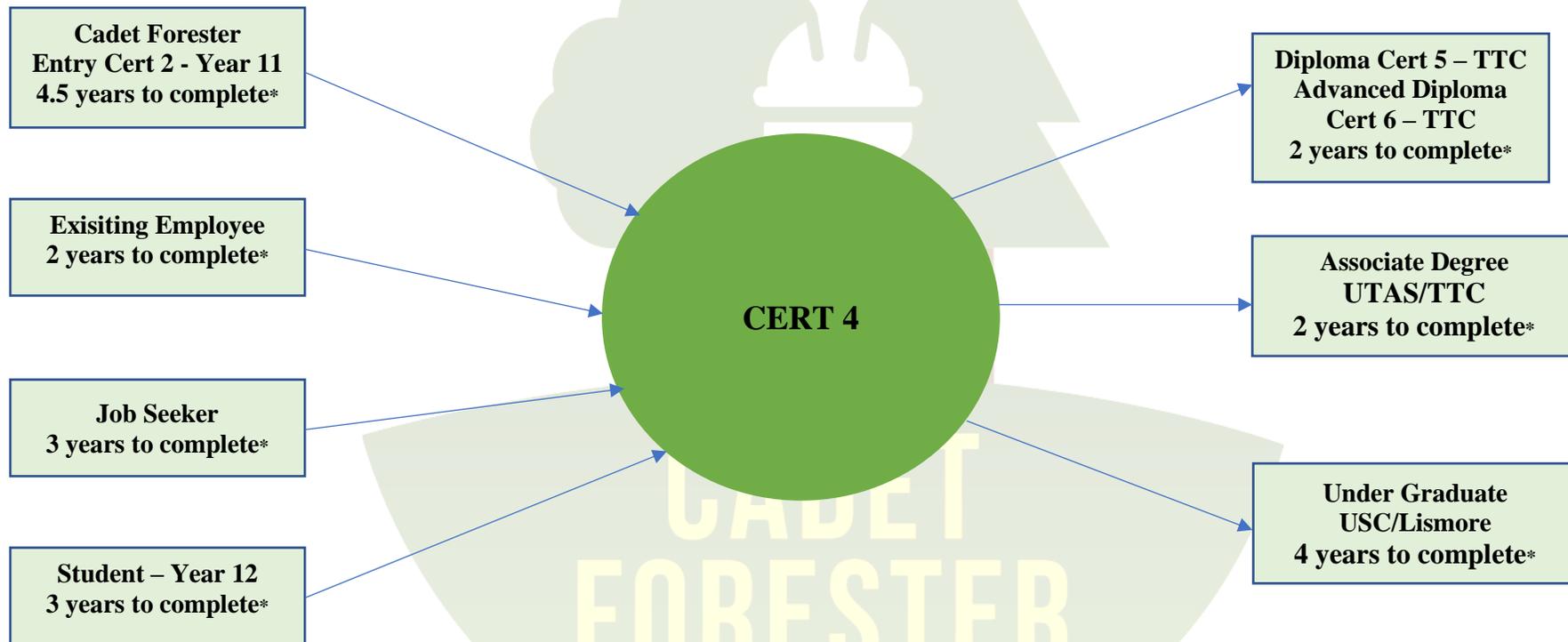


Website: www.arbre.net.au



FOREST INDUSTRY CONCEPT

Recruit→Educate→Employ



- All completion times are estimates



Position Description

Cadet Forester

January 2018

Position Title: Cadet Forester

Date:

Grade (HR use only):

Previous Incumbent: Not applicable

Business Unit:

Location:

Approved by (Name):

(Signature of Position Holder)

Reports to (Name):

(Signature of Immediate Manager)

PD Prepared by (Name):

Previous Review Date:

1. **Position Summary**

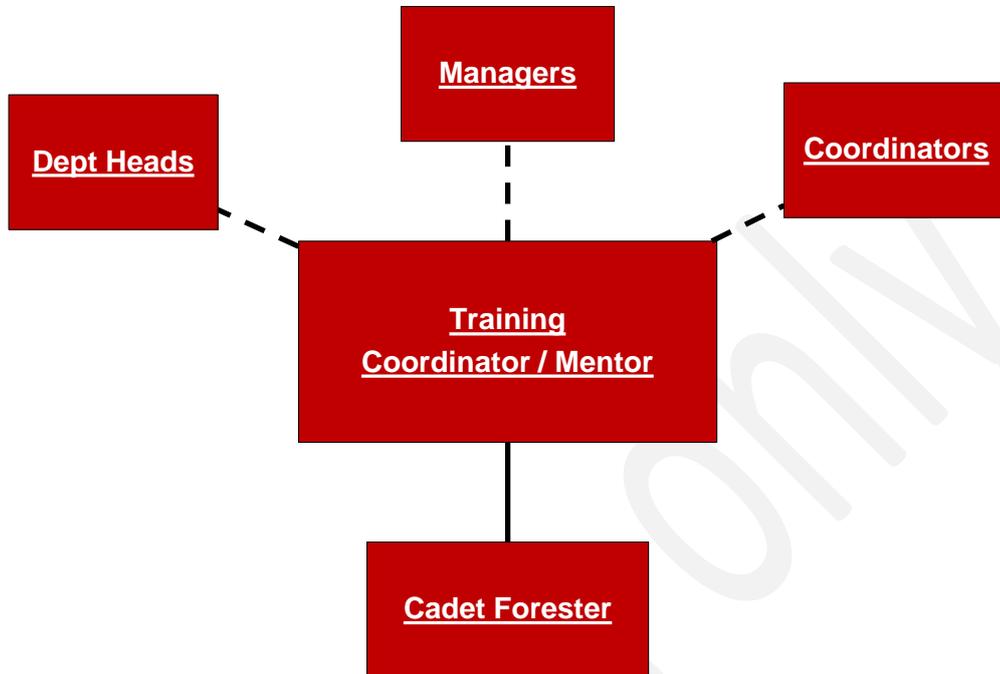
The Cadet Forester will aim to achieve Certificate II in Forest Operations within 12 months of employment commencement. Training will compose both practical and theoretical components. Practical training will be “on the job” working directly with the staff and service providers. Theoretical training and overall assessment of the Cadet Forester’s achievement will be provided by Arbre’s chosen Registered Training Organisation (RTO), as will final recommendation for accreditation.

2. **Dimensions**

The Cadet Forester is employed:

- for a minimum of 7.5hrs up to a maximum of 15hrs paid employment per week during school weeks.
- for a minimum of 4 x 38hr weeks paid training time during school holidays. The paid training time during school holidays should be used for block release to complete theory components with the RTO.

3. Organisational Relationship



4. Major Activities

Key Result Areas (KRA's)	% of Total Job	Result Expectations	Rank
Safety, Health and Environment	15 %	<ul style="list-style-type: none"> In accordance with Company policies and procedures, ensure compliance with duty of care requirements for areas within management control. Comply with the requirements of the Company's Safety, Health and Environment Management System to ensure appropriate management of identified safety, health and environmental significant risks through the implementation of appropriate control measures are deployed in a manner consistent with the Company's management system. Participate in workplace/site Toolbox Meetings. 	

Certificate II in Forest Growing and Management	70 %	<p>ASBA - FWP20116 Certificate II in Forest Growing and Management</p> <p>Core units:</p> <ul style="list-style-type: none"> • FWPCOR2201 Work effectively in the forest and forest products industry • FWPCOR2202 Communicate and interact effectively in the workplace • FWPCOR2203 Follow environmental care procedures • FWPCOR2204 Follow fire prevention procedures • FWPCOR2205 Follow WHS policies and procedures • HLTAID003 Provide first aid <p>Elective units:</p> <ul style="list-style-type: none"> • AHCWRK201A Observe and report on weather • PUAOPE002B Operate communications systems and equipment • PUATEA001B Work in a team • FWPCOT2239 Trim and cut felled trees • FWPCOT2237 Maintain chainsaws • FWPCOT3259 Operate a four wheel on unsealed road • FWPCOT2233 Navigate in forest areas 	
Stakeholder Engagement	10 %	<ul style="list-style-type: none"> • Participate in stakeholder engagement in an open and transparent fashion – including a timely response to any complaints, disputes and grievances. Ensure these interfaces are recorded in the Consultation Manager Database. • Ensure respect for people is valued and, transparency in communication that engenders trust and delivers a working environment whereby the Company is an employer of choice 	
Fire Protection	5 %	<ul style="list-style-type: none"> • Participate in company resource deployment to actively suppress wildfires in emergency response programs for asset protection. 	

5. Major Challenges

- The role requires working both as part of a team and autonomously.
- Appropriate time management principles apply to this role in order to meet defined timelines.

6. **Decision Making Authority**

<u>Decisions Expected</u>	<u>Recommendations Expected</u>
In accordance with approved Strategic Business Plan, Capex projects, operating budgets and Company Delegation of Authority Policy.	

7. **Working Relationships**

<u>Most Frequent Contacts</u>	<u>Nature of Purpose of Contact</u>
Employees	Engage and cooperate with all staff in a constructive and respectful fashion.
Management Systems Coordinator	Reporting relationship.
Stakeholders	Undertaken as appropriate. Email, phone, meetings.

8. **Training, Skills, Licence and Experience Requirements**

<u>Formal Qualifications</u>	
<u>Essential:</u> Current Year 12 student	<u>Desirable:</u> Commitment to complete year 12 schooling
<u>Training:</u>	
<u>Essential:</u>	<u>Desirable:</u>
<u>Preferred Technical Attributes or Competencies:</u> Drivers licence. Advanced computing skills.	
<u>Preferred Behavioural Attributes or Competencies:</u> Innovation. Problem solving. Leadership. Effective time management.	

9. **Other**

At all times act in a professional respectful manner to employees and stakeholders.
 Maintain a comprehensive work diary
 Report regularly to Training Coordinator/Mentor

10. **Tools Required to Perform the Role**

Tools of Trade required to perform the role that is supplied/available whilst in this position:

- Fully maintained company vehicle in accordance with company policies
- Mobile Phone
- Laptop personal computer with remote communication access

Required personal protective equipment

Reliable transport to point of hire (Ridgley Office)

Position Reviewed as at:

By:

Graded by HR as at:

By:

Grading Scoring:

Example Only



Australian Government

FWP20116 Certificate II in Forest Growing and Management

Release 1

FWP20116 Certificate II in Forest Growing and Management

Modification History

Release	Comments
Release 1	This qualification first released with FWP Forest and Wood Products Training Package Release 2.0. It is equivalent to FPI20111 Certificate II in Forest Growing and Management (Release 3) and FPI20113 Certificate II in Forest Growing and Management (Release 3)

Qualification Description

This qualification has seven employment pathways for typical operational environments of forest growing and management. These are:

- Arboriculture Worker
- Farm Forestry Worker
- Forestry Worker
- Nursery Worker
- Plantation Establishment Worker
- Plantation Forest Officer
- Silviculturalist

Licensing, legislative, regulatory, or certification requirements may apply to units in this qualification in some states & territories at the time of publication and may differ according to jurisdiction.

Some imported units in the elective bank may be subject to licensing, legislative, regulatory, or certification requirements. These units must be implemented in line with the licensing requirements outlined in the unit's parent Training Package.

Entry Requirements

There are no entry requirements for this qualification.

Packaging Rules

To be awarded the FWP20116 Certificate II in Forest Growing and Management, competency must be achieved in **thirteen (13)** units of competency.

six (6) core units of competency

seven (7) units of competency from the elective group, consisting of:

- 3 units from Group A
- 4 units from Group A and/or Group B, the total of which can include up to 2 units recommended for packaging at Certificate I, II or III level from this or any other endorsed Training Package or state/territory accredited course.

Elective units must be relevant to work undertaken in the forest growing and management sector of the industry.

Field	Unit Code	Unit Title
Core	FWPCOR2201	Work effectively in the forest and forest products industry
	FWPCOR2202	Communicate and interact effectively in the workplace
	FWPCOR2203	Follow environmental care procedures
	FWPCOR2204	Follow fire prevention procedures
	FWPCOR2205	Follow WHS policies and procedures
	HLTAID003	Provide first aid
GROUP A ELECTIVE UNITS		
Field	Unit Code	Unit Title
Fire Control	AHCFIR201A	Assist with prescribed burning
	AHCWRK201A	Observe and report on weather
	FWPFGM2211	Detect fires
	PUAEQU001B	Prepare, maintain and test response equipment
		Prerequisite PUAFIR215 Prevent injury (Fire sector specific)

	PUAFIR215	Prevent injury
	PUAFIR204B	Respond to wildfire
		Prerequisite PUAFIR215 Prevent injury
	PUAFIR209B	Work safely around aircraft
	PUALAW001B	Protect and preserve incident scene
	PUAOPE002B	Operate communications systems and equipment
	PUATEA001B	Work in a team
Site Establishment and Maintenance	AHCILM201A	Maintain cultural places
	AHCINF202A	Install, maintain and repair fencing
	AHCINF203A	Maintain properties and structures
	AHCIRG331	Install pressurised irrigation systems
	AHCIRG333	Maintain pressurised irrigation systems
	AHCPMG201A	Treat weeds
	AHCSAW201A	Conduct erosion and sediment control activities
	FWPFGM2207	Undertake brushcutting operations
	FWPFGM2210	Implement animal pest control procedures
	FWPFGM2214	Maintain visitor sites
	LGAWORK212A	Perform field support duties in a roadwork environment
Breeding and Propagation	AHCNSY201A	Pot up plants
	AHCNSY203A	Undertake propagation activities

	FWPFGM2201	Collect seed
	FWPFGM2202	Prepare seedbed
	FWPFGM2209	Cut, sort and set cuttings
	FWPFGM2212	Graft cuttings
	FWPFGM2213	Process seed
Tree Growing and Maintenance	AHCARB204A	Use standard climbing techniques to access trees
	AHCARB206A	Operate and maintain stump grinding machines
	AHCPMG202A	Treat plant pests, diseases and disorders
	AHCNSY202A	Care for nursery plants
	FWPCOT2236	Fall trees manually (basic)
	FWPCOR2207	Maintain quality and product care
	FWPCOT2220	Select trees for tending operations
	FWPCOT2239	Trim and cut felled trees
	FWPFGM2203	Plant trees by hand
	FWPFGM2204	Plant trees mechanically
	FWPFGM2205	Prune trees
	FWPFGM2206	Collect data or samples for assessment
Grading and Testing	FWPFGM2215	Measure trees

GROUP B ELECTIVE UNITS		
Field	Unit Code	Unit Title
Warehousing and Distribution	AHCNSY302A	Receive and dispatch nursery products
	FWPCOT2228	Store materials
Machinery and Equipment	TLID3033	Operate a vehicle-mounted loading crane
	FWPCOT2237	Maintain chainsaws
	FWPCOT3259	Operate a four-wheel drive on unsealed roads
	TLIC2002	Drive light rigid vehicle
	TLIC3003	Drive medium rigid vehicle
Load Handling	AHCCHM304A	Transport and store chemicals
	TLID2004	Load and unload goods/cargo
	TLID2010	Operate a forklift
	TLID2012	Operate specialised load shifting equipment
	TLILIC2001	Licence to operate a forklift truck
Safety and Quality Processes	AHCCHM201A	Apply chemicals under supervision
	AHCWRK203A	Operate in isolated and remote situations
	FWPCOT2233	Navigate in forest areas
	RIIWHS205D	Control traffic with stop-slow bat
	FWPCOT3263	Maintain and contribute to energy efficiency

Administration and Business	BSBINM201	Process and maintain workplace information
	BSBITU201	Produce simple word processed documents
	BSBWOR204	Use business technology

Qualification Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FWP20116 Certificate II in Forest Growing and Management	FPI20111 Certificate II in Forest Growing and Management (Release 3) FPI20113 Certificate II in Forest Growing and Management (Release 3)	Updated to meet Standards for Training Packages	Equivalent qualification

Links

Companion Volume Implementation Guide - <http://www.skillsimpact.com.au/forestry-and-timber/skills-standards-and-qualifications/>



FIVE + 5

FOREST INDUSTRY
VOCATIONAL EDUCATION

PRE-EMPLOYMENT TRAINING
FOR A CAREER IN TASMANIA'S
FOREST INDUSTRY

INTRODUCTION

FIVE+5 has been developed to address the shortage of skilled labour currently facing the Tasmanian forest industry. While at the same time offering job seekers a point to launch their careers into the industry.

Arbre's partnership with Forestry, Sawmilling & Transport RTO Businesses, has led to a course tailored to the needs of industry. Offering four contextualised versions of the FIVE+5 to suit Sawmilling, Harvesting, Transport and Silviculture, Arbre is home to the best pre-employment forestry course in Australia.

COURSE CONTENT

Participants in the FIVE+5 will complete up to five nationally accredited units of competency throughout the duration of the course.



Silviculture:

- Chemical handling skills
- Work Health & Safety skills and knowledge
- Tree planting training
- Manual handling skills



Harvesting:

- Environmental awareness
- Work Health & Safety skills and knowledge
- State-of-the-art forest machine simulator training



Transport/Log Haulage Pre-employment:

- Driver assessments
- Licensing
- Skill sets
- Qualifications



Sawmilling/Processing:

- Product care knowledge
- Timber grading skills
- Work Health & Safety skills and knowledge



PROVEN SUCCESS

FIVE+5 courses are proving to offer real career opportunities. Since the launch of FIVE+5 in mid-2016, Arbre has been rolling out courses on a regular basis to address labour shortages. Employers from across the state are continuing to offer real employment opportunities to the course participants.



Created by industry, and supported by Tasmania's largest forest growers and producers, Arbre has a clear mandate.

We promote career pathways, and offer linkages to industry for job seekers.

Contact Us

Arbre Forest Industries Training & Careers Hub

Address: 16 Hope St, Invermay TAS 7248

Email: hub@arbre.net.au

Visit us on the web: www.arbre.net.au



Industry sectors and occupational outcomes of qualifications						
AQF Level	Forest Growing and Management	Harvesting and Haulage	Sawmilling and Processing	Wood Panel and Board Production	Timber Manufactured Products	Timber Merchandising
I	<ul style="list-style-type: none"> Arbiculture Worker Forestry Worker 	<ul style="list-style-type: none"> Bulldozer Operator Chainsaw Operator Excavator Operator Forest Harvester Forwarder Operator Grader Harvesting Technician Mobile Equipment Operator Rigging Slinger Skidder Operator 	<ul style="list-style-type: none"> Kiln Worker Timber Grader Treatment Plant Worker Production Worker Sawmill Worker 	<ul style="list-style-type: none"> Production Worker (Laminates) Production Worker (Panel and Board) Production Worker (Veneer) 	<ul style="list-style-type: none"> Grader Manufacturing Assistant (Timber Products) Saw Operator Timber Manufacturing Worker Timber Products Worker Timber Puller 	<ul style="list-style-type: none"> Customer Service / Sales Assistant (Retail or Wholesale)
II	<ul style="list-style-type: none"> Arbiculture Technician Farm Forestry Technician Forestry Technician Nursery Technician Supervisor (Forestry Operations) Tree Planter Silviculturist 	<ul style="list-style-type: none"> Bulldozer Operator Excavator Operator Feller Buncher Operator Forest Harvester Forwarder Operator Harvesting Technician In-field Chipper Operator Loader Operator Log truck driver Mobile Equipment Operator Skidder Operator 	<ul style="list-style-type: none"> Benchman Chipper Operator Head Rig Operator Kiln Operator Machine Operator Operator (e.g. Finger Jointing, Moulding, Planning) Production Technician 	<ul style="list-style-type: none"> Engineered Timber Products Technician / Operator Kiln Operator Production Technician / Operator (Laminates) Production Technician / Operator (Panel and Board) Production Technician / Operator (Veneer) Timber Fabricator Timber Fabricator (Laminates) 	<ul style="list-style-type: none"> Press Operator Jig Setter Machine Operator (e.g. Finger Jointing, Moulding, Planning) Saw Operator Timber Manufactured Products Technician 	<ul style="list-style-type: none"> Customer Service / Sales Assistant (Retail or Wholesale) Customer Service Officer Sales and Merchandising Team Leader Sales and Merchandising Team Leader (Timber Products) Timber Advisor
III	<ul style="list-style-type: none"> Arbiculture Technician Farm Forestry Technician Forestry Technician Nursery Technician Supervisor (Forestry Operations) Tree Planter Silviculturist 	<ul style="list-style-type: none"> Bulldozer Operator Excavator Operator Feller Buncher Operator Forest Harvester Forwarder Operator Harvesting Technician In-field Chipper Operator Loader Operator Log truck driver Mobile Equipment Operator Skidder Operator 	<ul style="list-style-type: none"> Benchman Chipper Operator Head Rig Operator Kiln Operator Machine Operator Operator (e.g. Finger Jointing, Moulding, Planning) Production Technician 	<ul style="list-style-type: none"> Engineered Timber Products Technician / Operator Kiln Operator Production Technician / Operator (Laminates) Production Technician / Operator (Panel and Board) Production Technician / Operator (Veneer) Timber Fabricator Timber Fabricator (Laminates) 	<ul style="list-style-type: none"> Press Operator Jig Setter Machine Operator (e.g. Finger Jointing, Moulding, Planning) Saw Operator Timber Manufactured Products Technician 	<ul style="list-style-type: none"> Customer Service / Sales Assistant (Retail or Wholesale) Customer Service Officer Sales and Merchandising Team Leader Sales and Merchandising Team Leader (Timber Products) Timber Advisor
IV	<ul style="list-style-type: none"> Arbiculture Supervisor Farm Forestry Supervisor Forestry Supervisor Forestry Operations Supervisor 	<ul style="list-style-type: none"> Harvesting Supervisor Harvesting Team Leader Propagation and Stand Health Supervisor Tree Farm Supervisor 	<ul style="list-style-type: none"> Customer Service Manager (Wholesale) Sawmill Supervisor Production Supervisor Treatment Plant Supervisor 	<ul style="list-style-type: none"> Timber Advisor Supervisor Timber Manufacturing Supervisor Timber Supervisor (Wholesale) 		
V	<ul style="list-style-type: none"> Arbiculture Manager Forest Manager Forestry Manager Harvesting Manager 	<ul style="list-style-type: none"> Nursery Manager Plantation Establishment Manager Plantation Manager Production Manager 	<ul style="list-style-type: none"> Sawmill Manager Timber Advisory Manager Timber Manufacturing Manager Tree Farm Manager 		<ul style="list-style-type: none"> Production Manager (Timber Truss & Frame) Designer (Timber Truss & Frame) 	N/A
VI	<ul style="list-style-type: none"> Community Liaison Officer Designer (Manufacturing and Engineered Wood Products) Environmental Manager Environmental Planner 		<ul style="list-style-type: none"> Forest / Timber Harvester Forest Auditor (e.g. certification provider) Forest Planner Forest Sustainability Manager 	<ul style="list-style-type: none"> Forestry Manager General Manager Plantation Manager Sustainability Manager 	<ul style="list-style-type: none"> Technical Forester Technical Services Officer Technical Services Manager Value Recovery Officer 	

TIMBER TRAINING CRESWICK LTD CADET FORESTER PROGRAM (CFP)- TASMANIA- PROJECT PROPOSAL

January 3, 2018

OVERVIEW

1. Background and Description

This proposal has been developed after consultation between members of the ARBRE Hub, it's Project Manager, Col McCulloch and Rob Rule from Timber Training Creswick.

2. Scope

The Cadet Forester Program (CFP) seeks to provide a structured career pathway for technical foresters and master harvesters with multiple entry and exit points depending on the aspirations, ability and academic capability of the learners. Pathways are detailed from school based entry to Advanced Diploma. Initial discussions have been held with Melbourne University to recognise credit from Diploma and Advanced Diploma achievements towards undergraduate studies.

3. High-Level Requirements

The proposed system allows for the following:

- Multiple entry and exit points at the completion of each qualification level, putting together a career pathway.
- Ability to contextualise a component of learning via Work Integrated Learning (WIL) processes for specific forest and company requirements.
- Ability to access training subsidies and incentives through programs such as School Based Traineeships, User Choice and the Tasmanian Skills Development Service (where approved).
- Flexibility to alter training electives for specific client needs (subject to economic class sizes)
- Recognition pathways at all levels to evaluate existing worker status prior to entry.
- Unit compatibility with the Forestworks Better Business Program at Certificate IV and Diploma
- Compatibility with the FOLS skills verification service.

4. Deliverables

- Certificate II Forest Growing and Management via School Based Apprenticeship/ Traineeship (SBAT), pre-employment, or traineeship training pathways depending on the selected learners.
- Certificate II Public Safety (firefighting) for fire suppression crews (*? For Discussion*) or *failing that incorporation of the fire awareness and suppression skills into the learning program.*
- Certificate III Forest Growing and Management via traineeship training pathway
- Certificate III Harvesting and Haulage via traineeship training pathway
- Certificate IV in Forest Operations via traineeship training pathway, (*with separate streams for harvesting and forestry ?*).
- Diploma of Forest and Forest Products via workforce mentoring and development
- Advanced Diploma of Forest Industry Sustainability via workforce mentoring and development

5. Parties

Key stakeholders in this process are Forest industry resource and harvesting companies potentially including, but not limited to:

- Sustainable Timbers Tasmania or it's successor
- SFM
- Forico
- Technical Forest Services
- PF Olsen
- Timberlands Pacific
- Norske Skog

6. Business Processes or System Needs

Businesses taking part in these programs would be selecting individuals either internal or external to their existing organisation to target for structured professional development using the cadetship model. There is an expectation that businesses taking part would employ the learners (subject to normal performance measures) for the duration of their learning.

7. Exclusions from Scope

It is anticipated that this project would be delivered incrementally, starting at Certificate II level. However if minimum class sizes can be found (4 persons/ qualification) there is an opportunity to start the CFP at Certificates II, III, IV and Diploma commencing 2018, ideally after fire season (subject to SBAT and TSDS project approval)

8. Draft Implementation Plan

May- December 2017- ARBRE Hub member and stakeholder discussion

April- June 2018- Cadetship candidates identified at each level, TSDS and SBAT program approvals sought and approved. Model endorsement sought from stakeholder forums such as IFA, AFCA, Forestworks, etc.

July/ August 2018- Delivery commences.

July/ August 2019- First qualifications issued (Certificate II and III level). Entry into next levels determined. Commence new delivery at Certificate II/III

December 2019- First higher level qualifications achieved (Certificate IV and Diploma level). Determine entry into next levels

9. Suggested Project Team

Suggested project team consists of:

1x management and 1x technical representative from Timber Training Creswick

1x representative Arbre Hub

1x representative Sustainable Timbers Tasmania

1x representative private forestry company (Forico?)

1x representative Skills Tasmania or nominee

APPROVAL AND AUTHORITY TO PROCEED

We approve the project as described above, and authorize the team to proceed.

Name	Title	Date

Appendix 1: FWP20116 Certificate II in Forest Growing and Management with suggested learning units highlighted:

PACKAGING RULES

To be awarded the FWP20116 Certificate II in Forest Growing and Management, competency must be achieved in **thirteen (13)** units of competency.

six (6) core units of competency

seven (7) units of competency from the elective group, consisting of:

- 3 units from Group A
- 4 units from Group A and/or Group B, the total of which can include up to 2 units recommended for packaging at Certificate I, II or III level from this or any other endorsed Training Package or state/territory accredited course.

Elective units must be relevant to work undertaken in the forest growing and management sector of the industry.

Field	Unit Code	Unit Title
Core	FWPCOR2201	Work effectively in the forest and forest products industry
	FWPCOR2202	Communicate and interact effectively in the workplace
	FWPCOR2203	Follow environmental care procedures
	FWPCOR2204	Follow fire prevention procedures
	FWPCOR2205	Follow WHS policies and procedures
	HLTAID003	Provide first aid

GROUP A ELECTIVE UNITS

Field	Unit Code	Unit Title
Fire Control	AHCFIR201A	Assist with prescribed burning
	AHCWRK201A	Observe and report on weather
	FWPFGM2211	Detect fires
	PUAEQU001B	Prepare, maintain and test response equipment
		Prerequisite PUAFIR215 Prevent injury (Fire sector specific)
	PUAFIR215	Prevent injury
	PUAFIR204B	Respond to wildfire
		Prerequisite PUAFIR215 Prevent injury
	PUAFIR209B	Work safely around aircraft
	PUALAW001B	Protect and preserve incident scene
	PUAOPE002B	Operate communications systems and equipment
	PUATEA001B	Work in a team
Site Establishment and Maintenance	AHCILM201A	Maintain cultural places
	AHCINF202A	Install, maintain and repair fencing
	AHCINF203A	Maintain properties and structures
	AHCIRG331	Install pressurised irrigation systems
	AHCIRG333	Maintain pressurised irrigation systems
	AHCPMG201A	Treat weeds
	AHCSAW201A	Conduct erosion and sediment control activities
	FWPFGM2207	Undertake brushcutting operations
	FWPFGM2210	Implement animal pest control procedures

	FWPFGM2214	Maintain visitor sites
	LGAWORK212A	Perform field support duties in a roadwork environment
Breeding and Propagation	AHCNSY201A	Pot up plants
	AHCNSY203A	Undertake propagation activities
	FWPFGM2201	Collect seed
	FWPFGM2202	Prepare seedbed
	FWPFGM2209	Cut, sort and set cuttings
	FWPFGM2212	Graft cuttings
	FWPFGM2213	Process seed
Tree Growing and Maintenance	AHCARB204A	Use standard climbing techniques to access trees
	AHCARB206A	Operate and maintain stump grinding machines
	AHCPMG202A	Treat plant pests, diseases and disorders
	AHCNSY202A	Care for nursery plants
	FWPCOT2236	Fall trees manually (basic)
	FWPCOR2207	Maintain quality and product care
	FWPCOT2220	Select trees for tending operations
	FWPCOT2239	Trim and cut felled trees
	FWPFGM2203	Plant trees by hand
	FWPFGM2204	Plant trees mechanically
	FWPFGM2205	Prune trees
	FWPFGM2206	Collect data or samples for assessment
Grading and Testing	FWPFGM2215	Measure trees

GROUP B ELECTIVE UNITS		
Field	Unit Code	Unit Title
Warehousing and Distribution	AHCNSY302A	Receive and dispatch nursery products
	FWPCOT2228	Store materials
Machinery and Equipment	TLID3033	Operate a vehicle-mounted loading crane
	FWPCOT2237	Maintain chainsaws
	FWPCOT3259	Operate a four-wheel drive on unsealed roads
	TLIC2002	Drive light rigid vehicle
	TLIC3003	Drive medium rigid vehicle
Load Handling	AHCCHM304A	Transport and store chemicals
	TLID2004	Load and unload goods/cargo
	TLID2010	Operate a forklift
	TLID2012	Operate specialised load shifting equipment
	TLILIC2001	Licence to operate a forklift truck
Safety and Quality Processes	AHCCHM201A	Apply chemicals under supervision
	AHCWRK203A	Operate in isolated and remote situations
	FWPCOT2233	Navigate in forest areas
	RIIWS205D	Control traffic with stop-slow bat
	FWPCOT3263	Maintain and contribute to energy efficiency

Administration and Business	BSBINM201	Process and maintain workplace information
	BSBITU201	Produce simple word processed documents
	BSBWOR204	Use business technology

Appendix 2: Certificate III in Forest Growing and Management with:

- I. Suggested Units **Highlighted**.
- II. Credit Transfer units identified by **CT** for continuing students

PACKAGING RULES

To be awarded the FWP30116 Certificate III in Forest Growing and Management, competency must be achieved in **thirteen (13)** units of competency.

six (6) core units of competency

seven (7) units of competency from the elective group, consisting of:

- 3 units from Group A
- 4 units from Group A and/or Group B, the total of which can include up to 2 units recommended for packaging at Certificate II, III or IV level from this or any other endorsed Training Package or state/territory accredited course.

Elective units must be relevant to work undertaken in the forest growing and management sector of the industry.

CORE UNITS

Field	Unit Code	Unit Title
Core	BSBFLM312	Contribute to team effectiveness
	FWPCOR2201	Work effectively in the forest and forest products industry CT
	FWPCOR2202	Communicate and interact effectively in the workplace CT
	FWPCOR3201	Implement safety, health and environment policies and procedures
	FWPCOR3203	Evaluate fire potential and prevention
	HLTAID003	Provide first aid CT

GROUP A ELECTIVE UNITS

Field	Unit Code	Unit Title
Fire Control	AHCWRK302A	Monitor weather conditions
	PUAFIR303B	Suppress wildfire
		Prerequisite PUAFIR204B Respond to wildfire
	PUAFIR309B	Operate pumps

		<p>Prerequisite PUAEQU001B Prepare, maintain and test response equipment And one of the following four units: PUAFIR203B Respond to urban fire OR PUAFIR218 Respond to isolated structure fire OR PUAFIR204B Respond to wildfire OR PUAFIR205B Respond to aviation incident (specialist)</p>
	PUAFIR412	Conduct simple prescribed burns
		<p>Prerequisite PUAFIR303B Suppress wildfire</p>
	PUAFIR413	Develop simple prescribed burn plans
		<p>Prerequisite PUAFIR303B Suppress wildfire</p>
	PUALAW002B	Conduct initial investigation at incident scene
	PUAOHS002B	Maintain safety at an incident scene
	PUATEA002B	Work autonomously
Breeding and Propagation	AHCNSY301A	Maintain nursery plants
	AHCNSY306A	Implement a propagation plan
	FWPFGM3201	Manage seed collection
	FWPFGM3202	Extract seed
Site Establishment and Maintenance	AHCINF303A	Plan and construct conventional fencing
	AHCIRG301A	Implement a maintenance program for an irrigation system
	AHCIRG306A	Troubleshoot irrigation systems
	AHCLSC302A	Construct landscape features using concrete
	AHCLSC304A	Erect timber structures and features
	AHCSAW302A	Implement erosion and sediment control measures
	FWPCOT3221	Rehabilitate tracks, quarries and landings

	FWPFGM3209	Construct and maintain forest roads and tracks
	FWPFGM3210	Patrol forest
Grading and Testing	FWPCOR3204	Visually assess materials
	FWPCOT3223	Grade and mark logs
	FWPCOT3250	Prepare timber to meet import/export compliance requirements
Tree Growing & Maintenance	FWPCOR3202	Conduct quality and product care procedures
	FWPCOT3252	Use environmental care procedures to undertake fire salvage operations
	FWPFGM3212	Fall trees manually (intermediate)
	FWPFGM3213	Fall trees manually (advanced)
	FWPFGM3206	Plan and implement non-commercial thinning operations
	FWPFGM3207	Coordinate stem improvement
	FWPFGM3211	Manage coppice stems
	AHCPMG301A	Control weeds
	AHCPMG302A	Control plant pests, diseases and disorders
	AHCARB307A	Undertake complex tree climbing
GROUP B ELECTIVE UNITS		
Field	Unit Code	Unit Title
Machinery and Equipment	AHCMOM301A	Coordinate machinery and equipment maintenance and repair
	FWPCOT3259	Operate a four-wheel drive on unsealed roads
	FWPCOT3260	Recover four-wheel drive vehicles
	FWPFGM3214	Operate a four wheel drive in a towing situation
	FWPFGM3215	Perform complex 4x4 operations
	A maximum of 2 units may be selected from this field	
	FWPCOT3238	Operate a pole saw

Specialist Machinery and Equipment	RIIHAN308E	Load and unload plant
	RIIMPO315D	Conduct tractor operations
	RIIMPO317E	Conduct roller operations
	RIIMPO318E	Conduct civil construction skid steer loader operations
	RIIMPO319D	Conduct backhoe/loader operations
	RIIMPO320E	Conduct civil construction excavator operations
	RIIMPO321E	Conduct civil construction wheeled front end loader operations
	RIIMPO322D	Conduct civil construction tracked front end loader operations
	RIIMPO324E	Conduct civil construction grader operations
	RIIVEH304D	Conduct tip truck operations
	TLID3036	Lift and move load using a mobile crane
Load Handling	AHCCHM304A	Transport, handle and store chemicals
	TLID3011	Conduct specialised forklift operations
	TLID3014	Load and unload vehicles carrying special loads
Safety and Quality Processes	AHCCHM303A	Prepare and apply chemicals
	FWPCOT3202	Navigate in remote or trackless areas
	FWPCOT3254	Implement environmentally sustainable work practices in the work area/work site
	FWPCOT3255	Apply silvicultural principles
	FWPCOT3256	Apply biodiversity protection principles
	FWPCOT3257	Follow cultural heritage requirements
	FWPCOT3258	Comply with soil and water protection
	FWPCOT3263	Maintain and contribute to energy efficiency
	HLTAID006	Provide advanced first aid
	TLID3035	Operate a boom type elevating work platform

Administratio n and Business	BSBINM301	Organise workplace information
	BSBITU306	Design and produce business documents
Communicati on and Relationship s	BSBFLM303	Contribute to effective workplace relationships
	FWPCOT3222	Present forestry information and interpretations programs
Planning and Analysis	BSBFLM305	Support operational plan

Appendix 3: Certificate IV in Forest Operations with:

- I. Suggested Units **Highlighted**.
- II. Credit Transfer units identified by **CT** for continuing students
- III. Harvesting sector suggested units identified by **HAR**
- IV. Forestry sector suggested units identified by **FOR**

PACKAGING RULES

To be awarded the FWP40116 Certificate IV in Forest Operations, competency must be achieved in **fourteen (14)** units of competency.

five (5) core units of competency

nine (9) units of competency from the elective group, consisting of:

- 2 units from Group A
- 7 units from Group A and/or Group B, the total of which can include up to 2 units recommended for packaging at Certificate III, IV or Diploma level from this or any other endorsed Training Package or state/territory accredited course.

Elective units must be relevant to work undertaken in the forest operations sector of the industry.

CORE UNITS

Field	Unit Code	Unit Title
Core	BSBLED401	Develop teams and individuals
	FWPCOR3203	Evaluate fire potential and prevention CT
	FWPCOR4201	Monitor safety, health and environment policies and procedures
	FWPCOR4202	Monitor and review forestry operations
	FWPCOR4203	Monitor quality and product care procedures

GROUP A ELECTIVE UNITS

Field	Unit Code	Unit Title
Fire Control	PUAFIR511	Conduct complex prescribed burns FOR
		Prerequisite PUAFIR303B Suppress wildfire CT
	PUAFIR513	Develop complex prescribed burn plans FOR
		Prerequisite PUAFIR303B Suppress wildfire
	PUAOPE001B	Supervise response FOR

		Prerequisite PUAFIR302B Suppress urban fire OR PUAFIR303B Suppress wildfire (Fire specific)
Breeding & Propagation	AHCNSY402A	Plan a propagation program
Site Establishment & Maintenance	AHCNAR402A	Plan the implementation of revegetation works
	AHCILM401A	Protect places of cultural significance
	AHCIRG406A	Plan on-site irrigation system installation and construction work
	FWPFGM4201	Implement a forest establishment plan FOR
	FWPFGM4207	Conduct a forest site assessment FOR
	FWPFGM4208	Plan a quarry
	FWPFGM4209	Interpret and use aerial photographs for forest management
	PSPGOV521A	Collect statistical data
Tree Growing & Maintenance	AHCCHM402A	Plan and implement a chemical use program
	AHCPMG402A	Develop a pest management action plan within a local area
	FWPFGM4202	Manage stand health FOR
	FWPFGM4203	Design plantations
	FWPFGM4204	Conduct a pests and diseases assessment FOR
	FWPFGM4205	Monitor regeneration rates
	FWPFGM4206	Conduct a wood volume and yield assessment FOR
Harvesting Operations	FWPHAR4201	Apply tree jacking techniques
	FWPHAR4202	Coordinate log recovery (hook tender)
	FWPHAR4203	Design log landings and snig tracks HAR
	FWPHAR4204	Plan and coordinate fire salvage operations HAR
	FWPHAR4205	Implement harvesting plans HAR

Machinery & Equipment	AHCMOM402A	Supervise maintenance of machinery and equipment HAR
GROUP B ELECTIVE UNITS		
Field	Unit Code	Unit Title
Safety & Quality Processes	BSBMGT403	Implement continuous improvement HAR
	BSBRISK401	Identify risk and apply risk management processes FOR&HAR
	HLTAID003	Provide first aid HAR CT
	HLTAID008	Manage first aid services and resources
	HLTAID006	Provide advanced first aid
	PUALAW002B	Conduct initial investigation at incident scene
	TLIF4007	Implement and coordinate accident-emergency procedures HAR
	MSS015011A	Conduct a sustainability energy audit
	MSS405070A	Develop sustainable energy practices
Administration & Business	BSBINM401	Implement workplace information system
	BSBITS401	Maintain business technology
	BSBPMG416	Apply project procurement procedures
	BSBWRT401	Write complex documents
	FWPFGM4210	Prepare a tender
	TLIR4002	Source goods/services and evaluate contractors
Communication & Relationships	BSBCUS401	Coordinate implementation of customer service strategies
	BSBLDR402	Lead effective workplace relationships HAR
	BSBLDR403	Lead team effectiveness HAR
	PUACOM012B	Liaise with media at a local level
	SITTPPD402	Develop interpretive activities

Training & Assessment	BSBCMM401	Make a presentation
	TAEASS401B	Plan assessment activities and processes
	TAEASS402B	Assess competence
	TAEASS403B	Participate in assessment validation
	TAEDEL301A	Provide work skill instruction
	TAEDEL401A	Plan, organise and deliver group-based learning
	TAEDES401A	Design and develop learning programs
	TAEDES402A	Use training packages and accredited courses to meet client needs
Planning & Analysis	BSBMGT402	Implement operational plan
	BSBRES401	Analyse and present research information
	BSBSMB404	Undertake small business planning
	BSBWOR301	Organise personal work priorities and development

Appendix 4: Diploma of Forest and Forest Products with:

- I. Suggested Units **Highlighted.**
- II. Credit Transfer units identified by **CT** for continuing students
- III. Harvesting sector suggested units identified by **HAR**
- IV. Forestry sector suggested units identified by **FOR**

PACKAGING RULES

To be awarded the FWP50116 Diploma of Forest and Forest Products, competency must be achieved in **fifteen (15)** units of competency.

- six (6) core units of competency
- nine (9) units of competency from the elective group, consisting of:
 - 5 units from Group A
 - 4 units from Group A and /or Group B, the total of which may also include up to 2 units recommended for packaging at Certificate IV, Diploma or Advanced Diploma level from this or any other endorsed Training Package or state/territory accredited course.

Elective units must be relevant to work undertaken in the forest and wood products industry.

CORE UNITS

Field	Unit Code	Unit Title
Core	BSBCUS501	Manage quality customer service
	BSBMGT502	Manage people performance
	BSBMGT516	Facilitate continuous improvement
	BSBWHS503	Contribute to the systematic management of WHS risk
	BSBWOR501	Manage personal work priorities and professional development
	BSBWOR502	Lead and manage team effectiveness

GROUP A ELECTIVE UNITS

Field	Unit Code	Unit Title
Fire Control	PUALAW001B	Protect and preserve incident scene
	PUAOPE001B	Supervise response FOR CT
		Prerequisite PUAFIR302B Suppress urban fire OR PUAFIR303B Suppress wildfire (Fire specific)

	PUAFIR501B	Conduct fire investigation and analysis activities
		Prerequisite PUALAW001B Protect and preserve incident scene
	PUAFIR509B	Implement prevention strategies
	PUAOPE007B	Command agency personnel within a multi-agency emergency response
		Prerequisite PUAOPE021A Control a Level 1 incident PUAOPE015A Conduct briefings and debriefings (Fire sector specific)
Breeding & Propagation	AHCPHT503A	Manage a controlled growing environment
	FWPFGM5212	Manage genetic resources
	FWPFGM5215	Breed trees
Site Establishment & Maintenance	AHCIRG503A	Design irrigation, drainage and water treatment systems
	AHCWAT502A	Manage water systems
	FWPFGM5201	Plan and manage an inventory program FOR
	FWPCOT5206	Implement forestry chain of custody certification system
	FWPFGM5208	Manage road construction and maintenance
	FWPFGM5214	Develop a native forest regeneration plan FOR
	FWPFGM5217	Promote plantations as a sustainable form of land use
	LGAPLEM404A	Prepare and present geographic information systems data FOR
	LGAPLEM612B	Protect heritage and cultural assets FOR
Tree Growing & Maintenance	AHCPGD402A	Plan a plant establishment program
	AHCPMG503A	Develop a strategy for the management of target pests
	AHCNSY401A	Plan a growing-on program
	AHCNSY402A	Plan a propagation program
	AHCWRK505A	Manage trial and research material
	FWPCOT5205	Develop biohazard contingency plans

	FWPFGM5210	Manage tending operations in a native forest FOR
	FWPFGM5211	Coordinate stand nutrition FOR
	FWPFGM5213	Coordinate plantation tending operations FOR
	FWPFGM5216	Manage coupe planning FOR
Harvesting	FWPCOT5209	Manage tree harvesting to minimise environmental impact HAR
	FWPHAR5201	Design harvesting plans HAR
Timber Products & Processes	FWPCOT4201	Produce complex truss and frame plans and details using computers
	FWPCOT4202	Design timber structures
	FWPCOT4204	Schedule and coordinate load shifting
	FWPCOT4205	Coordinate log debarking operations
	FWPCOT4206	Plan and coordinate boiler operations
	FWPCOT4207	Plan and coordinate heat plant operations
	FWPCOT5207	Implement sustainability in the workplace
	FWPFGM5219	Undertake carbon stock sampling of forests and plantations
	FWPSAW4201	Plan and monitor timber treatment plant operations
	FWPSAW4202	Plan and monitor saw log operations
	FWPSAW4203	Coordinate timber drying operations
	FWPSAW4204	Plan and monitor board conversion
	FWPTMM4202	Diagnose and calculate production costs
	FWPTMM4203	Install and commission CNC software
	FWPTMM4204	Sample and test products to specifications
	FWPTMM5201	Assess product feasibility of designs
	FWPTMM5202	Develop, trial and evaluate prototypes
	FWPTMM5203	Generate and transfer complex computer-aided drawings and specifications
	FWPTMM5204	Manage product design
	FWPTMM5205	Optimise CNC operations

	FWPTMM5206	Plan production HAR
	FWPWPP4201	Plan and coordinate panel production
	FWPWPP4202	Perform laboratory testing
Competitive Manufacturing	MSS405001A	Develop competitive systems and practices for an organisation
	MSS405004A	Develop business plans in an organisation implementing competitive systems and practices
GROUP B ELECTIVE UNITS		
Field	Unit Code	Unit Title
Machinery & Equipment	FWPCOT5203	Manage installation and commissioning of equipment
	FWPCOT5204	Organise enterprise maintenance programs HAR
Safety & Quality Processes	AHCCHM401A	Develop procedures to minimise risks in the use of chemicals
	BSBR5K501	Manage risk
	BSBSUS501	Develop workplace policy and procedures for sustainability
	FWPCOT5201	Implement sustainable forestry practices
	PUAOPE005B	Manage a multi-team response
		Prerequisite PUAOPE001B Supervise response (Fire specific)
	MSS015011A	Conduct a sustainability energy audit
	MSS405070A	Develop sustainable energy practices
Administration & Business	BSBAUD501	Initiate a quality audit
	BSBFIM501	Manage budgets and financial plans HAR
	BSBINM501	Manage an information or knowledge management system
	LGACOM401A	Administer contracts

	LGACOM409A	Prepare tender documentation
Planning & Analysis	BSBINN502	Build and sustain an innovative work environment HAR
	BSBMGT517	Manage operational plan HAR
	BSBPMG522	Undertake project work
	BSBWRK506A	Coordinate research and analysis
	PSPGOV521A	Collect statistical data
Training & Assessment	BSBLED501	Develop a workplace learning environment
Communication & Relationships	AHCBUS502A	Market products and services
	FWPCOT5202	Manage forestry information and interpretations programs
	FWPCOT5208	Build and maintain community relationships
	LGACOM502B	Devise and conduct community consultations
	LGAEHRR504C	Implement public environmental health education programs

NB up to two electives from Certificate IV in Forest Operations may be used as credit towards the Diploma.

Appendix 5: Advanced Diploma of Forest Industry Sustainability:

- I. Suggested Units **Highlighted**.
- II. Credit Transfer units identified by **CT** for continuing students

PACKAGING RULES

To be awarded the FWP60116 Advanced Diploma of Forest Industry Sustainability, competency must be achieved in **ten (10)** units of competency.

- two (2) core units of competency
- eight (8) elective units of competency

CORE UNITS

Field	Unit Code	Unit Title
Core	FWPCOR6201	Manage sustainability in the workplace
	FWPCOR6202	Implement practices to maximise value from wood residues

ELECTIVE UNITS

	Unit Code	Unit Title
Sustainable Industry Practices	FWPCOT5201	Implement sustainable forestry practices
	FWPCOT5202	Manage forestry information and interpretations programs
	FWPCOT5205	Develop biohazard contingency plans
	FWPCOT5206	Implement forestry chain of custody certification system
	FWPCOT5207	Implement sustainability in the workplace
	FWPCOT5209	Manage tree harvesting to minimise environmental impact
	FWPCOT6202	Develop and manage a forestry chain of custody certification process for the workplace
	FWPCOT6203	Develop engineered timber products to meet energy efficient building design needs
	FWPCOT6204	Use carbon accounting to estimate emissions
FWPCOT6205	Prepare an enterprise carbon management report	

ELECTIVE UNITS

	Unit Code	Unit Title
	FWPCOT6207	Develop forest management systems and processes
	FWPFGM5217	Promote plantations as a sustainable form of land use
	FWPFGM5219	Undertake carbon stock sampling of forests and plantations
	FWPFGM6201	Plan a bio-char storage system for carbon capture and storage
	FWPFGM6203	Manage sustainable tree inventory
	MSS015002A	Develop strategies for more sustainable use of resources
	MSS015003A	Analyse product lifecycle for sustainability
Leadership and innovation	BSBINN501	Establish systems that support innovation
	BSBINN502	Build and sustain an innovative work environment
	BSBINN601	Lead and manage organisational change
	BSBMGT616	Develop and implement strategic plans
	BSBLDR803	Develop and cultivate collaborative partnerships and relationships
	FWPCOT4208	Implement workplace sustainability practices
	FWPCOT5208	Build and maintain community relationships
	FWPCOT6201	Manage community engagement
	FWPCOT5207	Implement sustainability in the workplace
	FWPCOT6208	Manage innovative thinking and practice in the forest and wood products industry
	FWPCOT6209	Manage forest and wood products industry research
	FWPCOT8101	Lead forest and wood products industry innovative thinking and practice
	FWPCOT8102	Initiate and lead a forest and wood products industry innovation

ELECTIVE UNITS

	Unit Code	Unit Title
	MSS015002A	Develop strategies for more sustainable use of resources
Administration and business	BSBAUD501	Initiate a quality audit
	BSBCMM402	Implement effective communication strategies
	BSBCRT402	Collaborate in a creative process
	BSBFIM501	Manage budgets and financial plans
	BSBSUS501	Develop workplace policy and procedures for sustainability
	BSBWRK506A	Coordinate research and analysis
	ICTSUS804	Use ICT to improve sustainability outcomes
	MSACMT671A	Develop and manage sustainable environmental practices
	PSPPOL603A	Manage policy implementation
	PSPREG603A	Manage and lead inspection and monitoring programs
	SIRXFIN004A	Manage financial resources
	SIRXQUA001A	Develop innovative ideas at work
	TLIE4006	Collect, analyse and present workplace data and information

NB One or two electives completed from the Diploma of Forest and Forest Products may be used as credit towards this qualification.