National Certificate in Forest Operations Advanced (Level 4) with strands in Establishment and Silvicultural Operations Management, Production Tree Felling, Hauler Set-Up, Machine Operations - Hauler, Head Breaker Out - Cable Harvesting, Log Making, Machine Operations - Log Extraction, Machine Operations - Loader, Mechanised Tree Felling, Mechanised Processing, Helicopter Logging, and Inventory

Level 4

Credits 40-76

This qualification has been **reviewed**. The last date to meet the requirements is 31 December 2018.

Transition Arrangements

This qualification has been reviewed and replaced by the New Zealand Certificate in Forest Harvesting Operations (Level 4) with strands in Cable Extraction; Fleet, Sort and Stack; Ground Based Extraction; Head Breaker - Out; Loading; Log Making; Mechanised Felling; Mechanised Processing; Spotting; Swing Yarder Extraction; and Tree Felling [Ref: 2327] and the New Zealand Certificate in Forest Industry Operations (Planning and Monitoring) (Level 4) with strands in Harvesting, Inventory, and Silviculture [Ref: 2330].

Version 4 of this qualification has been republished to extend the last date of enrolment into programmes leading to this qualification from 31 December 2015 to 31 December 2017 and the last date for assessment extended from 31 December 2017 to 31 December 2018.

People currently working towards this national qualification should complete its requirements by 31 December 2018.

New enrolments into programmes leading to this qualification will not be accepted after 31 December 2017.

For detailed information see Review Summaries on the NZQA website.

This qualification contains expiring unit standards for which replacement unit standards have now been registered. For the purposes of this qualification, people who have gained credit for the replacement unit standards are exempt from the requirement to gain credit for the expiring unit standards.

| Credit for | Exempt from |
|------------|-------------|
| 27628 | 6937 |
| 28561 | 17756 |

NZQF National Qualification Registration Information

| Process | Version | Date | Last Date for Assessment |
|---------------|---------|----------------|--------------------------|
| Registration | 1 | August 2008 | December 2012 |
| Review | 2 | March 2010 | December 2014 |
| Revision | 3 | January 2013 | December 2018 |
| Review | 4 | January 2015 | December 2018 |
| Republication | 4 | September 2015 | December 2018 |

Standard Setting Body

Competenz PO Box 9005 Newmarket Auckland 1149

Telephone 0800 526 1800 Fax 09 539 9899

Email qualifications@competenz.org.nz

Website www.competenz.org.nz

National Certificate in Forest Operations Advanced (Level 4) with strands in Establishment and Silvicultural Operations Management, Production Tree Felling, Hauler Set-Up, Machine Operations - Hauler, Head Breaker Out - Cable Harvesting, Log Making, Machine Operations - Log Extraction, Machine Operations - Loader, Mechanised Tree Felling, Mechanised Processing, Helicopter Logging, and Inventory

Level 4

Credits 40-76

Purpose

This qualification is designed for experienced forestry workers who have a good understanding of the forestry operation or operations they work in. The knowledge and skills covered in this qualification are related to crew roles requiring specialist skills, and/or skills leading to crew management are covered in this qualification.

The qualification includes a core compulsory set, a core elective set, and specialist strands. The core compulsory and core elective contain generic knowledge and skills which are applicable in a variety of forest operations, and enable crews to operate in a manner which meets customer needs as well as regulatory requirements. Each strand in this qualification allows candidates to specialise, and to gain advanced knowledge and skills pertaining to the operation they are required to work in.

This qualification builds on the knowledge and skills contained in the National Certificate in Forest Operations (Level 3) with strands in Establishment, Pruning, Thinning to Waste (Small Trees), Tree Felling - Basic Techniques, Thinning for Extraction, Breaking Out for Ground Based Harvesting, Breaking Out for Cable Harvesting, Landing Operations, and Mensuration [Ref: 1411].

As the Establishment and Silvicultural Operations Management strand covers management skills related to a variety of Silvicultural operations, candidates must have experience and qualifications in more than one Silvicultural operation before enrolling in this strand.

Candidates who have completed this qualification will have a wide range of technical skills relating to the operation they are employed in. They will be completely responsible for their own output, and will have the skills and knowledge required to monitor the output of other crew members when required. Depending on the selection of standards some candidates will be capable of operational management for their worksite.

The inclusion of Set B in the core elective section provides opportunities for employers and candidates to select standards from other areas of the Directory of Assessment Standards that meet the specific requirements of the enterprise.

People who complete this qualification may continue onto the National Certificate in Forestry (Operations Management) [Ref: 0834], the National Certificate in Forestry (Business Management) [Ref: 0820], the National Certificate in Forest Operations Management (Senior Crew Manager) [Ref: 1614] and/or the National Diploma in Forestry (Forest Management) (Level 6) [Ref: 0232].

Special Notes

- It is recommended that candidates hold the National Certificate in Forest Operations (Level 3) with strands in Establishment, Pruning, Thinning to Waste (Small Trees), Thinning to Waste (Large Trees), Tree Felling Basic Techniques, Thinning for Extraction, Breaking Out for Ground Based Harvesting, Breaking Out for Cable Harvesting, Landing Operations, and Mensuration [Ref: 1411], or demonstrate equivalent knowledge and skills before they commence this qualification.
- People completing the Establishment and Silvicultural Operations Management strand must have completed the National Certificate in Forest Operations (Level 3) with a minimum of two of the following strands: Establishment, Pruning, Thinning to Waste (Small Trees), Thinning to Waste (Large Trees), Thinning for Extraction [Ref: 1411], or demonstrated equivalent knowledge and skills.
- People completing the Production Tree Felling strand must have completed the National Certificate in Forest Operations (Level 3) with the Tree Felling – Basic Techniques strand [Ref: 1411], or demonstrated equivalent knowledge and skills.
- People completing the Head Breaker Out Cable Harvesting strand must have completed the National Certificate in Forest Operations (Level 3) with the Breaking Out for Cable Harvesting strand [Ref: 1411], or demonstrated equivalent knowledge and skills.
- People completing the Log Making strand must have completed the National Certificate in Forest Operations (Level 3) with the Landing Operations strand [Ref: 1411], or demonstrated equivalent knowledge and skills.
- People completing the Inventory strand must have completed the National Certificate in Forest Operations (Level 3) with the Mensuration strand [Ref: 1411], or demonstrated equivalent knowledge and skills.
- People completing the Helicopter Logging strand must have completed the National Certificate in Forest Operations (Level 3) with the Tree Felling – Basic Techniques strand [Ref: 1411], or demonstrated equivalent knowledge and skills.
- The diagram in Appendix 1 illustrates pathways between Forestry qualifications at Levels 2, 3 and 4.

Credit Range

| | Core Compulsory | Core Elective | | shment and Silvicultural ons Management |
|-------------------------------|--------------------|------------------|----|---|
| | | | С | E |
| Level 2 credits | - | 0-10 | - | 0-10 |
| Level 3 credits | - | 0-10 | - | 0-10 |
| Level 4 or above credits | 10 | 0-10 | 14 | 6-16 |
| Minimum totals | 20 | | 14 | 16 |
| Qualification total with stra | | | 50 | |

| | Production Tree Felling Strand | | Hauler Set-up Strand | | | Machine Operations - Hauler Strand | |
|---------------------------------|--------------------------------|----|-------------------------|----|------|------------------------------------|------|
| | С | | | | С | E | |
| Level 3 credits | - | - | - | - | 0-10 | 8 | 0-10 |
| Level 4 or above credits | 28 | 6 | 10 | 33 | 5-15 | 33 | 5-15 |
| Minimum totals | 28 | 16 | | 33 | 15 | 41 | 15 |
| Qualification total with strand | 64 68 7 | | 76 | | | | |

| | | Head Breaker Out - Cable Harvesting Strand | | Log Making Strand | | Machine Operations - Log Extraction Strand | | |
|---------------------------------|----|--|----|----------------------|----|--|-----|--|
| | С | E | С | | C | E1 | E2 | |
| Level 3 credits | 10 | 0-10 | 8 | | 4 | 10 | 0-6 | |
| Level 4 or above credits | 27 | 5-15 | 20 | | 20 | - | 0-6 | |
| Minimum totals | 37 | 15 | 28 | | 24 | 10 | 6 | |
| Qualification total with strand | | 72 | 4 | 8 | | 60 | | |

| | Machine Operations - Loader Strand | | Mechanised Tree Felling Strand | | | Mechanised Processing Strand | |
|--------------------------|------------------------------------|----|-----------------------------------|----|----|------------------------------------|----|
| | С | E | C | E1 | E2 | С | Е |
| Level 3 credits | 4 | 10 | 5 | 10 | - | 10 | 10 |
| Level 4 or above credits | 30 | - | 20 | - | 8 | 30 | - |
| Minimum totals | 34 | 10 | 25 | 10 | 8 | 40 | 10 |
| Qualification total with | 64 | | | 63 | | 7 | 0 |
| strand | | | | | | | |

| | Helicopter Logging | Inventory S | Strand |
|--------------------------|--------------------|-------------|--------|
| | Strand | С | E |
| Level 3 credits | 6 | - | - |
| Level 4 or above credits | 44 | 15 | 5-8 |
| Minimum totals | 50 | 15 | 5 |
| Qualification total with | 70 | 40 | |
| strand | | | |

Requirements for Award of Qualification

Award of NZQF National Qualifications

Credit gained for a standard may be used only once to meet the requirements of this qualification.

Unit standards and achievement standards that are equivalent in outcome are mutually exclusive for the purpose of award. The table of mutually exclusive standards is provided on the New Zealand Qualifications Authority (NZQA) website: http://www.nzqa.govt.nz/qualifications-standards/standards-exclusion-list/.

Reviewed standards that continue to recognise the same overall outcome are registered as new versions and retain their identification number (ID). Any version of a standard with the same ID may be used to meet qualification requirements that list the ID and/or that specify the past or current classification of the standard.

Summary of Requirements

A minimum of 40 credits at Level 4 or above

- · Core Compulsory standards
- Core Elective A minimum of 10 credits as specified

One of the following strands is required

- Establishment and Silvicultural Operations Management Strand
- Production Tree Felling Strand
- Hauler Set-Up Strand
- Machine Operations Hauler Strand
- Head Breaker Out Cable Harvesting Strand
- Log Making Strand
- Machine Operations Log Extraction Strand
- Machine Operations Loader Strand
- Mechanised Tree Felling Strand
- Mechanised Processing Strand
- Helicopter Logging Strand
- Inventory Strand

Detailed Requirements

Core Compulsory

The following standards are required

Agriculture, Forestry and Fisheries > Forestry > Forest Operations Advanced

| ID | Title | Level | Credit |
|-------|--|-------|--------|
| 24571 | Demonstrate knowledge of internal and external customer needs within a commercial forestry operation | 4 | 4 |
| 24577 | Demonstrate knowledge of health and safety management in a commercial forestry operation | 4 | 6 |

Core Elective

A minimum of 10 credits at Level 2 or above From the following sets

- Set A
- Set B

Set A

Agriculture, Forestry and Fisheries > Forestry > Forest Operations

| ID | Title | Le | vel | Credit |
|-------|---|----|-----|--------|
| 25788 | Demonstrate knowledge of, implement, and audit | 3 | | 6 |
| | temporary traffic control on private forest roads | | | |

Agriculture, Forestry and Fisheries > Forestry > Forest Operations Advanced

| ID | Title | | Level | Credit |
|-------|--|------|-------|--------|
| 1224 | Use prescription maps for forestry operations | | 4 | 4 |
| 17773 | Apply environmental management to harvesting tree a low environmental risk situation | s in | 4 | 6 |
| 24572 | Manage a forestry accident site in a simulated situat | ion | 4 | 7 |

Agriculture, Forestry and Fisheries > Primary Sector > Plant Pest, Weed, and Disease Control

| ID | Title | Level | Credit |
|-------|---|-------|--------|
| 21563 | Demonstrate knowledge of the HSNO Act, and NZS 8409:2004 for the use of agrichemicals | 3 | 5 |

Health > Occupational Health and Safety > Occupational Health and Safety Practice

| ID | Title | Level | Credit |
|-------|--|-------|--------|
| 17601 | Produce an occupational health and safety incident investigation | 4 | 6 |

Set B

From anywhere on the DAS

Establishment and Silvicultural Operations Management Strand

Meet the requirements of all of the following sets

- Establishment and Silvicultural Operations Management Strand Compulsory
- Establishment and Silvicultural Operations Management Strand Elective

Establishment and Silvicultural Operations Management Strand Compulsory

The following standards are required

Agriculture, Forestry and Fisheries > Forestry > Forest Operations Advanced

| ID | Title | Level | Credit |
|-------|---|-------|--------|
| 24576 | Supervise a crew in a commercial forest operation | 4 | 8 |

Agriculture, Forestry and Fisheries > Forestry > Forest Operations Management

| ID | Title | Level | Credit |
|-------|---|-------|--------|
| 25747 | Plan for and monitor production and quality of a forestry operation | 5 | 6 |

Establishment and Silvicultural Operations Management Strand Elective

A minimum of 16 credits

• Of which a minimum of 6 credits at Level 4 or above

Agriculture, Forestry and Fisheries > Forestry > Forest Establishment

| ID | Title | Level | Credit |
|------|---|-------|--------|
| 6966 | Apply environmental management to mechanised land | 4 | 10 |
| | preparation operations | | |

Agriculture, Forestry and Fisheries > Forestry > Forest Health Surveillance

| ID | Title | | Level | Credit |
|-------|--|--------|-------|--------|
| 18615 | Demonstrate the use of the Global Positioning S in forestry operations | System | 5 | 5 |

Agriculture, Forestry and Fisheries > Forestry > Forest Operations Management

| ID | Title | Level | Credit |
|-------|--|-------|--------|
| 6963 | Plan forestry operations to meet environmental requirements | 5 | 12 |
| 24573 | Plan for, manage, and perform quality control on a production thinning operation | 5 | 15 |

Agriculture, Forestry and Fisheries > Forestry > Forestry Knowledge

| ID | Title | Level | Credit |
|------|---|-------|--------|
| 1145 | Demonstrate knowledge of environmental legislation | 5 | 2 |
| 1146 | affecting commercial forestry Demonstrate knowledge of health and safety legislation | 5 | 2 |
| | affecting commercial forestry | | |

| Field | Subfield | Domain |
|-------------------------------------|-------------|-------------------------------------|
| Agriculture, Forestry and Fisheries | Agriculture | Agricultural Vehicles and Machinery |
| | Forestry | Forest Silvicultural Operations |

Production Tree Felling Strand

- Production Tree Felling Strand Compulsory
- Production Tree Felling Strand Elective 1
- Production Tree Felling Strand Elective 2

Production Tree Felling Strand Compulsory

The following standards are required

Agriculture, Forestry and Fisheries > Forestry > Tree Felling

| ID | Title | Level | Credit |
|-------|---|-------|--------|
| 17765 | Fell trees in a commercial forest harvesting operation | 4 | 20 |
| 19765 | Assess and deal with individual windthrown trees in a forest plantation | 4 | 8 |

Production Tree Felling Strand Elective 1

A minimum of 6 credits

Agriculture, Forestry and Fisheries > Forestry > Tree Felling

| ID | Title | | Lev | el | Credit |
|-------|--|---|-----|----|--------|
| 24569 | Fell trees using machine pushing assistance | | 4 | | 6 |
| 24570 | Fell trees using back-pulling machine assistance | V | 4 | | 6 |

Production Tree Felling Strand Elective 2

A minimum of 10 credits

Agriculture, Forestry and Fisheries > Forestry > Forest Operations Advanced

| ID | Title | | Level | Credit |
|------|-------------------------------------|----------------|-------|--------|
| 6964 | Apply environmental management to h | arvesting tree | es 4 | 10 |

Agriculture, Forestry and Fisheries > Forestry > Forest Operations Management

| ID | Title | Level | Credit |
|-------|--|-------|--------|
| 24582 | Plan for, manage, and perform quality control on a ground based motor manual clear fell harvesting operation | 5 | 15 |

Agriculture, Forestry and Fisheries > Forestry > Tree Felling

| ID | Title | Level | Credit |
|-------|--|-------|--------|
| 1270 | Salvage windthrown trees | 4 | 12 |
| 17756 | Assess and manage individual hazardous trees | 4 | 15 |
| 24585 | Use tree jacks to fell trees | 4 | 10 |

Hauler Set-Up Strand

- Hauler Set-Up Strand Compulsory
- Hauler Set-Up Strand Elective

Hauler Set-Up Strand Compulsory

The following standards are required

Agriculture, Forestry and Fisheries > Forestry > Forest Harvesting Operations

| ID | Title | Level | Credit |
|-------|--|-------|--------|
| 1262 | Position, secure and raise an integral tower on a cable yarder | 4 | 10 |
| 1268 | Prepare wire ropes, rigging, and equipment for cable harvesting operations | 4 | 15 |
| 24578 | Plan and manage a cable yarder downtower operation and plan the relocation of the cable yarder | 4 | 8 |

Hauler Set-Up Strand Elective

A minimum of 15 credits

• Of which a minimum of 5 credits at Level 4 or above

Agriculture, Forestry and Fisheries > Forestry > Forest Harvesting Operations

| ID | Title | Level | Credit |
|-------|--|-------|--------|
| 1269 | Plan, prepare for, and carry out lineshifts in a cable harvesting operation | 4 | 15 |
| 17764 | Plan and rig an elevated support system for a cable harvesting operation | 4 | 15 |
| 17771 | Carry out lineshifts in a cable harvesting operation using a mobile tailhold machine | 4 | 15 |

Agriculture, Forestry and Fisheries > Forestry > Forest Operations Management

| ID | Title | Level | Credit |
|-------|---|-------|--------|
| 26799 | Plan for, manage, and perform quality control on a cable harvesting operation | 5 | 15 |

Agriculture, Forestry and Fisheries > Forestry > Machine Operations - Forestry

| ĬĎ | Title | Level | Credit |
|------|--|-------|--------|
| 6934 | Operate a skidder in a forestry situation | 3 | 10 |
| 6935 | Operate an excavator based tracked machine in a forestry situation | 3 | 10 |
| 6936 | Operate a tracked machine in a forestry situation | 3 | 10 |

Machine Operations - Hauler Strand

- Machine Operations Hauler Strand Compulsory
- Machine Operations Hauler Strand Elective

Machine Operations - Hauler Strand Compulsory

The following standards are required

Agriculture, Forestry and Fisheries > Forestry > Forest Harvesting Operations

| ID | Title | Level | Credit |
|------|--|-------|--------|
| 1268 | Prepare wire ropes, rigging, and equipment for cable harvesting operations | 4 | 15 |
| 6920 | Demonstrate knowledge of cable harvesting operations | 3 | 8 |
| 6921 | Extract stems using a cable yarder | 4 | 18 |

Machine Operations - Hauler Strand Elective

A minimum of 15 credits

• Of which a minimum of 5 credits at Level 4 or above

Agriculture, Forestry and Fisheries > Forestry > Forest Harvesting Operations

| ID | Title | | Level | Credit |
|-------|---|------|-------|--------|
| 1269 | Plan, prepare for, and carry out lineshifts in a can harvesting operation | able | 4 | 15 |
| 17771 | Carry out lineshifts in a cable harvesting operations using a mobile tailhold machine | ion | 4 | 15 |

Agriculture, Forestry and Fisheries > Forestry > Forest Operations Management

| ID | Title | Level | Credit |
|-------|---|-------|--------|
| 26799 | Plan for, manage, and perform quality control on a cable harvesting operation | 5 | 15 |

Agriculture, Forestry and Fisheries > Forestry > Machine Operations - Forestry

| ID | Title | Level | Credit |
|------|--|-------|--------|
| 6934 | Operate a skidder in a forestry situation | 3 | 10 |
| 6935 | Operate an excavator based tracked machine in a forestry situation | 3 | 10 |
| 6936 | Operate a tracked machine in a forestry situation | 3 | 10 |

Head Breaker Out - Cable Harvesting Strand

- Head Breaker Out Cable Harvesting Strand Compulsory
- Head Breaker Out Cable Harvesting Strand Elective

Head Breaker Out - Cable Harvesting Strand Compulsory

The following standards are required

Agriculture, Forestry and Fisheries > Forestry > Forest Harvesting Operations

| ID | Title | Level | Credit |
|------|--|-------|--------|
| 1269 | Plan, prepare for, and carry out lineshifts in a cable | 4 | 15 |
| | harvesting operation | | |

Agriculture, Forestry and Fisheries > Forestry > Forestry - Breaking Out

| ID | Title | Level | Credit |
|------|--|-------|--------|
| 1231 | Prepare wire ropes for forest harvesting operations | 3 | 10 |
| 1258 | Coordinate breaking-out for a cable harvesting operation | 4 | 12 |

Head Breaker Out - Cable Harvesting Strand Elective

A minimum of 15 credits

Of which a minimum of 5 credits at Level 4

Agriculture, Forestry and Fisheries > Forestry > Forest Harvesting Operations

| ID | Title | Level | Credit |
|-------|--|-------|--------|
| 1268 | Prepare wire ropes, rigging, and equipment for cable harvesting operations | 4 | 15 |
| 17771 | Carry out lineshifts in a cable harvesting operation using a mobile tailhold machine | 4 | 15 |

Agriculture, Forestry and Fisheries > Forestry > Forest Operations Management

| right and its production is a second of the | | | | | |
|---|--|-------|--------|--|--|
| ID | Title | Level | Credit | | |
| 26799 | Plan for, manage, and perform quality control on a | 5 | 15 | | |
| | cable harvesting operation | | | | |

| ID | Title | Level | Credit |
|------|--|-------|--------|
| 6934 | Operate a skidder in a forestry situation | 3 | 10 |
| 6935 | Operate an excavator based tracked machine in a forestry situation | 3 | 10 |
| 6936 | Operate a tracked machine in a forestry situation | 3 | 10 |

Log Making Strand

The following standards are required

Agriculture, Forestry and Fisheries > Forestry > Forest Landing Operations

| ID | Title | Level | Credit |
|-------|--|-------|--------|
| 1254 | Mark logs to optimise value | 4 | 12 |
| 6924 | Process tree stems on a landing | 3 | 8 |
| 24588 | Demonstrate knowledge of forestry landing management | 4 | 8 |

Machine Operations - Log Extraction Strand

Meet the requirements of all of the following sets

- Machine Operations Log Extraction Strand Compulsory
- Machine Operations Log Extraction Strand Elective 1
- Machine Operations Log Extraction Strand Elective 2

Machine Operations - Log Extraction Strand Compulsory

The following standards are required

Agriculture, Forestry and Fisheries > Forestry > Forestry - Breaking Out

| ID | Title | Level | Credit |
|------|--|-------|--------|
| 1256 | Demonstrate knowledge of ground based log extraction | 3 | 4 |

Agriculture, Forestry and Fisheries > Forestry > Machine Operations - Forestry

| ID | Title | Level | Credit |
|-------|--|-------|--------|
| 27628 | Extract stems using a ground based machine | 4 | 20 |

Machine Operations - Log Extraction Strand Elective 1

A minimum of 10 credits

Agriculture, Forestry and Fisheries > Forestry > Forest Mechanised Harvesting

| ID | Title | Level | Credit |
|------|---|-------|--------|
| 6946 | Operate a forwarder in a forestry situation | 3 | 10 |

| ID | Title | Level | Credit |
|------|--|-------|--------|
| 6934 | Operate a skidder in a forestry situation | 3 | 10 |
| 6935 | Operate an excavator based tracked machine in a forestry situation | 3 | 10 |
| 6936 | Operate a tracked machine in a forestry situation | 3 | 10 |

Machine Operations - Log Extraction Strand Elective 2

A minimum of 6 credits

Agriculture, Forestry and Fisheries > Forestry > Forest Mechanised Harvesting

| ID | Title | Level | Credit |
|------|---|-------|--------|
| 6947 | Bunch tree lengths for extraction or processing | 4 | 10 |
| 6948 | Delimb stems using a static delimber | 4 | 8 |

Agriculture, Forestry and Fisheries > Forestry > Forestry - Breaking Out

| ĬĎ | Title | Level | Credit |
|------|---|-------|--------|
| 1231 | Prepare wire ropes for forest harvesting operations | 3 | 10 |

Agriculture, Forestry and Fisheries > Forestry > Machine Operations - Forestry

| ID | Title | | Le | vel | Credit |
|-------|--|---------|----|-----|--------|
| 17758 | Plan and form an extraction track in a forestry op | eration | 4 | | 6 |

Machine Operations - Loader Strand

Meet the requirements of all of the following sets

- Machine Operations Loader Strand Compulsory
- Machine Operations Loader Strand Elective

Machine Operations - Loader Strand Compulsory

The following standards are required

Agriculture, Forestry and Fisheries > Forestry > Machine Operations - Forestry

| ID | Title | Level | Credit |
|------|--|-------|--------|
| 6926 | Demonstrate knowledge of the log loading process | 3 | 4 |
| 6931 | Fleet, sort, and stack logs | 4 | 15 |
| 6932 | Load a logging truck and/or trailer | 4 | 15 |

Machine Operations - Loader Strand Elective

A minimum of 10 credits

Agriculture, Forestry and Fisheries > Forestry > Forest Mechanised Harvesting

| ID | Title | Level | Credit |
|------|---|-------|--------|
| 6946 | Operate a forwarder in a forestry situation | 3 | 10 |

| ĬĎ | Title | Level | Credit |
|------|---|-------|--------|
| 6927 | Operate a vehicle mounted hydraulic loader in a commercial forestry environment | 3 | 10 |

| ID | Title | Level | Credit |
|------|--|-------|--------|
| 6928 | Operate a Bell machine in a forest or log yard situation | 3 | 10 |
| 6930 | Operate a forked loader in a forestry or log yard situation | 3 | 10 |
| 6935 | Operate an excavator based tracked machine in a forestry situation | 3 | 10 |

Mechanised Tree Felling Strand

Meet the requirements of all of the following sets

- Mechanised Tree Felling Strand Compulsory
- Mechanised Tree Felling Strand Elective 1
- Mechanised Tree Felling Strand Elective 2

Mechanised Tree Felling Strand Compulsory

The following standards are required

Agriculture, Forestry and Fisheries > Forestry > Forest Mechanised Harvesting

| ĬĎ | Title | Level | Credit |
|------|--|-------|--------|
| 6941 | Demonstrate knowledge of forest mechanised harvesting and processing | 3 | 5 |
| 6945 | Fell trees using a mechanised harvesting machine | 4 | 20 |

Mechanised Tree Felling Strand Elective 1

A minimum of 10 credits

Agriculture, Forestry and Fisheries > Forestry > Forest Mechanised Harvesting

| , .g | , | <u></u> | |
|------|---|---------|--------|
| ID | Title | Level | Credit |
| 6946 | Operate a forwarder in a forestry situation | 3 | 10 |

Agriculture, Forestry and Fisheries > Forestry > Machine Operations - Forestry

| ĬĎ | Title | Level | Credit |
|-------|--|-------|--------|
| 6935 | Operate an excavator based tracked machine in a forestry situation | 3 | 10 |
| 24590 | Operate a self-levelling machine in a forestry situation | 3 | 10 |

Mechanised Tree Felling Strand Elective 2

A minimum of 8 credits

Agriculture, Forestry and Fisheries > Forestry > Forest Mechanised Harvesting

| ĬĎ | Title | Level | Credit |
|------|---|-------|--------|
| 6943 | Delimb tree lengths using a mechanised delimber | 4 | 12 |
| 6947 | Bunch tree lengths for extraction or processing | 4 | 10 |

| ID | Title | Level | Credit |
|------|--------------------------------------|-------|--------|
| 6948 | Delimb stems using a static delimber | 4 | 8 |

Mechanised Processing Strand

Meet the requirements of all of the following sets

- Mechanised Processing Strand Compulsory
- Mechanised Processing Strand Elective

Mechanised Processing Strand Compulsory

The following standards are required

Agriculture, Forestry and Fisheries > Forestry > Forest Landing Operations

| ID | Title | Level | Credit |
|------|-------------------------------------|-------|--------|
| 1252 | Demonstrate knowledge of log making | 3 | 5 |

Agriculture, Forestry and Fisheries > Forestry > Forest Mechanised Harvesting

| ID | Title | Level | Credit |
|------|--|-------|--------|
| 6941 | Demonstrate knowledge of forest mechanised harvesting and processing | 3 | 5 |
| 6943 | Delimb tree lengths using a mechanised delimber | 4 | 12 |
| 6944 | Make logs using a mechanised processing machine | 4 | 18 |

Mechanised Processing Strand Elective

A minimum of 10 credits

Agriculture, Forestry and Fisheries > Forestry > Forest Mechanised Harvesting

| ID | Title | Level | Credit |
|-------|---|-------|--------|
| 6946 | Operate a forwarder in a forestry situation | 3 | 10 |
| 24584 | Demonstrate use of a computerised system for | 4 | 5 |
| | controlling harvester functions in a forestry operation | | |

| ĬĎ | Title | Level | Credit |
|-------|--|-------|--------|
| 6935 | Operate an excavator based tracked machine in a forestry situation | 3 | 10 |
| 24590 | Operate a self-levelling machine in a forestry situation | 3 | 10 |

Helicopter Logging Strand

The following standards are required

Agriculture, Forestry and Fisheries > Forestry > Forest Harvesting Operations

| ID | Title | Level | Credit |
|-------|---|-------|--------|
| 19761 | Demonstrate knowledge of helicopter logging | 3 | 6 |
| 19762 | Prepare logs for extraction by helicopter | 4 | 6 |
| 19763 | Measure, mark, and record log details for helicopter extraction | 4 | 8 |
| 19764 | Manage a helicopter forest harvesting operation | 5 | 10 |

Agriculture, Forestry and Fisheries > Forestry > Tree Felling

| ID | Title | Level | Credit |
|-------|--|-------|--------|
| 17765 | Fell trees in a commercial forest harvesting operation | 4 | 20 |

Inventory Strand

Meet the requirements of all of the following sets

- Inventory Strand Compulsory
- Inventory Strand Elective

Inventory Strand Compulsory

The following standards are required

Agriculture, Forestry and Fisheries > Forestry > Forest Mensuration

| ID | Title | Level | Credit |
|---|---|-------|--------|
| 6955 | Carry out forest pre-harvest inventory sampling | 4 | 10 |
| 17768 Establish and measure permanent sample plots for 4 5 forest management and research | | | 5 |

Inventory Strand Elective

A minimum of 1 standard

Agriculture, Forestry and Fisheries > Forestry > Forest Mensuration

| ĬĎ | Title | Level | Credit |
|------|--|-------|--------|
| 6956 | Carry out waste assessment in cutover forest | 4 | 5 |

Agriculture, Forestry and Fisheries > Forestry > Forest Operations Advanced

| ID | Title | Level | Credit |
|-------|---|-------|--------|
| 24576 | Supervise a crew in a commercial forest operation | 4 | 8 |

Transition Arrangements

Version 3

Version 3 was issued following a revision.

Changes to structure and content

- The title of standard 24576 has changed from *Manage a crew in a commercial forest operation* to *Supervise a crew in a commercial forest operation*. This gives an improved separation between supervisors and managers.
- The Production Tree Felling strand has had the compulsory section adjusted resulting in the machine assisted felling standards (24569 and 24570) being moved to an elective section. In most operations machinery is only suited to one of these assisted felling operations.
- Standard 1266 is expiring and has been replaced by unit standard 26799 in the Hauler Set-Up, Machine Operations – Hauler and Head Breaker out – Cable Harvesting strands.
- Standard 1231 has been reduced from Level 4 to Level 3. This change is reflected in the Head Breaker Out – Cable Harvesting and Machine Operations – Log Extraction strands.
- Standard 6937 is expiring and has been replaced by unit standard 27628 in the Machine Operations – Log Extraction strand.
- Standard 24584 relating to use of a computerised system in a mechanised harvesting machine is related to processing of logs rather than felling. This unit standard has been moved from the Mechanised Tree Felling strand to the Mechanised Processing strand.
- The title for standard 17771 in several of the strand electives has been amended and the credits have increased from 5 to 15.

For detailed information see Review Summaries on the NZQA website.

This qualification contains standards that replace earlier standards. For the purposes of this qualification, people who have gained credit for the expiring standards are exempt from the requirement to gain credit for the replacement standards – see table below.

| Credit for | Exempt from |
|------------|--------------|
| 1255 | 24569, 24570 |
| 1266 | 26799 |
| 2722 | 20613 |
| 2723 | 20597 |
| 2724 | 20599 |
| 6937 | 27628 |

Candidates enrolled in version 2 of this qualification can choose to complete that version or transfer their existing achievements to this version. All new candidates will be enrolled in version 3 of this qualification.

Previous versions of the qualification

Version 1 was developed following an extensive review of Forestry standards and qualifications.

Version 2 was issued following a review.

Other standard setting bodies whose standards are included in the qualification

Primary Industry Training Organisation
The Skills Organisation

Certification

This certificate will display the logos of NZQA, the Competenz and the organisation that has been granted consent to assess against standards that meet the requirements of the qualification (accredited).

Classification

This qualification is classified according to the classification system listed on the Directory of Assessment Standards (DAS) and the New Zealand Standard Classification of Education (NZSCED) system as specified below.

| DAS Classification | | NZSCED | |
|--------------------|---|--------|---|
| Code | Description | Code | Description |
| 2002 | Agriculture, Forestry and Fisheries > Forestry > Forest | 050501 | Agriculture, Environmental and Related Studies > Forestry |
| | Operations Advanced | | Studies > Forestry Studies |

Quality Management Systems

Providers and Industry Training Organisations must be granted consent to assess by a recognised Quality Assurance Body before they can register credits from assessment against standards. Organisation with consent to assess and Industry Training Organisations assessing against standards must engage with the moderation system that applies to those standards. Consent to assess requirements and the moderation system are outlined in the associated Consent and Moderation Requirements (CMR) for each standard.

Appendix 1

FORESTRY QUALIFICATIONS - OVERVIEW

