

FPP30110 Certificate III in Pulping Operations

Modification History

Release 3

Elective unit HLT AID003 replaces HLTFA301C.

Release 1.2

Formatting updated, - no changes to outcome.

25 imported units of competency updated:

- BSBWHS403A replaces BSBOHS402B - Equivalent
- BSBWHS401A replaces BSBOHS407A - Equivalent
- CPPSEC2011B replaces CPPSEC2011A - Equivalent
- HLTFA301C replaces HLTFA301B - Equivalent
- MSS402020A replaces MSACMT220A - Equivalent
- MSS402040A replaces MSACMT240A - Equivalent
- MSS402050A replaces MSACMT250A - Equivalent
- MSS402051A replaces MSACMT251A - Equivalent
- MSS402081A replaces MSACMT281A - Equivalent
- MSS403032A replaces MSACMT432A - Equivalent
- MSS403051A replaces MSACMT451A - Equivalent
- MSS404052A replaces MSACMT452A - Equivalent
- TAEASS301B replaces TAEASS301A - Equivalent
- TAEASS401B replaces TAEASS401A - Equivalent
- TAEASS402B replaces TAEASS402A - Equivalent
- TAEASS403B replaces TAEASS403A - Equivalent
- TLID2003A replaces TLID307E - Equivalent
- TLID2010A replaces TLID1007C - Equivalent
- TLID2013A replaces TLID1307C - Equivalent
- TLID2047A replaces TLID707C - Equivalent
- TLID3011A replaces TLID1107C - Equivalent
- TLID3024A replaces TLID2407C - Equivalent
- TLID3031A replaces TLID3107C - Equivalent
- TLID3035A replaces TLID3507C - Equivalent
- UEPOPS411B replaces UEPOPS411A - Equivalent

Description

Not Applicable

Pathways Information

Not Applicable

Licensing/Regulatory Information

Not Applicable

Entry Requirements

Not Applicable

Employability Skills Summary

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

The following table contains a summary of the employability skills for this qualification. This table should be interpreted in conjunction with the detailed requirements of each unit of competency packaged in this qualification. The outcomes described here are broad industry requirements that may vary depending on the packaging options.

Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	• Document and report problems and solutions • Read and interpret required documentation, procedures and reports • Use required forms of communication in identifying and rectifying problems in the workplace
Teamwork	• Communicate in a way that responds positively to individual differences • Report problems and solutions to relevant personnel as required • Request advice and receive feedback
Problem-solving	• Analyse and use sensory information to adjust processes to maximise safety, quality and productivity • Identify and describe problems and their effects within OHS regulations, environmental and safe working requirements/practices, sop and housekeeping requirements • Rectify problems within level of responsibility
Initiative and enterprise	• Determine impact of problems on machinery performance • Take timely corrective action to maximise safety, quality and productivity • Use troubleshooting guides and diagnostic procedures
Planning and organising	• Identify work requirements, and understand and process basic workplace documentation • Plan work priorities and arrangements • Prioritise possible causes for investigation

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

Self-management	• Analyse and determine possible problem causes in a timely manner • Maintain situational awareness in the work area • Respond to instructions or enquiries promptly and in accordance with organisational requirements
Learning	• Communicate effectively with personnel to assist with analysis and resolution of operational problems • Identify, access and interpret relevant historical and operational data and information • Keep informed of changes to legislation, licensing and certification requirements
Technology	• Access, navigate and enter computer-based information • Select and use technology appropriate to communication tasks • Use electronic and other control systems to control equipment and processes as required

Packaging Rules

Qualification Notes

Total number of units = 11

2 Core units *plus*

9 Elective units

At least 1 and up to 3 elective units must be selected from a single Industry Specific group (**Groups A-H**), and must include a start up, shut down or troubleshoot and rectify unit

One elective unit must be selected from *each* of the following Support Electives groups

- Quality
- Numeracy
- OHS
- Sustainability

Remaining electives may be selected from the Supplementary Electives list and can include up to 2 units from an endorsed Training Package or State/Territory accredited course

Elective units must be relevant to the work outcome sought, industry requirements and the qualification level. Units selected must not duplicate each other in content
Please note that imported units from other Training Packages are for the purpose of Industry assessment only and that any licensing requirements are to be dealt with through specific Licensing units, undertaken prior to this qualification and in such a manner as to meet state and territory licensing requirements

CORE UNITS	
Unit Code	Unit Name
FPPPRS210A	Identify and rectify problems in the workplace
BSBCMM201A	Communicate in the workplace
ELECTIVE UNITS INDUSTRY SPECIFIC	
Group A: Chemical recovery operations	
(co-located in Certificate III Papermaking Operations)	
FPPREC210A	Monitor and control chemical recovery operations
FPPREC320A	Prepare and start up chemical recovery operations
FPPREC330A	Co-ordinate and implement chemical recovery shutdowns
Group B: Steam generation	
(co-located in Certificate III Papermaking Operations)	
FPPSTM210A	Monitor and control boiler operation
FPPSTM320A	Manage steam boiler startup
FPPSTM330A	Shut down and bank steam boiler
Group C: Electrical power generation	
(co-located in Certificate III Papermaking	

Operations)	
FPPEPG210A	Monitor and control power generation system
FPPEPG320A	Manage a power generation system startup
FPPEPG330A	Co-ordinate power generation system shutdown
Group D: Stock preparations operations	
FPPSPR210A	Monitor and control stock preparation systems
FPPSPR320A	Prepare and start up stock preparation system for production
FPPSPR330A	Co-ordinate and implement stock preparation system shutdown
Group E: Pulping operations	
FPPPUL210A	Monitor and control pulping operations
FPPPUL320A	Prepare and start up pulping system operations
FPPPUL330A	Co-ordinate and implement pulping plant shutdowns
Group F: Waste paper operations	
FPPWPO210A	Monitor and control waste paper operations
FPPWPO320A	Prepare and start up waste paper operations
FPPWPO330A	Co-ordinate and implement waste paper shutdown
Group G: Primary resource operations	
FPPRES210A	Prepare and operate the woodchip production system
FPPRES340A	Troubleshoot and rectify primary resource operations
Group H: Water services	

(co-located in Supplementary Electives and Certificate III Papermaking Operations)	
FPPWAS340A	Troubleshoot and rectify water systems
Group I: SUPPORT ELECTIVES	
Numeracy	
FPPNUM210A	Estimate and calculate basic data
FPPNUM320A	Measure and calculate routine workplace data
MSS404052A	Apply statistics to processes in manufacturing
OHS	
FPPOHS310A	Contribute to OHS processes
FPPOHS320A	Maintain OHS processes
Quality	
FPPQAS210A	Apply basic quality practices
MSS402051A	Apply quality standards
Sustainability	
FPPSUS210A	Apply sustainable work practices/policies
MSACMT270A	Use sustainable energy practices
MSACMT271A	Use sustainable environmental practices
Group J: SUPPLEMENTARY ELECTIVES	
Chemical preparation	
FPPCPR210A	Prepare chemical products
Computer / process control equipment	

FPPCSK310A	Operate process control equipment
MSAPMOPS212A	Use organisation computers or data systems
Emergency procedures / safety	
BSBOHS403B	Identify hazards and assess OHS risks
BSBWHS401A	Implement and monitor WHS policies, procedures and programs to meet legislative requirements
BSBWHS403A	Contribute to implementing and maintaining WHS consultation and participation processes
MSAPMOHS110A	Follow emergency response procedures
PMAOHS211B	Prepare equipment for emergency response
Environmental monitoring	
FPPENV210A	Identify and monitor environmental discharges/emissions
FPPENV320A	Monitor and control environmental hazards
First aid	
HLTAID003	Provide first aid
MSAPMOHS220A	Provide initial first aid response
Load shifting	
FPPMHV210A	Operate overhead crane
TLID2003A	Handle dangerous goods/hazardous substances
TLID2010A	Operate a forklift
TLID2013A	Move materials mechanically using automated equipment
TLID3011A	Conduct specialised forklift operations

TLID3024A	Use specialised liquid bulk transfer equipment (gravity/pressurised)
TLID3031A	Rig load
TLID3035A	Operate a boom type elevating work platform
TLID2047A	Prepare cargo for transfer with slings
Planning and organising	
MEM30020A	Develop and manage a plan for a simple manufacturing related project
MEM14005A	Plan a complete activity
BSBADM405B	Organise meetings
Preventative maintenance / operator maintainer	
FPPPRM210A	Undertake operator level preventative maintenance
FPPPRM220A	Perform lubrication
MEM09002B	Interpret technical drawings
MEM12023A	Perform engineering measurements
MEM18001C	Use hand tools
MEM18002B	Use power tools/hand held operations
MEM18003C	Use tools for precision work
MEM18006C	Repair and fit engineering components
MEM18007B	Maintain and repair mechanical drives and mechanical transmission assemblies
MEM18009B	Perform levelling and alignment of machines and engineering components
MEM18010C	Perform equipment condition monitoring and

	recording
<i>unit has pre-requisites:</i>	
MEM09002B	Interpret technical drawing
MEM12023A	Perform engineering measurements
MEM18001C	Use hand tools
MEM18002B	Use power tools/hand held operations
MEM18055B	Dismantle, replace and assemble engineering components
MEM18055B	Dismantle, replace and assemble engineering components
MSS402081A	Contribute to the application of a proactive maintenance strategy
Water services	
FPPWAS210A	Operate water systems
FPPWAS340A	Troubleshoot and rectify water systems (unit has pre-requisite) (co-located in Industry Specific: Group H)
Business support	
FPPREL210A	Contribute to effective working relationships
BSBFLM305C	Support operational plan
BSBFLM309C	Support continuous improvement systems and processes
BSBFLM311C	Support a workplace learning environment
BSBFLM312C	Contribute to team effectiveness
BSBRES401A	Analyse and present research information
BSBRISK401A	Identify risk and apply risk management

	processes
BSBWRK402A	Empower workers
BSBWRK403A	Communicate with workers
BSBWRK404A	Promote equality of opportunity and fair treatment for all workers
BSBWRK406A	Participate in the bargaining process
BSBWRK407A	Provide advice to union members
BSBWRK408A	Undertake negotiations
BSBWRK409A	Prepare for and participate in dispute resolution
Training and assessment	
TAEASS301B	Contribute to assessment
TAEDEL301A	Provide work skill instruction
TAEDEL404A	Mentor in the workplace
<i>(The following 3 units count as 1 unit)</i>	
TAEASS401B	Plan assessment activities and processes
TAEASS402B	Assess competence
TAEASS403B	Participate in assessment validation
Laboratory operations	
MSL904001A	Perform standard calibration
MSL973001A	Perform basic tests
Production support	
FPPPRS320A	Solve systemic problems in the workplace
FPPPRV210A	Operate ancillary equipment
FPPPRV320A	Co-ordinate and direct clothing changes

MEM18011C	Shut down and isolate machines/equipment
MSACMS401A	Ensure process improvements are sustained
MSACMT440A	Lead 5S in a manufacturing environment
MSS402020A	Apply quick changeover procedures
MSS402040A	Apply 5S procedures
MSS402050A	Monitor process capability
MSS403032A	Analyse manual handling processes
MSS403051A	Mistake proof an operational process
Security	
CPPSEC2011B	Control access to and exit from premises
CPPSEC2015A	Patrol premises
CPPSEC3007A	Maintain security of environment
Turbine operations	
UEPOPS341A	Shut down a steam turbine
UEPOPS411B	Run up a steam turbine

FPP30210 Certificate III in Papermaking Operations

Modification History

Release 3

Elective unit HLTAID003 replaces HLTFA301C.

Release 1.2

Formatting updated, typographical error corrected (TAEASS401B incorrectly entered as TAEASS401C) - no changes to outcome.

23 imported units of competency updated:

- HLTFA301C replaces HLTFA301B - Equivalent
- BSBWHS403A replaces BSBOHS402B - Equivalent
- BSBWHS401A replaces BSBOHS407A - Equivalent
- CPPSEC2011B replaces CPPSEC2011A - Equivalent
- MSS402020A replaces MSACMT220A - Equivalent
- MSS402040A replaces MSACMT240A - Equivalent
- MSS402050A replaces MSACMT250A - Equivalent
- MSS402051A replaces MSACMT251A - Equivalent
- MSS402081A replaces MSACMT281A - Equivalent
- MSS403032A replaces MSACMT432A - Equivalent
- MSS403051A replaces MSACMT451A - Equivalent
- MSS404052A replaces MSACMT452A - Equivalent
- TAEASS301B replaces TAEASS301A - Equivalent
- TAEASS402B replaces TAEASS402A - Equivalent
- TAEASS403B replaces TAEASS403A - Equivalent
- TLID2003A replaces TLID307E - Equivalent
- TLID2047A replaces TLID707C - Equivalent
- TLID2010A replaces TLID1007C - Equivalent
- TLID2013A replaces TLID1307C - Equivalent
- TLID3011A replaces TLID1107C - Equivalent
- TLID3024A replaces TLID2407C - Equivalent
- TLID3031A replaces TLID3107C - Equivalent
- TLID3035A replaces TLID3507C - Equivalent

Description

Not Applicable

Pathways Information

Not Applicable

Licensing/Regulatory Information

Not Applicable

Entry Requirements

Not Applicable

Employability Skills Summary

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

The following table contains a summary of the employability skills for this qualification. This table should be interpreted in conjunction with the detailed requirements of each unit of competency packaged in this qualification. The outcomes described here are broad industry requirements that may vary depending on the packaging options.

Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	• Document and report problems and solutions • Read and interpret required documentation, procedures and reports • Use required forms of communication in identifying and rectifying problems in the workplace
Teamwork	• Communicate in a way that responds positively to individual differences • Report problems and solutions to relevant personnel as required • Request advice and receive feedback
Problem-solving	• Analyse and use sensory information to adjust process to maximise safety, quality and productivity • Identify and describe problems and their effects within OHS regulations, environmental and safe working requirements/practices, sop and housekeeping requirements • Rectify problems within level of responsibility
Initiative and enterprise	• Determine impact of problems on machinery performance • Take timely corrective action to maximise safety, quality and productivity • Use troubleshooting guides and diagnostic procedures
Planning and organising	• Identify work requirements, and understand and process basic workplace documentation • Plan work priorities and arrangements • Prioritise possible causes for investigation

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

Self-management	• Analyse and determine possible problem causes in a timely manner • Maintain situational awareness in the work area • Respond to instructions or enquiries promptly and in accordance with organisational requirements
Learning	• Communicate effectively with personnel to assist with analysis and resolution of operational problems • Identify, access and interpret relevant historical and operational data and information • Keep informed of changes to legislation, licensing and certification requirements
Technology	• Access, navigate and enter computer-based information • Select and use technology appropriate to communication tasks • Use electronic and other control systems to control equipment and processes as required

Packaging Rules

Qualification Notes

Total number of units = 11

2	Core units <i>plus</i>
9	Elective units

At least 1 and up to 3 elective units must be selected from a single Industry Specific group (**Groups A-H**), and must include a start up, shut down or troubleshoot and rectify unit
One elective unit must be selected from *each* of the following Support Electives groups

- Quality
- Numeracy
- OHS
- Sustainability

Remaining electives may be selected from the Supplementary Electives list and can include up to 2 units from an endorsed Training Package or State/Territory accredited course

Elective units must be relevant to the work outcome sought, industry requirements and the qualification level. Units selected must not duplicate each other in content
 Units previously achieved as part of the successful completion of another qualification in Pulp and Paper manufacturing may not be counted toward this qualification with the exception of Core units and Support Electives

CORE UNITS	
Unit Code	Unit Name
FPPPRS210A	Identify and rectify problems in the workplace
BSBCMM201A	Communicate in the workplace
ELECTIVE UNITS INDUSTRY SPECIFIC	
Group A: Chemical recovery operations	
(co-located in Certificate III Pulping Operations)	
FPPREC210A	Monitor and control chemical recovery operations
FPPREC320A	Prepare and start up chemical recovery operations
FPPREC330A	Co-ordinate and implement chemical recovery plant shutdowns
Group B: Steam generation	
(co-located in Certificate III Pulping Operations)	
FPPSTM210A	Monitor and control boiler operation
FPPSTM320A	Manage steam boiler startup
FPPSTM330A	Shut down and bank steam boiler
Group C: Electrical power generation	
(co-located in Certificate III Pulping Operations)	

FPPEPG210A	Monitor and control power generation system
FPPEPG320A	Manage a power generation system startup
FPPEPG330A	Co-ordinate power generation system shutdown
Group D: Wet end operations	
FPPWEO210A	Monitor and control wet end operations
FPPWEO320A	Prepare and start up wet end operations
FPPWEO330A	Co-ordinate and implement wet end shutdown
Group E: Dry end operations	
FPPDEO210A	Monitor and control dry end operations
FPPDEO320A	Prepare and start up dry end operations
FPPDEO330A	Co-ordinate and implement dry end shutdown
Group F: Coated paper processes	
FPPCPP210A	Monitor and control coated paper processes
FPPCPP320A	Prepare and start up coated paper processes
FPPCPP330A	Co-ordinate the shutdown of coated paper processes
Group G: Finishing and converting	

FPPFCO320A	Prepare and start up finishing and converting operations
FPPFCO340A	Troubleshoot and rectify finishing and converting systems
Group H: Water services	
(co-located in Supplementary Electives and Certificate III Pulp and Paper Operations)	
FPPWAS340A	Troubleshoot and rectify water systems
Group I: SUPPORT ELECTIVES	
Numeracy	
FPPNUM210A	Estimate and calculate basic data
FPPNUM320A	Measure and calculate routine workplace data
MSS404052A	Apply statistics to operational processes
OHS	
FPPOHS310A	Contribute to OHS processes
FPPOHS320A	Maintain OHS processes
Quality	
FPPQAS210A	Apply basic quality practices
MSS402051A	Apply quality standards
Sustainability	
FPPSUS210A	Apply sustainable work practices/policies
MSACMT270A	Use sustainable energy practices

MSACMT271A	Use sustainable environmental practices
Group J: SUPPLEMENTARY ELECTIVES	
Chemical preparation	
FPPCPR210A	Prepare chemical products
Computer / process control equipment	
FPPCSK310A	Operate process control equipment
MSAPMOPS212A	Use enterprise computers or data systems
Emergency procedures / safety	
BSBOHS403B	Identify hazards and assess OHS risks
BSBWHS401A	Implement and monitor WHS policies, procedures and programs to meet legislative requirements
BSBWHS403A	Contribute to implementing and maintaining WHS consultation and participation processes
MSAPMOHS110A	Follow emergency response procedures
PMAOHS211B	Prepare equipment for emergency response
Environmental monitoring	
FPPENV210A	Identify and monitor environmental discharges/emissions
FPPENV320A	Monitor and control environmental hazards
First aid	

HLTAID003	Provide first aid
MSAPMOHS220A	Provide initial first aid response
Load shifting	
FPPMHV210A	Operate overhead crane
TLID2003A	Handle dangerous goods/hazardous substances
TLID2010A	Operate a forklift
TLID2013A	Move materials mechanically using automated equipment
TLID3011A	Conduct specialised forklift operations
TLID3024A	Use specialised liquid bulk transfer equipment (gravity/pressurised)
TLID3031A	Rig load
TLID3035A	Operate a boom type elevating work platform
TLID2047A	Prepare cargo for transfer with slings
Planning and organising	
BSBADM405B	Organise meetings
MEM14005A	Plan a complete activity
MEM30020A	Develop and manage a plan for a simple manufacturing related project
Preventative maintenance / operator maintainer	
FPPPRM210A	Undertake operator level preventative maintenance
FPPPRM220A	Perform lubrication

MEM09002B	Interpret technical drawings
MEM12023A	Perform engineering measurements
MEM18001C	Use hand tools
MEM18002B	Use power tools/hand held operations
MEM18003C	Use tools for precision work
MEM18006C	Repair and fit engineering components
MEM18007B	Maintain and repair mechanical drives and mechanical transmission assemblies
MEM18009B	Perform levelling and alignment of machines and engineering components
MEM18010C	Perform equipment condition monitoring and recording
<i>unit has pre-requisites:</i>	
MEM09002B	Interpret technical drawing
MEM12023A	Perform engineering measurements
MEM18001C	Use hand tools
MEM18002B	Use power tools/hand held operations
MEM18055B	Dismantle, replace and assemble engineering components)
MEM18055B	Dismantle, replace and assemble engineering components
MSS402081A	Contribute to the application of a proactive maintenance strategy
Water services	

FPPWAS210A	Operate water systems
FPPWAS340A	Troubleshoot and rectify water systems (<i>unit has pre-requisite</i>) (co-located in Industry Specific: Group H)
Business support	
FPPREL210A	Contribute to effective working relationships
BSBFLM305C	Support operational plan
BSBFLM309C	Support continuous improvement systems and processes
BSBFLM311C	Support a workplace learning environment
BSBFLM312C	Contribute to team effectiveness
BSBRES401A	Analyse and present research information
BSBRSK401A	Identify risk and apply risk management processes
BSBWRK402A	Empower workers
BSBWRK403A	Communicate with workers
BSBWRK404A	Promote equality of opportunity and fair treatment for all workers
BSBWRK406A	Participate in the bargaining process
BSBWRK407A	Provide advice to union members
BSBWRK408A	Undertake negotiations
BSBWRK409A	Prepare for and participate in dispute resolution
Training and assessment	

TAEASS301B	Contribute to assessment
TAEDEL301A	Provide work skill instruction
TAEDEL404A	Mentor in the workplace
<i>(The following 3 units count as 1 unit)</i>	
TAEASS401B	Plan assessment activities and processes
TAEASS402B	Assess competence
TAEASS403B	Participate in assessment validation
Laboratory operations	
MSL904001A	Perform standard calibration
MSL973001A	Perform basic tests
Production support	
FPPPRS320A	Solve systemic problems in the workplace
FPPPRV210A	Operate ancillary equipment
FPPPRV320A	Co-ordinate and direct clothing changes
MEM18011C	Shut down and isolate machines/equipment
MSACMS401A	Ensure process improvements are sustained
MSACMT440A	Lead 5S in a manufacturing environment
MSS402020A	Apply quick changeover procedures
MSS402040A	Apply 5S procedures
MSS402050A	Monitor process capability

MSS403032A	Analyse manual handling processes
MSS403051A	Mistake proof an operational process
Security	
CPPSEC2011B	Control access to and exit from premises
CPPSEC2015A	Patrol premises
CPPSEC3007A	Maintain security of environment

FPP40110 Certificate IV in Pulping Operations

Modification History

Release 1.2

Formatting updated - no changes to outcome.

23 imported units of competency updated:

- BSBWHS403A replaces BSBOHS402B - Equivalent
- BSBWHS510A replaces BSBOHS405B - Equivalent
- BSBWHS409A replaces BSBOHS406B - Equivalent
- BSBWHS401A replaces BSBOHS407A - Equivalent
- BSBWHS402A replaces BSBOHS408A - Equivalent
- MSS402020A replaces MSACMT220A - Equivalent
- MSS402040A replaces MSACMT240A - Equivalent
- MSS402050A replaces MSACMT250A - Equivalent
- MSS402051A replaces MSACMT251A - Equivalent
- MSS403001A replaces MSACMS400A - Equivalent
- MSS403032A replaces MSACMT432A - Equivalent
- MSS403051A replaces MSACMT451A - Equivalent
- MSS404052A replaces MSACMT452A - Equivalent
- TAEASS301B replaces TAEASS301A - Equivalent
- TAEASS401B replaces TAEASS401A - Equivalent
- TAEASS402B replaces TAEASS402A - Equivalent
- TAEASS403B replaces TAEASS403A - Equivalent
- TAEASS502B replaces TAEASS502A - Equivalent
- TAEASS505A replaces TAAASS501B - Equivalent
- TAEDES502A replaces TAADES502B - Equivalent
- TAETAS501B replaces TAETAS501A - Equivalent
- TLIE4006A replaces TLIE607D - Equivalent
- UEPOPS411B replaces EUPOPS411A - Equivalent

Description

Not Applicable

Pathways Information

Not Applicable

Licensing/Regulatory Information

Not Applicable

Entry Requirements

The following units of competency must be achieved either before or while undertaking Certificate IV in Pulping Operations

Please note that imported units from other Training Packages are for the purpose of Industry assessment only and that any licensing requirements are to be dealt with through specific Licensing Units, undertaken prior to this qualification and in such a manner as to meet state and territory licensing requirements

If **Group A** Elective is chosen:

FPPREC210A Monitor and control chemical recovery operations

FPPREC320A Prepare and start up chemical recovery operations

FPPREC330A Co-ordinate and implement chemical recovery shutdowns

If **Group B** Elective is chosen:

FPPSTM210A Monitor and control boiler operation

FPPSTM320A Manage steam boiler startup

FPPSTM330A Shut down and bank steam boiler

If **Group C** Elective is chosen:

FPPEPG210A Monitor and control power generation system

FPPEPG320A Manage a power generation system startup

FPPEPG330A Co-ordinate power generation system shutdown

If **Group D** Elective is chosen:

FPPSPR210A Monitor and control stock preparation systems

FPPSPR320A Prepare and start up stock preparation system for production

FPPSPR330A Co-ordinate and implement stock preparation system shutdown

If **Group E** Elective is chosen:

FPPPUL210A Monitor and control pulping operations

FPPPUL250A Store and distribute pulped product

FPPPUL320A Prepare and start up pulping system operations

If **Group F** Elective is chosen:

FPPWPO210A Monitor and control waste paper operations

FPPWPO320A Prepare and start up waste paper operations

FPPWPO330A Co-ordinate and implement waste paper shutdown

Employability Skills Summary

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

The following table contains a summary of the employability skills for this qualification. This table should be interpreted in conjunction with the detailed requirements of each unit of competency packaged in this qualification. The outcomes described here are broad industry requirements that may vary depending on the packaging options.

Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	• Communicate effectively with others when collecting, analysing and presenting workplace data and information • Communicate outcomes of problem solutions to team and appropriate personnel • Read complex text
Teamwork	• Assemble team for analysis • Lead and manage team processes • Refer problems to appropriate group or department
Problem-solving	• Devise appropriate action and solutions to typical presentation and communication problems • Promptly report and/or rectify any identified problems that may arise when collecting, analysing and presenting workplace data and information in accordance with regulatory requirements and workplace procedures • Rectify problems within level of responsibility
Initiative and enterprise	• Identify causes and effects of faults and corrective action on associated processes • Implement contingency plans if required • Modify activities depending on differing operational contingencies, risk situations and environments
Planning and organising	• Develop action plan including contingencies • Identify and organise resources to implement action plan • Organise and present processed information in a logical manner

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

Self-management

- Demonstrate leadership
- Interpret and follow operational instructions and prioritise work
- Maintain situational awareness in work area

Employability Skill

Industry/enterprise requirements for this qualification include:

Learning

- Assess available types of problem solving activities/methodologies and determine most appropriate, such as e-learning tools
- Assist others to identify and resolve operational problems in the workplace
- Assist team members where required

Technology

- Identify and use required communication and presentation technology
- Solve systemic problems in the pulp and paper industry, typically involving complex integrated equipment and continuous operations
- Use electronic and other control systems to control equipment and processes as required

Packaging Rules

Qualification Notes

Total number of units = 10

2 Core units *plus*

8 Elective units

One elective unit must be selected from a single Industry Specific group (**Groups A-F**)

One elective unit must be selected from *each* of the following Support Electives groups

- Quality
- Numeracy
- OHS
- Sustainability

Remaining electives may be selected from the Supplementary Electives list and can include up to 2 units from an endorsed Training Package or State/Territory accredited course. Elective units must be relevant to the work outcome sought, industry requirements and the qualification level. Units selected must not duplicate each other in content.

CORE UNITS	
Unit Code	Unit Name
FPPPRS320A	Solve systemic problems in the workplace
TLIE4006A	Collect, analyse and present workplace data and information
ELECTIVE UNITS INDUSTRY SPECIFIC	
Group A: Chemical recovery operations	
(co-located in Certificate IV Papermaking Operations)	
FPPREC440A	Troubleshoot and rectify chemical recovery operations
Group B: Steam generation	
(co-located in Certificate IV Papermaking Operations)	
FPPSTM440A	Troubleshoot and rectify boiler plant systems
Group C: Electrical power generation	
(co-located in Certificate IV Papermaking Operations)	
FPPEPG440A	Troubleshoot and rectify power generation system
Group D: Stock preparations operations	

FPPSPR440A	Troubleshoot and rectify stock preparation systems
Group E: Pulping operations	
FPPPUL440A	Troubleshoot and rectify pulping processes
Group F: Waste paper operations	
FPPWPO440A	Troubleshoot and rectify waste paper operations
Group G: SUPPORT ELECTIVES	
Numeracy	
FPPNUM320A	Measure and calculate routine workplace data
FPPNUM430A	Calculate and analyse production and financial performance
MSS404052A	Apply statistics to operational processes
OHS	
FPPOHS320A	Maintain OHS processes
FPPOHS420A	Manage OHS processes
Quality	
FPPQAS420A	Co-ordinate in-process quality assurance
MSS402051A	Apply quality standards
MSAPMSUP400A	Develop and monitor quality systems
Sustainability	
FPPSUS210A	Apply sustainable work practices/policies
MSACMT270A	Use sustainable energy practices
MSACMT271A	Use sustainable environmental practices
MSAENV472B	Implement and monitor environmentally sustainable work practices

Group H: SUPPLEMENTARY ELECTIVES	
Computers / process control equipment	
FPPCSK310A	Operate process control equipment
Emergency procedures / safety	
FPPOHS410A	Identify, assess and control OHS risk in own work
BSBOHS401B	Contribute to the implementation of a systematic approach to managing OHS
BSBWHS403A	Contribute to implementing and maintaining WHS consultation and participation processes
BSBOHS403B	Identify hazards and assess OHS risks
BSBOHS404B	Contribute to the implementation of strategies to control OHS risk
BSBWHS510A	Contribute to the implementing emergency procedures
BSBWHS409A	Assist with workplace monitoring processes
BSBWHS401A	Implement and monitor WHS policies, procedures and programs to meet legislative requirements
BSBWHS402A	Assist with compliance with WHS laws
MSAPMOHS110A	Follow emergency response procedures
Environmental monitoring	
FPPENV320A	Monitor and control environmental hazards
First aid	
MSAPMOHS220A	Provide initial first aid response
Planning and organising	
FPPPLN420A	Plan a complex activity

BSBADM405B	Organise meetings
MEM14005A	Plan a complete activity
MEM30020A	Develop and manage a plan for a simple manufacturing related project
PSPPM402B	Manage simple projects
Water services	
FPPWAS340A	Troubleshoot and rectify water systems (unit has pre-requisite)
Business support	
FPPQAS430A	Oversee quality assurance process
BSBCMM401A	Make a presentation
BSBFLM305C	Support operational plan
BSBFLM309C	Support continuous improvement systems and processes
BSBFLM311C	Support a workplace learning environment
BSBREL401A	Establish networks
BSBRSK401A	Identify risk and apply risk management processes
BSBWOR401A	Establish effective workplace relationships
BSBWOR402A	Promote team effectiveness
BSBWRK402A	Empower workers
BSBWRK403A	Communicate with workers
BSBWRK404A	Promote equality of opportunity and fair treatment for all workers
BSBWRK406A	Participate in the bargaining process
BSBWRK407A	Provide advice to union members

BSBWRK408A	Undertake negotiations
BSBWRK409A	Prepare for and participate in dispute resolution
MSAPMSUP382A	Provide coaching/mentoring in the workplace
Training and assessment	
TAEASS505A	Lead and coordinate assessment systems and services
TAEDES502B	Design and develop learning resources
TAEASS301B	Contribute to assessment
TAEASS502B	Develop assessment tools
TAEDEL401A	Plan, organise and deliver group-based delivery
TAEDEL402A	Plan, organise and facilitate learning in the workplace
TAEDEL404A	Mentor in the workplace
TAEDES401A	Design and develop learning programs
TAEDES402A	Use training packages and accredited courses to meet client needs
TAETAS501B	Undertake organisational training needs analysis
TAEASS401B	Plan assessment activities and processes
TAEASS402B	Assess competence
TAEASS403B	Participate in assessment validation
Laboratory operations	
MSL904001A	Perform standard calibration
Production support	
FPPPRV320A	Co-ordinate and direct clothing changes
MEM18011C	Shut down and isolate machines/equipment
MSACMC411A	Lead a competitive manufacturing team

MSS403001A	Implement a competitive systems and practices
MSACMS401A	Ensure process improvements are sustained
MSS402020A	Apply quick changeover procedures
MSS402040A	Apply 5S procedures
MSS402050A	Monitor process capability
MSS403032A	Analyse manual handling processes
MSACMT440A	Lead 5S in a manufacturing environment
MSS403051A	Mistake proof an operational process
Turbine operations	
UEPOPS341A	Shut down a steam turbine
UEPOPS411B	Run up a steam turbine

FPP40210 Certificate IV in Papermaking Operations

Modification History

Release 1.2

Formatting updated - no changes to outcome.

23 imported units of competency updated:

- BSBWHS403A replaces BSBOHS402B - Equivalent
- BSBWHS510A replaces BSBOHS405B - Equivalent
- BSBWHS409A replaces BSBOHS406B - Equivalent
- BSBWHS401A replaces BSBOHS407A - Equivalent
- BSBWHS402A replaces BSBOHS408A - Equivalent
- MSS402020A replaces MSACMT220A - Equivalent
- MSS402040A replaces MSACMT240A - Equivalent
- MSS402050A replaces MSACMT250A - Equivalent
- MSS402051A replaces MSACMT251A - Equivalent
- MSS403001A replaces MSACMS400A - Equivalent
- MSS403032A replaces MSACMT432A - Equivalent
- MSS403051A replaces MSACMT451A - Equivalent
- MSS404052A replaces MSACMT452A - Equivalent
- TAEASS301B replaces TAEASS301A - Equivalent
- TAEASS401B replaces TAEASS401A - Equivalent
- TAEASS402B replaces TAEASS402A - Equivalent
- TAEASS403B replaces TAEASS403A - Equivalent
- TAEASS502B replaces TAEASS502A - Equivalent
- TAEASS505A replaces TAAASS501B - Equivalent
- TAEDES502A replaces TAADES502B - Equivalent
- TAETAS501B replaces TAETAS501A - Equivalent
- TLIE4006A replaces TLIE607D - Equivalent
- UEPOPS411B replaces EUPOPS411A - Equivalent

Description

Not Applicable

Pathways Information

Not Applicable

Licensing/Regulatory Information

Not Applicable

Entry Requirements

The following units of competency must be achieved either before or while undertaking Certificate IV in Papermaking Operations

Please note that imported units from other Training Packages are for the purpose of Industry assessment only and that any licensing requirements are to be dealt with through specific Licensing Units, undertaken prior to this qualification and in such a manner as to meet state and territory licensing requirements

If **Group A** Elective is chosen:

FPPREC210A Monitor and control chemical recovery operations

FPPREC320A Prepare and start up chemical recovery operations

FPPREC330A Co-ordinate and implement chemical recovery shutdowns

If **Group B** Elective is chosen:

FPPSTM210A Monitor and control boiler operation

FPPSTM320A Manage steam boiler startup

FPPSTM330A Shut down and bank steam boiler

If **Group C** Elective is chosen:

FPPEPG210A Monitor and control power generation system

FPPEPG320A Manage a power generation system startup

FPPEPG330A Co-ordinate power generation system shutdown

If **Group D** Elective is chosen:

FPPWEO210A Monitor and control wet end operations

FPPWEO320A Prepare and start up wet end operations

FPPWEO330A Co-ordinate and implement wet end shutdown

If **Group E** Elective is chosen:

FPPDEO210A Monitor and control dry end operations

FPPDEO320A Prepare and start up dry end operations

FPPDEO330A Co-ordinate and implement dry end shutdown

If **Group F** Elective is chosen

FPPCPP210A Monitor and control coated paper processes

FPPCPP320A Prepare and start up coated paper processes

FPPCPP330A Co-ordinate the shutdown of coated paper processes

If **Group G** Elective is chosen:

FPPFCO210A Monitor, control and shut down finishing and converting operations

FPPFCO320A Prepare and start up finishing and converting operations

Employability Skills Summary

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

The following table contains a summary of the employability skills for this qualification. This table should be interpreted in conjunction with the detailed requirements of each unit of competency packaged in this qualification. The outcomes described here are broad industry requirements that may vary depending on the packaging options.

Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	• Communicate effectively with others when collecting, analysing and presenting workplace data and information • Communicate outcomes of problem solutions to team and appropriate personnel • Read complex text
Teamwork	• Assemble team for analysis • Lead and manage team processes • Refer problems to appropriate group or department
Problem-solving	• Devise appropriate action and solutions to typical presentation and communication problems • Promptly report and/or rectify any identified problems that may arise when collecting, analysing and presenting workplace data and information in accordance with regulatory requirements and workplace procedures • Rectify problems within level of responsibility
Initiative and enterprise	• Identify causes and effects of faults and corrective action on associated processes • Implement contingency plans if required • Modify activities depending on differing operational contingencies, risk situations and environments
Planning and organising	• Develop action plan including contingencies • Identify and organise resources to implement action plan • Organise and present processed information in a logical manner

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

Self-management	• Demonstrate leadership • Interpret and follow operational instructions and prioritise work • Maintain situational awareness in work area
Learning	• Assess available types of problem solving activities/methodologies and determine most appropriate, such as e-learning tools • And determine most appropriate, such as e-learning tools • Assist others to identify and resolve operational problems in the workplace • Assist team members where required
Technology	• Identify and use required communication and presentation technology • Solve systemic problems in the pulp and paper industry, which typically involves complex integrated equipment and continuous operations • Use electronic and other control systems to control equipment and processes as required

Packaging Rules

Qualification Notes

Total number of units = 10

2 Core units plus

8 Elective units

One elective unit must be selected from a single Industry Specific group (Groups A-G)

One elective unit must be selected from each of the following Support Electives groups

- Quality
- Numeracy
- OHS
- Sustainability

Remaining electives may be selected from the Supplementary Electives list and can include up to 2 units from an endorsed Training Package or State/Territory accredited course. Elective units must be relevant to the work outcome sought, industry requirements and the qualification level. Units selected must not duplicate each other in content.

CORE UNITS	
Unit Code	Unit Name
FPPPRS320A	Solve systemic problems in the workplace
TLIE4006A	Collect, analyse and present workplace data and information
ELECTIVE UNITS INDUSTRY SPECIFIC	
Group A: Chemical recovery operations	
(co-located in Certificate IV Papermaking Operations)	
FPPREC440A	Troubleshoot and rectify chemical recovery operations
Group B: Steam generation	
(co-located in Certificate IV Papermaking Operations)	
FPPSTM440A	Troubleshoot and rectify boiler plant systems
Group C: Electrical power generation	
(co-located in Certificate IV Papermaking Operations)	
FPPEPG440A	Troubleshoot and rectify power generation system
Group D: Wet end operations	

FPPWEO440A	Troubleshoot and rectify wet end systems
Group E: Dry end operations	
FPPDEO440A	Troubleshoot and rectify dry end systems
Group F: Coated paper processes	
FPPCPP440A	Troubleshoot and rectify coated paper processes
Group G: Finishing and converting	
FPPFCO340A	Troubleshoot and rectify finishing and converting systems
Group H: SUPPORT ELECTIVES	
Numeracy	
FPPNUM320A	Measure and calculate routine workplace data
FPPNUM430A	Calculate and analyse production and financial performance
MSS404052A	Apply statistics to operational processes
OHS	
FPPOHS320A	Maintain OHS processes
FPPOHS420A	Manage OHS processes
Quality	
FPPQAS420A	Co-ordinate in-process quality assurance
MSS402051A	Apply quality standards
MSAPMSUP400A	Develop and monitor quality systems
Sustainability	
FPPSUS210A	Apply sustainable work practices/policies
MSACMT270A	Use sustainable energy practices

MSACMT271A	Use sustainable environmental practices
MSAENV472B	Implement and monitor environmentally sustainable work practices
Group I: SUPPLEMENTARY ELECTIVES	
Computers / process control equipment	
FPPCSK310A	Operate process control equipment
Emergency procedures / safety	
FPPOHS410A	Identify, assess and control OHS risk in own work
BSBOHS401B	Contribute to the implementation of a systematic approach to managing OHS
BSBWHS403A	Contribute to the implementing and maintaining WHS consultation and participation process
BSBOHS403B	Identify hazards and assess OHS risks
BSBOHS404B	Contribute to the implementation of strategies to control OHS risk
BSBWHS510A	Contribute to implementing emergency procedures
BSBWHS409A	Assist with workplace monitoring processes
BSBWHS401A	Implement and monitor WHS policies, procedures and programs to meet legislative requirements
BSBWHS402A	Assist with compliance with WHS laws
MSAPMOHS110A	Follow emergency response procedures
Environmental monitoring	
FPPENV320A	Monitor and control environmental hazards
First aid	

MSAPMOHS220A	Provide initial first aid response
Planning and organising	
FPPPLN420A	Plan a complex activity
BSBADM405B	Organise meetings
MEM14005A	Plan a complete activity
MEM30020A	Develop and manage a plan for a simple manufacturing related project
PSPPM402B	Manage simple projects
Water services	
FPPWAS340A	Troubleshoot and rectify water systems (unit has pre-requisite)
Business support	
FPPQAS430A	Oversee quality assurance process
BSBCMM401A	Make a presentation
BSBFLM305C	Support operational plan
BSBFLM309C	Support continuous improvement systems and processes
BSBFLM311C	Support a workplace learning environment
BSBREL401A	Establish networks
BSBRISK401A	Identify risk and apply risk management processes
BSBWOR401A	Establish effective workplace relationships
BSBWOR402A	Promote team effectiveness
BSBWRK402A	Empower workers
BSBWRK403A	Communicate with workers
BSBWRK404A	Promote equality of opportunity and fair treatment for

	all workers
BSBWRK406A	Participate in the bargaining process
BSBWRK407A	Provide advice to union members
BSBWRK408A	Undertake negotiations
BSBWRK409A	Prepare for and participate in dispute resolution
MSAPMSUP382A	Provide coaching/mentoring in the workplace
Training and assessment	
TAEASS505A	Lead and coordinate assessment systems and services
TAEDES502A	Design and develop learning resources
TAEASS301B	Contribute to assessment
TAEASS502B	Develop assessment tools
TAEDEL401A	Plan, organise and deliver group-based delivery
TAEDEL402A	Plan, organise and facilitate learning in the workplace
TAEDEL404A	Mentor in the workplace
TAEDES401A	Design and develop learning programs
TAEDES402A	Use training packages and accredited courses to meet client needs
TAETAS501B	Undertake organisational training needs analysis
TAEASS401B	Plan assessment activities and processes
TAEASS402B	Assess competence
TAEASS403B	Participate in assessment validation
Laboratory operations	
MSL904001A	Perform standard calibration
Production support	

FPPPRV320A	Co-ordinate and direct clothing changes
MEM18011C	Shut down and isolate machines/equipment
MSACMC411A	Lead a competitive manufacturing team
MSS403001A	Implement competitive systems and practices
MSACMS401A	Ensure process improvements are sustained
MSS402020A	Apply quick changeover procedures
MSS402040A	Apply 5S procedures
MSS402050A	Monitor process capability
MSS403032A	Analyse manual handling processes
MSACMT440A	Lead 5S in a manufacturing environment
MSS403051A	Mistake proof an operational process
Turbine operations	
UEPOPS341A	Shut down a steam turbine
UEPOPS411B	Run up a steam turbine

LMT30107 Certificate III in Textile Production

Modification History

Not applicable.

Description

Job roles/employment outcomes

Certificate III reflects vocational outcomes for those performing supervision roles, specialised technical tasks or multi-skilled roles within a textile production or early stage wool processing environment.

The Certificate III in Textile Production also includes a pathway for textile production operators who wish to proceed to gain additional mechanical skills related to the set-up, maintenance and operation of their equipment.

Application

This qualification is typically used to develop skill and knowledge in the application of specialised technical, operational and supervisory skills within textile production enterprises. The Certificate III in Textile Production, Textile Mechanic pathway caters for those TCF enterprises where the emphasis on a TCF Mechanic's duties are on the set up, change over and non-heavy engineering related repair of equipment. Where greater repair and engineering skills are required than is available in this pathway, then LMT31909 Certificate III in Engineering - TCF Mechanic or the proposed Certificate IV Engineering - TCF Technician developed for the Metal and Engineering Training Package should be considered.

Pathways Information

Pathways into the qualification

Direct entry into this qualification requires completion of a total of nineteen (19) units of competency according to the rules described below.

Credit may be granted towards this qualification by those who have completed LMT20107 Certificate II in Textile Production, LMT20207 Certificate II in Textile Production (Complex or Multiple Processes), or achieved equivalent industry experience.

Pathways from the qualification

Further training pathways from this qualification include LMT40107 Certificate IV in Textile Technology and Production, MEM40105 Certificate IV in Engineering, MSA41108 Certificate IV in Competitive Manufacturing, or other relevant manufacturing qualifications.

Licensing/Regulatory Information

There are no specific licences that relate to this qualification. However, some units in this qualification may have licensing or regulatory requirements in some environments. Local regulations should be checked for details.

Entry Requirements

Not applicable.

Employability Skills Summary

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

Employability Skills Summary - Certificate III in Textile Production

The following table contains a summary of the Employability Skills as identified by the Textile Production industries for this qualification. This table should be interpreted in conjunction with the detailed requirements of each unit of competency packaged in this qualification. The outcomes described here are broad industry requirements that reflect skill requirements for this level.

Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	• complete written documents, job cards, forms and timesheets • use communication technologies efficiently • communicate production abnormalities • demonstrate effective and appropriate communication and interpersonal skills when dealing with people from a range of backgrounds • read, interpret and communicate production schedules • communicate with all team members
Teamwork	• work cooperatively with people of different ages, gender, race or religion • liaise with and provide support to other team members • work as part of a team • keep team members informed of changes to work practices • identify team performance required to meet customer needs • provide leadership to others in the team • encourage the sharing of information between team members • plan and support team activities
Problem-solving	• identify and report problems and make contributions to their solution • investigate problem causes • implement changes • examine tools for damage, missing components or

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

	- other defects • identify and promptly address problems or issues • assess quality of work pieces • determine effective work practices • provide problem solving support to team members • problem solve machine operational and maintenance requirements • identify and report potential environmental hazards
Initiative and enterprise	• seek and provide feedback on procedures • gather and analyse information • record information on the quality and other indicators of production performance • adjust and implement production schedules changes • provide leadership • identify and implement process improvements • coordinate work activities and manufacturing processes • monitor workplace performance • use analytical and decision making skills
Planning and organising	• identify hazards and implement appropriate hazard control measures • organise self and others to meet production schedules • identify and rectify stock shortages in advance • sequence work to maximise safety and productivity • select and use appropriate tools and equipment • determine materials, quality and production requirements • monitor resource use in own work • apply time management skills to ensure work flow • identify and monitor resource use in own work
Self-management	• interpret and apply relevant acts and regulations • keep the work area clean and tidy at all times • conduct regular housekeeping activities • understand own work activities • manage own time and establish own work schedule • develop and implement workplace procedures and

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
	- instructions - locate, interpret and apply information relevant to own work - monitor and evaluate own work quality - accept responsibility for quality of work - conduct work in a manner which minimises waste
Learning	- develop learning activities as appropriate - assess competencies in meeting job requirements - identify own training needs and seek skill development if required - listen to feedback from others - identify sources of information to expand knowledge and understanding - identify and address skill development needs of others in the team
Technology	- use software applications effectively - properly start up, operate and shut down computers - work with technology safely and according to workplace standards - establish procedures - carry out pre-operational checks on equipment and machines - operate equipment and machines safely, efficiently and to productivity requirements - monitor and adjust machine functions - perform machine maintenance as determined by workplace procedures - clean and check equipment and machines

Packaging Rules

To be awarded the Certificate III in Textile Production, competency must be achieved in nineteen (19) units of competency.

- Five (5) core units of competency
- Fourteen (14) elective units of competency as specified below.

If Certificate II in Textile Production (Complex or Multiple Processes) has been achieved, an additional six (6) units are required. The six (6) units must include core unit LMTGN3002B Organise and plan own work to achieve planned outcomes, plus three (3) units selected from Group B, E or F. The remaining two (2) units must not have been used as credit towards the Certificate II outcome.

Note: Where prerequisite units apply, these have been noted, and must be considered in the total number of units.

CORE UNITS

Complete all five (5) units from this list

Unit code	Unit title
LMTGN2001B	Follow defined OH&S policies and procedures
LMTGN2002B	Apply quality standards
LMTGN2003B	Work in the Textiles, Clothing and Footwear industry
LMTGN3002B	Organise and plan own work to achieve planned outcomes
MSAENV272B	Participate in environmentally sustainable work practices

ELECTIVE UNITS

Select fourteen (14) units as specified below.

For the Textile Production pathway:

- A minimum of two (2) units must be selected from Group A When this qualification is applied for a textile production context, the two (2) units must be selected from Group A units coded TX When this qualification is applied for an early stage wool context, the two (2) units must be selected from Group A units coded EW
- A minimum of two (2) units must be selected from Group B
- A maximum of two (2) units may be selected from Groups D and F
- A maximum of three (3) units may be selected from Group G
- The remainder must be selected from Groups A, B and C.

For the TCF Mechanic pathway:

- A minimum of five (5) units must be selected from Group A When this qualification is applied for a textile production context, the five (5) units must be selected from Group A units coded TX When this qualification is applied for an early stage wool context, the five (5) units must be selected from Group A units coded EW
- A minimum of two (2) units must be selected from Group B
- A minimum of three (3) units must be selected from Group E
- A maximum of two (2) units may be selected from Groups D and F
- A maximum of three (3) units may be selected from Group G
- The remainder must be selected from Groups A, B, C and E.

NOTE: Competitive Manufacturing Training Package units, identified as MSACM in the code (packaged in Groups D and F), should be selected on the basis of work requirements. Those at Certificate II level (units in the 200 series packaged in Group D) are appropriate for operators. MSACM units for those in Certificate III level positions such as team leaders should be selected from both the 200 series and the 400 series (packaged in Groups F).

GROUP A

Unit code	Unit title	Prerequisites
LMTEW2001A	Blend and open greasy wool	
LMTEW2002A	Press and dump wool	
LMTEW2004A	Perform wool combing	
LMTEW2005A	Perform wool preparation using gilling machinery	
LMTEW2006A	Perform wool finishing	
LMTEW2007A	Perform wool pressing operations	
LMTEW2008A	Perform wool backwash process	
LMTEW2009A	Perform wool scouring	
LMTEW2010A	Perform wool carbonising	
LMTEW2011A	Perform wool superwash	
LMTEW2012A	Perform tests to check wool quality	
LMTEW2013A	Perform wool grease recovery and monitor	

Unit code	Unit title	Prerequisites
	waste disposal	
LMTEW2014A	Perform machine setting and operational maintenance	
LMTEW2015A	Perform wool store operations	
LMTTX2001B	Identify fibres, yarns and textile materials and their uses in textile production	
LMTTX2002B	Prepare yarn for textile manufacturing	
LMTTX2003B	Perform spinning operations	
LMTTX2004B	Perform tufting operations	
LMTTX2005B	Perform creeling operations	
LMTTX2006B	Operate a weaving loom	
LMTTX2007B	Perform knitting operations	
LMTTX2008B	Apply finishing processes to textile production	
LMTTX2009B	Weigh and check textile materials and products	
LMTTX2010B	Load and operate	

Unit code	Unit title	Prerequisites
	dyeing equipment	
LMTTX2011B	Repair textile product	
LMTTX2012B	Perform industrial sewing on textile products	
LMTTX2013B	Conduct packaging or folding for textile production	
LMTTX2014B	Use specialised machinery to assist textile production	
LMTTX2015B	Handle and prepare chemicals, dyes or other substances used in textile production	
LMTTX2016B	Perform knotting for weaving operations	
LMTTX2017B	Access and use information resources for textile production operations	
LMTTX2018B	Restart machine after stoppage	
LMTTX2019B	Undertake carding operations	

GROUP B

Unit code	Unit title	Prerequisites
LMTTX3001B	Identify quality and types of textile fibres, yarns and	LMTTX2001B

Unit code	Unit title	Prerequisites
	fabrics	
LMTTX3002B	Contribute to textile production process improvements	LMTGN2002B
LMTTX3004B	Set up textile production machines for product change	
LMTTX3005B	Organise and interpret tests	
LMTTX3006B	Ensure efficient operation of textile machines	
LMTTX3007B	Prepare dyes for textile production	
LMTTX3008B	Select raw materials	
LMTTX3009B	Operate in a complex textile production environment	
LMTTX3010B	Monitor textile production processes	

GROUP C

Unit code	Unit title	Prerequisites
LMTGN2004B	Work in a team environment	
LMTGN2005B	Perform minor maintenance	
LMTGN2006B	Perform test or inspection to check product quality	

Unit code	Unit title	Prerequisites
LMTGN2007B	Select, transfer and remove materials and products	
LMTGN2008B	Coordinate work of team or section	
LMTGN2009B	Operate computing technology in a Textiles, Clothing and Footwear workplace	
LMTGN2010B	Perform tasks to support production	
MEM11010B	Operate mobile load shifting equipment	

GROUP D

Unit code	Unit title	Prerequisites
MSS402010A	Manage the impact of change on own work	
MSS402001A	Apply competitive systems and practices	
MSS402002A	Sustain process improvements	
MSS402020A	Apply quick changeover procedures	
MSS402021A	Apply Just in Time procedures	

Unit code	Unit title	Prerequisites
MSS402030A	Apply cost factors to work practices	
MSS402031A	Interpret product costs in terms of customer requirements	
MSS402040A	Apply 5S procedures	
MSS402050A	Monitor process capability	
MSS402060A	Use planning software systems in operations	
MSS402061A	Use SCADA systems in operations	
MSACMT270A	Use sustainable energy practices	
MSS402080A	Undertake root cause analysis	
MSS402081A	Contribute to the application of a proactive maintenance strategy	

GROUP E

Unit code	Unit title	Prerequisites
LMTGN2005B	Perform minor maintenance	

Unit code	Unit title	Prerequisites
LMTTX3011A	Set up, adjust and maintain circular knitting machines	
LMTTX3012A	Set up, adjust and maintain flat knitting machines	
LMTTX3013A	Set up, adjust and maintain spinning machines	
LMTTX3014A	Set up, adjust and maintain carding machines	LMTTX3001B
LMTTX3015A	Set up, adjust and maintain tufting machines	LLMTTX4002A
LMTTX3016A	Set up, adjust and maintain domestic sewing machines	
LMTTX3017A	Set up, adjust and maintain industrial sewing machines	
LMTTX3018A	Undertake electronic fault finding on textile machinery	
LMTTX3019A	Identify and correct mechanical faults in loom and other weaving equipment	
LMTTX3020A	Identify and correct weaving process faults	
LMTTX3021A	Apply knowledge of weaving process to	

Unit code	Unit title	Prerequisites
	production requirements	
LMTTX3022A	Set up and operate weaving loom for production	
MEM18001C	Use hand tools	
MEM18002B	Use power tools/hand held operations	

GROUP F

Unit code	Unit title	Prerequisites
MSS403010A	Facilitate change in an organisation implementing competitive systems and practices	
MSS403001A	Implement competitive systems and practices	
MSS403002A	Ensure process improvements are sustained	
MSS403021A	Facilitate a Just in Time system	
MSS403030A	Improve cost factors in work practices	
MSS403032A	Analyse manual handling processes	
MSS403040A	Facilitate and improve implementation of 5S	
MSS404050A	Undertake process	MSS404052A

Unit code	Unit title	Prerequisites
	capability improvements	
MSS403051A	Mistake proof an operational process	
MSS404052A	Apply statistics to operational processes	
MSS404060A	Facilitate the use of planning software systems in a work area or team	
MSS404061A	Facilitate the use of SCADA systems in a team or work area	
MSS404081A	Undertake proactive maintenance analyses	
MSS404082A	Assist in implementing a proactive maintenance strategy	
MSAENV472B	Implement and monitor environmentally sustainable work practices	

GROUP G

Other Textile Production units that are available at Certificates II (maximum 1 unit) and III (maximum 3 units)

Other TCF Training Package units that are available at Certificates II (maximum 1 unit), III (maximum 3 units) and IV (maximum 1 unit)

Units from other endorsed Training Packages and accredited courses that are available at Certificates II (maximum 1 unit), III (maximum 3 units) and IV (maximum 1 unit)

LMT30307 Certificate III in Cotton Ginning

Modification History

Release 2 - imported units updated to current versions, outcomes equivalent.

Description

Job roles/employment outcomes

Certificate III reflects vocational outcomes for those performing supervision roles, specialised technical tasks or multi-skilled roles within a cotton ginning environment.

Application

This qualification is typically used to develop skill and knowledge in the application of specialised technical, operational and supervisory skills within cotton ginning enterprises.

Pathways Information

Pathways into the qualification

Direct entry into this qualification requires completion of a total of twenty-three (23) units of competency according to the rules described below.

Credit may be granted towards this qualification by those who have completed LMT20407 Certificate II in Cotton Ginning or achieved equivalent industry experience.

Pathways from the qualification

Further training pathways from this qualification include LMT40207 Certificate IV in Cotton Ginning, MSA41108 Certificate IV in Competitive Manufacturing, or other relevant qualifications.

Licensing/Regulatory Information

There are no specific licences that relate to this qualification. However, some units in this qualification may have licensing or regulatory requirements in some environments. Local regulations should be checked for details.

Entry Requirements

Not applicable.

Employability Skills Summary

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

Employability Skills Summary - Certificate III in Cotton Ginning

The following table contains a summary of the Employability Skills as identified by the Cotton Ginning industries for this qualification. This table should be interpreted in conjunction with the detailed requirements of each unit of competency packaged in this qualification. The outcomes described here are broad industry requirements that reflect skill requirements for this level.

Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	• understand personal requirements of relevant industry and workplace standards, regulations and policies • complete standard documentation • use communication technologies efficiently • communicate problems with cotton • communicate to others ginning operational requirements • ensure ginning records are accurate and legible • establish effective working relationships with colleagues • undertake interactive workplace communication • demonstrate effective and appropriate communication and interpersonal skills when dealing with people from a range of backgrounds • read, interpret and communicate production schedules
Teamwork	• explain and implement work team reporting requirements • monitor work team tasks in accordance with regulatory and workplace requirements • demonstrate and encourage others in working cooperatively with people of different ages, gender, race or religion • undertake appropriate and effective communication with team members • liaise with and provide support to other team members • keep team members informed of changes to work practices

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
	• identify team performance required to meet customer needs • provide leadership to others in the team • encourage the sharing of information between team members • plan and support team activities
Problem-solving	• identify risks and implement risk control measures for machinery and equipment • identify and address machinery problems and faults • check performance of machinery • assess and evaluate skills requirements of self and others to perform tasks • deal with and promptly resolve issues • identify and report potential environmental hazards • use problem solving techniques to determine ginning requirements • provide problem solving support to team members • investigate problem causes • implement changes • examine tools and machinery for damage, missing components or other defects
Initiative and enterprise	• seek and provide feedback on procedures • collect and monitor information • identify non-conformances to standards and take appropriate action • rectify problems promptly and appropriately • monitor and adjust activity in response to operational variations • identify and address existing and potential risks • monitor information and records to identify trends that may require remedial action • develop and promote continuous improvement • gather and analyse information on machinery or process problems • record information on the quality and other indicators of production performance

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
	• adjust and implement production schedules changes
Planning and organising	• monitor quality outcomes • allocate tasks to operators • implement contingency plan promptly when incidents occur • identify training needs for the work team and seek training support • monitor equipment condition and performance • identify hazards and implement appropriate hazard control measures • organise self and others to meet production schedules • identify and rectify stock shortages in advance • sequence work to maximise safety and productivity • select and use appropriate hand and power tools • identify labour requirements to achieve product manufacture and perform required services • determine materials, chemicals, quality and production requirements • identify and monitor resource use in own work • apply time management skills to ensure work flow
Self-management	• monitor information in work area • keep the work area clean and tidy at all times • conduct regular housekeeping activities during shift • locate, interpret and apply relevant information • monitor own work against quality standards • understand own work activities and responsibilities • identify and apply safety procedures, including the use of protective equipment • manage work load priorities • conduct work in a manner which minimises waste • interpret and apply relevant acts and regulations • develop and implement workplace procedures and instructions • establish own work schedule • accept responsibility for quality of work

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
Learning	• Recognise limits of own expertise • Assess competencies in meeting job requirements • Ask questions to expand own knowledge • Identify own training needs and seek skill development if required • Listen to feedback from others • Identify sources of information to expand knowledge and understanding • Identify and address skill development needs of others in the team
Technology	• Use software applications effectively • Properly start up, operate and shut down computers • Work with technology safely and according to workplace standards • Establish standard operating procedures • Carry out pre-operational checks on equipment and machines • Operate equipment and machines safely, efficiently and to productivity requirements • Monitor and adjust machine functions • Perform machine maintenance and problem solving • Clean and check equipment and machines

Packaging Rules

To be awarded the Certificate III in Cotton Ginning, competency must be achieved in twenty-three (23) units of competency.

- Sixteen (16) core units of competency
- Seven (7) elective units of competency as specified below.

If Certificate II has been achieved, an additional ten (10) units are required. All core units listed must be achieved. Any Certificate III core units not achieved at Certificate II must be completed as part of the additional ten (10) units required for the Certificate III. Units that have been credited towards lower level qualifications must not be selected in the additional ten (10) unit requirement. A minimum of two (2) units must be selected from Group B units. Note: Where prerequisite units apply, these have been noted, and must be considered in the total number of units.

CORE UNITS

Complete all sixteen (16) units from this list

Unit code	Unit title
LMTCG2001A	Identify cotton characteristics
LMTCG2002A	Gin cotton
LMTCG2003A	Control bale or mote press operations
LMTCG3001A	Identify factors that impact on cotton quality
LMTCG3002A	Perform advanced operational maintenance of cotton ginning machines and equipment
LMTGN2001B	Follow defined OH&S policies and procedures
LMTGN2002B	Apply quality standards
LMTGN2003B	Work in the Textiles, Clothing and Footwear industry
LMTGN2010B	Perform tasks to support production
LMTGN3002B	Organise and plan own work to achieve planned outcomes
MEM11010B	Operate mobile load shifting equipment
MEM12023A	Perform engineering measurements
MEM13001B	Perform emergency first aid
MEM18001C	Use hand tools
MEM18002B	Use power tools/hand held operations
MSAENV272B	Participate in environmentally sustainable work practices

ELECTIVE UNITS

Select seven (7) units as specified below:

- A minimum of three (3) units must be selected from Group A and B
- A maximum of four (4) units may be selected from Group C
- The remainder must be selected from Group A and B.

NOTE: Competitive Manufacturing Training Package units, identified as MSACM in the code should be selected on the basis of work requirements. Those at Certificate II level (units in the 200 series) are appropriate for operators. MSACM units for those in Certificate III level positions such as team leaders should be selected from both the 200 series and the 400 series.

GROUP A

Unit code	Unit title	Prerequisites
LMTGN2004B	Work in a team environment	
LMTGN2008B	Coordinate work of team or section	
LMTGN2009B	Operate computing technology in a textiles, clothing and footwear workplace	
MEM05004C	Perform routine oxy acetylene welding	
MEM05007C	Perform manual heating and thermal cutting	
MEM05012C	Perform routine manual metal arc welding	
MEM05050B	Perform routine gas metal arc welding	
MEM07001B	Perform operational maintenance of machines/equipment	MEM18001C
MSS402010A	Manage the impact of change on own work	
MSS402001A	Apply competitive systems and practices	

Unit code	Unit title	Prerequisites
MSS402002A	Sustain process improvements	
MSS402020A	Apply quick changeover procedures	
MSS402021A	Apply Just in Time procedures	
MSS402030A	Apply cost factors to work practices	
MSS402031A	Interpret product costs in terms of customer requirements	
MSS402040A	Apply 5S procedures	
MSS402050A	Monitor process capability	
MSS402060A	Use planning software systems in operations	
MSS402061A	Use SCADA systems in operations	
MSACMT270A	Use sustainable energy practices	
MSS402080A	Undertake root cause analysis	
MSS402081A	Contribute to the application of a proactive maintenance strategy	

GROUP B

LMTCG3003A	Assist in overhauling or repairing cotton ginning fluid power equipment	
LMTGN3001B	Control production in a section of a textiles, clothing and footwear enterprise	
LMTGN4010A	Implement and monitor OH&S in the workplace	
MEM05008C	Perform advanced manual thermal cutting, gouging and shaping	MEM05007C
MEM09002B	Interpret engineering drawing	
MEM18049B	Disconnect/reconnect fixed wire equipment (up to 1000v ac and 1500v dc)	MEM9002B MEM10002B MEM12002B MEM18001C
MEM18055B	Dismantle, replace and assemble engineering components	MEM09002B MEM12023A MEM18001C MEM18002B
MSS403010A	Facilitate change in an organisation implementing competitive systems and practices	
MSS403001A	Implement competitive systems and practices	
MSS403002A	Ensure process improvements are sustained	
MSS403021A	Facilitate a Just in Time system	

LMTCG3003A	Assist in overhauling or repairing cotton ginning fluid power equipment	
MSS403030A	Improve cost factors in work practices	
MSS403032A	Analyse manual handling processes	
MSS403040A	Facilitate and improve implementation of 5S	
MSS404050A	Undertake process capability improvements	MSS404052A
MSS403051A	Mistake proof an operational process	
MSS404052A	Apply statistics to operational processes	
MSS404060A	Facilitate the use of planning software systems in a work area or team	MSS402060A
MSS404061A	Facilitate the use of SCADA systems in a team or work area	
MSS404081A	Undertake proactive maintenance analyses	
MSS404082A	Assist in implementing a proactive maintenance strategy	
MSAENV472B	Implement and monitor environmentally sustainable work practices	

GROUP C

Other Cotton Ginning units that are available at Certificates II (maximum 1 unit), III (maximum 4 units) and IV (maximum 1 unit)

Other TCF Training Package units that are available at Certificates II (maximum 1 unit), III (maximum 4 units) and IV (maximum 1 unit)

Units from other endorsed Training Packages and accredited courses that are available at Certificates II (maximum 1 unit), III (maximum 4 units) and IV (maximum 1 unit)

LMT30407 Certificate III in Textile Fabrication

Modification History

Release 2 - imported units updated to current versions, outcomes equivalent.

Description

Job roles/employment outcomes

The Certificate III reflects vocational outcomes for those performing supervision roles, specialised technical tasks or multi-skilled roles within a production environment.

Application

This qualification is typically used to develop skill and knowledge in the application of specialised technical, operational and supervisory skills within textile fabrication enterprises.

Pathways Information

Pathways into the qualification

Direct entry into this qualification requires completion of a total of nineteen (19) units of competency according to the rules described below.

Credit may be granted towards this qualification by those who have completed LMT20507 Certificate II in Textile Fabrication or achieved equivalent industry experience.

Pathways from the qualification

Further training pathways from this qualification include LMT40107 Certificate IV in Textile Technology and Production, MSA41108 Certificate IV in Competitive Manufacturing, or other relevant manufacturing qualifications.

Licensing/Regulatory Information

There are no specific licences that relate to this qualification. However, some units in this qualification may have licensing or regulatory requirements in some environments. Local regulations should be checked for details.

Entry Requirements

Not applicable.

Employability Skills Summary

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

Employability Skills Summary - Certificate III in Textile Fabrication

The following table contains a summary of the Employability Skills as identified by the Textile Fabrication industries for this qualification. This table should be interpreted in conjunction with the detailed requirements of each unit of competency packaged in this qualification. The outcomes described here are broad industry requirements that reflect skill requirements for this level.

Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	• communicate verbally with internal and external clients • complete written documents, job cards, forms, timesheets and quotations • use communication technologies efficiently • communicate production abnormalities • develop work instructions, visuals and signs • demonstrate effective and appropriate communication and interpersonal skills when dealing with people from a range of backgrounds • read, interpret and communicate production schedules • communicate with all team members • use appropriate barriers and signs • perform measurements and calculations to determine work requirements
Teamwork	• work cooperatively with people of different ages, gender, race or religion • liaise with and provide support to other team members • work independently or as part of a team • keep team members informed of changes to work practices • identify team performance required to meet customer needs • provide leadership to others in the team • encourage the sharing of information between team members

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
	• plan and support team activities
Problem-solving	• identify and report problems and make contributions to their solution • investigate problem causes • implement changes • examine tools for damage, missing components or other defects • identify and promptly address problems or issues • assess quality of work pieces • determine effective work practices • provide problem solving support to team members • identify and report potential environmental hazards
Initiative and enterprise	• seek and provide feedback on procedures • gather and analyse information • record information on the quality and other indicators of production performance • adjust and implement production schedules changes • provide leadership • identify and implement process improvements • coordinate work activities and manufacturing processes • monitor workplace performance • use analytical and decision making skills
Planning and organising	• identify hazards and implement appropriate hazard control measures • organise self and others to meet production schedules • identify and rectify stock shortages in advance • sequence work to maximise safety and productivity • select and use appropriate hand and power tools • identify labour requirements to achieve product manufacture and perform required services • monitor resource use in own work • determine materials, chemicals, quality and production requirements • apply time management skills to ensure work flow

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
Self-management	• interpret and apply relevant acts and regulations • keep the work area clean and tidy at all times • conduct regular housekeeping activities • understand own work activities • manage own time • develop and implement workplace procedures and instructions • locate, interpret and apply information relevant to own work • establish own work schedule • monitor and evaluate own work quality • conduct work in a manner which minimises waste • accept responsibility for quality of work
Learning	• develop learning activities as appropriate • assess competencies in meeting job requirements • identify own training needs and seek skill development if required • listen to feedback from others • identify sources of information to expand knowledge and understanding • identify and address skill development needs of others in the team
Technology	• use software applications effectively • properly start up, operate and shut down computers • work with technology safely and according to workplace standards • establish procedures • carry out pre-operational checks on equipment and machines • operate equipment and machines safely, efficiently and to productivity requirements • monitor and adjust machine functions • perform minor maintenance • clean and check equipment and machines

Packaging Rules

To be awarded the Certificate III in Textile Fabrication, competency must be achieved in nineteen (19) units of competency.

- Nine (9) core units of competency
- Ten (10) elective units of competency as specified below.

If Certificate II has been achieved, an additional six (6) units are required. All core units listed must be achieved - any Certificate III core units not achieved at Certificate II must be completed as part of the additional six (6) unit required for the Certificate III. Units that have been credited towards lower level qualifications must not be selected in the additional six (6) unit requirement. A minimum of three (3) of the six (6) units must be selected from Groups A or B.

Note: Where prerequisite units apply, these have been noted, and must be considered in the total number of units.

CORE UNITS

Complete all nine (9) units from this list

Unit code	Unit title
LMTGN2001B	Follow defined OH&S policies and procedures
LMTGN2002B	Apply quality standards
LMTGN2003B	Work in the Textiles, Clothing and Footwear industry
LMTGN3002B	Organise and plan own work to achieve planned outcomes
LMTTF2005A	Translate information into measurements or diagrams
LMTTF2006A	Measure and scale geometric shapes
LMTTF2009A	Identify and select canvas and sail materials
LMTTF2018A	Use canvas and sail production tools
MSAENV272B	Participate in environmentally sustainable work practices

ELECTIVE UNITS

Select ten (10) units as specified below.

- A minimum of two (2) units must be selected from Group A
- A minimum of two (2) units must be selected from Group B
- A minimum of two (2) units must be selected from Group C
- A maximum of two (2) units may be selected from Group E

- A maximum of three (3) units may be selected from Group F
- The remainder must be selected from Groups A, B and C.

NOTE: Competitive Manufacturing Training Package units, identified in Group E as MSACM coded units, should be selected on the basis of work requirements. Those at Certificate II level (units in the 200 series) are appropriate for operators. MSACM units for those in Certificate III level positions such as team leaders should be selected from both the 200 series and the 400 series.

GROUP A

Unit code	Unit title	Prerequisites
LMTTF3001A	Identify customer requirements (on site)	
LMTTF3002A	Gain customer acceptance of service proposal	
LMTTF3003A	Produce patterns for 3D products	LMTTF2007A
LMTTF3004A	Perform advanced welding of plastic materials	LMTTF2014A
LMTTF3005A	Apply lofting skills to sail making	
LMTTF3006A	Cut and join sail panels	

GROUP B

Unit code	Unit title	Prerequisites
LMTGN3001B	Control production in a section of a Textiles, Clothing and Footwear enterprise	
LMTGN3003B	Estimate and cost job	
LMTGN3005B	Plan tasks to assist production operations	

Unit code	Unit title	Prerequisites
LMTLG3001A	Make a prototype	
LMTTF3001A	Identify customer requirements (on site)	
LMTTF3002A	Gain customer acceptance	
LMTTF3003A	Produce patterns for 3D products	LMTTF2007A
LMTTF3004A	Perform advanced welding of plastic materials	LMTTF2014A
LMTTF3005A	Apply lofting skills to sail making	
LMTTF3006A	Cut and join sail panels	

GROUP C

Unit code	Unit title	Prerequisites
LMTTF2001A	Despatch products	
LMTTF2003A	Package and handle products for despatch	
LMTTF2004A	Add reinforcements and attachments	
LMTTF2007A	Produce patterns for 2D products	
LMTTF2008A	Use adhesives	
LMTTF2010A	Lay out and mark out canvas or sail materials	
LMTTF2011A	Cut and shape canvas or sail materials	

Unit code	Unit title	Prerequisites
LMTTF2012A	Stitch by hand	
LMTTF2013A	Waterproof canvas product	
LMTTF2014A	Weld plastic materials	
LMTTF2016A	Install products on and off-site	
LMTTF2017A	Cut, bend and shape metal	
LMTTF2019A	Inspect canvas or sail product	

GROUP D

Unit code	Unit title	Prerequisites
CPCCOHS2001A	Apply OHS requirements, policies and procedures in the construction industry	
CPCCCM2002A	Carry out excavation	*
CPCCCO2013A	Carry out concreting to simple forms	*
LMTCL2001B	Use a sewing machine	
LMTGN2004B	Work in a team environment	
LMTGN2005B	Perform minor	

Unit code	Unit title	Prerequisites
	maintenance	
LMTGN2008B	Coordinate work of team or section	
LMTGN2009B	Operate computing technology in a Textiles, Clothing and Footwear workplace	
LMTGN2010B	Perform tasks to support production	
LMTLG2006A	Identify materials used in leather goods production	
LMTTX2012B	Perform industrial sewing on textile products	
MEM05012C	Perform routine manual metal arc welding	
MEM05050B	Perform routine gas metal arc welding	
AHCLSC308A	Install metal structures and features	

GROUP E

Unit code	Unit title	Prerequisites
MSS402010A	Manage the impact of change on own	

Unit code	Unit title	Prerequisites
	work	
MSS403010A	Facilitate change in an organisation implementing competitive systems and practices	
MSS402001A	Apply competitive systems and practices	
MSS402002A	Sustain process improvements	
MSS403001A	Implement competitive systems and practices	
MSS403002A	Ensure process improvements are sustained	
MSS402020A	Apply quick changeover procedures	
MSS402021A	Apply Just in Time procedures	
MSS402030A	Apply cost factors to work practices	
MSS402031A	Interpret product costs in terms of customer requirements	
MSS402040A	Apply 5S procedures	
MSS402050A	Monitor process	

Unit code	Unit title	Prerequisites
	capability	
MSS402060A	Use planning software systems in operations	
MSS402061A	Use SCADA systems in operations	
MSACMT270A	Use sustainable energy practices	
MSS402080A	Undertake root cause analysis	
MSS402081A	Contribute to the application of a proactive maintenance strategy	
MSS403021A	Facilitate a Just in Time system	
MSS403030A	Improve cost factors in work practices	
MSS403032A	Analyse manual handling processes	
MSS403040A	Facilitate and improve implementation of 5S	
MSS404050A	Undertake process capability improvements	*
MSS403051A	Mistake proof an operational process	

Unit code	Unit title	Prerequisites
MSS404052A	Apply statistics to operational processes	
MSS404060A	Facilitate the use of planning software systems in a work area or team	
MSS404061A	Facilitate the use of SCADA systems in a team or work area	
MSS404081A	Undertake proactive maintenance analyses	
MSS404082A	Assist in implementing a proactive maintenance strategy	

GROUP F

Other Textile Fabrication units that are available at Certificates II (maximum 1 unit) and III (maximum 3 units)

Other TCF Training Package units that are available at Certificates II (maximum 1 unit), III (maximum 3 units) and IV (maximum 1 unit)

Units from other endorsed Training Packages and accredited courses that are available at Certificates II (maximum 1 unit), III (maximum 3 units) and IV (maximum 1 unit)

LMT30507 Certificate III in Clothing Production

Modification History

Release 2 - imported units updated to current versions, outcomes equivalent.

Description

Job roles/employment outcomes

Certificate III reflects vocational outcomes for those performing supervision roles, specialised technical tasks or multi-skilled roles within a production oriented work environment.

Application

This qualification is typically used to develop skill and knowledge in the application of specialised technical, operational and supervisory skills within clothing production enterprises.

Pathways Information

Pathways into the qualification

Direct entry into this qualification requires completion of a total of nineteen (19) units of competency according to the rules described below.

Credit may be granted towards this qualification by those who have completed LMT20607 Certificate II in Clothing Production, LMT20707 Certificate II in Clothing Production (Complex or Multiple Processes) or achieved equivalent industry experience.

Pathways from the qualification

Further training pathways from this qualification include LMT40307 Certificate IV in Clothing Production, LMT41007 Certificate IV in Fashion Design and Technology, MSA41108 Certificate IV in Competitive Manufacturing, or other relevant manufacturing qualifications.

Licensing/Regulatory Information

There are no specific licences that relate to this qualification. However, some units in this qualification may have licensing or regulatory requirements in some environments. Local regulations should be checked for details.

Entry Requirements

Not applicable.

Employability Skills Summary

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

Employability Skills Summary - Certificate III in Clothing Production

The following table contains a summary of the Employability Skills as identified by the Clothing Production industries for this qualification. This table should be interpreted in conjunction with the detailed requirements of each unit of competency packaged in this qualification. The outcomes described here are broad industry requirements that reflect skill requirements for this level.

Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	• confirm relevant industry and workplace requirements • understand personal requirements of relevant industry and workplace standards, regulations and policies • complete standard documentation • use communication technologies efficiently • communicate problems with clothing production • communicate to others clothing production requirements • ensure records are accurate and legible • establish effective working relationships with colleagues • undertake interactive workplace communication • communicate effectively and appropriately when dealing with customers
Teamwork	• explain and implement work team reporting requirements • monitor work team tasks in accordance with regulatory and workplace requirements • demonstrate and encourage others in working cooperatively with people of different ages, gender, race or religion • undertake appropriate and effective communication with team members • provide support to team members
Problem-solving	• identify risks and implement risk control measures for machinery and equipment

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

	• identify and address problems and faults • check performance of machinery and equipment • assess and evaluate skills requirements of self and others to perform tasks • deal with and promptly resolve issues • use problem solving techniques to determine production requirements • assess quality of materials before using in clothing production • identify and report potential environmental hazards
Initiative and enterprise	• seek and provide feedback on procedures • collect and monitor information • identify non-conformances to standards and take appropriate action • rectify problems promptly and appropriately • monitor and adjust activity in response to operational variations • identify and assess existing and potential risks and seek advice • monitor information and records to identify trends that may require remedial action • develop and promote continuous improvement
Planning and organising	• plan work requirements for self and others as required • monitor quality outcomes • monitor resource use in own work • allocate tasks to operators • implement contingency plan promptly when incidents occur • monitor equipment condition and performance
Self-management	• manage own work • monitor information in work area • keep the work area clean and tidy at all times • conduct regular housekeeping activities during shift • locate, interpret and apply relevant information • monitor own work against quality standards • understand own work activities and responsibilities

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
	• conduct work in a manner which minimises waste • identify and apply safety procedures, including the use of protective equipment • manage work load priorities
Learning	• recognise limits of own expertise • assess competencies in meeting job requirements • identify own skill requirements and seek skill development if required • ask questions to expand own knowledge
Technology	• monitor performance of machine operation • use a range of clothing production machines and equipment to achieve variable production outcomes • perform minor maintenance on machinery • work with technology safely and according to workplace standards

Packaging Rules

To be awarded the Certificate III in Clothing Production, competency must be achieved in nineteen (19) units of competency.

- Five (5) core units of competency
- Fourteen (14) elective units of competency as specified below.

If Certificate II in Clothing Production (Complex or Multiple Processes) has been achieved, an additional six (6) units are required. All core units listed must be achieved - any Certificate III core units not achieved at Certificate II must be completed as part of the additional six (6) units required for Certificate III. Units that have been credited towards lower level qualifications must not be selected in the additional six (6) unit requirement. A minimum of three (3) of the six (6) units must be selected from the Groups A and B units.

Note: Where prerequisite units apply, these have been noted, and must be considered in the total number of units.

CORE UNITS

Complete all units five (5) from this list

Unit code	Unit title
LMTGN2001B	Follow defined OH&S policies and procedures

LMTGN2002B	Apply quality standards
LMTGN2003B	Work in the Textiles, Clothing and Footwear industry
LMTCL2003B	Identify fibres and fabrics
MSAENV272B	Participate in environmentally sustainable work practices

ELECTIVE UNITS

Select fourteen (14) units as specified below.

- A minimum of two (2) units must be selected from Group A
- A minimum of one (1) unit must be selected from Group B
- A maximum of one (1) unit may be selected from Group D
- A maximum of three (3) units may be selected from Group E
- The remainder must be selected from Groups A, B and C.

NOTE: Competitive Manufacturing Training Package units, identified in Group D as MSACM coded units, should be selected on the basis of work requirements. Those at Certificate II level (units in the 200 series) are appropriate for operators. MSACM units for those in Certificate III level positions such as team leaders should be selected from both the 200 series and the 400 series.

GROUP A

Unit code	Unit title	Prerequisites
LMTCL3001B	Identify fabric performance and handling requirements	LMTCL2003B
LMTCL3002B	Prepare and produce sewn garment	LMTCL2001B LMTCL2003B LMTCL2004B
LMTCL3003B	Perform garment repairs and alterations	LMTCL2001B LMTCL2003B LMTCL2004B
LMTCL3004B	Press whole garments	LMTCL2006B
LMTCL3005B	Lay up and cut complicated fabrics and lays	LMTCL2007B

LMTCL3006B	Assemble bra or swimwear	LMTCL2001B LMTCL2003B LMTCL2004B
LMTCL3007B	Embellish garment by hand or machine	LMTCL2001B LMTCL2003B LMTCL2005B
LMTCL3008B	Set and produce digital embroidery	
LMTCL3009B	Develop patterns from a block using basic patternmaking principles	
LMTCL3010B	Sew woven and stretch knit garments	LMTCL2001B LMTCL2003B LMTCL2004B
LMTCL3011B	Contribute to garment production process improvements	LMTGN2002B
LMTCL3012B	Make marker for complicated fabrics and lays	LMTCL2007B
LMTCL3013B	Interpret patterns and apply pattern information	
LMTCL3014B	Interact and communicate with garment production personnel	

GROUP B

Unit code	Unit title	Prerequisites
LMTCL3001B	Identify fabric performance and	LMTCL2003B

	handling requirements	
LMTCL3002B	Prepare and produce sewn garment	LMTCL2001B LMTCL2003B LMTCL2004B
LMTCL3003B	Perform garment repairs and alterations	LMTCL2001B LMTCL2003B LMTCL2004B
LMTCL3004B	Press whole garments	LMTCL2006B
LMTCL3005B	Lay up and cut complicated fabrics and lays	LMTCL2007B
LMTCL3006B	Assemble bra or swimwear	LMTCL2001B LMTCL2003B LMTCL2004B
LMTCL3007B	Embellish garment by hand or machine	LMTCL2001B LMTCL2003B LMTCL2005B
LMTCL3008B	Set and produce digital embroidery	
LMTCL3009B	Develop patterns from a block using basic pattern making principles	
LMTCL3010B	Sew woven and stretch knit garments	LMTCL2001B LMTCL2003B LMTCL2004B
LMTCL3011B	Contribute to garment production	LMTCL2002B

	process improvements	
LMTCL3012B	Make marker for complicated fabrics and lays	LMTCL2007B
LMTCL3013B	Interpret patterns and apply pattern information	
LMTCL3014B	Interact and communicate with garment production personnel	
LMTGN3001B	Control production in a section of a Textiles, Clothing and Footwear enterprise	
LMTGN3002B	Organise and plan own work to achieve planned outcomes	

GROUP C

Unit code	Unit title	Prerequisites
LMTCL2001B	Use a sewing machine	
LMTCL2002B	Provide hand sewing and finishing support	
LMTCL2004B	Sew components	LMTCL2001B
LMTCL2005B	Use specialised machinery or processes to assist assembly production	

LMTCL2006B	Press work	
LMTCL2007B	Lay up, mark and cut uncomplicated fabrics and lays	
LMTCL2008B	Finish garment production	LMTCL2003B
LMTCL2009B	Despatch work	
LMTCL2010B	Modify patterns to create basic styles	
LMTCL2011B	Draw and interpret a basic sketch	
LMTCL2012B	Organise and plan own work in a home-based production environment	
LMTCL2013B	Block and shape headwear by machine	
LMTCL2014B	Pack, store, handle or despatch headwear	
LMTCL2015B	Finish headwear	
LMTCL2016B	Trim headwear	
LMTCL2017B	Access and use information resources for clothing production operations	
LMTCL2018B	Perform basic maintenance of headwear	
LMTFD2005B	Identify design process for fashion designs	

LMTFD3003B	Prepare design concept for a simple garment	LMTCL2011B LMTFD2005B
LMTFD3004B	Draw a trade drawing for fashion design	
LMTGN2004B	Work in a team environment	
LMTGN2005B	Perform minor maintenance	
LMTGN2006B	Perform test or inspection to check product quality	
LMTGN2007B	Select, transfer and remove materials and products	
LMTGN2008B	Coordinate work of team or section	
LMTGN2009B	Operate computing technology in a textiles, clothing and footwear workplace	
LMTGN2010B	Perform tasks to support production	

GROUP D

Unit code	Unit title	Prerequisites
MSS402010A	Manage the impact of change on own work	
MSS403010A	Facilitate change in an organisation	

	implementing competitive systems and practices	
MSS402001A	Apply competitive systems and practices	
MSS402002A	Sustain process improvements	
MSS403001A	Implement competitive systems and practices	
MSS403002A	Ensure process improvements are sustained	
MSS402020A	Apply quick changeover procedures	
MSS402021A	Apply Just in Time procedures	
MSS402030A	Apply cost factors to work practices	
MSS402031A	Interpret product costs in terms of customer requirements	
MSS402040A	Apply 5S procedures	
MSS402050A	Monitor process capability	
MSS402060A	Use planning software systems in operations	

MSS402061A	Use SCADA systems in operations	
MSACMT270A	Use sustainable energy practices	
MSS402080A	Undertake root cause analysis	
MSS402081A	Contribute to the application of a proactive maintenance strategy	
MSS403021A	Facilitate a Just in Time system	
MSS403030A	Improve cost factors in work practices	
MSS403032A	Analyse manual handling processes	
MSS403040A	Facilitate and improve implementation of 5S	
MSS404050A	Undertake process capability improvements	MSS404052A
MSS403051A	Mistake proof an operational process	
MSS404052A	Apply statistics to operational processes	
MSS404060A	Facilitate the use of planning software systems in a work	MSS402060A

	area or team	
MSS404061A	Facilitate the use of SCADA systems in a team or work area	
MSS404081A	Undertake proactive maintenance analyses	
MSS404082A	Assist in implementing a proactive maintenance strategy	
MSAENV472B	Implement and monitor environmentally sustainable work practices	

GROUP E

Other Clothing Production units that are available at Certificates II (maximum 1 unit), III (maximum 3 units) and IV (maximum 1 unit)

Other TCF Training Package units that are available at Certificates II (maximum 1 unit), III (maximum 3 units) and IV (maximum 1 unit)

Units from other endorsed Training Packages and accredited courses that are available at Certificates II (maximum 1 unit), III (maximum 3 units) and IV (maximum 1 unit)

LMT30607 Certificate III in Millinery

Modification History

Not applicable.

Description

Job roles/employment outcomes

The Certificate III reflects vocational outcomes for those performing production roles applying technical skills within a millinery production environment.

Application

This qualification is typically used to develop skill and knowledge in the application of specialised technical, operational and supervisory skills within millinery enterprises.

Pathways into the qualification

Direct entry into this qualification requires completion of a total of nineteen (19) units of competency according to the rules described below.

Credit may be granted towards this qualification by those who have completed LMT20807 Certificate II in Millinery or achieved equivalent industry experience.

Pathways from the qualification

Further training pathways from this qualification include LMT40407 Certificate IV in Millinery, or other relevant qualifications.

Licensing considerations

There are no specific licences that relate to this qualification. However, some units in this qualification may have licensing or regulatory requirements in some environments. Local regulations should be checked for details.

Pathways Information

Not applicable.

Licensing/Regulatory Information

Not applicable.

Entry Requirements

Not applicable.

Employability Skills Summary

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

Employability Skills Summary - Certificate III in Millinery

The following table contains a summary of the Employability Skills as identified by the Millinery industries for this qualification. This table should be interpreted in conjunction with the detailed requirements of each unit of competency packaged in this qualification. The outcomes described here are broad industry requirements that reflect skill requirements for this level.

Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	• confirm relevant industry and workplace requirements • understand personal requirements of relevant industry and workplace standards, regulations and policies • complete standard documentation • use communication technologies efficiently • communicate problems with millinery • communicate to others millinery operational requirements • ensure records are accurate and legible • establish effective working relationships with colleagues • undertake interactive workplace communication • communicate effectively and appropriately when dealing with customers
Teamwork	• explain and implement work team reporting requirements • monitor work team tasks in accordance with regulatory and workplace requirements • demonstrate and encourage others in working cooperatively with people of different ages, gender, race or religion • undertake appropriate and effective communication with team members
Problem-solving	• identify risks and implement risk control measures for chemicals and equipment • identify and address problems and faults • check performance of machinery and equipment

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
	• assess and evaluate skills requirements of self and others to perform tasks • deal with and promptly resolve issues • use problem solving techniques to determine millinery requirements • assess quality of millinery materials before using in millinery items • identify and report potential environmental hazards
Initiative and enterprise	• seek and provide feedback on procedures • collect and monitor information • identify non-conformances to standards and take appropriate action • rectify problems promptly and appropriately • monitor and adjust activity in response to operational variations • identify and assess existing and potential risks and seek advice • monitor information and records to identify trends that may require remedial action • develop and promote continuous improvement
Planning and organising	• plan work requirements for self and others as required • monitor quality outcomes • allocate tasks to operators • monitor resource use in own work • implement contingency plan promptly when incidents occur • monitor equipment condition and performance
Self-management	• manage own work • monitor information in work area • keep the work area clean and tidy at all times • conduct regular housekeeping activities during shift • locate, interpret and apply relevant information • monitor own work against quality standards • understand own work activities and responsibilities • identify and apply safety procedures, including the use of protective equipment

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
	• conduct work in a manner which minimises waste • manage work load priorities
Learning	• recognise limits of own expertise • assess competencies in meeting job requirements • identify own skill requirements and seek skill development if required • ask questions to expand own knowledge
Technology	• monitor machine operation • use machine or equipment in correct operational mode • perform minor maintenance on machinery • work with technology safely and according to workplace standards • handle and use chemicals correctly and safely

Packaging Rules

Packaging Rules

To be awarded the Certificate III in Millinery, competency must be achieved in nineteen (19) units of competency.

- Eleven (11) core units of competency
- Eight (8) elective units of competency as specified below.

If Certificate II has been achieved, an additional six (6) units are required. All core units listed must be achieved - any Certificate III core units not achieved at Certificate II must be completed as part of the additional six (6) unit required for the Certificate III. Units that have been credited towards lower level qualifications must not be selected in the additional six (6) unit requirement.

Note: Where prerequisite units apply, these have been noted, and must be considered in the total number of units.

CORE UNITS

Complete all eleven (11) units from this list

Unit code	Unit title
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Unit code	Unit title
LMTGN2001B	Follow defined OH&S policies and procedures
LMTGN2002B	Apply quality standards
LMTGN2003B	Work in the Textiles, Clothing and Footwear industry
LMTML2001A	Identify materials used in millinery
LMTML2002A	Make flat patterns for millinery
LMTML2007A	Block and shape millinery by hand
LMTML2008A	Assemble simple blocked millinery components
LMTML3001A	Make flat patterns from hat blocks
LMTML3003A	Make millinery using a pattern derived from a hat block
LMTML3004A	Identify performance and handling requirements of millinery materials
MSAENV272B	Participate in environmentally sustainable work practices

ELECTIVE UNITS

Select eight (8) units as specified below.

- A minimum of one (1) unit must be selected from Group A
- A maximum of three (3) units may be selected from Group C
- The remainder must be selected from Groups A and B.
-

GROUP A

Unit code	Unit title	Prerequisites
LMTML3002A	Block and shape complex millinery	LMTML2007A LMTML3004A
LMTML3005A	Use skin, fur or leather in millinery products	LMTML2002A

Unit code	Unit title	Prerequisites
LMTML3006A	Assemble complex blocked millinery components	LMTML3002A

GROUP B

Unit code	Unit title	Prerequisites
LMTCL2001B	Use a sewing machine	
LMTCL2005B	Use specialised machinery to assist assembly production	
LMTCL2011B	Draw and interpret a basic sketch	
LMTCL2018B	Perform basic maintenance of headwear	
LMTFD3001B	Market design product to local outlets	
LMTGN2004B	Work in a team environment	
LMTGN2005B	Perform minor maintenance	
LMTGN2006B	Perform test or inspection to check product quality	
LMTGN2008B	Coordinate work of team or section	
LMTGN2009B	Operate computing technology in a	

Unit code	Unit title	Prerequisites
	Textiles, Clothing and Footwear workplace	
LMTGN2010B	Perform tasks to support production	
LMTGN3002B	Organise and plan own work to achieve planned outcomes	
LMTGN3003B	Estimate and cost job	
LMTGN3008A	Draw 3D designs	
LMTML2003A	Produce and attach millinery trims	
LMTML2004A	Produce felt for millinery	LMTML2001A
LMTML2005A	Place and cut millinery patterns	
LMTML2006A	Use millinery steaming and pressing equipment	
LMTML2009A	Apply millinery sewing and adhesion techniques	
LMTML2010A	Make millinery with flat pattern components	

GROUP C

Other Millinery units that are available at Certificates II (maximum 1 unit), III (maximum 3 units) and IV (maximum 1 unit)

Other Millinery units that are available at Certificates II (maximum 1 unit), III (maximum 3 units) and IV (maximum 1 unit)
Other TCF Training Package units that are available at Certificates II (maximum 1 unit), III (maximum 3 units) and IV (maximum 1 unit)
Units from other endorsed Training Packages and accredited courses that are available at Certificates II (maximum 1 unit), III (maximum 3 units) and IV (maximum 1 unit)

LMT30707 Certificate III in Footwear Production

Modification History

Release 2 - imported units updated to current versions, outcomes equivalent.

Description

Job roles/employment outcomes

Certificate III reflects vocational outcomes for those performing supervision roles, specialised technical tasks or multi-skilled roles within a production oriented work environment.

Application

This qualification is typically used to develop skill and knowledge in the application of specialised technical, operational and supervisory skills within footwear production enterprises.

Pathways Information

Pathways into the qualification

Direct entry into this qualification requires completion of a total of nineteen (19) units of competency according to the rules described below.

Credit may be granted towards this qualification by those who have completed LMT20907 Certificate II in Footwear Production (Intermediate), LMT21007 Certificate II in Footwear Production (Complex or Multiple Processes) or achieved equivalent industry experience.

Pathways from the qualification

Further training pathways from this qualification include LMT40407 Certificate IV in Custom-made Footwear, MSA41108 Certificate IV in Competitive Manufacturing, or other relevant manufacturing qualifications.

Licensing/Regulatory Information

There are no specific licences that relate to this qualification. However, some units in this qualification may have licensing or regulatory requirements in some environments. Local regulations should be checked for details.

Entry Requirements

Not applicable.

Employability Skills Summary

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

Employability Skills Summary - Certificate III in Footwear Production

The following table contains a summary of the Employability Skills as identified by the footwear production industries for this qualification. This table should be interpreted in conjunction with the detailed requirements of each unit of competency packaged in this qualification. The outcomes described here are broad industry requirements that reflect skill requirements for this level.

Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	• complete written documents, job cards, forms and timesheets • use communication technologies efficiently • communicate production abnormalities • demonstrate effective and appropriate communication and interpersonal skills when dealing with people from a range of backgrounds • read, interpret and communicate production schedules • communicate with all team members
Teamwork	• work cooperatively with people of different ages, gender, race or religion • liaise with and provide support to other team members • work as part of a team • keep team members informed of changes to work practices • identify team performance required to meet customer needs • provide leadership to others in the team • encourage the sharing of information between team members • plan and support team activities
Problem-solving	• identify and report problems and make contributions to their solution • investigate problem causes • implement changes • examine materials for damage, missing components or

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
	- other defects • identify and promptly address problems or issues • assess quality of work pieces • determine effective work practices • provide problem solving support to team members • problem solve machine operational and maintenance requirements • identify and report potential environmental hazards
Initiative and enterprise	• seek and provide feedback on procedures • gather and analyse information • record information on the quality and other indicators of production performance • adjust and implement production schedules changes • provide leadership • identify and implement process improvements • coordinate work activities and manufacturing processes • monitor workplace performance • use analytical and decision making skills
Planning and organising	• identify hazards and implement appropriate hazard control measures • organise self and others to meet production schedules • identify and rectify stock shortages in advance • sequence work to maximise safety and productivity • select and use appropriate tools and equipment • determine materials, quality and production requirements • monitor resource use in own work • apply time management skills to ensure work flow
Self-management	• interpret and apply relevant acts and regulations • keep the work area clean and tidy at all times • conduct regular housekeeping activities • understand own work activities • manage own time and establish own work schedule • develop and implement workplace procedures and instructions

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
	• locate, interpret and apply information relevant to own work • monitor and evaluate own work quality • conduct work in a manner which minimises waste • accept responsibility for quality of work
Learning	• develop learning activities as appropriate • assess competencies in meeting job requirements • identify own training needs and seek skill development if required • listen to feedback from others • identify sources of information to expand knowledge and understanding • identify and address skill development needs of others in the team
Technology	• use software applications effectively • properly start up, operate and shut down machines • work with technology safely and according to workplace standards • carry out pre-operational checks on equipment and machines • operate equipment and machines safely, efficiently and to productivity requirements • monitor and adjust machine functions • perform machine maintenance as determined by workplace procedures • clean and check equipment and machines

Packaging Rules

To be awarded the Certificate III in Footwear Production, competency must be achieved in nineteen (19) units of competency.

- Five (5) core units of competency
- Fourteen (14) elective units of competency as specified below.

If Certificate II in Footwear Production (Complex or Multiple Processes) has been achieved, an additional six (6) units are required. All core units listed must be achieved - any Certificate III core units not achieved at Certificate II must be completed as part of the additional six (6) units required for Certificate III. Units that have been credited towards lower level qualifications must not be selected in the additional six (6) unit requirement. A minimum of three (3) of the six (6) units must be selected from the Group A or B units.

Note: Where prerequisite units apply, these have been noted, and must be considered in the total number of units.

CORE UNITS

Complete all five (5) units from this list

Unit code	Unit title
LMTFP2001B	Identify materials used in footwear production
LMTGN2001B	Follow defined OH&S policies and procedures
LMTGN2002B	Apply quality standards
LMTGN2003B	Work in the Textiles, Clothing and Footwear industry
MSAENV272B	Participate in environmentally sustainable work practices

ELECTIVE UNITS

Select fourteen (14) units as specified below.

- A minimum of two (2) units must be selected from Group A
- A minimum of one (1) unit must be selected from Group B
- A maximum of two (2) units may be selected from Group D
- A maximum of three (3) units may be selected from Group E
- The remainder must be selected from Groups A, B and C.

NOTE: Competitive Manufacturing Training Package units, identified in Group D as MSACM coded units, should be selected on the basis of work requirements. Those at Certificate II level (units in the 200 series) are appropriate for operators. MSACM units for those in Certificate III level positions such as team leaders should be selected from both the 200 series and the 400 series.

GROUP A

Unit code	Unit title	Prerequisites
LMTFP3001B	Cut leather by hand	
LMTFP3002B	Hand last shoe	

Unit code	Unit tile	Prerequisites
LMTFP3003B	Assemble shoe by hand	LMTFP2001B
LMTFP3004B	Contribute to footwear production improvement processes	LMTGN2002B
LMTFP3005B	Supervise footwear production operations	
LMTFP3006B	Apply foot anatomy principles to footwear production	

GROUP B

Unit code	Unit tile	Prerequisites
LMTFP3001B	Cut leather by hand	
LMTFP3002B	Hand last shoe	
LMTFP3003B	Assemble shoe by hand	LMTFP2001B
LMTFP3004B	Contribute to footwear production improvement processes	LMTGN2002B
LMTFP3005B	Supervise footwear production operations	
LMTFP3006B	Apply foot anatomy principles to footwear production	
LMTGN3001B	Control production in a section of a Textiles, Clothing and Footwear enterprise	
LMTGN3002B	Organise and plan own	

Unit code	Unit tile	Prerequisites
	work to achieve planned outcomes	
LMTGN3003B	Estimate and cost job	
LMTLG3005A	Grade leather	

GROUP C

Unit code	Unit tile	Prerequisites
LMTFP2001B	Identify materials used in footwear production	
LMTFP2002B	Perform stuff cutting	
LMTFP2003B	Cut printed materials by machine	
LMTFP2004B	Cut non printed leather by machine	
LMTFP2005B	Operate machine to sew upper	
LMTFP2006B	Machine upper according to product requirements	LMTFP2005B
LMTFP2007B	Last shoe by machine	
LMTFP2008B	Perform moulding operations	
LMTFP2009B	Perform footwear finishing operations	
LMTFP2010B	Repair footwear product	
LMTFP2011B	Perform table-based operations	

Unit code	Unit tile	Prerequisites
LMTGN2004B	Work in a team environment	
LMTGN2005B	Perform minor maintenance	
LMTGN2006B	Perform test or inspection to check product quality	
LMTGN2007B	Select, transfer and remove materials and products	
LMTGN2008B	Coordinate work of team or section	
LMTGN2009B	Operate computing technology in a Textiles, Clothing and Footwear workplace	
LMTGN2010B	Perform tasks to support production	

GROUP D

Unit code	Unit tile	Prerequisites
MSS402010A	Manage the impact of change on own work	
MSS403010A	Facilitate change in an organisation implementing competitive systems and practices	
MSS402001A	Apply competitive systems and	

Unit code	Unit tile	Prerequisites
	practices	
MSS402002A	Sustain process improvements	
MSS403001A	Implement competitive systems and practices	
MSS403002A	Ensure process improvements are sustained	
MSS402020A	Apply quick changeover procedures	
MSS402021A	Apply Just in Time procedures	
MSS402030A	Apply cost factors to work practices	
MSS402031A	Interpret product costs in terms of customer requirements	
MSS402040A	Apply 5S procedures	
MSS402050A	Monitor process capability	
MSS402060A	Use planning software systems in operations	
MSS402061A	Use SCADA systems in operations	

Unit code	Unit tile	Prerequisites
MSACMT270A	Use sustainable energy practices	
MSS402080A	Undertake root cause analysis	
MSS402081A	Contribute to the application of a proactive maintenance strategy	
MSS403021A	Facilitate a Just in Time system	
MSS403030A	Improve cost factors in work practices	
MSS403032A	Analyse manual handling processes	
MSS403040A	Facilitate and improve implementation of 5S	
MSS404050A	Undertake process capability improvements	MSS404052A
MSS403051A	Mistake proof an operational process	
MSS404052A	Apply statistics to operational processes	
MSS404060A	Facilitate the use of planning software systems in a work area or team	MSS402060A

Unit code	Unit tile	Prerequisites
MSS404061A	Facilitate the use of SCADA systems in a team or work area	
MSS404081A	Undertake proactive maintenance analyses	
MSS404082A	Assist in implementing a proactive maintenance strategy	
MSAENV472B	Implement and monitor environmentally sustainable work practices	

GROUP E

Other Footwear Production units that are available at Certificates II (maximum 1 unit) and III (maximum 3 units)

Other TCF Training Package units that are available at Certificates II (maximum 1 unit), III (maximum 3 units) and IV (maximum 1 unit)

Units from other endorsed Training Packages and accredited courses that are available at Certificates II (maximum 1 unit), III (maximum 3 units) and IV (maximum 1 unit)

LMT30807 Certificate III in Footwear Repair

Modification History

Release 2 - imported units updated to current versions, outcomes equivalent.

Description

Job roles/employment outcomes

The Certificate III reflects vocational outcomes for those performing supervision roles, specialised technical tasks or multi-skilled roles within a production environment.

Application

This qualification is typically used to develop skill and knowledge in the application of specialised technical, operational and supervisory skills within footwear repair enterprises.

Pathways Information

Pathways into the qualification

Direct entry into this qualification requires completion of a total of nineteen (19) units of competency according to the rules described below.

Credit may be granted towards this qualification by those who have completed LMT21107 Certificate II in Footwear Repair or achieved equivalent industry experience.

Pathways from the qualification

Further training pathways from this qualification include relevant supervisory, management or competitive manufacturing qualifications.

Licensing/Regulatory Information

There are no specific licences that relate to this qualification. However, some units in this qualification may have licensing or regulatory requirements in some environments. Local regulations should be checked for details.

Entry Requirements

Not applicable.

Employability Skills Summary

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

Employability Skills Summary - Certificate III in Footwear Repair

The following table contains a summary of the Employability Skills as identified by the footwear repair industries for this qualification. This table should be interpreted in conjunction with the detailed requirements of each unit of competency packaged in this qualification. The outcomes described here are broad industry requirements that reflect skill requirements for this level.

Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	• communicate effectively and appropriately when dealing with customers • give verbal and/or written feedback • communicate with all relevant personnel, management and administration • confirm relevant industry and workplace requirements • understand personal requirements of relevant industry and workplace standards, regulations and policies • complete standard documentation • use communication technologies efficiently • communicate problems with footwear processes or outcomes • communicate to others footwear repair requirements • ensure records are accurate and legible • establish effective working relationships with colleagues • undertake interactive workplace communication
Teamwork	• work as part of a team • supervise and support team activities • identify team performance required to meet customer needs • explain and implement work team reporting requirements • monitor work team tasks in accordance with regulatory and workplace requirements • apply team leadership and development techniques • demonstrate and encourage others in working

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
	cooperatively with people of different ages, gender, race or religion • undertake appropriate and effective communication with team members
Problem-solving	• identify footwear problems and make contributions to their solution • apply knowledge of materials, product purpose and processes to problem solving • check machine performance and address faulty operations • use problem solving techniques • identify risks and implement risk control measures for processes and equipment • assess and evaluate skills requirements of self and others to perform tasks • deal with and promptly resolve issues • use problem solving techniques to determine footwear repair requirements • identify and report potential environmental hazards
Initiative and enterprise	• determine cost effective solutions for customer repair needs • recognise problems in systems and documentation • investigate non-conformances to standards and take appropriate action • use decision making skills to support work flow • seek and provide feedback on procedures • collect and monitor information • rectify problems promptly and appropriately • monitor and adjust activity in response to operational variations • identify and assess existing and potential risks and seek advice • monitor information and records to identify trends that may require remedial action • develop and promote continuous improvement
Planning and organising	• identify priority in which jobs are to be completed

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

	• plan work requirements and task sequences • monitor work and make adjustments to meet deadlines • ensure availability of resources to meet work requirements • monitor and maintain product quality • assess equipment performance and readiness for use • plan work requirements for repair jobs • plan work requirements for self and others as required • monitor resource use in own work • monitor quality outcomes • allocate tasks to operators • implement contingency plan promptly when incidents occur • identify training needs for the work team and seek training support • monitor equipment condition and performance
Self-management	• keep the work area clean and tidy at all times • conduct regular housekeeping activities • plan to ensure timelines are achieved • accept responsibility for quality of own work • implement and follow OHS practices during the preparation, repair and finishing of shoes • manage own work • monitor information in work area • locate, interpret and apply relevant information • monitor own work against quality standards • understand own work activities and responsibilities • conduct work in a manner which minimises waste • identify and apply safety procedures, including the use of protective equipment • manage work load priorities
Learning	• recognise limits of own expertise • assess competencies in meeting job requirements • identify own skill requirements and seek skill development if required • ask questions to expand own knowledge

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
	• listen to feedback on own performance
Technology	• monitor and adjust machine functions • use machinery to meet productivity requirements • perform minor maintenance on machinery • work with technology safely and according to workplace standards • use communication technologies in the workplace • use machine or equipment in correct operational mode • demonstrate safe and effective use of tools and equipment to others

Packaging Rules

To be awarded the Certificate III in Footwear Repair, competency must be achieved in nineteen (19) units of competency.

- Five (5) core units of competency
- Fourteen (14) elective units of competency as specified below.

If Certificate II has been achieved, an additional six (6) units are required. All core units listed must be achieved - any Certificate III core units not achieved at Certificate II must be completed as part of the additional six (6) units required for the Certificate III. Units that have been credited towards lower level qualifications must not be selected in the additional six (6) unit requirement. A minimum of three (3) of the six (6) units must be selected from Group B units.

Note: Where prerequisite units apply, these have been noted, and must be considered in the total number of units.

CORE UNITS

Complete all five (5) units from this list

Unit code	Unit title
LMTFP2001B	Identify materials used in footwear production
LMTGN2001B	Follow defined OH&S policies and procedures
LMTGN2002B	Apply quality standards
LMTGN2003B	Work in the Textiles, Clothing and Footwear industry

Unit code	Unit title
MSAENV272B	Participate in environmentally sustainable work practices

ELECTIVE UNITS

Select fourteen (14) units as specified below.

- A minimum of four (4) units must be selected from Group A
- A minimum of four (4) units must be selected from Group B
- A maximum of two (2) units may be selected from Group D
- A maximum of three (3) units may be selected from Group E
- The remainder must be selected from Groups A, B and C.

NOTE: Competitive Manufacturing Training Package units, identified in Group D as MSACM coded units, should be selected on the basis of work requirements. Those at Certificate II level (units in the 200 series) are appropriate for operators. MSACM units for those in Certificate III level positions such as team leaders should be selected from both the 200 series and the 400 series.

GROUP A

Unit code	Unit title	Prerequisites
LMTFR2001A	Assess and cost footwear repair job	
LMTFR2002A	Supply and fit new heel block	
LMTFR2003A	Attach non-slip sole and heel top piece	
LMTFR2004A	Replace half leather sole	
LMTFR2005A	Sew or patch by machine	
LMTLG2006A	Identify materials used in leather goods production	
MEM18001C	Use hand tools	
MEM19006B	Replace watch batteries	MEM18001C
MEM20001A	Produce keys	

GROUP B

Unit code	Unit title	Prerequisites
LMTFR3001A	Replace full sole and heel	
LMTFR3002A	Operate sole stitcher	
LMTFR3003A	Hand sew welt	
LMTFR3004A	Re-cover footwear	
LMTFR3005A	Dye footwear or leather product	
LMTFR3006A	Undertake specialised footwear repair techniques	
LMTGN3001B	Control production in a section of a Textiles, Clothing and Footwear enterprise	
LMTGN3002B	Organise and plan own work to achieve planned outcomes	
LMTGN3003B	Estimate and cost job	
LMTGN3005B	Plan tasks to assist production operations	
MEM19014B	Perform hand engraving	MEM18001C

GROUP C

Unit code	Unit title	Prerequisites
LMTGN2004B	Work in a team environment	
LMTGN2005B	Perform minor maintenance	

Unit code	Unit title	Prerequisites
LMTGN2006B	Perform test or inspection to check product quality	
LMTGN2007B	Select, transfer and remove materials and products	
LMTGN2008B	Coordinate work of team or section	
LMTGN2009B	Operate computing technology in a Textiles, Clothing and Footwear workplace	
LMTGN2010B	Perform tasks to support production	

GROUP D

Unit code	Unit title	Prerequisites
MSS402010A	Manage the impact of change on own work	
MSS403010A	Facilitate change in an organisation implementing competitive systems and practices	
MSS402001A	Apply competitive systems and practices	
MSS402002A	Sustain process improvements	
MSS403001A	Implement	

Unit code	Unit title	Prerequisites
	competitive systems and practices	
MSS403002A	Ensure process improvements are sustained	
MSS402020A	Apply quick changeover procedures	
MSS402021A	Apply Just in Time procedures	
MSS402030A	Apply cost factors to work practices	
MSS402031A	Interpret product costs in terms of customer requirements	
MSS402040A	Apply 5S procedures	
MSS402050A	Monitor process capability	
MSS402060A	Use planning software systems in operations	
MSS402061A	Use SCADA systems in operations	
MSACMT270A	Use sustainable energy practices	
MSS402080A	Undertake root cause analysis	

Unit code	Unit title	Prerequisites
MSS402081A	Contribute to the application of a proactive maintenance strategy	
MSS403021A	Facilitate a Just in Time system	
MSS403030A	Improve cost factors in work practices	
MSS403032A	Analyse manual handling processes	
MSS403040A	Facilitate and improve implementation of 5S	
MSS404050A	Undertake process capability improvements	MSS404052A
MSS403051A	Mistake proof an operational process	
MSS404052A	Apply statistics to operational processes	
MSS404060A	Facilitate the use of planning software systems in a work area or team	
MSS404061A	Facilitate the use of SCADA systems in a team or work area	
MSS404081A	Undertake proactive maintenance	

Unit code	Unit title	Prerequisites
	analyses	
MSS404082A	Assist in implementing a proactive maintenance strategy	
MSAENV472B	Implement and monitor environmentally sustainable work practices	

GROUP E

Other Footwear Repair units that are available at Certificates II (maximum 1 unit) and III (maximum 3 units)

Other TCF Training Package units that are available at Certificates II (maximum 1 unit), III (maximum 3 units) and IV (maximum 1 unit)

Units from other endorsed Training Packages and accredited courses that are available at Certificates II (maximum 1 unit), III (maximum 3 units) and IV (maximum 1 unit)

LMT30907 Certificate III in Leather Production

Modification History

Release 2 - imported units updated to current versions, outcomes equivalent.

Description

Job roles/employment outcomes

The Certificate III reflects vocational outcomes for those performing supervision roles, specialised technical tasks or multi-skilled roles within a production environment.

Application

This qualification is typically used to develop skill and knowledge in the application of specialised technical, operational and supervisory skills within a hide, skin and leather processing enterprise or an enterprise involved in the production of leather goods.

Pathways Information

Pathways into the qualification

Direct entry into this qualification requires completion of a total of nineteen (19) units of competency according to the rules described below.

Units that have been achieved through completion of the LMT21207 Certificate II in Leather Production may be credited towards this Certificate III qualification.

Pathways from the qualification

Further training pathways from this qualification include MSA41108 Certificate IV in Competitive Manufacturing, or other relevant manufacturing qualifications.

Licensing/Regulatory Information

There are no specific licences that relate to this qualification. However, some units in this qualification may have licensing or regulatory requirements in some environments. Local regulations should be checked for details.

Entry Requirements

Not applicable.

Employability Skills Summary

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

Employability Skills Summary - Certificate III in Leather Production

The following table contains a summary of the Employability Skills as identified by the leather production industries for this qualification. This table should be interpreted in conjunction with the detailed requirements of each unit of competency packaged in this qualification. The outcomes described here are broad industry requirements that reflect skill requirements for this level.

Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	• communicate with personnel throughout the enterprise • complete and compile written orders and documentation • use communication technologies efficiently • develop work instructions, visuals and signs • demonstrate effective and appropriate communication and interpersonal skills • read and interpret work orders • explain processes to others in the workplace • encourage the sharing of work information
Teamwork	• work cooperatively with people of different ages, gender, race or religion • provide support to others in the work area • provide leadership in a team • identify performance required to meet customer needs in own work and team • encourage the sharing of information between team members • plan and support team activities
Problem-solving	• identify hazards and monitor risk control procedures • check performance of equipment and make approved adjustments • identify problems and make contributions to their solution • monitor and report on workplace activities • identify and promptly address problems or issues

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
	• assess quality of work pieces • determine effective work practices • provide problem solving support to team members • identify and report potential environmental hazards
Initiative and enterprise	• develop and implement continuous improvement strategies • facilitate team development • seek and provide feedback on procedures and processes • redesign or adjust workplace practices to ensure that non-conformance is not repeated • record information on the quality and other indicators of production performance • identify and implement process improvements • coordinate work activities and manufacturing processes • monitor workplace performance • use analytical and decision making skills
Planning and organising	• plan work requirements and production • determine and implement work schedules and priorities • monitor and evaluate production and quality • identify hazards and implement appropriate hazard control measures • determine materials, chemicals, quality and production requirements • monitor resource use in own work • apply time management skills to ensure work flow
Self-management	• identify responsibilities for own work role • keep the work area clean and tidy at all times • conduct regular housekeeping activities • identify task outcomes and performance measures • locate, interpret and apply information relevant to own work • understand own work activities • establish own work schedule

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
	• monitor and evaluate own work • conduct work in a manner which minimises waste • accept responsibility for quality of work • identify resource requirements
Learning	• assess competencies in meeting job requirements • listen to feedback from others • identify own skill requirements and seek skill development if required • identify sources of information to expand knowledge and understanding • identify and address skill development needs of others in the team
Technology	• carry out pre-operational checks on equipment and machines • operate equipment and machines • use machinery to meet productivity requirements • monitor and adjust machine functions • perform minor maintenance • clean and check equipment and machines • work with technology safely and according to workplace standards

Packaging Rules

To be awarded the Certificate III in Leather Production, competency must be achieved in nineteen (19) units of competency.

- Six (6) core units of competency
- Thirteen (13) elective units of competency as specified below.

If Certificate II has been achieved, an additional six (6) units are required. All core units listed must be achieved - any Certificate III core units not achieved at Certificate II must be completed as part of the additional six (6) units required for the Certificate III. Units that have been credited towards lower level qualifications must not be selected in the additional six (6) unit requirement. At least two (2) of the six (6) units must be from Group A and at least one (1) must be from Group B.

Note: Where prerequisite units apply, these have been noted, and must be considered in the total number of units.

CORE UNITS

Complete all six (6) units from this list

Unit code	Unit title
LMTGN2001B	Follow defined OH&S policies and procedures
LMTGN2002B	Apply quality standards
LMTGN2003B	Work in the Textiles, Clothing and Footwear industry
LMTGN2010B	Perform tasks to support production
LMTGN3002B	Organise and plan own work to achieve planned outcomes
MSAENV272B	Participate in environmentally sustainable work practices

ELECTIVE UNITS

Select thirteen (13) units as specified below.

- A minimum of two (2) units must be selected from Group A A minimum of one (1) unit must be selected from Group B
- A minimum of four (4) units must be selected from Group C
- A maximum of two (2) units may be chosen from Group E
- A maximum of three (3) units may be selected from Group F
- The remainder must be selected from Groups A, B, C and D.

When this qualification is applied for a hide skin and leather context, the rules for unit selection apply to units coded HL.

When this qualification is applied for a leather production context, the rules for unit selection apply to units coded LG.

NOTE: Competitive Manufacturing Training Package units, identified in Group E as MSACM coded units, should be selected on the basis of work requirements. Those at Certificate II level (units in the 200 series) are appropriate for operators. MSACM units for those in Certificate III level positions such as team leaders should be selected from both the 200 series and the 400 series.

GROUP A

Unit code	Unit title	Prerequisites
LMTHL3001A	Determine suitability of hide, skin and leather for specific requirements	
LMTHL3002A	Determine tanning	

Unit code	Unit title	Prerequisites
	requirements for hide, skin and leather	
LMTLG3001A	Make a prototype	
LMTLG3002A	Cut leather by hand	
LMTLG3003A	Sew leather by hand	
LMTLG3004A	Apply finishes to leather products	
LMTLG3005A	Grade leather	
LMTLG3006A	Apply pattern specifications to saddlery operations	
LMTLG3007A	Assemble saddle components	

GROUP B

Unit code	Unit title	Prerequisites
LMTGN3001B	Control production in a section of a Textiles, Clothing and Footwear enterprise	
LMTGN3002B	Supervise operations in a textiles, clothing and footwear enterprise	
LMTGN3003B	Estimate and cost job	
LMTGN3005B	Plan tasks to assist production operations	
LMTGN3007B	Monitor and operate trade waste process	

Unit code	Unit title	Prerequisites
LMTHL3001A	Determine suitability of hide, skin and leather for specific requirements	
LMTHL3002A	Determine tanning requirements for hide, skin and leather	
LMTLG3001A	Make a prototype	
LMTLG3002A	Cut leather by hand	
LMTLG3003A	Sew leather by hand	
LMTLG3004A	Apply finishes to leather products	
LMTLG3005A	Grade leather	
LMTLG3006A	Apply pattern specifications to saddlery operations	
LMTLG3007A	Assemble saddle components	

GROUP C

Unit code	Unit title	Prerequisites
LMTHL2001A	Undertake receipt, storage, handling and preservation of materials or products	
LMTHL2002A	Perform fellmongering processes	
LMTHL2003A	Operate machines to prepare hides or skins for	

Unit code	Unit title	Prerequisites
	tanning	
LMTHL2004A	Prepare chemicals to a formula	
LMTHL2006A	Use drum or vessel to prepare or tan hides or skins	
LMTHL2007A	Operate machine to crust hides, skins or leather	
LMTHL2008A	Use drum or vessel to crust hides, skins or leather	
LMTHL2009A	Perform drying operations	
LMTHL2010A	Finish hides, skins or leather	
LMTHL2011A	Trim hides, skins or leather	
LMTHL2012A	Sort, grade or class hides, skins or leather	
LMTLG2000A	Skive leather pieces	
LMTLG2001A	Cut by machine	
LMTLG2002A	Sew leather by machine	
LMTLG2003A	Perform table work	
LMTLG2004A	Operate leather production machines	
LMTLG2005A	Split leather pieces	
LMTLG2006A	Identify materials used in leather goods production	

GROUP D

Unit code	Unit title	Prerequisites
LMTGN2004B	Work in a team environment	
LMTGN2005B	Perform minor maintenance	
LMTGN2006B	Perform test or inspection to check product quality	
LMTGN2007B	Select, transfer and remove materials and products	
LMTGN2008B	Coordinate work of team or section	
LMTGN2009B	Operate computing technology in a Textiles, Clothing and Footwear workplace	
MEM11010B	Operate mobile load shifting equipment	

GROUP E

Unit code	Unit title	Prerequisites
MSS402010A	Manage the impact of change on own work	
MSS403010A	Facilitate change in an organisation implementing competitive systems	

Unit code	Unit title	Prerequisites
	and practices	
MSS402001A	Apply competitive systems and practices	
MSS402002A	Sustain process improvements	
MSS403001A	Implement competitive systems and practices	
MSS403002A	Ensure process improvements are sustained	
MSS402020A	Apply quick changeover procedures	
MSS402021A	Apply Just in Time procedures	
MSS402030A	Apply cost factors to work practices	
MSS402031A	Interpret product costs in terms of customer requirements	
MSS402040A	Apply 5S procedures	
MSS402050A	Monitor process capability	
MSS402060A	Use planning software systems in operations	

Unit code	Unit title	Prerequisites
MSS402061A	Use SCADA systems in operations	
MSACMT270A	Use sustainable energy practices	
MSS402080A	Undertake root cause analysis	
MSS402081A	Contribute to the application of a proactive maintenance strategy	
MSS403021A	Facilitate a Just in Time system	
MSS403030A	Improve cost factors in work practices	
MSS403032A	Analyse manual handling processes	
MSS403040A	Facilitate and improve implementation of 5S	
MSS404050A	Undertake process capability improvements	MSS404052A
MSS403051A	Mistake proof an operational process	
MSS404052A	Apply statistics to operational processes	

Unit code	Unit title	Prerequisites
MSS404060A	Facilitate the use of planning software systems in a work area or team	
MSS404061A	Facilitate the use of SCADA systems in a team or work area	
MSS404081A	Undertake proactive maintenance analyses	
MSS404082A	Assist in implementing a proactive maintenance strategy	
MSAENV472B	Implement and monitor environmentally sustainable work practices	

GROUP F

Other Leather Production units that are available at Certificates II (maximum 1 unit) and III (maximum 3 units)

Other TCF Training Package units that are available at Certificates II (maximum 1 unit), III (maximum 3 units) and IV (maximum 1 unit)

Units from other endorsed Training Packages and accredited courses that are available at Certificates II (maximum 1 unit), III (maximum 3 units) and IV (maximum 1 unit)

LMT31110 Certificate III in Laundry Operations

Modification History

Release 2 - imported units updated to current versions, outcomes equivalent.

Description

Job roles/employment outcomes

The Certificate III in Laundry Operations reflects vocational outcomes for those performing supervision roles, specialised technical tasks or multi-skilled roles within a laundry environment.

Application

This qualification is typically used to develop skill and knowledge in the operations of laundry enterprises.

Pathways Information

Pathways into the qualification

Direct entry into this qualification requires completion of a total of nineteen (19) units of competency according to the rules described below.

Credit may be granted towards this qualification by those who have completed LMT21410 Certificate II in Laundry Operations or achieved equivalent industry experience.

Pathways from the qualification

Further training pathways from this qualification include LMT408010 Certificate IV in Laundry Operations and Supervision and other relevant manufacturing qualifications.

Licensing/Regulatory Information

There are no specific licences that relate to this qualification. However, depending on the jurisdiction, licensing or regulatory requirements may apply to the use of some units in this qualification. Local regulations should be checked for details.

Entry Requirements

Not applicable.

Employability Skills Summary

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	• confirm relevant industry and workplace requirements • understand personal requirements of relevant industry and workplace standards, regulations and policies • read and understand international and Australian care labels and symbols • complete standard documentation • use communication technologies efficiently • communicate problems with garments and stains • communicate to others laundry operational requirements • ensure laundry records are accurate and legible • establish effective working relationships with colleagues • undertake interactive workplace communication • communicate effectively and appropriately when dealing with customers
Teamwork	• explain and implement work team reporting requirements • monitor work team tasks in accordance with regulatory and workplace requirements • apply team leadership and development techniques • demonstrate and encourage others in working cooperatively with people of different ages, gender, race or religion • undertake appropriate and effective communication with team members
Problem solving	• identify risks and implement risk control measures for chemicals and equipment • rectify problems and faults • check performance of machinery and operators • assess and evaluate skills requirements of self and

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

	- others to perform tasks • deal with and promptly resolve issues • use problem solving techniques to determine laundry requirements • identify and report potential environmental hazards
Initiative and enterprise	• seek and provide feedback on procedures • collect and monitor information • identify non-conformances to standards and take appropriate action • rectify problems promptly and appropriately • monitor and adjust activity in response to operational variations • contribute to improvements in resource efficiency • identify and assess existing and potential risks and seek advice • monitor information and records to identify trends that may require remedial action • develop and promote continuous improvement
Planning and organising	• plan work requirements for self and others as required • monitor quality outcomes • monitor resource use in own work • allocate tasks to operators • implement contingency plan promptly when incidents occur • identify training needs for the work team and seek training support • monitor equipment condition and performance
Self-management	• manage own work • monitor information in work area • keep the work area clean and tidy at all times • conduct regular housekeeping activities during shift • locate, interpret and apply relevant information • monitor own work against quality standards • understand own work activities and responsibilities • identify and apply safety procedures, including the use of protective equipment

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
	• manage work load priorities • conduct work in a manner which minimises waste
Learning	• recognise limits of own expertise • assess competencies in meeting job requirements • identify own skill requirements and seek skill development if required • ask questions to expand own knowledge
Technology	• monitor machine operation • use machine or equipment in correct operational mode • perform minor maintenance on machinery • work with technology safely and according to workplace standards • handle and use chemicals correctly and safely

Packaging Rules

To be awarded the Certificate III in Laundry Operations, competency must be achieved in nineteen (19) units of competency.

- Six (6) core units of competency
- Thirteen (13) elective units of competency.

If the Certificate II in Laundry Operations has been achieved, an additional six (6) units are required. All core units listed must be achieved - any Certificate III core units not achieved at Certificate II must be completed as part of the additional six (6) units required for the Certificate III. Units that have been credited towards lower level qualifications must not be selected in the additional six (6) unit requirement. At least two of the six (6) units must be from Group A units.

Note: Where prerequisite units apply, these have been listed, and need to be considered in the total number of units.

CORE UNITS

Complete all six (6) units from this list.

Unit code	Unit title
LMTDC2010A	Identify fabric and garment cleaning requirements
LMTGN2001B	Follow defined OH&S policies and procedures

Unit code	Unit title
LMTGN2002B	Apply quality standards
LMTGN2003B	Work in the Textiles, Clothing and Footwear industry
LMTGN3002B	Organise and plan own work to achieve planned outcomes
MSAENV272B	Participate in environmentally sustainable work practices

ELECTIVE UNITS

Select thirteen (13) units as specified below.

- A minimum of two (2) units must be selected from Group A
- A minimum of three (3) units must be selected from Group B
- A maximum of two (2) units may be selected from Group D
- A maximum of three (3) units may be selected from Group E
- The remainder must be selected from Groups A, B and C.

NOTE: Competitive Manufacturing Training Package units, identified in Group D as MSACM coded units, should be selected on the basis of work requirements. Those at Certificate II level (units in the 200 series) are appropriate for operators. MSACM units for those in Certificate III level positions such as team leaders should be selected from both the 200 series and the 400 series.

GROUP A

Unit code	Unit title	Prerequisites
LMTCL3004B	Press whole garments	LMTCL2006B
LMTGN3001B	Control production in a section of a Textiles, Clothing and Footwear enterprise	
LMTGN3005B	Plan tasks to assist production operations	
LMTGN3007B	Monitor and operate trade waste process	
LMTGN3009B	Supervise operations	

Unit code	Unit title	Prerequisites
	in a textiles, clothing and footwear enterprise	
LMTLA3001A	Perform advanced laundry operations	
LMTLA3002A	Determine linen rental requirements	
MSAPMSUP382A	Provide coaching/mentoring in the workplace	

GROUP B

Unit code	Unit title	Prerequisites
LMTDC2001A	Provide customer service in a dry cleaning or laundry enterprise	
LMTDC2007A	Receive and sort articles for cleaning	
LMTLA2001A	Conduct safe handling of laundry chemicals	
LMTLA2002A	Operate washing machines	
LMTLA2003A	Control washing machine operation	LMTLA2002A
LMTLA2004A	Perform linen rewash	LMTLA2002A
LMTLA2005A	Operate hydro extractor	
LMTLA2006A	Perform conditioning and drying processes	

Unit code	Unit title	Prerequisites
LMTLA2007A	Finish products for despatch	
LMTLA2008A	Repair damaged laundry items	
LMTLA2009A	Inspect, fold and pack theatre linen	
LMTLA2010A	Prepare products for storage or despatch	
LMTLA2011A	Apply infection control policies and procedures in laundry operations	

GROUP C

Unit code	Unit title	Prerequisites
LMTCL2001B	Use a sewing machine	
LMTCL2002B	Provide hand sewing and finishing support	
LMTCL2003B	Identify fibres and fabrics	
LMTCL2004B	Sew components	LMTCL2002B
LMTCL2006B	Press work	
LMTGN2004B	Work in a team environment	
LMTGN2006B	Perform test or inspection to check product quality	
LMTGN2007B	Select, transfer and remove materials and products	

Unit code	Unit title	Prerequisites
LMTGN2008B	Coordinate work of team or section	
LMTGN2009B	Operate computing technology in a Textiles, Clothing and Footwear workplace	
LMTGN2010B	Perform tasks to support production	
MEM07033B	Operate and monitor basic boiler	
MEM07034A	Operate and monitor intermediate class boiler	MEM07033B

GROUP D

Unit code	Unit title	Prerequisites
MSS402010A	Manage the impact of change on own work	
MSS403010A	Facilitate change in an organisation implementing competitive systems and practices	
MSS402001A	Apply competitive systems and practices	
MSS402002A	Sustain process improvements	
MSS403001A	Implement competitive systems	

Unit code	Unit title	Prerequisites
	and practices	
MSS403002A	Ensure process improvements are sustained	
MSS402021A	Apply Just in Time procedures	
MSS402030A	Apply cost factors to work practices	
MSS402031A	Interpret product costs in terms of customer requirements	
MSS402040A	Apply 5S procedures	
MSS402050A	Monitor process capability	
MSS402060A	Use planning software systems in operations	
MSS402061A	Use SCADA systems in operations	
MSACMT270A	Use sustainable energy practices	
MSS402080A	Undertake root cause analysis	
MSS402081A	Contribute to the application of a proactive maintenance strategy	

Unit code	Unit title	Prerequisites
MSS403021A	Facilitate a Just in Time system	
MSS403030A	Improve cost factors in work practices	
MSS403032A	Analyse manual handling processes	
MSS403040A	Facilitate and improve implementation of 5S	
MSS404050A	Undertake process capability improvements	MSS404052A
MSS403051A	Mistake proof an operational process	
MSS404052A	Apply statistics to operational processes	
MSS404060A	Facilitate the use of planning software systems in a work area or team	MSS402060A
MSS404061A	Facilitate the use of SCADA systems in a team or work area	
MSS404081A	Undertake proactive maintenance analyses	
MSS404082A	Assist in implementing a proactive maintenance	

Unit code	Unit title	Prerequisites
	strategy	
MSAENV472B	Implement and monitor environmentally sustainable work practices	

GROUP E

Other Laundry Operations units that are available at Certificates II (maximum 1 unit), III (maximum 3 units) and IV (maximum 1 unit)

Other TCF Training Package units that are available at Certificates II (maximum 1 unit), III (maximum 3 units) and IV (maximum 1 unit)

Units from other endorsed Training Packages and accredited courses that are available at Certificates II (maximum 1 unit), III (maximum 3 units) and IV (maximum 1 unit)

LMT31210 Certificate III in Dry Cleaning Operations

Modification History

Release 2 - imported units updated to current versions, outcomes equivalent.

Description

Job roles/employment outcomes

The Certificate III reflects vocational outcomes for those performing supervision roles, specialised technical tasks or multi-skilled roles within a dry cleaning environment.

Application

This qualification is typically used to develop skill and knowledge in the operations of dry cleaning enterprises.

Pathways Information

Pathways into the qualification

Direct entry into this qualification requires completion of a total of nineteen (19) units of competency according to the rules described below.

Credit may be granted towards this qualification by those who have completed LMT21510 Certificate II in Dry Cleaning Operations or achieved equivalent industry experience.

Pathways from the qualification

Further training pathways from this qualification may include relevant supervisory, management or competitive manufacturing qualifications.

Licensing/Regulatory Information

There are no specific licences that relate to this qualification. However, depending on the jurisdiction, licensing or regulatory requirements may apply to the use of some units in this qualification. Local regulations should be checked for details.

Entry Requirements

Not applicable.

Employability Skills Summary

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	• communicate effectively and appropriately when dealing with customers • give verbal and/or written feedback • communicate with all relevant personnel, management and administration • confirm relevant industry and workplace requirements • understand personal requirements of relevant industry and workplace standards, regulations and policies • complete standard documentation • use communication technologies efficiently • communicate dry cleaning outcomes and process problems • communicate dry cleaning requirements to others • ensure records are accurate and legible • undertake interactive workplace communication
Teamwork	• establish effective working relationships with colleagues • work as part of a team • supervise and support team activities • identify team performance required to meet customer needs • explain and implement work team reporting requirements • monitor work team tasks in accordance with regulatory and workplace requirements • apply team leadership and development techniques • demonstrate and encourage others to work cooperatively with people of different ages, gender, race or religion • undertake appropriate and effective communication with team members
Problem solving	• identify dry cleaning problems and make contributions to their solution • apply knowledge of fabrics, chemicals, stains and

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

	processes to problem solving • check machine performance and address faulty operations • use problem solving techniques • identify risks and implement risk control measures for processes, equipment and handling of chemicals • assess and evaluate skills requirements of self and others to perform tasks • deal with and promptly resolve issues in a timely manner • use problem solving techniques to determine dry cleaning repair or cleaning requirements • identify and report potential environmental hazards
Initiative and enterprise	• recognise problems in systems and documentation • investigate non-conformances to standards and take appropriate action • use decision making skills to support work flow • seek and provide feedback on procedures • collect and monitor information • rectify problems promptly and appropriately • monitor and adjust activity in response to operational variations • identify and assess existing and potential risks and seek advice • monitor information and records to identify trends that may require remedial action • develop and promote continuous improvement • contribute towards production efficiencies, business opportunities and value adding • contribute to improvements in resource efficiency
Planning and organising	• identify priority in which jobs are to be completed • plan work requirements and task sequences • monitor work and make adjustments to meet deadlines • ensure availability of resources to meet work requirements • monitor and maintain product quality

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
	• assess equipment performance and readiness for use • prepare equipment for operational readiness • plan work requirements for self and others as required • monitor quality outcomes • monitor resource use in own work • allocate tasks to operators • implement contingency plan promptly when incidents occur • identify training needs for the work team and seek training support • monitor equipment condition and performance
Self-management	• keep the work area clean and tidy at all times • conduct regular housekeeping activities • plan to ensure timelines are achieved • accept responsibility for quality of own work • implement and follow OHS practices and safe handling of chemicals during dry cleaning operations • manage own work • monitor information in work area • locate, interpret and apply relevant information • monitor own work against quality standards • conduct work in a manner which minimises waste • understand own work activities and responsibilities • identify and apply safety procedures, including the use of protective equipment • manage work load priorities
Learning	• recognise limits of own expertise • assess competencies in meeting job requirements • identify own skill requirements and seek skill development if required • ask questions to expand own knowledge
Technology	• monitor and adjust machine functions • use machinery to meet productivity requirements • perform minor maintenance on machinery • work with technology safely and according to workplace standards

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
	• use communication technologies in the workplace • use machine or equipment in correct operational mode • demonstrate safe and effective use of tools and equipment to others

Packaging Rules

To be awarded the Certificate III in Dry Cleaning Operations, competency must be achieved in nineteen (19) units of competency.

- Ten (10) core units of competency
- Nine (9) elective units of competency.

If the Certificate II in Dry Cleaning Operations has been achieved, an additional six (6) units are required. All mandatory units listed must be achieved - any Certificate III mandatory units not achieved at Certificate II must be completed as part of the additional six (6) units required for the Certificate III. Units that have been credited towards lower level qualifications must not be selected in the additional six (6) unit requirement. At least three (3) of the six (6) units must be selected from Group A.

Note: Where prerequisite units apply, these have been listed, and must be considered in the total number of units.

CORE UNITS

Complete all ten (10) units from this list.

Unit code	Unit title
LMTCL2003B	Identify fibres and fabrics
LMTDC2004A	Operate dry cleaning machines
LMTDC2010A	Identify fabric and garment cleaning requirements
LMTDC2011A	Identify pre- and post-spotting requirements
LMTDC2012A	Conduct safe handling of dry cleaning chemicals and solvents
LMTDC3002A	Dry clean garments with special treatment requirements
LMTGN2001B	Follow defined OH&S policies and procedures
LMTGN2002B	Apply quality standards

Unit code	Unit title
LMTGN2003B	Work in the Textiles, Clothing and Footwear industry
MSAENV272B	Participate in environmentally sustainable work practices

ELECTIVE UNITS

Select nine (9) units as specified below.

- A minimum of three (3) units must be chosen from Group A
- A minimum of two (2) units must be chosen from Group B
- A maximum of two (2) units may be chosen from Group D
- A maximum of three (3) units may be chosen from Group E
- The remainder may be chosen from Groups A, B and C.

NOTE: Competitive Manufacturing Training Package units, identified in Group D as MSACM coded units, should be selected on the basis of work requirements. Those at Certificate II level (units in the 200 series) are appropriate for operators. MSACM units for those in Certificate III level positions such as team leaders should be selected from both the 200 series and the 400 series.

GROUP A

Unit code	Unit title	Prerequisites
LMTCL3003B	Perform garment repairs and alterations	LMTCL2001B LMTCL2003B LMTCL2004B LMTCL2001B
LMTCL3004B	Press whole garments	LMTCL2006B
LMTDC3003A	Perform spotting function in dry cleaning operations	
LMTGN3001B	Control production in a section of a Textiles, Clothing and Footwear enterprise	
LMTGN3002B	Organise and plan own work to achieve	

Unit code	Unit title	Prerequisites
	planned outcomes	
LMTGN3005B	Plan tasks to assist production operations	
LMTGN3007B	Monitor and operate trade waste process	
LMTGN3009B	Supervise operations in a textiles, clothing and footwear enterprise	
MSAPMSUP382A	Provide coaching/mentoring in the workplace	

GROUP B

Unit code	Unit title	Prerequisites
LMTDC2001A	Provide customer service in a dry cleaning or laundry enterprise	
LMTDC2005A	Operate wet cleaning machines	
LMTDC2006A	Operate finishing equipment	
LMTDC2007A	Receive and sort articles for cleaning	
LMTDC2008A	Carry out final inspection of articles	
LMTDC2009A	Prepare articles for storage or despatch	

GROUP C

Unit code	Unit title	Prerequisites
LMTCL2001B	Use a sewing machine	
LMTCL2002B	Provide hand sewing and finishing support	
LMTCL2004B	Sew components	LMTCL2001B
LMTCL2006B	Press work	
LMTGN2004B	Work in a team environment	
LMTGN2008B	Coordinate work of team or section	
LMTGN2009B	Operate computing technology in a Textiles, Clothing and Footwear workplace	
MEM07033B	Operate and monitor basic boiler	
MEM07034A	Operate and monitor intermediate class boiler	MEM07033B

GROUP D

Unit code	Unit title	Prerequisites
MSS402010A	Manage the impact of change on own work	
MSS403010A	Facilitate change in an organisation implementing competitive systems	

Unit code	Unit title	Prerequisites
	and practices	
MSS402001A	Apply competitive systems and practices	
MSS402002A	Sustain process improvements	
MSS403001A	Implement competitive systems and practices	
MSS403002A	Ensure process improvements are sustained	
MSS402021A	Apply Just in Time procedures	
MSS402030A	Apply cost factors to work practices	
MSS402031A	Interpret product costs in terms of customer requirements	
MSS402040A	Apply 5S procedures	
MSS402050A	Monitor process capability	
MSS402060A	Use planning software systems in operations	
MSS402061A	Use SCADA systems in operations	
MSACMT270A	Use sustainable	

Unit code	Unit title	Prerequisites
	energy practices	
MSS402080A	Undertake root cause analysis	
MSS402081A	Contribute to the application of a proactive maintenance strategy	
MSS403021A	Facilitate a Just in Time system	
MSS403030A	Improve cost factors in work practices	
MSS403032A	Analyse manual handling processes	
MSS403040A	Facilitate and improve implementation of 5S	
MSS404050A	Undertake process capability improvements	MSS404052A
MSS403051A	Mistake proof an operational process	
MSS404052A	Apply statistics to operational processes	
MSS404060A	Facilitate the use of planning software systems in a work area or team	
MSS404061A	Facilitate the use of SCADA systems in	

Unit code	Unit title	Prerequisites
	a team or work area	
MSS404081A	Undertake proactive maintenance analyses	
MSS404082A	Assist in implementing a proactive maintenance strategy	
MSAENV472B	Implement and monitor environmentally sustainable work practices	

GROUP E

Other Dry Cleaning units that are available at Certificates II (maximum 1 unit) and III (maximum 3 units)

Other TCF Training Package units that are available at Certificates II (maximum 1 unit), III (maximum 3 units) and IV (maximum 1 unit)

Units from other endorsed Training Packages and accredited courses that are available at Certificates II (maximum 1 unit), III (maximum 3 units) and IV (maximum 1 unit)

LMT31407 Certificate III in Applied Fashion Design and Technology

Modification History

Not applicable.

Description

Job roles/employment outcomes

Certificate III in Applied Fashion Design and Technology reflects a vocational outcome for those producing fashion products where a basic understanding of design skills is needed and where localised distribution not requiring specialised merchandising and supply chain skills is to be undertaken. Items to be produced may include a single or small range of products.

Application

This qualification is particularly suitable for those who are self-employed undertaking low volume production of items for local distribution outlets for example markets.

Pathways into the qualification

Direct entry into this qualification requires completion of a total of nineteen (19) units of competency according to the rules described below.

Credit may be granted towards this qualification by those who have completed LMT21707 Certificate II in Applied Fashion Design and Technology or achieved equivalent industry experience.

Pathways from the qualification

Further training pathways from this qualification include LMT41007 Certificate IV in Applied Fashion Design and Technology and other relevant qualifications.

Licensing considerations

There are no specific licences that relate to this qualification. However, some units in this qualification may have licensing or regulatory requirements in some environments. Local regulations should be checked for details.

Pathways Information

Not applicable.

Licensing/Regulatory Information

Not applicable.

Entry Requirements

Not applicable.

Employability Skills Summary

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

Employability Skills Summary - Certificate III in Applied Fashion Design and Technology

The following table contains a summary of the Employability Skills as identified by the fashion design industries for this qualification. This table should be interpreted in conjunction with the detailed requirements of each unit of competency packaged in this qualification. The outcomes described here are broad industry requirements that reflect skill requirements for this level.

Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	• confirm relevant industry and workplace requirements • understand personal requirements of relevant industry and workplace standards, regulations and policies • complete standard documentation • use communication technologies efficiently • interpret pattern specifications • communicate problems with fashion items and designs • discuss design requirements with others • ensure records are accurate and legible • establish effective working relationships with colleagues • undertake interactive workplace communication • present design ideas
Teamwork	• work independently or as a team member • demonstrate and encourage others in working cooperatively with people of different ages, gender, race or religion • identify role of others in the design process • undertake appropriate and effective communication with others in the design process
Problem-solving	• identify risks and implement risk control measures for machinery and equipment • identify and address problems and faults • check performance of machinery and equipment • assess and evaluate skills requirements of self and others to perform tasks • deal with and promptly resolve issues

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
	• use problem solving techniques to determine fashion design requirements • apply knowledge of fabrics and materials to solve design problems • assess quality of materials before using in fashion items • identify and report potential environmental hazards
Initiative and enterprise	• seek and provide feedback on procedures • participate in design and production processes • collect and monitor information • identify non-conformances to standards and take appropriate action • identify effective ways to achieve design and production outcomes • rectify problems promptly and appropriately • monitor and adjust activity in response to operational variations • identify and assess existing and potential risks and seek advice • develop and promote continuous improvement
Planning and organising	• plan work requirements for self and others as required • prepare materials required for design production • monitor resource use in own work • select and prepare materials and equipment • monitor quality outcomes • monitor equipment condition and performance
Self-management	• manage own work • monitor information in work area • keep the work area clean and tidy at all times • conduct regular housekeeping activities during shift • locate, interpret and apply relevant information • monitor own work against quality standards • conduct work in a manner which minimises waste • understand own work activities and responsibilities • manage work load priorities

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
Learning	• recognise limits of own expertise • assess competencies in meeting job requirements • identify own skill requirements and seek skill development if required • ask questions to expand own knowledge • experiment with design ideas and review outcomes • seek feedback on ideas and work outcomes
Technology	• monitor machine operation • use a variety of machines and equipment to achieve a range of production outcomes • perform minor maintenance on machines • work with technology safely and according to workplace standards

Packaging Rules

Packaging Rules

To be awarded the Certificate III in Applied Fashion Design and Technology, competency must be achieved in nineteen (19) units of competency.

- Eleven (11) core units of competency
- Eight (8) elective units of competency as specified below.

If Certificate II in Applied Fashion Design and Technology has been achieved, an additional eight (8) units are required. All core units listed must be achieved. - any Certificate III core units not achieved at Certificate II must be completed as part of the additional eight (8) units required for Certificate III. Units that have been credited towards lower level qualifications must not be selected in the additional eight (8) unit requirement.

This qualification includes units LMTFD2002B, LMTFD2003B and LMTFD2004B which, when selected, must be applied in an indigenous Australian context.

Note: Where prerequisite units apply, these have been noted, and must be considered in the total number of units.

CORE UNITS

Complete all eleven (11) units from this list

Unit code	Unit title
LMTCL2001B	Use a sewing machine
LMTCL2003B	Identify fibres and fabrics
LMTCL2004B	Sew components
LMTCL2010B	Modify patterns to create basic styles
LMTCL2011B	Draw and interpret a basic sketch
LMTCL3001B	Identify fabric performance and handling requirements
LMTFD2001B	Design and produce a simple garment
LMTFD2005B	Identify design process for fashion designs
LMTGN2001B	Follow defined OH&S policies and procedures
LMTGN2002B	Apply quality standards
MSAENV272B	Participate in environmentally sustainable work practices

ELECTIVE UNITS

Select eight (8) units as specified below.

- A minimum of one (1) unit must be selected from Group A
- A minimum of four (4) units must be selected from Group B
- A maximum of three (3) units may be selected from Group C
- The remainder must be selected from Group B.
-

GROUP A

Unit code	Unit title	Prerequisites
LMTFD2004B	Work within an indigenous cultural framework	

Unit code	Unit title	Prerequisites
LMTGN2003B	Work in the Textiles, Clothing and Footwear industry	

GROUP B

Unit code	Unit title	Prerequisites
LMTCL3002B	Prepare and produce sewn garment	LMTCL2001B LMTCL2003B LMTCL2004B
LMTCL3003B	Perform garment repairs and alterations	LMTCL2001B LMTCL2003B LMTCL2004B
LMTCL3006B	Assemble bra or swimwear	LMTCL2001B LMTCL2003B LMTCL2004B
LMTCL3007B	Embellish garment by hand or machine	LMTCL2001B LMTCL2003B LMTCL2005B
LMTCL3009B	Develop patterns from a block using basic patternmaking principles	
LMTFD2002B	Apply printing techniques to produce indigenous textile designs	LMTCL2003B
LMTFD2003B	Apply dyeing techniques to produce indigenous	LMTCL2003B

Unit code	Unit title	Prerequisites
	textile designs	
LMTFD3001B	Market design product to local outlets	
LMTFD3002B	Design and produce indigenous printed textiles to a brief	LMTFD2002B LMTFD2003B LMTFD2004B
LMTFD3003B	Prepare design concept for a simple garment	LMTCL2001B LMTCL2003B LMTCL2004B
LMTFD3004B	Draw a trade drawing for fashion design	
LMTGN2004B	Work in a team environment	
LMTGN2009B	Operate computing technology in a Textiles, Clothing and Footwear workplace	
LMTGN3002B	Organise and plan own work to achieve planned outcomes	

GROUP C

Other Fashion Design and Technology units that are available at Certificates II (maximum 1 unit), III (maximum 3 units) and IV (maximum 1 unit)

Other TCF Training Package units that are available at Certificates II (maximum 1 unit), III (maximum 3 units) and IV (maximum 1 unit)

Other Fashion Design and Technology units that are available at Certificates II (maximum 1 unit), III (maximum 3 units) and IV (maximum 1 unit)
Units from other endorsed Training Packages and accredited courses that are available at Certificates II (maximum 1 unit), III (maximum 3 units) and IV (maximum 1 unit)

LMT31807 Certificate III in Technical Textiles and Non-wovens

Modification History

Release 2 - imported units updated to current versions, outcomes equivalent.

Description

Job roles/employment outcomes

Certificate III in Technical Textiles and Non-wovens reflects vocational outcomes for those performing supervision roles, specialised technical tasks or multi-skilled roles within a production oriented work environment.

Application

This qualification is typically used to develop skill and knowledge in the application of specialised technical, operational and supervisory skills within technical textiles and non-wovens production enterprises.

Pathways Information

Pathways into the qualification

Direct entry into this qualification requires completion of a total of nineteen (19) units of competency according to the rules described below.

Credit may be granted towards this qualification by those who have completed LMT21607 Certificate II in Technical Textiles and Non-wovens or achieved equivalent industry experience.

Pathways from the qualification

Further training pathways from this qualification include LMT40107 Certificate IV in Textile Technology and Production, MSA41108 Certificate IV in Competitive Manufacturing or other relevant manufacturing qualifications.

Licensing/Regulatory Information

There are no specific licences that relate to this qualification. However, some units in this qualification may have licensing or regulatory requirements in some environments. Local regulations should be checked for details.

Entry Requirements

Not applicable.

Employability Skills Summary

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

Employability Skills Summary - Certificate III in Technical Textiles and Non-wovens

The following table contains a summary of the Employability Skills as identified by the technical textile and non-woven industries for this qualification. This table should be interpreted in conjunction with the detailed requirements of each unit of competency packaged in this qualification. The outcomes described here are broad industry requirements that reflect skill requirements for this level.

Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	• complete written documents, job cards, forms and timesheets • use communication technologies efficiently • communicate production abnormalities • demonstrate effective and appropriate communication and interpersonal skills when dealing with people from a range of backgrounds • read, interpret and communicate production schedules • communicate with all team members
Teamwork	• work cooperatively with people of different ages, gender, race or religion • liaise with and provide support to other team members • work as part of a team • keep team members informed of changes to work practices • identify team performance required to meet customer needs • provide leadership to others in the team • encourage the sharing of information between team members • plan and support team activities
Problem-solving	• identify and report problems and make contributions to their solution • investigate problem causes • implement changes • examine equipment for damage, missing components

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

	- or other defects • identify and promptly address problems or issues • assess quality of work pieces • determine effective work practices • provide problem solving support to team members • problem solve machine operational and maintenance requirements • identify and report potential environmental hazards
Initiative and enterprise	• seek and provide feedback on procedures • gather and analyse information • record information on the quality and other indicators of production performance • adjust and implement production schedules changes • provide leadership • identify and implement process improvements • coordinate work activities and manufacturing processes • monitor workplace performance • use analytical and decision making skills
Planning and organising	• identify hazards and implement appropriate hazard control measures • organise self and others to meet production schedules • identify and rectify stock shortages in advance • sequence work to maximise safety and productivity • select and use appropriate tools and equipment • determine materials, quality and production requirements • monitor resource use in own work • apply time management skills to ensure work flow
Self-management	• interpret and apply relevant acts and regulations • keep the work area clean and tidy at all times • conduct regular housekeeping activities • understand own work activities • manage own time and establish own work schedule • conduct work in a manner which minimises waste • develop and implement workplace procedures and

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
	instructions • locate, interpret and apply information relevant to own work • monitor and evaluate own work quality • accept responsibility for quality of work
Learning	• develop learning activities as appropriate • assess competencies in meeting job requirements • identify own training needs and seek skill development if required • listen to feedback from others • identify sources of information to expand knowledge and understanding • identify and address skill development needs of others in the team
Technology	• use software applications effectively • properly start up, operate and shut down computers • work with technology safely and according to workplace standards • establish procedures • carry out pre-operational checks on equipment and machines • operate equipment and machines safely, efficiently and to productivity requirements • monitor and adjust machine functions • perform machine maintenance as determined by workplace procedures • clean and check equipment and machines

Packaging Rules

To be awarded the Certificate III in Technical Textiles and Non-wovens, competency must be achieved in nineteen (19) units of competency.

- Five (5) core units of competency
- Fourteen (14) elective units of competency as specified below.

Entry via Certificate II in Technical Textiles and Non-wovens requires an additional six (6) units. One (1) unit must be selected from the Group A units, all core units must be completed, and up to two (2) units may be selected from units coded MCM. Units already credited at Certificate II cannot be counted as part of the additional six (6) units.

Note: Where prerequisite units apply, these have been noted, and must be considered in the total number of units.

CORE UNITS

Complete all five (5) units from this list

Unit code	Unit title
LMTGN2001B	Follow defined OH&S policies and procedures
LMTGN2002B	Apply quality standards
LMTGN2003B	Work in the Textiles, Clothing and Footwear industry
LMTGN3002B	Organise and plan own work to achieve planned outcomes
MSAENV272B	Participate in environmentally sustainable work practices

ELECTIVE UNITS

Select fourteen (14) units as specified below.

- A minimum of two (2) units must be selected from Group A
- A minimum of one (1) unit must be selected from Group B
- A maximum of two (2) units may be selected from Group D
- A maximum of three (3) units may be selected from Group E
- The remainder must be selected from Groups A, B and C.

NOTE: Competitive Manufacturing Training Package units, identified in Group D as MSACM coded units, should be selected on the basis of work requirements. Those at Certificate II level (units in the 200 series) are appropriate for operators. MSACM units for those in Certificate III level positions such as team leaders should be selected from both the 200 series and the 400 series.

GROUP A

Unit code	Unit title	Prerequisites
LMTTN2001B	Set up and operate a dry laid web forming machine	
LMTTN2002B	Set up and operate a spun	

Unit code	Unit title	Prerequisites
	bond web forming machine	
LMTTN2003B	Use basic recognition techniques to identify technical and nonwoven textiles	
LMTTN2004B	Undertake web bonding processes	
LMTTN2005B	Undertake web conversion and finishing	
LMTTN2006B	Identify purpose and performance outcomes of technical textile product	LMTTN2003B
LMTTN2007B	Conduct technical textile mechanical finishing processes	
LMTTN2008B	Conduct heat setting on technical textiles	
LMTTN2009B	Apply surface coating to technical textiles	
LMTTN2010B	Apply laminations and fusible interlinings to technical textiles	
LMTTN2011B	Undertake fibre blending and feeding for nonwoven technical production processes	

GROUP B

Unit code	Unit title	Prerequisites
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Unit code	Unit title	Prerequisites
LMTGN3001B	Control production in a section of a Textiles, Clothing and Footwear enterprise	LMTTX2001B
LMTGN3009B	Supervise operations in a textiles, clothing and footwear enterprise	
LMTTX3001B	Identify quality and types of textile fibres, yarns and fabrics	LMTTX2001B
LMTTX3002B	Contribute to textile production process improvements	LMTGN2002B
LMTTX3004B	Set up textile production machines for product change	
LMTTX3005B	Organise and interpret tests	
LMTTX3006B	Ensure efficient operation of textile machines	
LMTTX3007B	Prepare dyes for textile production	
LMTTX3008B	Select raw materials	

GROUP C

Unit code	Unit title	Prerequisites
LMTGN2004B	Work in a team environment	
LMTGN2005B	Perform minor	

Unit code	Unit title	Prerequisites
	maintenance	
LMTGN2006B	Perform test or inspection to check product quality	
LMTGN2007B	Select, transfer and remove materials and products	
LMTGN2008B	Coordinate work of team or section	
LMTGN2009B	Operate computing technology in a Textiles, Clothing and Footwear workplace	
LMTGN2010B	Perform tasks to support production	
LMTTX2001B	Identify fibres, yarns and textile materials and their uses in textile production	
LMTTX2002B	Prepare yarn for textile manufacturing	
LMTTX2003B	Perform spinning operations	
LMTTX2005B	Perform creeling operations	
LMTTX2006B	Operate a weaving loom	
LMTTX2007B	Perform knitting operations	
LMTTX2009B	Weigh and check textile materials and products	
LMTTX2010B	Load and operate dyeing	

Unit code	Unit title	Prerequisites
	equipment	
LMTTX2011B	Repair textile product	
LMTTX2012B	Perform industrial sewing on textile products	
LMTTX2013B	Conduct packaging or folding for textile production	
LMTTX2014B	Use specialised machinery to assist textile production	
LMTTX2019B	Undertake carding operations	

GROUP D

Unit code	Unit title	Prerequisites
MSS402010A	Manage the impact of change on own work	
MSS403010A	Facilitate change in an organisation implementing competitive systems and practices	
MSS402001A	Apply competitive systems and practices	
MSS402002A	Sustain process improvements	
MSS403001A	Implement competitive systems	

Unit code	Unit title	Prerequisites
	and practices	
MSS403002A	Ensure process improvements are sustained	
MSS402020A	Apply quick changeover procedures	
MSS402021A	Apply Just in Time procedures	
MSS402030A	Apply cost factors to work practices	
MSS402031A	Interpret product costs in terms of customer requirements	
MSS402040A	Apply 5S procedures	
MSS402050A	Monitor process capability	
MSS402060A	Use planning software systems in operations	
MSS402061A	Use SCADA systems in operations	
MSACMT270A	Use sustainable energy practices	
MSS402080A	Undertake root cause analysis	
MSS402081A	Contribute to the	

Unit code	Unit title	Prerequisites
	application of a proactive maintenance strategy	
MSS403021A	Facilitate a Just in Time system	
MSS403030A	Improve cost factors in work practices	
MSS403032A	Analyse manual handling processes	
MSS403040A	Facilitate and improve implementation of 5S	
MSS404050A	Undertake process capability improvements	MSS404052A
MSS403051A	Mistake proof an operational process	
MSS404052A	Apply statistics to operational processes	
MSS404060A	Facilitate the use of planning software systems in a work area or team	
MSS404061A	Facilitate the use of SCADA systems in a team or work area	
MSS404081A	Undertake proactive maintenance analyses	

Unit code	Unit title	Prerequisites
MSS404082A	Assist in implementing a proactive maintenance strategy	
MSAENV472B	Implement and monitor environmentally sustainable work practices	

GROUP E

Other Technical Textiles and Non-wovens units that are available at Certificates II (maximum 1 unit) and III (maximum 3 units)

Other TCF Training Package units that are available at Certificates II (maximum 1 unit), III (maximum 3 units) and IV (maximum 1 unit)

Units from other endorsed Training Packages and accredited courses that are available at Certificates II (maximum 1 unit), III (maximum 3 units) and IV (maximum 1 unit)

LMT31909 Certificate III in Engineering - TCF Mechanic

Modification History

Not applicable.

Description

This qualification covers the skills and knowledge required to work as a TCF Mechanic in enterprises conducting carding, footwear manufacture, knitting, sewing, spinning, tufting, or weaving operations. Both TCF specific and general mechanical trade skills are included in the qualification. If TCF only skills are required, LMT30107 Certificate III in Textile Production should be considered.

Job roles / employment outcomes

The Certificate III in Engineering - TCF Mechanic offers trade level skills that can then be extended to advanced trade, technician and other engineering applications. Employment outcomes targeted by this qualification include engineering technicians working in the TCF industry.

Application

This qualification is typically used to provide initial training for employees performing a technical role that includes an ability to work independently and conduct technical problem solving according to the needs of technical work in the TCF industry.

Training programs for this qualification are suitable to be undertaken as part of a formal training contract with an employer under an Australian Traineeship arrangement.

Pathways into the qualification

This qualification may be accessed by direct entry to an Australian Apprenticeship. Credit may be granted towards this qualification by those who have completed LMT20107 Certificate II in Textile Production (Intermediate), LMT20207 Certificate II in Textile Production (Complex or Multiple), MEM30205 Certificate III in Engineering - Mechanical Trade, or other relevant qualifications. Credit for this qualification may also include units contained within relevant skill sets.

Pathways from the qualification

Further training pathways from this qualification include MEM40105 Certificate IV in Engineering, MSA41108 Certificate III in Competitive Manufacturing, or other relevant manufacturing qualifications.

Licensing considerations

There are no specific licences that relate to this qualification. However, some units in this qualification may have licensing or regulatory requirements in some environments. Local regulations should be checked for details.

Pathways Information

Not applicable.

Licensing/Regulatory Information

Not applicable.

Entry Requirements

Not applicable.

Employability Skills Summary

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

The following table contains a summary of the Employability Skills as identified by Manufacturing Skills Australia for this qualification. The Employability Skills facets described here are broad industry requirements that may vary depending on qualification packaging options.

Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	• Use communication technologies efficiently • Communicate production requirements, abnormalities, documentation, first off and other test results • Demonstrate effective and appropriate communication and interpersonal skills when dealing with people from a range of backgrounds • Read, interpret and communicate work related documents • Communicate with operators and other employees
Teamwork	• Work cooperatively with people of different ages, gender, race or religion • Liaise with and provide support to other team members • Work as part of a team • Identify team performance required to meet customer needs • Provide leadership to others in the team • Encourage the sharing of information between other team members • Plan and support team activities
Problem-solving	• Identify and report problems and make contributions to their solution • Investigate problem causes • Implement changes • Examine equipment for damage, missing components or other defects • Identify and promptly address problems or issues • Assess quality of work according to specifications • Determine effective work practices • Problem solve machine and product operational requirements
Initiative and enterprise	• Seek and provide feedback on procedures • Gather and analyse information • Record information on the quality and other indicators of

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
	production performance • Identify and implement process improvements • Coordinate work activities and production processes • Use analytical and decision making skills
Planning and organising	• Identify hazards and implement appropriate hazard control measures • Organise self and others to meet production schedules • Sequence work to maximise safety and productivity • Select and use appropriate tools and equipment • Apply time management skills to ensure work flow
Self-management	• plan own work requirements from production schedules • operate within appropriate time constraints and work standards • select and use appropriate equipment, materials, processes and procedures • plan to ensure effective production • apply workplace procedures • identify resource requirements, document and monitor • recognise limitations and seek timely advice
Learning	• ask questions to gain information • identify sources of information to expand knowledge and understanding • participate in improvement procedures • participate in development of continuous improvement strategies
Technology	• operation and adjustment of production processes to meet design requirements and production schedules • start up and shut down equipment • set up equipment • monitor product/process quality • function and operating principles of equipment, machine components • maintain computer based workplace records

Packaging Rules

Packaging Rules

The minimum requirements for achievement of the Certificate III in Engineering - TCF Mechanic are:

- completion of all core units of competency listed below
- completion of elective units to a total value of at least 73 points, chosen as described below:
 - TCF mechanic units from Group A to the value of at least 14 points
 - Group B mechanical trade units or additional Group A TCF mechanic units to the value of 26 points
 - Group C units (or any combination of units from Groups A, B and C) to bring the total value to at least 73 points.

Units with prerequisites are marked with an asterisk. Points associated with prerequisites count towards the total.

Group C units up to the value of 16 points may be chosen from other qualifications in this Training Package, other Training Packages or accredited courses where those units are available for inclusion at Certificate III. Units should be selected on the basis that they are relevant to the work requirements of TCF mechanics. Imported units should not duplicate existing units in this qualification.

Registered Training Organisations must seek a determination from Manufacturing Skills Australia in respect of the allocation of points values for units of competency drawn from other LMT qualifications, other Training Packages or accredited courses.

Core units of competency

- Select all of the units from this list.

Unit code	Unit title
MEM12023A	Perform engineering measurements
MEM12024A	Perform computations
MEM13014A	Apply principles of occupational health and safety in the work environment
MEM14004A	Plan to undertake a routine task
MEM14005A	Plan a complete activity
MEM15002A	Apply quality systems
MEM15024A	Apply quality procedures

Unit code	Unit title
MEM16006A	Organise and communicate information
MEM16007A	Work with others in a manufacturing, engineering or related environment
MEM16008A	Interact with computing technology
MEM17003A	Assist in the provision of on the job training
MSAENV272B	Participate in environmentally sustainable work practices

Elective units of competency

Group A - TCF Mechanic units

- Select units from this list to the value of at least 14 points.

Unit code	Unit title	Points
LMTGN3001B	Control production in a section of a textile, clothing or footwear enterprise	4
LMTGN3009B	Supervise operations in a textiles, clothing and footwear enterprise	4
LMTTX2001B	Identify fibres, yarns and textile materials and their uses in textile production	2
LMTTX2002B	Prepare yarn for textile manufacturing	2
LMTTX3001B	Identify quality and types of textile fibres, yarns and fabrics*	4
LMTTX3002B	Contribute to textile production process improvements	4

Unit code	Unit title	Points
LMTTX3011A	Set up, adjust and maintain circular knitting machines	6
LMTTX3012A	Set up, adjust and maintain flat knitting machines	6
LMTTX3013A	Set up and adjust spinning machines	6
LMTTX3014A	Set up, adjust and maintain carding machines	6
LMTTX3015A	Set up, adjust and maintain tufting machines	6
LMTTX3016A	Set up, adjust and maintain domestic sewing machines	6
LMTTX3017A	Set up, adjust and maintain industrial sewing machines	6
LMTTX3018A	Undertake electronic fault finding on textile machinery	6
LMTTX3019A	Identify and correct mechanical faults in loom and other weaving equipment	6
LMTTX3020A	Identify and correct weaving process faults	6
LMTTX3021A	Apply knowledge of weaving processes to production requirements	6
LMTTX3022A	Set up and operate weaving loom for production	6
LMTTX4001A	Interpret and apply textile calculations and specifications	4

Group B - Mechanical Trade Stream Units

- Select units to the value of at least 26 points from either the units listed below in Group B, or from Group A above (additional to any already chosen).

Note that the MEM units of competency in Group B are only available in the LMT Training Package for the LMT3109 Certificate III in Engineering - TCF Mechanic qualification.

Unit code	Unit title	Points
MEM07001B	Perform operational maintenance of machines/equipment*	2
MEM07002B	Perform precision shaping/planing/slotting operations*	4
MEM07003B	Perform machine setting (routine) *	4
MEM07004B	Perform machine setting (complex) *	8
MEM07005B	Perform general machining*	8
MEM07006B	Perform lathe operations*	4
MEM07007B	Perform milling operations*	4
MEM07008C	Perform grinding operations*	4
MEM07009B	Perform precision jig boring operations*	4
MEM07010B	Perform tool and cutter grinding operations*	4
MEM07011B	Perform complex milling operations*	4
MEM07012B	Perform complex grinding operations*	4
MEM07013B	Perform machining operations using horizontal and/or vertical boring machine*	4

Unit code	Unit title	Points
MEM07014B	Perform electro-discharge (EDM) machining operations*	4
MEM07015B	Set computer controlled machines/processes*	2
MEM07016C	Set and edit computer controlled machines/processes*	4
MEM07018C	Write basic NC/CNC programs*	4
MEM07019C	Program NC/CNC machining centre*	2
MEM07020C	Program multiple spindle and/or multiple axis NC/CNC machining centre*	2
MEM07021B	Perform complex lathe operations*	4
MEM07022C	Program CNC wire cut machines*	2
MEM07023C	Program and set up CNC manufacturing cell*	6
MEM07024B	Operate and monitor machine/process	4
MEM07025B	Perform advanced machine/process operation*	6
MEM07026B	Perform advanced plastic processing*	6
MEM07027B	Perform advanced press operations*	6
MEM07028B	Operate computer controlled machines/processes*	2
MEM07029B	Perform routine sharpening/maintenance of production tools and cutters*	4

Unit code	Unit title	Points
MEM07030C	Perform metal spinning lathe operations (basic) *	8
MEM07031C	Perform metal spinning lathe operations (complex) *	4
MEM07032B	Use workshop machines for basic operations*	2
MEM07033B	Operate and monitor basic boiler	6
MEM07034A	Operate and monitor intermediate class boiler*	4
MEM07040A	Set multistage integrated processes*	6
MEM09002B	Interpret technical drawing	4
MEM09022A	Create 2D code files using computer aided manufacturing system*	4
MEM10004B	Enter and change programmable controller operational parameters*	2
MEM10006B	Install machine/plant*	4
MEM12003B	Perform precision mechanical measurement*	2
MEM12006B	Mark off/out (general engineering) *	4
MEM13007B	Maintain water treatment systems for cooling towers*	2
MEM18001C	Use hand tools	2
MEM18002B	Use power tools/hand held operations	2
MEM18003C	Use tools for precision work*	4
MEM18004B	Maintain and overhaul mechanical	4

Unit code	Unit title	Points
	equipment*	
MEM18005B	Perform fault diagnosis, installation and removal of bearings*	4
MEM18006B	Repair and fit engineering components*	6
MEM18007B	Maintain and repair mechanical drives and mechanical transmission assemblies*	4
MEM18008B	Balance equipment*	2
MEM18009B	Perform levelling and alignment of machines and engineering components*	4
MEM18010C	Perform equipment condition monitoring and recording*	4
MEM18011C	Shut down and isolate machines/equipment	2
MEM18012B	Perform installation and removal of mechanical seals*	2
MEM18013B	Perform gland packing*	2
MEM18014B	Manufacture press tools and gauges*	8
MEM18015B	Maintain tools and dies*	4
MEM18018C	Maintain pneumatic system components*	4
MEM18019B	Maintain pneumatic systems*	4
MEM18020B	Maintain hydraulic system components*	4
MEM18021B	Maintain hydraulic systems*	4

Unit code	Unit title	Points
MEM18022B	Maintain fluid power controls*	8
MEM18024B	Maintain engine cooling systems*	2
MEM18025B	Service combustion engines*	2
MEM18026C	Test compression ignition fuel systems*	4
MEM18027C	Overhaul engine fuel system components*	8
MEM18028B	Maintain engine lubrication systems*	2
MEM18029B	Tune diesel engine*	4
MEM18030B	Diagnose and rectify low voltage electrical systems*	8
MEM18031B	Diagnose and rectify low voltage starting systems*	2
MEM18032B	Maintain induction/exhaust systems*	4
MEM18033B	Perform engine bottom-end overhaul*	4
MEM18034B	Perform engine top-end overhaul*	8
MEM18035B	Diagnose and rectify braking systems*	6
MEM18037B	Diagnose and rectify low voltage charging systems*	2
MEM18038B	Maintain wheels and tyres*	2
MEM18039B	Diagnose and rectify track type undercarriage*	4

Unit code	Unit title	Points
MEM18040B	Maintain suspension systems*	4
MEM18041B	Maintain steering systems*	4
MEM18042C	Diagnose and rectify manual transmissions*	4
MEM18043C	Diagnose and rectify automatic transmissions*	8
MEM18044C	Diagnose and rectify drive line and final drives*	4
MEM18045B	Fault find/repair electrical equipment/components up to 250 volts single phase supply*	4
MEM18046B	Fault find/repair electrical equipment/components up to 1000 volts a.c./1500 volts d.c. *	10
MEM18047B	Diagnose and maintain electronic controlling systems on mobile plant*	4
MEM18048B	Fault find and repair/rectify basic electrical circuits*	12
MEM18049B	Disconnect/reconnect fixed wired equipment up to 1000 volts a.c./1500 volts d.c. *	3
MEM18050B	Disconnect/reconnect fixed wired equipment over 1000 volts a.c./1500 volts d.c. *	3
MEM18051B	Fault find and repair/rectify complex electrical circuits*	6
MEM18052B	Maintain fluid power systems for mobile plant*	4
MEM18054B	Fault find, test and calibrate	8

Unit code	Unit title	Points
	instrumentation systems and equipment*	
MEM18055B	Dismantle, replace and assemble engineering components*	3
MEM18056B	Diagnose and repair analog equipment and components*	10
MEM18057B	Maintain/service analog/digital electronic equipment*	6
MEM18058C	Modify electronic equipment*	4
MEM18060B	Maintain, repair control instrumentation - single and multiple loop control systems*	8
MEM18062B	Install, maintain and calibrate instrumentation sensors, transmitters and final control elements*	8
MEM18063B	Terminate signal and data cables*	4
MEM18064B	Maintain instrumentation system components*	6
MEM18065B	Diagnose and repair digital equipment and components*	10
MEM18066B	Diagnose and repair microprocessor-based equipment*	6
MEM18067B	Tune control loops - multi controller or multi element systems*	6
MEM18071B	Connect/disconnect fluid conveying system components*	2
MEM18072B	Manufacture fluid conveying conductor assemblies*	4

Unit code	Unit title	Points
MEM18086B	Test, recover, evacuate and charge refrigeration systems*	4
MEM18087B	Service and repair domestic and light commercial refrigeration and air conditioning equipment*	6
MEM18088B	Maintain and repair commercial air conditioning systems and components*	4
MEM18089B	Maintain and repair central air handling systems*	6
MEM18090B	Maintain and repair industrial refrigeration systems and components*	6
MEM18091B	Maintain and repair multi stage, cascade and/or ultra-cold industrial refrigeration systems*	4
MEM18092B	Maintain and repair commercial and/or industrial refrigeration and/or air conditioning controls*	6
MEM18094B	Service and repair commercial refrigeration*	6
MEM18095A	Maintain and repair cooling towers/evaporative condensers and associated equipment*	4
MEM18096A	Maintain, repair/replace and adjust refrigerant flow controls and associated equipment*	6
MEM18097A	Manufacture cavity dies*	8

Group C - specialisation units

- The balance of units to bring the total value to at least 73 points (including any prerequisites) may be selected from the Group C units below.

Unit code	Unit title	P
	Appropriate Group C units to the value of 16 points may be drawn from other qualifications in this Training Package, other endorsed Training Packages and accredited courses where those units are available for inclusion at Certificate III.	

Unit code	Unit title	P
LMTGN2002B	Apply quality standards	2
MEM03001B	Perform manual production assembly	4
MEM03002B	Perform precision assembly*	4
MEM03003B	Perform sheet and plate assembly*	4
MEM03004B	Perform electronic/electrical assembly (production)	8
MEM03005B	Rework and repair (electrical/electronic production)*	8
MEM03006B	Set assembly stations*	2
MEM04001B	Operate melting furnaces*	4
MEM04002B	Perform gravity die casting*	2
MEM04003B	Operate pressure die casting machine*	4
MEM04004B	Prepare and mix sand for metal moulding	4
MEM04005B	Produce moulds and cores by hand (jobbing)*	16
MEM04006B	Operate sand moulding and core making machines	8
MEM04007B	Pour molten metal*	4
MEM04008B	Fettle and trim metal castings/forgings*	4
MEM04010B	Develop and manufacture wood patterns*	20
MEM04011B	Produce polymer patterns*	8

Unit code	Unit title	P
MEM04012B	Assemble plated patterns*	8
MEM04013B	Develop and manufacture polystyrene patterns*	2
MEM04014B	Develop and manufacture production patterns*	8
MEM04015B	Develop and manufacture vacuum forming moulds and associated equipment*	6
MEM04016C	Develop and manufacture precision models*	6
MEM04017B	Develop and manufacture gear, conveyor screw and propeller patterns*	4
MEM04018B	Perform general woodworking machine operations*	4
MEM04019B	Perform refractory installation and repair*	4
MEM05001B	Perform manual soldering/desoldering - electrical/electronic components	4
MEM05002B	Perform high reliability soldering and desoldering*	4
MEM05003B	Perform soft soldering	2
MEM05004C	Perform routine oxy acetylene welding	2
MEM05005B	Carry out mechanical cutting*	2
MEM05006B	Perform brazing and/or silver soldering	2

Unit code	Unit title	P
MEM05007C	Perform manual heating and thermal cutting	2
MEM05008C	Perform advanced manual thermal cutting, gouging and shaping*	2
MEM05009C	Perform automated thermal cutting*	2
MEM05010B	Apply fabrication, forming and shaping techniques*	8
MEM05011C	Assemble fabricated components*	8
MEM05012C	Perform routine manual metal arc welding	2
MEM05013C	Perform manual production welding*	2
MEM05014C	Monitor quality of production welding/fabrications*	2
MEM05015C	Weld using manual metal arc welding process*	4
MEM05016C	Perform advanced welding using manual metal arc welding process*	4
MEM05017C	Weld using gas metal arc welding process*	4
MEM05018C	Perform advanced welding using gas metal arc welding process*	4
MEM05019C	Weld using gas tungsten arc welding process*	4
MEM05020C	Perform advanced welding using gas tungsten arc welding process*	4
MEM05022C	Perform advanced welding using	6

Unit code	Unit title	P
	oxy acetylene welding process*	
MEM05023C	Weld using submerged arc welding process*	4
MEM05036C	Repair/replace/modify fabrications*	4
MEM05037B	Perform geometric development*	6
MEM05038B	Perform advanced geometric development - cylindrical/rectangular*	2
MEM05039B	Perform advanced geometric development - conical*	2
MEM05040B	Perform advanced geometric development - transitions*	4
MEM05041B	Weld using powder flame spraying*	4
MEM05047B	Weld using flux core arc welding process*	4
MEM05048B	Perform advanced welding using flux core arc welding process*	4
MEM05049B	Perform routine gas tungsten arc welding	2
MEM05050B	Perform routine gas metal arc welding	2
MEM05051A	Select welding processes	2
MEM05052A	Apply safe welding practices	4
MEM05053A	Set and edit computer controlled thermal cutting machines*	4

Unit code	Unit title	P
MEM05054A	Write basic NC/CNC programs for thermal cutting machines*	4
MEM06001B	Perform hand forging*	4
MEM06002B	Perform hammer forging	4
MEM06003C	Carry out heat treatment	6
MEM06004B	Select heat treatment processes and test finished product*	6
MEM06005B	Perform drop and upset forging*	4
MEM06006C	Repair springs*	4
MEM06007B	Perform basic incidental heat/quenching, tempering and annealing	2
MEM06008A	Hammer forge complex shapes*	4
MEM06009A	Hand forge complex shapes*	4
MEM08001B	Perform wire, jig and barrel load/unload work	4
MEM08002C	Pre-treat work for subsequent surface coating	4
MEM08003C	Perform electroplating operations*	6
MEM08004B	Finish work using wet, dry and vapour deposition methods*	4
MEM08005B	Prepare and produce specialised coatings*	4
MEM08006B	Produce clear and/or coloured and/or sealed anodised films on aluminium*	2

Unit code	Unit title	P
MEM08007B	Control surface finish production and finished product quality	4
MEM08008B	Operate and control surface finishing waste treatment process*	3
MEM08009C	Make up solutions*	2
MEM08010B	Manually finish/polish materials*	6
MEM08011B	Prepare surfaces using solvents and/or mechanical means*	2
MEM08012B	Prepare surfaces by abrasive blasting (basic)*	4
MEM08013B	Prepare surfaces by abrasive blasting (advanced)*	4
MEM08014B	Apply protective coatings (basic)*	4
MEM08015B	Apply protective coatings (advanced)*	4
MEM08016B	Control blast coating by-products, materials and emissions*	1
MEM08018B	Electroplate engineering coatings*	6
MEM08019B	Electroplate protective finishes*	6
MEM08020B	Electroplate decorative finishes*	6
MEM09003B	Prepare basic engineering drawing*	8
MEM09005B	Perform basic engineering detail drafting*	8
MEM09011B	Apply basic engineering design concepts*	6

Unit code	Unit title	P
MEM09021B	Interpret and produce curved 3-dimensional shapes	4
MEM10001C	Erect structures*	4
MEM10002B	Terminate and connect electrical wiring*	3
MEM10003B	Install and test electrical wiring and circuits up to 1000 volts a.c. and 1500 volts d.c.*	12
MEM10005B	Commission programmable controller programs*	4
MEM10009B	Install refrigeration and air conditioning plant and equipment*	4
MEM10010B	Install pipework and pipework assemblies*	4
MEM10011B	Terminate and connect specialist cables*	3
MEM10012A	Install split air conditioning system*	4
MEM11001C	Erect/dismantle scaffolding and equipment*	4
MEM11002C	Erect/dismantle complex scaffolding and equipment*	4
MEM11003B	Coordinate erection/dismantling of complex scaffolding/equipment*	4
MEM11004B	Undertake dogging*	4
MEM11005B	Pick and process order	4
MEM11006B	Perform production packaging	2

Unit code	Unit title	P
MEM11007B	Administer inventory procedures	4
MEM11008B	Package materials (stores and warehouse)	2
MEM11009B	Handle/move bulk fluids/gases	4
MEM11010B	Operate mobile load shifting equipment	4
MEM11011B	Undertake manual handling	2
MEM11012B	Purchase materials	6
MEM11013B	Undertake warehouse receipt process*	4
MEM11014B	Undertake warehouse dispatch process*	4
MEM11015B	Manage warehouse inventory system*	6
MEM11016B	Order materials	2
MEM11017B	Organise and lead stocktakes*	4
MEM11018B	Organise and maintain warehouse stock receipt and/or dispatch system*	6
MEM11019B	Undertake tool store procedures*	4
MEM11020B	Perform advanced warehouse computer operations*	4
MEM11021B	Perform advanced operation of load shifting equipment*	2
MEM11022B	Operate fixed/movable load shifting equipment	4

Unit code	Unit title	P
MEM12001B	Use comparison and basic measuring devices	2
MEM12002B	Perform electrical/electronic measurement	2
MEM12004B	Perform precision electrical/electronic measurement	4
MEM12007C	Mark off/out structural fabrications and shapes*	4
MEM12019B	Measure components using coordinate measuring machine	4
MEM12020B	Set and operate coordinate measuring machine	2
MEM12021B	Program coordinate measuring machine*	4
MEM12022B	Program coordinate measuring machines (advanced)*	2
MEM12025A	Use graphical techniques and perform simple statistical computations*	2
MEM13001B	Perform emergency first aid	1
MEM13002B	Undertake occupational health and safety activities in the workplace	3
MEM13003B	Work safely with industrial chemicals and materials	2
MEM13004B	Work safely with molten metals/glass	2
MEM13006B	Collect and evaluate occupational health and safety data for an enterprise or section of an	4

Unit code	Unit title	P
	enterprise	
MEM13010A	Supervise occupational health and safety in an industrial work environment*	4
MEM13013B	Work safely with ionizing radiation	4
MEM15001B	Perform basic statistical quality control	2
MEM15003B	Use improvement processes in team activities*	4
MEM15004B	Perform inspection	2
MEM15005B	Select and control inspection processes and procedures*	4
MEM15015B	Examine trading practices*	5
MEM15016B	Inspect pre-packed articles*	8
MEM15022B	Verify reference standards*	8
MEM16001B	Give formal presentations and take part in meetings	2
MEM16002C	Conduct formal interviews and negotiations	4
MEM16004B	Perform internal/external customer service	2
MEM16005A	Operate as a team member to conduct manufacturing, engineering or related activities	2
MEM16011A	Communicate with individuals and small groups*	2

Unit code	Unit title	P
MEM16013A	Operate in a self-directed team*	2
MEM17001B	Assist in development and deliver training in the workplace	2
MEM17002B	Conduct workplace assessment	2
MEM30012A	Apply mathematical techniques in a manufacturing, engineering or related environment	4

LMT32011 Certificate III in Digitising and Computerised Embroidery

Modification History

Release 2 - imported units updated to current versions, outcomes equivalent.

Description

Job roles/employment outcomes

The LMT32011 Certificate III in Digitising and Computerised Embroidery reflects vocational outcomes for those performing digitising and computer-based decoration on a range of garments and textiles, including embroidery and short-run garment printing. Work includes artwork preparation and production of decorated goods using a range of machines and software applications.

Application

This qualification is typically used to develop technical and operational skills to digitise decorative artwork for embroidery or printing and to produce printed or embroidered designs. Work may be conducted within a commercial production environment, a retail outlet for digitised embroidery machines or within a home production environment. It also includes coverage of some digital printing skills, typically used in a short-run production.

Pathways Information

Pathways into the qualification

Candidates may undertake this qualification by direct entry.

Credit will be granted towards this qualification to those who have completed LMT20607 Certificate II in Clothing Production, LMT20707 Certificate II in Clothing Production (Complex or Multiple Processes) or achieved equivalent industry experience.

Pathways from the qualification

Further training pathways from this qualification include other relevant manufacturing or design qualifications.

Licensing/Regulatory Information

There are no specific licences that relate to this qualification. However, some units in this qualification may have licensing or regulatory requirements in some environments. Local regulations should be checked for details.

Entry Requirements

Not applicable.

Employability Skills Summary

The following table contains a summary of the Employability Skills as identified by the digital embroidery industries for this qualification. This table should be interpreted in conjunction with the detailed requirements of each unit of competency packaged in this qualification. The outcomes described here are broad industry requirements that reflect skill requirements for this level.

Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	• Confirm relevant industry and workplace requirements • Understand personal requirements of relevant industry and workplace standards, regulations and policies • Complete standard documentation • Use communication technologies efficiently • Communicate problems with embroidery design or production • Ensure records are accurate and legible • Establish effective working relationships with colleagues • Undertake interactive workplace communication • Communicate effectively and appropriately when dealing with customers
Teamwork	• Explain and implement work team reporting requirements • Monitor project tasks in accordance with regulatory and workplace requirements • Demonstrate and encourage others in working cooperatively with people of different ages, gender, race or religion • Undertake appropriate and effective communication with others in the supply chain • Provide support to team members or others in the supply chain
Problem-solving	• Identify risks and implement risk control measures for machinery and equipment • Identify and address problems and faults • Check performance of machinery and equipment • Assess and evaluate skills requirements of self and others to perform tasks • Deal with and promptly resolve issues • Use problem-solving techniques to determine production

	requirements • Assess quality of materials before applying embroidery • Identify and report potential environmental hazards
Initiative and enterprise	• Seek and provide feedback on procedures • Collect and monitor information • Identify non-conformances to standards and take appropriate action • Rectify problems promptly and appropriately • Monitor and adjust activity in response to operational variations • Identify and assess existing and potential risks and seek advice • Monitor information and records to identify trends that may require remedial action • Develop and promote continuous improvement
Planning and organising	• Plan work requirements for self and others as required • Monitor quality outcomes • Monitor resource use in own work • Implement contingency plan promptly when incidents occur • Monitor equipment condition and performance • Assess productivity and cost efficiencies of own work
Self-management	• Manage own work • Monitor information in work area • Keep the work area clean and tidy at all times • Conduct regular housekeeping activities • Locate, interpret and apply relevant information • Monitor own work against quality standards • Understand own work activities and responsibilities • Conduct work in a manner which minimises waste • Identify and apply safety procedures, including the use of protective equipment • Manage work load priorities
Learning	• Recognise limits of own expertise • Assess competencies in meeting job requirements • Identify own skill requirements and seek skill development if required • Ask questions to expand own knowledge

Technology	• Monitor performance of machine operation • Use machines and equipment to achieve variable production outcomes • Perform minor maintenance on machinery • Work with technology safely and according to workplace standards
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Packaging Rules

To be awarded the LMT32011 Certificate III in Digitising and Computerised Embroidery, competency must be achieved in **nineteen (19)** units of competency.

- **seven (7)** core units of competency
- **twelve (12)** elective units of competency, as specified below.

Note: Where prerequisite units apply, these have been noted with an asterisk. Refer to the units of competency for details. Prerequisites must be considered in the total number of units.

Core units of competency

Unit code	Unit title
LMTGN2001B	Follow defined OH&S policies and procedures
LMTGN2002B	Apply quality standards
LMTGN2003B	Work in the textiles, clothing and footwear industry
LMTCL2003B	Identify fibres and fabrics
LMTDE3001A	Apply hooping and fabric handling techniques
CUFCMP301A	Implement copyright arrangements
MSAENV272B	Participate in environmentally sustainable work practices

Elective units of competency

Select **twelve (12)** units of competency, as specified below.

- a minimum of five (5) units must be selected from Group A
- a minimum of two (2) units must be selected from Group B
- a maximum of four (4) units may be selected from Group C
- a maximum of three (3) units may be selected from Group D
- The remainder must be selected from Groups A and B.

Group A

Unit code	Unit title	Prerequisites
LMTDE3002A	Digitise artwork for computerised embroideries	*
LMTDE3003A	Apply advanced digitising techniques to produce computerised embroideries	*
LMTDE3004A	Generate artwork for computerised embroideries	
LMTDE3005A	Replicate traditional hand craft techniques	*
LMTDE3006A	Digitise text to produce embroidered lettering	*
LMTDE3007A	Demonstrate features of digitised embroidery machines	
LMTDE3008A	Produce embroidery from digitised images	
LMTDE3009A	Maintain computerised embroidery machines	

Group B

Unit code	Unit title	Prerequisites
LMTGN3002B	Organise and plan own work to achieve planned outcomes	
LMTGN3003B	Estimate and cost job	
LMTTX3017A	Set up, adjust and maintain industrial sewing machines	
BSBDES301A	Explore the use of colour	
BSBDES302A	Explore and apply the creative design process to 2D forms	
BSBSMB304A	Determine resource requirements for the micro business	
BSBSMB305A	Comply with regulatory, taxation and insurance requirements for the micro business	
ICPPR282C	Produce and manage basic digital print	
ICPPR383C	Prepare for personalised digital printing	
ICPPR385A	Apply software applications to digital production	*
ICPPR386A	Troubleshoot digital media	
ICPPR387A	Use colour management for production	*
ICPPR388A	Preflight and import complex images for digital device	
ICPPR389A	Manage digital files	
ICPPR390A	Generate a proof for digital production	
ICPPR392A	Set up and produce specialised digital print	
MSAPMSUP382A	Provide coaching/mentoring in the workplace	

Group C

Unit code	Unit title	Prerequisites
LMTCL2006B	Press work	
LMTCL2009B	Despatch work	
LMTCL2011B	Draw and interpret a basic sketch	
LMTCL2012B	Organise and plan own work in a home-based production environment	
LMTGN2004B	Work in a team environment	
LMTGN2005B	Perform minor maintenance	
LMTGN2006B	Perform test or inspection to check product quality	
LMTGN2008B	Coordinate work of team or section	
LMTGN2009B	Operate computing technology in a textiles, clothing and footwear workplace	
BSBDES202A	Evaluate the nature of design in a specific industry context	
ICPPR284A	Introduction to colour management	
ICPSU281C	Use computer systems	
MSS402010A	Manage the impact of change on own work	
MSS402030A	Apply cost factors to work practices	
MSS402031A	Interpret product costs in terms of customer requirements	
MSS402040A	Apply 5S procedures	
MSACMT270A	Use sustainable energy practices	
MSS402080A	Undertake root cause analysis	
SIRXSL002A	Advise on products and services	

Group D

Units of competency from Groups A, B or C not previously selected

Other TCF Training Package units that are available at Certificates II (maximum 1 unit), III (maximum 3 units) and IV (maximum 1 unit)

Units from other endorsed Training Packages and accredited courses that are available at Certificates II (maximum 1 unit), III (maximum 3 units) and IV (maximum 1 unit).

Note that if LMTDE3002A and LMTDE3008A have been selected, the unit LMTCL3008B available in other LMT qualifications may not be selected.

Custom Content Section

Not applicable.

LMT40107 Certificate IV in Textile Technology and Production

Modification History

Release 2 - imported units updated to current versions, outcomes equivalent.

Description

Job roles/employment outcomes

The Certificate IV in Textile Technology and Production covers occupations such as those in technical support or production management roles within the textiles industry, with functions such as product design assistance, computer aided design and manufacturing technologies, colour coordination, production planning, quality control, technical support and problem solving. This qualification also covers a broad range of skilled applications, including evaluation and analysis of current practices, development of new criteria and procedures for performing current practice and provision of leadership and guidance to others.

Application

This qualification is typically used to develop skill and knowledge in the application of specialised technical and management skills within textile production enterprises.

Pathways Information

Pathways into the qualification

Direct entry into this qualification requires completion of a total of twenty-five (25) units of competency according to the rules described below.

Credit may be granted towards this qualification by those who have completed LMT30107 Certificate III in Textile Production, LMT30407 Textile Fabrication, LMT31807 Technical Textiles and Non-wovens or achieved equivalent industry experience.

Pathways from the qualification

Further training pathways from this qualification include LMT50407 Diploma of Textile Technology and Production Management, MSA51108 Diploma of Competitive Manufacturing or other relevant manufacturing qualifications.

Licensing/Regulatory Information

There are no specific licences that relate to this qualification. However, some units in this qualification may have licensing or regulatory requirements in some environments. Local regulations should be checked for details.

Entry Requirements

Not applicable.

Employability Skills Summary

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

Employability Skills Summary - Certificate IV in Textile Technology and Production

The following table contains a summary of the Employability Skills as identified by the textile technology and production industries for this qualification. This table should be interpreted in conjunction with the detailed requirements of each unit of competency packaged in this qualification. The outcomes described here are broad industry requirements that reflect skill requirements for this level.

Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	• complete workplace documentation and records • use communication technologies efficiently • develop work instructions, specifications and procedures for production • demonstrate effective and appropriate communication and interpersonal skills when dealing with people from nesb • communicate with all team members • demonstrate effective and appropriate communication and interpersonal skills when dealing with clients • use most appropriate communication method given priority, cost and customer facilities • access, interpret and apply technical information • interpret and apply textile calculations and specifications • interpret production data
Teamwork	• work cooperatively with people of different ages, gender, race or religion • liaise with and provide support to other team members • work as part of a team • identify and manage performance required to meet customer needs in own work and team • manage technical processes and provide problem solving support to others • participate in sustainability improvements

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY**Problem-solving**

- investigate problem causes
- identify, rectify or report potential difficulties associated with manufacture of products or provision of services
- identify and act on environmental hazards
- use material and process knowledge to solve problems
- identify hazards and implement control measures
- determine production requirements
- apply information on textile sciences to determine solutions to production or design problems
- conduct tests and analyse results to determine and assess production requirements

Initiative and enterprise

- seek feedback on products, processes and procedures
- gather and analyse information and apply to production processes
- record information on the quality and other indicators of products
- determine types and quantities of materials required for manufacture
- support achievement of efficient production processes
- determine and act on situations requiring further information or problem solving
- identify opportunities for improvements to environmental performance

Planning and organising

- identify hazards and implement appropriate hazard control measures
- demonstrate time management skills
- source and prepare materials and resources for production
- identify and rectify stock shortages in advance
- sequence work to maximise safety and productivity
- interpret production requirements for textile designs

Self-management

- interpret and apply relevant acts and regulations
- keep the work area clean and tidy at all times
- monitor own work and work of team and identify and act on any quality issues

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
	• monitor use of resources • understand own work activities • manage own time to meet deadlines • implement workplace procedures and instructions
Learning	• implement learning activities as appropriate to ensure achievement of specified production requirements • assess competencies in meeting job requirements • be supportive, assertive and use interpersonal skills • identify own training needs and seek skill development if required • learn about sustainability developments relating to work practice • gather feedback to own work to assess effectiveness in meeting objectives and integrate information into own practice
Technology	• ensure textile production equipment is operated and maintained efficiently and according to workplace standards • use computer software applications effectively • work with technology safely and according to workplace standards • help others use textile technology efficiently and safely • use testing technology

Packaging Rules

To be awarded the Certificate IV in Textile Technology and Production, competency must be achieved in twenty-five (25) units of competency.

- Eleven (11) core units of competency
- Fourteen (14) elective units of competency as specified below.

Note: Where prerequisite units apply, these have been noted, and must be considered in the total number of units.

CORE UNITS

Complete all eleven (11) units from this list

Unit code	Unit title
LMTGN2003B	Work in the Textiles, Clothing and Footwear industry
LMTGN3002B	Organise and plan own work to achieve planned outcomes
LMTGN4010A	Implement and monitor OH&S in the workplace
LMTGN4011A	Coordinate quality system and procedures
LMTGN4013A	Manage technical processes
LMTTX2001B	Identify fibres, yarns and textile materials and their uses in textile production
LMTTX3001B	Identify quality and types of textile fibres, yarns and fabrics
LMTTX4001A	Interpret and apply textile calculations and specifications
LMTTX4002A	Understand and apply textile science
LMTTX4003A	Perform routine textile testing and analyse results
MSAENV272B	Participate in environmentally sustainable work practices

ELECTIVE UNITS

Select fourteen (14) units as specified below.

- A minimum of four (4) units must be selected from Group A
- A maximum of four (4) units may be selected from Group B
- A maximum of four (4) units may be selected from Group D
- A maximum of four (4) units may be selected from Group E
- The remainder must be selected from Groups A and C.

NOTE: Competitive Manufacturing Training Package units, identified in Group D as MSACM coded units, should be selected on the basis of work requirements. Those at Certificate II level (units in the 200 series) are appropriate for operators. MSACM units for those in Certificate III level positions such as team leaders should be selected from both the 200 series and the 400 series.

GROUP A

Unit code	Unit title	Prerequisites
LMTGN4001A	Coordinate or set up machine/s for product change	
LMTGN4002A	Participate in product engineering	
LMTGN4003A	Install and commission process and machine control programs	
LMTGN4005A	Plan and implement production within a work area	
LMTGN4006A	Evaluate equipment and systems	
LMTGN4008A	Analyse product and determine machine settings	
LMTGN4009A	Set and modify machines for product change	
LMTGN4012A	Fabricate or machine tooling	
LMTGN4014A	Design production tooling	
LMTGN4016A	Contribute to the development of products or processes	
LMTTX4004A	Select dyes and develop dye specification and recipe for production	
LMTTX4005A	Undertake textile colouration and finishing	LMTTX4002A

GROUP B

Unit code	Unit title	Prerequisites
LMTCL2001B	Use a sewing machine	
LMTGN2009B	Operate computing technology in a Textile Clothing and Footwear workplace	
LMTGN3001B	Control production in a section of a Textile Clothing and Footwear enterprise	
LMTGN3005B	Plan tasks to assist production operations	
LMTGN3006B	Take responsibility for visitors and new employees	
LMTGN3009B	Supervise operations in a textiles, clothing and footwear enterprise	
LMTLG2006A	Identify materials used in leather goods production	
LMTLG3001A	Make a prototype	
LMTTF2001A	Despatch products	
LMTTF2003A	Package and handle products for despatch	
LMTTF2004A	Add reinforcements and attachments	
LMTTF2005A	Translate information into measurements or diagrams	

Unit code	Unit title	Prerequisites
LMTTF2006A	Measure and scale geometric shapes	LMTTF2005A
LMTTF2007A	Produce patterns for 2D products	
LMTTF2008A	Use adhesives	
LMTTF2009A	Identify and select canvas and sail materials	
LMTTF2010A	Lay out and mark out canvas or sail materials	
LMTTF2011A	Cut and shape canvas or sail materials	
LMTTF2012A	Stitch by hand	
LMTTF2013A	Waterproof canvas product	
LMTTF2014A	Weld plastic materials	
LMTTF2016A	Install products on and off-site	
LMTTF2017A	Cut, bend and shape metal	
LMTTF2018A	Use canvas and sail production tools	
LMTTF2019A	Inspect canvas or sail product	
LMTTF3001A	Identify customer requirements (on site)	
LMTTF3002A	Gain customer acceptance of service proposal	

Unit code	Unit title	Prerequisites
LMTTF3003A	Produce patterns for 3D products	LMTTF2007A
LMTTF3004A	Perform advanced welding of plastic materials	LMTTF2014A
LMTTF3005A	Apply lofting skills to sail making	
LMTTF3006A	Cut and join sail panels	
LMTTN2001B	Set up and operate a dry laid web forming machine	
LMTTN2002B	Set up and operate a spun bond web forming machine	
LMTTN2003B	Use basic recognition techniques to identify technical and nonwoven textiles	
LMTTN2004B	Undertake web bonding processes	
LMTTN2005B	Undertake web conversion and finishing	
LMTTN2006B	Identify purpose and performance outcomes of technical textile product	LMTTN2003B
LMTTN2007B	Conduct technical textile mechanical finishing processes	
LMTTN2008B	Conduct heat setting on technical textiles	

Unit code	Unit title	Prerequisites
LMTTN2009B	Apply surface coating to technical textiles	
LMTTN2010B	Apply laminations and fusible interlinings to technical textiles	
LMTTN2011B	Undertake fibre blending and feeding for nonwoven technical production processes	
LMTTX2002B	Prepare yarn for textile manufacturing	
LMTTX2003B	Perform spinning operations	
LMTTX2004B	Perform tufting operations	
LMTTX2005B	Perform creeling operations	
LMTTX2006B	Operate a weaving loom	
LMTTX2007B	Perform knitting operations	
LMTTX2008B	Apply finishing processes to textile production	
LMTTX2009B	Weigh and check textile materials and products	
LMTTX2010B	Load and operate dyeing equipment	
LMTTX2011B	Repair textile product	
LMTTX2012B	Perform industrial sewing on textile products	

Unit code	Unit title	Prerequisites
LMTTX2013B	Conduct packaging or folding for textile production	
LMTTX2014B	Use specialised machinery to assist textile production	
LMTTX2015B	Handle and prepare chemicals, dyes and other substances used in textile production	
LMTTX2016B	Perform knotting for weaving operations	
LMTTX2017B	Access and use information resources for textile production operations	
LMTTX2018B	Restart machine after stoppage	
LMTTX2019B	Undertake carding operations	
LMTTX3002B	Contribute to textile production process improvements	LMTGN2002B
LMTTX3004B	Set up textile production machines for product change	
LMTTX3005B	Organise and interpret tests	
LMTTX3006B	Ensure efficient operation of textile machines	

Unit code	Unit title	Prerequisites
LMTTX3007B	Prepare dyes for textile production	
LMTTX3008B	Select raw materials	
LMTTX3009B	Operate in a complex textile production environment	
LMTTX3010B	Monitor textile production processes	
LMTTX3011A	Set up, adjust and maintain circular knitting machines	
LMTTX3012A	Set up, adjust and maintain flat knitting machines	
LMTTX3013A	Set up and adjust spinning machines	
LMTTX3014A	Set up, adjust and maintain carding machines	LMTTX3001B
LMTTX3015A	Set up, adjust and maintain tufting machines	LMTTX4002A
LMTTX3016A	Set up, adjust and maintain domestic sewing machines	
LMTTX3017A	Set up, adjust and maintain industrial sewing machines	
LMTTX3018A	Undertake electronic fault finding on textile machinery	

Unit code	Unit title	Prerequisites
LMTTX3019A	Identify and correct mechanical faults in loom and other weaving equipment	
LMTTX3020A	Identify and correct weaving process faults	
LMTTX3021A	Apply knowledge of weaving processes to production requirements	
LMTTX3022A	Set up and operate weaving loom for production	

GROUP C

Unit code	Unit title	Prerequisites
MEM12023A	Perform engineering measurements	
MEM12024A	Perform computations	
MEM13003B	Work safely with industrial chemicals and materials	
MEM14004A	Plan to undertake a routine task	
MEM14005A	Plan a complete activity	
MEM17003A	Assist in the provision of on the job training	

Unit code	Unit title	Prerequisites
PMASUP420B	Minimise environmental impact of process	

GROUP D

Unit code	Unit title	Prerequisites
MSS402010A	Manage the impact of change on own work	
MSS403010A	Facilitate change in an organisation implementing competitive systems and practices	
MSS402001A	Apply competitive systems and practices	
MSS402002A	Sustain process improvements	
MSS403001A	Implement competitive systems and practices	
MSS403002A	Ensure process improvements are sustained	
MSS402020A	Apply quick changeover procedures	
MSS402021A	Apply Just in Time procedures	

Unit code	Unit title	Prerequisites
MSS402030A	Apply cost factors to work practices	
MSS402031A	Interpret product costs in terms of customer requirements	
MSS402040A	Apply 5S procedures	
MSS402050A	Monitor process capability	
MSS402060A	Use planning software systems in operations	
MSS402061A	Use SCADA systems in operations	
MSACMT270A	Use sustainable energy practices	
MSS402080A	Undertake root cause analysis	
MSS402081A	Contribute to the application of a proactive maintenance strategy	
MSS403021A	Facilitate a Just in Time system	
MSS403030A	Improve cost factors in work practices	
MSS403032A	Analyse manual	

Unit code	Unit title	Prerequisites
	handling processes	
MSS403040A	Facilitate and improve implementation of 5S	
MSS404050A	Undertake process capability improvements	MSS404052A
MSS403051A	Mistake proof an operational process	
MSS404052A	Apply statistics to operational processes	
MSS404060A	Facilitate the use of planning software systems in a work area or team	MSS402060A
MSS404061A	Facilitate the use of SCADA systems in a team or work area	
MSS404081A	Undertake proactive maintenance analyses	
MSS404082A	Assist in implementing a proactive maintenance strategy	
MSAENV472B	Implement and monitor environmentally sustainable work	

Unit code	Unit title	Prerequisites
	practices	

GROUP E

Other Textile Technology and Production units that are available at Certificates IV (maximum 4) or V (maximum 1)

Other TCF Training Package units that are available at Certificates III (maximum 1), IV (maximum 4) and V (maximum 1)

Units from other endorsed Training Packages and accredited courses at Certificates III (maximum 1), IV (maximum 4) and V (maximum 1)

LMT40207 Certificate IV in Cotton Ginning

Modification History

Release 2 - imported units updated to current versions, outcomes equivalent.

Description

Job roles/employment outcomes

The Certificate IV covers occupations such as supervisors in cotton ginning operations. It allows for a multi-skilled outcome and provides a basis for career progression.

Application

This qualification is typically used to develop skill and knowledge in the application of specialised technical and supervisory skills within cotton ginning enterprises.

Pathways Information

Pathways into the qualification

Direct entry into this qualification requires completion of a total of twenty-seven (27) units according to the rules described below.

Credit may be granted towards this qualification by those who have completed LMT30307 Certificate III in Cotton Ginning or achieved equivalent industry experience.

Pathways from the qualification

Further training pathways from this qualification include MSA51108 Diploma of Competitive Manufacturing or other relevant manufacturing or management qualifications.

Licensing/Regulatory Information

There are no specific licences that relate to this qualification. However, some units in this qualification may have licensing or regulatory requirements in some environments. Local regulations should be checked for details.

Entry Requirements

Not applicable.

Employability Skills Summary

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

Employability Skills Summary - Certificate IV in Cotton Ginning

The following table contains a summary of the Employability Skills as identified by the Cotton Ginning industries for this qualification. This table should be interpreted in conjunction with the detailed requirements of each unit of competency packaged in this qualification. The outcomes described here are broad industry requirements that reflect skill requirements for this level.

Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	• understand personal requirements of relevant industry and workplace standards, regulations and policies • complete standard documentation • use communication technologies efficiently • communicate technical issues and procedures about cotton ginning • communicate to others ginning operational requirements • ensure ginning records are accurate and legible • establish effective working relationships with colleagues • undertake interactive workplace communication • demonstrate effective and appropriate communication and interpersonal skills when dealing with people from a range of backgrounds • develop and communicate work instructions, specifications and procedures for production
Teamwork	• explain and implement work team reporting requirements • monitor work team tasks in accordance with regulatory and workplace requirements • provide leadership and encourage others in working cooperatively with people of different ages, gender, race or religion • undertake appropriate and effective communication with team members • participate in sustainability improvements

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

	• liaise with and provide support to other team members • keep team members informed of changes to work practices • identify team performance required to meet customer needs • provide leadership to others in the team • encourage the sharing of information between team members • plan and support team activities
Problem-solving	• identify risks and implement risk control measures for machinery and equipment • identify and act on environmental hazards • identify and address machinery problems and faults • check performance of machinery • assess and evaluate skills requirements of self and others to perform tasks • deal with and promptly resolve issues • conduct tests, analyse results and use other problem solving techniques to determine ginning requirements • manage cotton ginning technical processes and provide problem solving support to team members • implement changes to ginning procedures when required • examine tools and machinery for damage, missing components or other defects • analyse relevant workplace data to identify hazards, assess risks and evaluate the effectiveness of risk control measures
Initiative and enterprise	• seek and provide feedback on cotton ginning processes and procedures • collect and monitor information from a variety of sources including customers, suppliers, technical resources and regulatory authorities • identify non-conformances to standards and take appropriate action • identify potential areas for improvement to environmental performance

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

	• rectify problems promptly and appropriately • monitor and adjust activity in response to variations caused by differences in raw cotton, equipment condition and customer requirements • identify and address existing and potential risks • monitor information and records to identify trends that may require remedial action • develop and promote continuous improvement • gather and analyse information on machinery or ginning process problems • record information on the quality and other indicators of ginning performance • adjust and implement production schedules changes
Planning and organising	• monitor quality outcomes • allocate tasks to operators • implement contingency plan promptly when incidents occur • identify training needs for the work team and seek training support • monitor equipment condition and performance • identify hazards and implement appropriate hazard control measures • organise self and others to meet production schedules • identify and rectify parts and other shortages in advance • sequence work to maximise safety and productivity • select and use appropriate hand and power tools • identify labour requirements to achieve efficient ginning and perform required services • determine materials, chemicals, quality and ginning production requirements • apply time management skills to ensure flow of modules to gin according to ginning schedule
Self-management	• monitor information in work area • monitor and keep work areas clean and tidy at all times • conduct regular housekeeping activities during shift

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

	• locate, interpret and apply relevant OHS, ginning process and equipment information • monitor own work against quality standards • understand own work activities and responsibilities • identify and apply safety procedures, including the use of protective equipment • manage work load priorities • interpret and apply relevant acts and regulations • develop and implement workplace procedures and instructions • establish own work schedule • monitor use of resources • accept responsibility for quality of work
Learning	• recognise limits of own expertise • assess competencies in meeting job requirements • ask questions to expand own knowledge • identify own training needs and seek skill development if required • listen to feedback from others • identify sources of information to expand knowledge and understanding • learn about sustainability developments relating to work practice • identify and address skill development needs of others in the team
Technology	• use software applications effectively • properly start up, operate and shut down control equipment • work with technology safely and according to workplace standards • establish standard operating procedures • carry out pre-operational checks on equipment and machines • operate ginning equipment and other machines safely, efficiently and to productivity requirements • monitor and adjust machine functions according to

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
	manufacturer's instructions and ginning requirements • perform machine maintenance and problem solving • clean and check equipment and machines

Packaging Rules

To be awarded the Certificate IV in Cotton Ginning, competency must be achieved in twenty-seven (27) units of competency.

- Eighteen (18) core units of competency
- Nine (9) elective units of competency as specified below.

If Certificate III has been achieved, an additional five (5) units are required according to the rules described. Units that have been credited towards lower level qualifications must not be selected in the additional five (5) unit requirement.

Note: Where prerequisite units apply, these have been noted, and must be considered in the total number of units.

CORE UNITS

Complete all eighteen (18) units from this list

Unit code	Unit title
LMTCG2001A	Identify cotton characteristics
LMTCG2002A	Gin cotton
LMTCG2003A	Control bale or mote press operations
LMTCG3001A	Identify factors that impact on cotton quality
LMTCG3002A	Perform advanced operational maintenance of cotton ginning machines and equipment
LMTGN2001B	Follow defined OH&S policies and procedures
LMTGN2002B	Apply quality standards
LMTGN2003B	Work in the Textiles, Clothing and Footwear industry
LMTGN2010B	Perform tasks to support production

Unit code	Unit title
LMTGN3001B	Control production in a section of a Textiles, Clothing and Footwear enterprise
LMTGN3002B	Organise and plan own work to achieve planned outcomes
LMTGN4010A	Implement and monitor OH&S in the workplace
MEM11010B	Operate mobile load shifting equipment
MEM12023A	Perform engineering measurements
MEM13001B	Perform emergency first aid
MEM18001C	Use hand tools
MEM18002B	Use power tools/hand held operations
MSAENV272B	Participate in environmentally sustainable work practices

ELECTIVE UNITS

Select nine (9) units as specified below.

- A minimum of five (5) units must be selected from Group A
- A maximum of four (4) units may be selected from Group B

NOTE: Competitive Manufacturing Training Package units, identified in Group A as MSACM coded units, should be selected on the basis of work requirements. Those at Certificate II level (units in the 200 series) are appropriate for operators. MSACM units for those in Certificate III level positions such as team leaders should be selected from both the 200 series and the 400 series.

GROUP A

Unit code	Unit title	Prerequisites
FNSACC402A	Prepare operational budgets	
LMTCG3003A	Assist in overhauling or repairing cotton ginning fluid power equipment	
LMTGN2004B	Work in a team environment	

Unit code	Unit title	Prerequisites
MEM05004C	Perform routine oxy acetylene welding	
MEM05007C	Perform manual heating and thermal cutting	
MEM05008C	Perform advanced manual thermal cutting, gouging and shaping	MEM05007C
MEM05012C	Perform routine manual metal arc welding	
MEM05050B	Perform routine gas metal arc welding	
MEM07001B	Perform operational maintenance of machines/equipment	MEM18001C
MEM09002B	Interpret engineering drawing	
MEM18005B	Perform fault diagnosis, installation and removal of bearings	MEM09002B MEM12023A MEM18001C MEM18002B MEM18003C MEM18006C MEM18055B
MEM18008B	Balance equipment	MEM09002B MEM12023A MEM18001C MEM18002B MEM18003C MEM18006C MEM18055B
MEM18009B	Perform levelling and alignment of machines and engineering components	MEM09002B MEM12023A MEM18001C MEM18002B MEM18003C MEM18006C MEM18055B

Unit code	Unit title	Prerequisites
MEM18018C	Maintain pneumatic system components	MEM09002B MEM12023A MEM18001C MEM18002B MEM18003C MEM18006C MEM18055B
MEM18019B	Maintain pneumatic systems	MEM09002B MEM12023A MEM18001C MEM18002B MEM18003C MEM18006C MEM18018C MEM18055B
MEM18049B	Disconnect/reconnect fixed wire equipment up to 1000v ac and 1500v dc	MEM09002B MEM10002B MEM12002B MEM18001C
MEM18055B	Dismantle, replace and assemble engineering components	MEM09002B MEM12023A MEM18001C MEM18002B
MSS402010A	Manage the impact of change on own work	
MSS403010A	Facilitate change in an organisation implementing competitive systems and practices	

Unit code	Unit title	Prerequisites
MSS402001A	Apply competitive systems and practices	
MSS402002A	Sustain process improvements	
MSS403001A	Implement competitive systems and practices	
MSS403002A	Ensure process improvements are sustained	
MSS402020A	Apply quick changeover procedures	
MSS402021A	Apply Just in Time procedures	
MSS402030A	Apply cost factors to work practices	
MSS402031A	Interpret product costs in terms of customer requirements	
MSS402040A	Apply 5S procedures	
MSS402050A	Monitor process capability	
MSS402060A	Use planning software systems in operations	
MSS402061A	Use SCADA systems in operations	
MSACMT270A	Use sustainable energy practices	
MSS402080A	Undertake root cause analysis	
MSS402081A	Contribute to the application of a proactive maintenance	

Unit code	Unit title	Prerequisites
	strategy	
MSS403021A	Facilitate a Just in Time system	
MSS403030A	Improve cost factors in work practices	
MSS403032A	Analyse manual handling processes	
MSS403040A	Facilitate and improve implementation of 5S	
MSS404050A	Undertake process capability improvements	MSS404052A
MSS403051A	Mistake proof an operational process	
MSS404052A	Apply statistics to operational processes	
MSS404060A	Facilitate the use of planning software systems in a work area or team	
MSS404061A	Facilitate the use of SCADA systems in a team or work area	
MSS404081A	Undertake proactive maintenance analyses	
MSS404082A	Assist in implementing a proactive maintenance strategy	
MSAENV472B	Implement and monitor environmentally sustainable work practices	

Unit code	Unit title	Prerequisites
TAEASS401B	Plan assessment activities and processes	
TAEASS402B	Assess competence	

GROUP B

Other Cotton Ginning units that are available at Certificates IV (maximum 4) or V (maximum 1)

Other TCF Training Package units that are available at Certificates III (maximum 1), IV (maximum 4) and V (maximum 1)

Units from other endorsed Training Packages and accredited courses at Certificates III (maximum 1), IV (maximum 4) and V (maximum 1)

LMT40307 Certificate IV in Clothing Production

Modification History

Release 2 - imported units updated to current versions, outcomes equivalent.

Description

Job roles/employment outcomes

The Certificate IV in Clothing Production covers occupations such as supervisory roles in a production environment, pattern makers and sample machinists. It allows for a multi-skilled approach to clothing production and provides a basis for career progression to higher skills at the Diploma level in the Fashion Design and Technology area.

Application

This qualification is typically used to develop skill and knowledge in the application of specialised technical and supervisory skills within clothing production enterprises.

Pathways Information

Pathways into the qualification

Direct entry into this qualification requires completion of a total of twenty-five (25) units according to the rules described below.

Credit may be granted towards this qualification by those who have completed LMT30507 Certificate III in Clothing Production or achieved equivalent industry experience.

Pathways from the qualification

Further training pathways from this qualification include LMT50307 Diploma of Applied Fashion Design and Technology or other relevant manufacturing or management qualifications.

Licensing/Regulatory Information

There are no specific licences that relate to this qualification. However, some units in this qualification may have licensing or regulatory requirements in some environments. Local regulations should be checked for details.

Entry Requirements

Not applicable.

Employability Skills Summary

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

Employability Skills Summary - Certificate IV in Clothing Production

The following table contains a summary of the Employability Skills as identified by the clothing production industries for this qualification. This table should be interpreted in conjunction with the detailed requirements of each unit of competency packaged in this qualification. The outcomes described here are broad industry requirements that reflect skill requirements for this level.

Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	• work with the client, designer or patternmaker to determine clothing design and production needs • complete detailed documentation on design specifications and production requirements • interpret design and patternmaking specifications, terminology and symbols • give and receive feedback during development of design • take, calculate and document measurements • establish effective working relationships with colleagues • access and apply information on clothing design and construction • discuss production requirements with relevant personnel • understand personal requirements of relevant industry and workplace standards, regulations and policies
Teamwork	• explain and implement work team reporting requirements • work with others in the business to meet business targets • provide feedback to improve overall team performance • work closely and effectively with designers and patternmakers to develop direction for design production • undertake appropriate and effective communication

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
	- with team members • support others to meet targets • work cooperatively to produce clothing to client and enterprise standards • participate in sustainability improvements
Problem-solving	• identify risks and implement risk control measures for enterprise processes • identify and address problems and issues relating to clothing patterns and specifications • identify and act on environmental hazards • provide problem solving support to others • use problem solving techniques to determine clothing requirements • assess quality of materials before using in clothing items • use a range of problem solving strategies to address potential and actual problems
Initiative and enterprise	• look for opportunities to improve outcomes and reduce costs for client and enterprise • contribute to business development ideas • identify non-conformances to standards and take appropriate action • identify opportunities for improvements in environmental performance • monitor and adjust activity in response to operational variations • monitor information and records to identify trends that may require remedial action • develop and promote continuous improvement
Planning and organising	• plan development of pattern or clothing products • plan activity to meet business and client needs • organise work area to maximise efficiency • plan to meet resource requirements • monitor equipment condition and performance
Self-management	• manage work to meet business targets • maintain currency of information relating to work

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
	• keep the work area clean and tidy at all times • conduct regular housekeeping activities • monitor own work against quality standards • understand own work activities and responsibilities • identify and apply safety procedures, including the use of protective equipment • manage work load priorities • monitor use of resources
Learning	• recognise limits of own expertise • assess competencies in meeting job requirements • identify own skill requirements and seek skill development if required • develop new skills to meet business and client needs • learn about sustainability developments relating to work practice
Technology	• ensure correct and safe use of machines, tools and equipment in the enterprise • perform minor maintenance on machinery and identify and act on requirements for further maintenance • work with technology safely and according to workplace standards • handle and use clothing materials correctly and safely

Packaging Rules

To be awarded the Certificate IV in Clothing Production, competency must be achieved in twenty-five (25) units of competency.

- Nine (9) core units of competency
- Sixteen (16) elective units of competency as specified below.

If Certificate III has been achieved, an additional seven (7) units are required according to the rules described. Units that have been credited towards lower level qualifications must not be selected in the additional seven (7) unit requirement.

Note: Where prerequisite units apply, these have been noted, and must be considered in the total number of units.

CORE UNITS

Complete all nine (9) units from this list

Unit code	Unit title
LMTCL2003B	Identify fibres and fabrics
LMTCL2011B	Draw and interpret a basic sketch
LMTCL3001B	Identify fabric performance and handling requirements
LMTFD2005B	Identify design process for fashion designs
LMTFD4006B	Interact and network with fashion industry participants
LMTGN2002B	Apply quality standards
LMTGN2003B	Work in the textiles, clothing and footwear industry
LMTGN4010A	Implement and monitor OH&S in the workplace
MSAENV272B	Participate in environmentally sustainable work practices

ELECTIVE UNITS

Select sixteen (16) units as specified below.

- A minimum of two (2) units must be selected from Group A
- A minimum of one (1) unit must be selected from Group B
- A maximum of four (4) units may be selected from Group D
- A maximum of four (4) units may be selected from Group E
- The remainder must be selected from Groups A, B and C.

NOTE: Competitive Manufacturing Training Package units, identified in Group D as MSACM coded units, should be selected on the basis of work requirements. Those at Certificate II level (units in the 200 series) are appropriate for operators. MSACM units for those in Certificate III level positions such as team leaders should be selected from both the 200 series and the 400 series.

GROUP A

Unit code	Unit title	Prerequisites
LMTCL4001A	Perform sample machining of bespoke garments	LMTCL3002B
LMTCL4002A	Assemble and fit commercially tailored or	

Unit code	Unit title	Prerequisites
	bespoke garments	
LMTCL4003A	Measure, lay-up and cut commercially tailored garments	
LMTCL4004A	Determine and perform garment maintenance repair	

GROUP B

Unit code	Unit title	Prerequisites
LMTCL4001A	Perform sample machining of bespoke garments	LMTCL3002B
LMTCL4002A	Assemble and fit commercially tailored or bespoke garments	
LMTCL4003A	Measure, lay-up and cut commercially tailored garments	
LMTCL4004A	Determine and perform garment maintenance repair	
LMTFD4002B	Apply principles of colour theory to fashion design development	LMTCL2003B LMTFD2005B
LMTFD4003B	Assist in the preparation of preliminary design concepts	
LMTFD4007B	Conduct quality assurance for patterns	

Unit code	Unit title	Prerequisites
LMTFD4008B	Construct stock size block for garment to meet size and fit specifications	
LMTFD4009B	Create and edit digital embroidery designs	LMTCL2003B
LMTFD4010B	Create pattern to meet design specifications applying advanced pattern making principles	LMTCL3009B
LMTFD4011B	Cut fabrics for prototype designs	
LMTFD4012B	Develop product specifications for fashion designs	LMTFD3004B
LMTFD4013B	Grade 2D patterns	
LMTFD4015B	Create pattern from block to meet customer specifications	LMTCL3009B
LMTFD4016B	Sew design prototypes	
LMTFD4017B	Source materials and resources for production of fashion design	
LMTFD4018B	Use and apply sizing systems appropriate for fashion design	
LMTFD4020B	Use electronic fashion design tools	
LMTFD4021B	Drape fabrics to make patterns	
LMTGN4001A	Coordinate or set up	

Unit code	Unit title	Prerequisites
	machine/s for product change	
LMTGN4003A	Install and commission process and machine control programs	
LMTGN4005A	Plan and implement production within a work area	

GROUP C

Unit code	Unit title	Prerequisites
LMTCL2001B	Use a sewing machine	
LMTCL2002B	Provide hand sewing and finishing support	
LMTCL2004B	Sew components	LMTCL2001B
LMTCL2005B	Use specialised machinery or processes to assist assembly production	
LMTCL2006B	Press work	
LMTCL2007B	Lay up, mark and cut uncomplicated fabrics and lays	
LMTCL2008B	Finish garment production	LMTCL2003B
LMTCL2009B	Despatch work	
LMTCL2010B	Modify patterns to create basic styles	

Unit code	Unit title	Prerequisites
LMTCL2011B	Draw and interpret a basic sketch	
LMTCL2012B	Organise and plan own work in a home-based production environment	
LMTCL2013B	Block and shape headwear by machine	
LMTCL2014B	Pack, store, handle or despatch headwear	
LMTCL2015B	Finish headwear	
LMTCL2016B	Trim headwear	
LMTCL2017B	Access and use information resources for clothing production operations	
LMTCL2018B	Perform basic maintenance of headwear	
LMTCL3001B	Identify fabric performance and handling requirements	LMTCL2003B
LMTCL3002B	Prepare and produce sewn garment	LMTCL2001B
LMTCL3003B	Perform garment repairs and alterations	LMTCL2001B LMTCL2003B LMTCL2004B
LMTCL3004B	Press whole garments	LMTCL2006B

Unit code	Unit title	Prerequisites
LMTCL3005B	Lay up and cut complicated fabrics and lays	LMTCL2007B
LMTCL3006B	Assemble bra or swimwear	LMTCL2001B LMTCL2003B LMTCL2004B
LMTCL3007B	Embellish garment by hand or machine	LMTCL2001B LMTCL2003B LMTCL2005B
LMTCL3008B	Set and produce digital embroidery	
LMTCL3009B	Develop patterns from a block using basic patternmaking principles	
LMTCL3010B	Sew woven and stretch knit garments	LMTCL2001B LMTCL2003B LMTCL2004B
LMTCL3011B	Contribute to garment production process improvements	LMTGN2002B
LMTCL3012B	Make marker for complicated fabrics and lays	LMTCL2007B
LMTCL3013B	Interpret patterns and apply pattern information	
LMTCL3014B	Interact and communicate with	

Unit code	Unit title	Prerequisites
	garment production personnel	
LMTFD2005B	Identify design process for fashion designs	
LMTFD3003B	Prepare design concept for a simple garment	LMTCL2011B LMTFD2005B
LMTFD3004B	Draw a trade drawing for fashion design	
LMTFD5002B	Develop and test patterns for bras and swimwear	LMTCL2004B LMTCL3009B
LMTFD5003B	Analyse fit model	
LMTFD5012B	Perform contour draping	LMTFD4021B
LMTFD5014B	Construct complex blocks for fashion garments	LMTFD4008B
LMTFD5015B	Develop patterns for complex fashion garments	LMTCL3009B LMTFD4010B LMTFD4015B
LMTFD5016B	Grade shaped patterns	LMTFD4013B
LMTFD5018B	Determine and specify advanced construction processes	
LMTFD5019B	Analyse individual fit and make pattern	LMTCL3009B

Unit code	Unit title	Prerequisites
	alterations	
LMTGN2004B	Work in a team environment	
LMTGN2005B	Perform minor maintenance	
LMTGN2006B	Perform test or inspection to check product quality	
LMTGN2007B	Select, transfer and remove materials and products	
LMTGN2008B	Coordinate work of team or section	
LMTGN2009B	Operate computing technology in a textiles, clothing and footwear workplace	
LMTGN2010B	Perform tasks to support production	
LMTGN3001B	Control production in a section of a textiles, clothing and footwear enterprise	
LMTGN3002B	Organise and plan own work to achieve planned outcomes	

GROUP D

Unit code	Unit title	Prerequisites
MSS402010A	Manage the impact	

Unit code	Unit title	Prerequisites
	of change on own work	
MSS403010A	Facilitate change in an organisation implementing competitive systems and practices	
MSS402001A	Apply competitive systems and practices	
MSS402002A	Sustain process improvements	
MSS403001A	Implement competitive systems and practices	
MSS403002A	Ensure process improvements are sustained	
MSS402020A	Apply quick changeover procedures	
MSS402021A	Apply Just in Time procedures	
MSS402030A	Apply cost factors to work practices	
MSS402031A	Interpret product costs in terms of customer requirements	
MSS402040A	Apply 5S procedures	

Unit code	Unit title	Prerequisites
MSS402050A	Monitor process capability	
MSS402060A	Use planning software systems in operations	
MSS402061A	Use SCADA systems in operations	
MSACMT270A	Use sustainable energy practices	
MSS402080A	Undertake root cause analysis	
MSS402081A	Contribute to the application of a proactive maintenance strategy	
MSS403021A	Facilitate a Just in Time system	
MSS403030A	Improve cost factors in work practices	
MSS403032A	Analyse manual handling processes	
MSS403040A	Facilitate and improve implementation of 5S	
MSS404050A	Undertake process capability improvements	MSS404052A

Unit code	Unit title	Prerequisites
MSS403051A	Mistake proof an operational process	
MSS404052A	Apply statistics to operational processes	
MSS404060A	Facilitate the use of planning software systems in a work area or team	
MSS404061A	Facilitate the use of SCADA systems in a team or work area	
MSS404081A	Undertake proactive maintenance analyses	
MSS404082A	Assist in implementing a proactive maintenance strategy	
MSAENV472B	Implement and monitor environmentally sustainable work practices	

GROUP E

Other Clothing Production units that are available at Certificates IV (maximum 4) or V (maximum 1)

Other TCF Training Package units that are available at Certificates III (maximum 1), IV (maximum 4) and V (maximum 1)

Other Clothing Production units that are available at Certificates IV (maximum 4) or V (maximum 1)

Units from other endorsed Training Packages and accredited courses at Certificates III (maximum 1), IV (maximum 4) and V (maximum 1)

LMT40407 Certificate IV in Custom-made Footwear

Modification History

Release 2 - imported units updated to current versions, outcomes equivalent.

Description

Job roles/employment outcomes

The Certificate IV in Custom-made Footwear covers occupations such as custom-made footwear technical and production roles.

Application

The Certificate IV in covers occupations in a production environment where footwear is typically custom-made or involves small production quantities.

Pathways Information

Pathways into the qualification

Direct entry into this qualification requires completion of a total of twenty-five (25) units according to the rules described below.

Credit may be granted towards this qualification by those who have completed LMT30707 Certificate III in Footwear Production or achieved equivalent industry experience.

Pathways from the qualification

Further training pathways from this qualification include relevant manufacturing, design or management qualifications.

Licensing/Regulatory Information

There are no specific licences that relate to this qualification. However, some units in this qualification may have licensing or regulatory requirements in some environments. Local regulations should be checked for details.

Entry Requirements

Not applicable.

Employability Skills Summary

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

Employability Skills Summary - Certificate IV in Custom-made Footwear

The following table contains a summary of the Employability Skills as identified by the custom-made footwear industry for this qualification. This table should be interpreted in conjunction with the detailed requirements of each unit of competency packaged in this qualification. The outcomes described here are broad industry requirements that reflect skill requirements for this level.

Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	• work with the client to determine custom made footwear design and production needs • complete detailed documentation on design specifications and production requirements • develop patterns complete with pattern making information • take and calculate measurements • establish effective working relationships with colleagues • represent the enterprise to customers • interpret business related information • calculate costing for footwear • provide written and verbal information to promote products to customers • access and apply information on footwear design and construction • understand personal requirements of relevant industry and workplace standards, regulations and policies
Teamwork	• explain and implement work team reporting requirements • work with others in the business to meet business targets • provide feedback to improve overall team performance • undertake appropriate and effective communication with team members

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
	• support others to meet targets • participate in sustainability improvements • work cooperatively to produce custom made footwear to client and enterprise standards
Problem-solving	• identify risks and implement risk control measures for enterprise processes • identify and act on environmental hazards • address problems at all stages of production • provide problem solving support to others • use problem solving techniques to determine footwear requirements • assess quality of footwear materials before using in millinery items • use a range of problem solving strategies to address potential and actual problems • handle client problems effectively
Initiative and enterprise	• look for opportunities to improve outcomes and reduce costs for client and enterprise • contribute to business development ideas • identify opportunities for improvement to environmental performance • identify non-conformances to standards and take appropriate action • monitor and adjust activity in response to operational variations • monitor information and records to identify trends that may require remedial action • develop and promote continuous improvement
Planning and organising	• assist in business planning • plan activity to meet business and client needs • organise work area to maximise efficiency • plan to meet resource requirements • monitor equipment condition and performance
Self-management	• manage work to meet business targets • maintain currency of information relating to work • keep the work area clean and tidy at all times

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
	• conduct regular housekeeping activities • monitor own work against quality standards • understand own work activities and responsibilities • identify and apply safety procedures, including the use of protective equipment • manage work load priorities • monitor use of resources
Learning	• recognise limits of own expertise • assess competencies in meeting job requirements • identify own skill requirements and seek skill development if required • ask questions to expand own knowledge • develop new skills to meet business and client needs • learn about sustainability developments relating to work practice
Technology	• ensure correct, efficient and safe use of machines, tools and equipment in the enterprise • perform minor maintenance on machinery and identify and act on requirements for further maintenance • work with technology safely and according to workplace standards • handle and use chemicals and footwear materials correctly and safely

Packaging Rules

To be awarded the Certificate IV in Custom-made Footwear, competency must be achieved in twenty-five (25) units of competency.

- Ten (10) core units of competency
- Fifteen (15) elective units of competency as specified below.

If Certificate III in Footwear Production has been achieved, an additional seven (7) units are required. All core units listed must be achieved - any Certificate IV core units not achieved at Certificate III must be completed as part of the additional seven (7) units required for Certificate IV. Units that have been credited towards lower level qualifications must not be selected in the additional unit requirement.

Note: Where prerequisite units apply, these have been noted, and must be considered in the total number of units.

CORE UNITS

Complete all ten (10) units from this list

Unit code	Unit title
LMTFP2001B	Identify materials used in footwear production
LMTFP4001A	Develop design for custom-made footwear
LMTFP4002A	Make patterns for custom-made footwear
LMTFP4003A	Prepare, cut and sew custom-made shoe components
LMTFP4004A	Assemble and finish custom-made shoe
LMTFP4005A	Fit custom-made footwear
LMTGN2001B	Follow defined OH&S policies and procedures
LMTGN2002B	Apply quality standards
LMTGN2003B	Work in the Textiles, Clothing and Footwear industry
MSAENV272B	Participate in environmentally sustainable work practices

ELECTIVE UNITS

Select fifteen (15) units as specified below.

- A minimum of one (1) unit must be selected from Group A
- A minimum of two (2) units must be selected from Group B
- A minimum of one (1) unit must be selected from Group C
- A maximum of two (2) units may be selected from Group E
- A maximum of four (4) units may be selected from Group F
- The remainder must be selected from Groups A, B, C and D.

NOTE: Competitive Manufacturing Training Package units, identified in Group E as MSACM coded units, should be selected on the basis of work requirements. Those at Certificate II level (units in the 200 series) are appropriate for operators. MSACM units for those in Certificate III level positions such as team leaders should be selected from both the 200 series and the 400 series.

GROUP A

Unit code	Unit title	Prerequisites
LMTFD4003B	Assist in preparation of preliminary design concepts	
LMTFD4014B	Identify contemporary fashion influences and construction techniques	
LMTGN4001A	Coordinate or set up machine/s for product change	
LMTGN4002A	Participate in product engineering	
LMTGN4005A	Plan and implement production within a work area	
LMTGN4010A	Implement and monitor OH&S in the workplace	
LMTGN4011A	Coordinate quality system and procedures	
LMTGN4012A	Fabricate or machine tooling	
LMTGN4016A	Contribute to the development of products or processes	

GROUP B

Unit code	Unit title	Prerequisites
LMTFP3001B	Cut leather by hand	
LMTFP3002B	Hand last shoe	

Unit code	Unit title	Prerequisites
LMTFP3003B	Assemble shoe by hand	LMTFP2001B
LMTFP3004B	Contribute to footwear production improvement processes	LMTGN2002B
LMTFP3005B	Supervise footwear production operations	
LMTFP3006B	Apply foot anatomy principles to footwear production	

GROUP C

Unit code	Unit title	Prerequisites
LMTFP3001B	Cut leather by hand	
LMTFP3002B	Hand last shoe	
LMTFP3003B	Assemble shoe by hand	LMTFP2001B
LMTFP3004B	Contribute to footwear production improvement processes	LMTGN2002B
LMTFP3005B	Supervise footwear production operations	
LMTFP3006B	Apply foot anatomy principles to footwear production	
LMTGN3001B	Control production in a section of a Textiles, Clothing and Footwear enterprise	
LMTGN3002B	Organise and plan own work to achieve planned	

Unit code	Unit title	Prerequisites
	outcomes	
LMTGN3003B	Estimate and cost job	
LMTLG3005A	Grade leather	

GROUP D

Unit code	Unit title	Prerequisites
LMTFD3004B	Draw a trade drawing for fashion design	
LMTFP2002B	Perform stuff cutting	
LMTFP2003B	Cut printed materials by machine	
LMTFP2004B	Cut non printed leather by machine	
LMTFP2005B	Operate machine to sew upper	
LMTFP2006B	Machine upper according to product requirements	LMTFP2005B
LMTFP2007B	Last shoe by machine	
LMTFP2008B	Perform moulding operations	
LMTFP2009B	Perform footwear finishing operations	
LMTFP2010B	Repair footwear product	

Unit code	Unit title	Prerequisites
LMTFP2011B	Perform table-based operations	
LMTGN2004B	Work in a team environment	
LMTGN2005B	Perform minor maintenance	
LMTGN2006B	Perform test or inspection to check product quality	
LMTGN2007B	Select, transfer and remove materials and products	
LMTGN2008B	Coordinate work of team or section	
LMTGN2009B	Operate computing technology in a Textiles, Clothing and Footwear workplace	
LMTGN2010B	Perform tasks to support production	
LMTGN3008A	Draw 3D designs	
LMTLG2000A	Skive leather pieces	

GROUP E

Unit code	Unit title	Prerequisites
MSS402010A	Manage the impact of change on own work	

Unit code	Unit title	Prerequisites
MSS403010A	Facilitate change in an organisation implementing competitive systems and practices	
MSS402001A	Apply competitive systems and practices	
MSS402002A	Sustain process improvements	
MSS403001A	Implement competitive systems and practices	
MSS403002A	Ensure process improvements are sustained	
MSS402020A	Apply quick changeover procedures	
MSS402021A	Apply Just in Time procedures	
MSS402030A	Apply cost factors to work practices	
MSS402031A	Interpret product costs in terms of customer requirements	
MSS402040A	Apply 5S procedures	
MSS402050A	Monitor process capability	

Unit code	Unit title	Prerequisites
MSS402060A	Use planning software systems in operations	
MSS402061A	Use SCADA systems in operations	
MSACMT270A	Use sustainable energy practices	
MSS402080A	Undertake root cause analysis	
MSS402081A	Contribute to the application of a proactive maintenance strategy	
MSS403021A	Facilitate a Just in Time system	
MSS403030A	Improve cost factors in work practices	
MSS403032A	Analyse manual handling processes	
MSS403040A	Facilitate and improve implementation of 5S	
MSS404050A	Undertake process capability improvements	MSS404052A
MSS403051A	Mistake proof an operational process	

Unit code	Unit title	Prerequisites
MSS404052A	Apply statistics to operational processes	
MSS404060A	Facilitate the use of planning software systems in a work area or team	MSS402060A
MSS404061A	Facilitate the use of SCADA systems in a team or work area	
MSS404081A	Undertake proactive maintenance analyses	
MSS404082A	Assist in implementing a proactive maintenance strategy	
MSAENV472B	Implement and monitor environmentally sustainable work practices	

GROUP F

Other Footwear units that are available at Certificates IV (maximum 4) or V (maximum 1)

Other TCF Training Package units that are available at Certificates III (maximum 1), IV (maximum 4) and V (maximum 1)

Units from other endorsed Training Packages and accredited courses at Certificates III (maximum 1), IV (maximum 4) and V (maximum 1)

LMT40707 Certificate IV in Millinery

Modification History

Not applicable.

Description

Job roles/employment outcomes

The Certificate IV covers occupations such as self-employed milliner. It allows for a multi-skilled outcome and provides a basis for career progression to higher skills in these areas at the Diploma level.

Application

This qualification is typically used to develop skill and knowledge in the application of specialised technical and supervisory skills within millinery enterprises.

Pathways into the qualification

Direct entry into this qualification requires completion of a total of twenty-five (25) units of competency according to the rules described below

Credit may be granted towards this qualification by those who have completed LMT30607 Certificate III in Clothing Production or achieved equivalent industry experience.

Pathways from the qualification

Further training pathways from this qualification include relevant manufacturing, design or management qualifications.

Licensing considerations

There are no specific licences that relate to this qualification. However, some units in this qualification may have licensing or regulatory requirements in some environments. Local regulations should be checked for details.

Pathways Information

Not applicable.

Licensing/Regulatory Information

Not applicable.

Entry Requirements

Not applicable.

Employability Skills Summary

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

Employability Skills Summary - Certificate IV in Millinery

The following table contains a summary of the Employability Skills as identified by the Millinery industries for this qualification. This table should be interpreted in conjunction with the detailed requirements of each unit of competency packaged in this qualification. The outcomes described here are broad industry requirements that reflect skill requirements for this level.

Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	• establish and maintain effective relationships with industry representatives and clients • interpret industry standards, regulations and policies • undertake client consultations to determine fitting requirements and job specifications • consult with supply chain personnel to determine resource supply capabilities • calculate job costs • negotiate with client to establish costing and job time-frames • sketch and prepare designs • accurately record and interpret detailed pattern specifications • use a range of communication technologies and presentation tools to display millinery • complete detailed and accurate documentation and maintain records
Teamwork	• establish and maintain cooperative and consultative relationships with clients • work with others in the supply chain • provide information and feedback to others to maintain production quality • participate in sustainability improvements
Problem-solving	• examine risks and implement and maintain risk control measures for millinery chemicals and equipment • identify and act on environmental hazards • determine and implement corrective measures for

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

	- production problems and faults • undertake maintenance of machinery and equipment • determine millinery requirements and modifications • assess quality of millinery materials before using in millinery items • produce cost-effective specifications in line with client expectations • determine specific construction techniques • respond effectively to supply chain issues related to supply of resources
Initiative and enterprise	• apply creative processes to the development of designs and new design features • develop continuous improvement of processes • determine necessary adjustment to production techniques in line with specifications • identify potential areas for improvement in environmental performance • anticipate and address design and production issues
Planning and organising	• undertake effective planning of own work to achieve desired outcomes within agreed time-frames • arrange fitting schedules • undertake ordering of resources and materials to ensure work flows are met • monitor quality processes and analyse outcomes • determine and implement contingency plans to respond to incidents and problems • monitor and maintain equipment condition and performance
Self-management	• manage own work plans and priorities • manage client and industry relationships and contracts • manage data flows and record keeping • maintain housekeeping of work-place • monitor and maintain own work against quality standards • apply safety procedures, including the use of protective equipment

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
	• monitor use of resources
Learning	• assess own skill requirements and seek further development if required • develop or adjust own processes based on prior experience • maintain currency of learning with regards to trends, fashion styles, design features and production techniques • experiment with design • learn about sustainability developments relating to work practice
Technology	• monitor and maintain machine operation • use millinery machinery and equipment effectively, efficiently and safely • make millinery patterns using computing technology • use specialised machinery in millinery production • handle and use chemicals correctly and safely

Packaging Rules

Packaging Rules

To be awarded the Certificate IV in Millinery, competency must be achieved in twenty-five (25) units of competency.

- Eleven (11) core units of competency
- Fourteen (14) elective units of competency as specified below.

If Certificate III has been achieved, an additional seven (7) units are required. Units that have been credited towards lower level qualifications must not be selected in the additional unit requirement.

Note: Where prerequisite units apply, these have been noted, and must be considered in the total number of units.

CORE UNITS

Complete all eleven (11) units from this list

Unit code	Unit title
LMTGN2001B	Follow defined OH&S policies and procedures
LMTGN2002B	Apply quality standards
LMTGN2003B	Work in the Textiles, Clothing and Footwear industry
LMTML2001A	Identify materials used in millinery
LMTML2002A	Make flat patterns for millinery
LMTML2007A	Block and shape millinery by hand
LMTML2008A	Assemble simple blocked millinery components
LMTML3001A	Make flat patterns from hat blocks
LMTML3003A	Make millinery using a pattern derived from a hat block
LMTML3004A	Identify performance and handling requirements of millinery materials
MSAENV272B	Participate in environmentally sustainable work practices

ELECTIVE UNITS

Select fourteen (14) units as specified below.

- A minimum of seven (7) units must be chosen from Group A
- A minimum of three (3) units may be selected from Group B
- A maximum of four (4) units may be selected from Group C
- The remainder must be selected from Groups A and B.
-

GROUP A

Unit code	Unit title	Prerequisites
LMTML3002A	Block and shape complex millinery	

Unit code	Unit title	Prerequisites
LMTML4001A	Undertake specific millinery construction techniques	
LMTML4004A	Manage millinery procurement and cost millinery products	
LMTML4005A	Undertake initial millinery consultation, subsequent fittings and finishing	
LMTML4006A	Sketch and prepare millinery fashion designs	
LMTML4007A	Make millinery patterns	
LMTML4008A	Undertake couture millinery	
LMTML4009A	Modify millinery blocks to make new shapes	

GROUP B

Unit code	Unit title	Prerequisites
LMTCL2001B	Use a sewing machine	
LMTCL2005B	Use specialised machinery to assist assembly production	
LMTCL2011B	Draw and interpret a basic sketch	
LMTCL2018B	Perform basic	

Unit code	Unit title	Prerequisites
	maintenance of headwear	
LMTFD3001B	Market design product to local outlets	
LMTGN2004B	Work in a team environment	
LMTGN2005B	Perform minor maintenance	
LMTGN2006B	Perform test or inspection to check product quality	
LMTGN2008B	Coordinate work of team or section	
LMTGN2009B	Operate computing technology in a Textiles, Clothing and Footwear workplace	
LMTGN2010B	Perform tasks to support production	
LMTGN3002B	Organise and plan own work to achieve planned outcomes	
LMTGN3003B	Estimate and cost job	
LMTGN3008A	Draw 3D designs	
LMTGN4010A	Implement and monitor OH&S in the workplace	
LMTML2003A	Produce and attach	

Unit code	Unit title	Prerequisites
	millinery trims	
LMTML2004A	Produce felt for millinery	LMTML2001A
LMTML2005A	Place and cut millinery patterns	
LMTML2006A	Use millinery steaming and pressing equipment	
LMTML2009A	Apply millinery sewing and adhesion techniques	
LMTML2010A	Make millinery with flat pattern components	
LMTML3005A	Use skin, fur or leather in millinery products	LMTML2002A
LMTML3006A	Assemble complex blocked millinery components	LMTML3002A
LMTML4002A	Rejuvenate millinery	
LMTML4002A	Rejuvenate millinery	
LMTML4003A	Present and display millinery	
LMTML4010A	Make couture trims	LMTCL2016A LMTML3004A
MSAENV472B	Implement and monitor environmentally sustainable work	

Unit code	Unit title	Prerequisites
	practices	

GROUP C

Other Millinery units that are available at Certificates IV (maximum 4) or V (maximum 1)
Other TCF Training Package units that are available at Certificates III (maximum 1), IV (maximum 4) and V (maximum 1)
Units from other endorsed Training Packages and accredited courses at Certificates III (maximum 1), IV (maximum 4) and V (maximum 1)

LMT40810 Certificate IV in Laundry Operations and Supervision

Modification History

Release 2 - imported units updated to current versions, outcomes equivalent.

Description

Job roles/employment outcomes

The Certificate IV in Laundry Operations and Supervision reflects vocational outcomes for those performing a broad range of skilled applications, including requirements to evaluate and analyse current laundry practices, develop new criteria and procedures for performing current practice, and provision of some leadership and guidance to others in the application and planning of laundry skills.

Application

This qualification is typically used to develop skill and knowledge in leadership and management operations within laundry enterprises.

Pathways Information

Pathways into the qualification

Direct entry into this qualification requires completion of a total of twenty-five (25) units according to the rules described below.

Credit may be granted towards this qualification by those who have completed LMT31110 Certificate III in Laundry Operations or achieved equivalent industry experience.

Pathways from the qualification

Further training pathways from this qualification include suitable leadership, management or competitive manufacturing qualifications.

Licensing/Regulatory Information

There are no specific licences that relate to this qualification. However, depending on the jurisdiction, licensing or regulatory requirements may apply to the use of some units in this qualification. Local regulations should be checked for details.

Entry Requirements

Not applicable.

Employability Skills Summary

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	• confirm relevant industry and workplace requirements • understand personal requirements of relevant industry and workplace standards, regulations and policies • read and understand international and Australian care labels and symbols • complete standard documentation • use communication technologies efficiently • apply communication strategies to support, train and supervise others • ensure laundry records and procedures are accurate and legible • establish effective working relationships with colleagues • collect and analyse information and data on laundry process quality
Teamwork	• establish work team reporting requirements • monitor work team tasks in accordance with regulatory and workplace requirements • supervise and lead work teams • demonstrate and encourage others in working cooperatively with people of different ages, gender, race or religion • undertake appropriate and effective communication with team members • participate in sustainability improvements
Problem solving	• identify risks and implement risk control measures for chemicals and equipment • identify and act on environmental hazards • rectify problems and faults and determine cause • assess performance of machinery and operators • assess and evaluate skills requirements of self and others to perform tasks • deal with and promptly resolve issues • use problem solving techniques to determine training

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
	requirements • identify and act on compliance issues
Initiative and enterprise	• use feedback to improve procedures • collect and analyse information • identify non-conformances to standards and take appropriate action • rectify problems promptly and appropriately • address operational variations through procedural or process improvements • provide advice to eliminate or reduce existing and potential risks • identify opportunities to improve environmental performance • monitor information and records to identify trends that may require remedial action • lead continuous improvement
Planning and organising	• plan or schedule work • monitor quality outcomes • allocate tasks to operators and monitor effectiveness in achieving targets • lead others to implement contingency plan promptly when incidents occur • identify training needs and organise training support for the work team • ensure equipment condition and performance meets workplace requirements
Self-management	• supervise activity in own work area • monitor information in work area • keep the work area clean and tidy at all times • conduct regular housekeeping activities during shift • locate, interpret and apply relevant information • monitor own work against quality standards • apply own work activities and responsibilities • identify and apply safety procedures, including the use of protective equipment • manage work load priorities

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
	• provide positive role modelling to team members • delegate work activity to meet work requirements • monitor use of resources
Learning	• recognise limits of own expertise • assess competencies in meeting job requirements • identify own skill requirements and seek skill development if required • learn about sustainability developments relating to work practice • ask questions to expand own knowledge • seek and assess feedback from work team • monitor and evaluate environmental performance
Technology	• monitor machine operation against operational targets • support others to use machine or equipment efficiently • perform minor maintenance and problem solving on machinery • work with technology safely and according to workplace standards • handle and use chemicals correctly and safely • use electronic information systems • ensure compliance of machine operations

Packaging Rules

To be awarded the Certificate IV in Laundry Operations and Supervision, competency must be achieved in twenty-five (25) units of competency.

- Ten (10) core units of competency
- Fifteen (15) elective units of competency.

If the Certificate III in Laundry Operations has been achieved, an additional seven (7) units are required. All core units listed must be achieved - any Certificate IV core units not achieved at Certificate III must be completed as part of the additional seven (7) units required for the Certificate IV. Units that have been credited towards lower level qualifications must not be selected in the additional seven (7) unit requirement.

Note: Where prerequisite units apply, these have been listed, and must be considered in the total number of units.

CORE UNITS

Complete all ten (10) units from this list.

Unit code	Unit title
LMTDC2010A	Identify fabric and garment cleaning requirements
LMTGN2001B	Follow defined OH&S policies and procedures
LMTGN2002B	Apply quality standards
LMTGN2003B	Work in the Textiles, Clothing and Footwear industry
LMTGN3002B	Organise and plan own work to achieve planned outcomes
LMTLA2001A	Conduct safe handling of laundry chemicals
LMTLA2002A	Operate washing machines
LMTLA2003A	Control washing machine operation
LMTLA4001A	Monitor compliance with industry standards and regulations
MSAENV272B	Participate in environmentally sustainable work practices

ELECTIVE UNITS

Select fifteen (15) units as specified below.

- A minimum of five (5) units must be chosen from Group A.
- A minimum of four (4) units must be chosen from Group B.
- A maximum of two (2) units may be chosen from Group C.
- A maximum of four (4) units may be chosen from Group D.
- The remainder may be chosen from Groups A and B.

NOTE: Competitive Manufacturing Training Package units, identified in Group C as MSACM coded units, should be selected on the basis of work requirements. Those at Certificate II level (units in the 200 series) are appropriate for operators. MSACM units for those in Certificate III level positions such as team leaders should be selected from both the 200 series and the 400 series.

GROUP A

Unit code	Unit title	Prerequisites
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Unit code	Unit title	Prerequisites
LMTCL2001B	Use a sewing machine	
LMTCL2002B	Provide hand sewing and finishing support	
LMTCL2003B	Identify fibres and fabrics	
LMTCL2004B	Sew components	LMTCL2001B
LMTCL2006B	Press work	
LMTCL3004B	Press whole garments	LMTCL2006B
LMTDC2001A	Provide customer service in a dry cleaning or laundry enterprise	
LMTDC2007A	Receive and sort articles for cleaning	
LMTGN2004B	Work in a team environment	
LMTGN2006B	Perform test or inspection to check product quality	
LMTGN2007B	Select, transfer and remove materials and products	
LMTGN2008B	Coordinate work of team or section	
LMTGN2009B	Operate computing technology in a Textiles, Clothing and Footwear workplace	
LMTGN2010B	Perform tasks to	

Unit code	Unit title	Prerequisites
	support production	
LMTGN3001B	Control production in a section of a Textiles, Clothing and Footwear enterprise	
LMTGN3005B	Plan tasks to assist production operations	
LMTGN3009B	Supervise operations in a textiles, clothing and footwear enterprise	
LMTLA2004A	Perform linen rewash	LMTLA2002A
LMTLA2005A	Operate hydro extractor	
LMTLA2006A	Perform conditioning and drying processes	
LMTLA2007A	Finish products for despatch	
LMTLA2008A	Repair damaged laundry items	
LMTLA2009A	Inspect, fold and pack theatre linen	
LMTLA2010A	Prepare products for storage or despatch	
LMTLA2011A	Apply infection control policies and procedures in laundry operations	
LMTLA3001A	Perform advanced laundry operations	

Unit code	Unit title	Prerequisites
LMTLA3002A	Determine linen rental requirements	
MEM07033B	Operate and monitor basic boiler	
MEM07034A	Operate and monitor intermediate class boiler	MEM07033B

GROUP B

Unit code	Unit title	Prerequisites
BSBADM409A	Coordinate business resources	
BSBCUS401B	Coordinate implementation of customer service strategies	
BSBINN301A	Promote innovation in a team environment	
BSBLED401A	Develop teams and individuals	
BSBMGT402A	Implement operational plan	
BSBMGT403A	Implement continuous improvement	
BSBWOR402A	Promote team effectiveness	
LMTGN4005A	Plan and implement	

Unit code	Unit title	Prerequisites
	production within a work area	
LMTGN4006A	Evaluate equipment and systems	
LMTGN4010A	Implement and monitor OH&S in the workplace	
LMTGN4011A	Coordinate quality system and procedures	
LMTGN5001B	Participate in production planning processes	
LMTLA4002A	Program and monitor commercial laundry machine control systems	
TAEASS401B	Plan assessment activities and processes	
TAEASS402B	Assess competence	
TAEASS403B	Participate in assessment validation	
TAEDEL401A	Plan, organise and deliver group-based learning	
TAEDEL402A	Plan, organise and facilitate learning	

Unit code	Unit title	Prerequisites
	in the workplace	

GROUP C

Unit code	Unit title	Prerequisites
MSS402010A	Manage the impact of change on own work	
MSS403010A	Facilitate change in an organisation implementing competitive systems and practices	
MSS402001A	Apply competitive systems and practices	
MSS402002A	Sustain process improvements	
MSS403001A	Implement competitive systems and practices	
MSS403002A	Ensure process improvements are sustained	
MSS402020A	Apply quick changeover procedures	
MSS402021A	Apply Just in Time procedures	
MSS402030A	Apply cost factors to work practices	
MSS402031A	Interpret product costs in terms of customer	

Unit code	Unit title	Prerequisites
	requirements	
MSS402040A	Apply 5S procedures	
MSS402050A	Monitor process capability	
MSS402060A	Use planning software systems in operations	
MSS402061A	Use SCADA systems in operations	
MSACMT270A	Use sustainable energy practices	
MSACMT271A	Use sustainable environmental practices	
MSS402080A	Undertake root cause analysis	
MSS402081A	Contribute to the application of a proactive maintenance strategy	
MSS403021A	Facilitate a Just in Time system	
MSS403030A	Improve cost factors in work practices	
MSS403032A	Analyse manual handling processes	
MSS403040A	Facilitate and improve implementation of 5S	
MSS404050A	Undertake process capability	MSS404052A

Unit code	Unit title	Prerequisites
	improvements	
MSS403051A	Mistake proof an operational process	
MSS404052A	Apply statistics to operational processes	
MSS404060A	Facilitate the use of planning software systems in a work area or team	MSS402060A
MSS404061A	Facilitate the use of SCADA systems in a team or work area	
MSS404081A	Undertake proactive maintenance analyses	
MSS404082A	Assist in implementing a proactive maintenance strategy	
MSAENV472B	Implement and monitor environmentally sustainable work practices	

GROUP D

Other Laundry Operations units that are available at Certificates IV (maximum 4) or V (maximum 1)

Other TCF Training Package units that are available at Certificates III (maximum 1), IV (maximum 4) and V (maximum 1)

Units from other endorsed Training Packages and accredited courses at Certificates III (maximum 1), IV (maximum 4) and V (maximum 1)

LMT40907 Certificate IV in Supply and Fitting of Pre-manufactured Medical Grade Footwear

Modification History

Not applicable.

Description

Job roles/employment outcomes

The breadth, depth and complexity of knowledge and skills gained in this qualification will prepare a person to perform a broad range of skilled applications, including requirements to evaluate and analyse current practices, develop new criteria and procedures for performing current practice and provision of some leadership and guidance to others in the application and planning of the skills.

Application

This qualification covers the skills needed to supply and fit pre-manufactured medical grade footwear. It includes a basic level of modification skills.

Pathways into the qualification

Direct entry into this qualification requires completion of a total of eight (8) units according to the rules described below.

Credit may be granted towards this qualification by those who have achieved relevant industry experience.

Pathways from the qualification

Further training pathways from this qualification include LMT50207 Diploma of Medical Grade Footwear or other relevant manufacturing or management qualifications.

Pathways Information

Not applicable.

Licensing/Regulatory Information

Not applicable.

Entry Requirements

Not applicable.

Employability Skills Summary

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

Employability Skills Summary - Certificate IV in Supply and Fitting or Pre-fabricated Medical Grade Footwear

The following table contains a summary of the Employability Skills as identified by the medical grade footwear industries for this qualification. This table should be interpreted in conjunction with the detailed requirements of each unit of competency packaged in this qualification. The outcomes described here are broad industry requirements that reflect skill requirements for this level.

Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	• read and interpret client assessments and prescriptions • ensure the sufficiency and relevance of client information • consult with other parties to clarify or obtain client information • discuss client's expectations, current conditions and assessment needs and negotiate assessment and treatment requirements • provide information to clients about services and products • negotiate appointment requirements with client • reassure client to reduce anxiety or stress • take and analyse foot measurements • provide pre-treatment briefing to client • record measurement and assessment data • maintain client files
Teamwork	• gather and provide client information to other health care providers, in order to ensure effective client treatment • work with the client to ensure correct fit of footwear and orthoses • work collaboratively with other health professionals • maintain client documentation for use by other health professionals if required • receive and provide referrals for client care

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
	• participate in sustainability improvements
Problem-solving	• determine client requirements for footwear and orthoses • determine modification and adjustment requirements for footwear and orthoses • identify and act on environmental hazards • determine client mobility issues to provide appropriate aids • identify and address client medical grade footwear needs • identify and source additional client information requirements • identify and report environmental hazards • match clients needs and goals with treatment options • undertake physical examinations of the foot and identify medical conditions • conduct gait analysis, measurements and trial fittings • analyse assessment data and prescriptions • prioritise client needs and formulate action plans for treatment • develop treatment specifications and time-frames • make modifications to footwear and orthoses • specify construction, materials and styles to meet client requirements • determine dimensional and therapeutic factors for footwear and orthoses • coordinate fitting processes
Initiative and enterprise	• make referrals • identify non-conformances to standards and take appropriate action • identify opportunities for improvement to environmental performance • look for efficient ways to meet client physical needs • negotiate treatment options with client to meet physical needs and client priorities and expectations
Planning and organising	• plan assessment and treatment processes to achieve

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
	determined outcomes for client • determine and fittings treatment schedules • provide an effective assessment environment • prioritise client needs and formulate action plans for treatment • identify client information requirements • select appropriate techniques and materials • organise client information and records for future reference
Self-management	• check equipment and materials for use • ensure compliance with requirements and specifications • manage work to meet targets • keep the work area clean and tidy at all times • conduct regular housekeeping activities • identify and apply safety procedures, including the use of protective equipment • manage work load priorities • assess work against specifications and quality standards • monitor use of resources
Learning	• recognise limits of own expertise • ask questions to expand own knowledge • maintain currency of information relating to work • seek and apply information from client about condition • refer to other professionals as required • learn about sustainability developments relating to work practice
Technology	• ensure correct, efficient and safe use of machines, tools and equipment in the enterprise • work with technology safely and according to workplace standards • handle and use chemicals and footwear materials correctly and safely

Packaging Rules

Packaging Rules

To be awarded the Certificate IV in Supply and Fitting of Pre-manufactured Medical Grade Footwear, competency must be achieved in eight (8) units of competency.

- Four (4) core units of competency
- Four (4) elective units of competency as specified below.

Note: Where prerequisite units apply, these have been noted, and must be considered in the total number of units.

CORE UNITS

Complete all four (4) units from this list

Unit code	Unit title
LMTMF4001A	Select and adjust prefabricated footwear-related orthoses
LMTMF4002A	Conduct medical grade footwear assessments for clients with footwear related medical conditions
LMTMF4004A	Select and adjust prefabricated medical grade footwear and accessories
MSAENV272B	Participate in environmentally sustainable work practices

ELECTIVE UNITS

Select four (4) units as specified below.

- A minimum of two (2) units must be selected from Group A
- A maximum of two (2) units may be selected from Group B
- The remainder must be selected from Group A.

GROUP A

Unit code	Unit title	Prerequisites
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Unit code	Unit title	Prerequisites
BSBSMB403A	Market the small business	
LMTMF4003A	Modify medical grade footwear	
MSAENV472B	Implement and monitor environmentally sustainable work practices	
SIRXCCS002A	Interact with customers	
SIRXINV002A	Maintain and order stock	
SIRXSLS001A	Sell products and services	
SIRXSLS002A	Advise on products and services	

GROUP B

Other Medical Grade Footwear units that are available at Certificates IV (maximum 2) or V (maximum 1)
Other TCF Training Package units that are available at Certificates III (maximum 1), IV (maximum 2) and V (maximum 1)
Units from other endorsed Training Packages and accredited courses at Certificates III (maximum 1), IV (maximum 2) and V (maximum 1)

LMT41007 Certificate IV in Applied Fashion Design and Technology

Modification History

Not applicable.

Description

Job roles/employment outcomes

The Certificate IV in Applied Fashion Design and Technology covers occupations such as assistant designers and pattern makers who work with and support other fashion industry personnel. It allows for a multi-skilled approach to the skills needed by assistant designers and pattern makers and provides a basis for career progression to higher skills in these areas at the Diploma level.

Application

This qualification is typically used to develop skill and knowledge in the application of technical and introductory design skills within fashion design and clothing production enterprises.

Pathways into the qualification

Direct entry into this qualification requires completion of a total of twenty-five (25) units according to the rules described below.

Credit may be granted towards this qualification by those who have completed LMT31407 Certificate III in Applied Fashion Design and Technology, LMT30507 Certificate III in Clothing Production and LMT40307 Certificate IV in Clothing Production or achieved equivalent industry experience.

Pathways from the qualification

Further training pathways from this qualification include LMT50307 Diploma of Applied Fashion Design and Technology or other relevant qualifications.

Licensing considerations

There are no specific licences that relate to this qualification. However, some units in this qualification may have licensing or regulatory requirements in some environments. Local regulations should be checked for details.

Pathways Information

Not applicable.

Licensing/Regulatory Information

Not applicable.

Entry Requirements

Not applicable.

Employability Skills Summary

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

Certificate IV in Applied Fashion Design and Technology

The following table contains a summary of the Employability Skills as identified by the fashion design industries for this qualification. This table should be interpreted in conjunction with the detailed requirements of each unit of competency packaged in this qualification. The outcomes described here are broad industry requirements that reflect skill requirements for this level.

Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	• confirm relevant industry and workplace requirements • understand personal requirements of relevant industry and workplace standards, regulations and policies • complete standard documentation • use communication technologies efficiently • interpret pattern specifications • communicate problems with fashion items and designs • discuss design requirements with others • ensure records are accurate and legible • establish effective working relationships with colleagues • undertake interactive workplace communication • present design ideas
Teamwork	• work independently or as a team member • demonstrate and encourage others in working cooperatively with people of different ages, gender, race or religion • identify role of others in the design process • undertake appropriate and effective communication with others in the design process • participate in sustainability improvements
Problem-solving	• identify risks and implement risk control measures for machinery and equipment • identify and act on environmental hazards • identify and address problems and faults • check performance of machinery and equipment • assess and evaluate skills requirements of self and

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

	- others to perform tasks • deal with and promptly resolve issues • use problem solving techniques to determine fashion design requirements • apply knowledge of fabrics and materials to solve design problems • assess quality of materials before using in fashion items
Initiative and enterprise	• seek and provide feedback on procedures • participate in design and production processes • collect and monitor information • identify non-conformances to standards and take appropriate action • identify opportunities for improvement to environmental performance • identify effective ways to achieve design and production outcomes • rectify problems promptly and appropriately • monitor and adjust activity in response to operational variations • identify and assess existing and potential risks and seek advice • develop and promote continuous improvement
Planning and organising	• plan work requirements for self and others as required • prepare materials required for design production • select and prepare materials and equipment • monitor quality outcomes • monitor equipment condition and performance
Self-management	• manage own work • monitor information in work area • keep the work area clean and tidy at all times • conduct regular housekeeping activities during shift • locate, interpret and apply relevant information • monitor own work against quality standards • understand own work activities and responsibilities • manage work load priorities

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
	• monitor use of resources
Learning	• recognise limits of own expertise • assess competencies in meeting job requirements • identify own skill requirements and seek skill development if required • ask questions to expand own knowledge • experiment with design ideas and review outcomes • seek feedback on ideas and work outcomes • learn about sustainability developments relating to work practice
Technology	• monitor machine operation • use a variety of machines and equipment to achieve a range of production outcomes • perform minor maintenance on machines • work with technology safely, efficiently and according to workplace standards

Packaging Rules

Packaging Rules

To be awarded the Certificate IV in Applied Fashion Design and Technology, competency must be achieved in twenty-five (25) units of competency.

- Nine (9) core units of competency
- Sixteen (16) elective units of competency as specified below.

Note: Where prerequisite units apply, these have been noted, and must be considered in the total number of units.

CORE UNITS

Complete all nine (9) units from this list:

Unit code	Unit title
LMTCL2003B	Identify fibres and fabrics

Unit code	Unit title
LMTCL2010B	Modify patterns to create basic styles
LMTCL2011B	Draw and interpret a basic sketch
LMTCL3001B	Identify fabric performance and handling requirements
LMTFD2005B	Identify design process for fashion designs
LMTFD4001B	Apply design studio process
LMTFD4006B	Interact and network with fashion industry participants
LMTGN2001B	Follow defined OH&S policies and procedures
MSAENV272B	Participate in environmentally sustainable work practices

ELECTIVE UNITS

Select sixteen (16) units as specified below.

- A minimum of twelve (12) units must be selected from Group A
- A maximum of four (4) units may be selected from Group B
- The remainder must be selected from Group A.

GROUP A

Unit code	Unit title	Prerequisite
LMTCL2001B	Use a sewing machine	
LMTCL2004B	Sew components	LMTCL2001B
LMTCL3008B	Set and produce digital embroidery	
LMTCL3009B	Develop patterns from a block using basic patternmaking principles	

Unit code	Unit title	Prerequisite
LMTCL3010B	Sew woven and stretch knit garments	LMTCL2001B LMTCL2003B LMTCL2004B
LMTFD3004B	Draw a trade drawing for fashion design	
LMTFD4002B	Apply principles of colour theory to fashion design development	LMTCL2003B LMTFD2005B
LMTFD4003B	Assist in preparation of preliminary design concepts	
LMTFD4004B	Calculate cost estimates for fashion products	
LMTFD4005B	Communicate and sell design concepts	
LMTFD4007B	Conduct quality assurance for patterns and garments	
LMTFD4008B	Construct stock size block for garment to meet size and fit specifications	
LMTFD4009B	Create and edit digital embroidery designs	LMTCL2003B LMTCL3008B
LMTFD4010B	Create pattern to meet design specifications applying advanced patternmaking principles	LMTCL3009B

Unit code	Unit title	Prerequisite
LMTFD4011B	Cut fabrics for prototype designs	
LMTFD4012B	Develop product specifications for fashion design	LMTFD3004B
LMTFD4013B	Grade 2D patterns	
LMTFD4014B	Identify influences on contemporary fashion designs and construction techniques	
LMTFD4015B	Create pattern from block to meet customer specifications	LMTCL3009B LMTFD4010B
LMTFD4016B	Sew design prototypes	
LMTFD4017B	Source materials and resources for production of fashion designs	
LMTFD4018B	Use and apply sizing systems appropriate for fashion design	
LMTFD4019B	Use colourisation techniques on fabrics	LMTCL2003B LMTCL3001B
LMTFD4020B	Use electronic fashion design tools	
LMTFD4021B	Drape fabrics to make patterns	
LMTFD5003B	Analyse fit model	

Unit code	Unit title	Prerequisite
LMTGN2009B	Operate computing technology in a Textiles, Clothing and Footwear workplace	

GROUP B

MSAENV472B Implement and monitor environmentally sustainable work practices
Other Fashion Design and Technology units that are available at Certificates IV (maximum 4) and V (maximum 1)
Other TCF Training Package units that are available at Certificates III (maximum 1), IV (maximum 4) and V (maximum 1)
Units from other endorsed Training Packages and accredited courses at Certificates III (maximum 1), IV (maximum 4) and V (maximum 1)

LMT41107 Certificate IV in Textile Design and Development

Modification History

Release 2 - imported units updated to current versions, outcomes equivalent.

Description

Job roles/employment outcomes

The Certificate IV in Textile Design and Development covers occupations such as those in assistant design and sample production roles within the textiles industry.

Application

This qualification is typically used to develop skill and knowledge in the application of specialised technical skills within textile design and production enterprises.

Pathways Information

Pathways into the qualification

Direct entry into this qualification requires completion of a total of twenty-five (25) units of competency according to the rules described below.

This qualification is not a direct progression from LMT30107 Certificate III in Textile Production. However credit may be granted towards this qualification for units completed in the LMT30107 Certificate III in Textile Production, or for equivalent industry experience.

Pathways from the qualification

Further training pathways from this qualification include LMT50507 Diploma of Textile Design and Development, or other relevant qualifications.

Licensing/Regulatory Information

There are no specific licences that relate to this qualification. However, some units in this qualification may have licensing or regulatory requirements in some environments. Local regulations should be checked for details.

Entry Requirements

Not applicable.

Employability Skills Summary

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

Employability Skills Summary - Certificate IV in Textile Design and Development

The following table contains a summary of the Employability Skills as identified by the textile design industries for this qualification. This table should be interpreted in conjunction with the detailed requirements of each unit of competency packaged in this qualification. The outcomes described here are broad industry requirements that reflect skill requirements for this level.

Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	• use information and communication technology to gather and interpret data related to the development of designs • interpret specifications • communicate with clients and design team • complete documentation and maintain records • interpret and apply information from patterns
Teamwork	• share information with clients and design team • provide feedback on designs • participate in sustainability improvements
Problem-solving	• determine suitability of raw materials for use in textile products • analyse design influences • assist with design development processes • identify and address production problems • identify and act on environmental hazards
Initiative and enterprise	• identify design influences • develop textile effects to meet design requirements • identify opportunities for improvement to environmental performance
Planning and organising	• undertake work to achieve desired outcomes within agreed time-frames • set up work station and equipment to ensure work requirements are met • produce textile design samples in line with specifications

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
	• implement contingency plans when responding to incidents and problems • determine production requirements to meet specifications
Self-management	• monitor own work against workplace, industry and quality standards • adjust activities as required according to variations in operations • apply OHS practices in the workplace • monitor use of resources
Learning	• assess own skill requirements and seek further development if required • ask questions and seek advice to improve own knowledge • learn about sustainability developments relating to work practice
Technology	• use information and communication technology to acquire, manage and share data • use textile production technology efficiently to produce design samples

Packaging Rules

To be awarded the Certificate IV in Textile Design and Development, competency must be achieved in twenty-five (25) units of competency.

- Eight (8) core units of competency
- Seventeen (17) elective units of competency as specified below.

Note: Where prerequisite units apply, these have been noted, and must be considered in the total number of units.

CORE UNITS

Complete all eight (8) units from this list

Unit code	Unit title
LMTCL2003B	Identify fibres and fabrics

Unit code	Unit title
LMTGN2003B	Work in the Textiles, Clothing and Footwear industry
LMTGN4010A	Implement and monitor OH&S in the workplace
LMTTD4007A	Analyse textile design influences
LMTTD4009A	Assist in the development of textile designs
LMTTD4012A	Analyse use of colour in textiles
LMTTX2001B	Identify fibres, yarns and textile materials and their uses in textile production
MSAENV272B	Participate in environmentally sustainable work practices

ELECTIVE UNITS

Select seventeen (17) units as specified below.

- A minimum of nine (9) units must be selected from Group A
- A maximum of four (4) units may be selected from Group C
- The remainder must be selected from Groups A and B.

GROUP A

Unit code	Unit title	Prerequisites
LMTFD4005B	Communicate and sell design concepts	
LMTGN4008A	Analyse product and determine machine settings	
LMTGN4016A	Contribute to the development of products or processes	
LMTTD4001A	Produce knitted textile samples	
LMTTD4003A	Produce woven textile samples	

Unit code	Unit title	Prerequisites
LMTTD4004A	Produce woven tapestry samples	
LMTTD4005A	Produce screen printed textiles	
LMTTD4006A	Source textile materials and resources	
LMTTD4008A	Present and promote textile design concepts	
LMTTD4010A	Apply manipulation techniques to create experimental textile samples	
LMTTD4011A	Estimate costs for development of textile designs	
LMTTD4013A	Prepare stencils and screens for textile printing	
LMTTX4001A	Interpret and apply textile calculations and specifications	
LMTTX4002A	Understand and apply textile science	LMTTX2001B LMTTX3001B
LMTTX4003A	Perform routine textile tests and analyse results	LMTTX4001A LMTTX4002A
LMTTX4004A	Select dyes and develop dye specification and	

Unit code	Unit title	Prerequisites
	recipe for production	
LMTTX4005A	Undertake textile colouration and finishing	

GROUP B

Unit code	Unit title	Prerequisites
CUVDRA201A	Develop drawing skills	
LMTFD3001B	Market design product to local outlets	
LMTGN2009B	Operate computing technology in a Textiles, Clothing and Footwear workplace	
LMTGN3002B	Organise and plan own work to achieve planned outcomes	
LMTGN3008A	Draw 3D designs	
LMTTX2012B	Perform industrial sewing on textile products	
LMTTX2015B	Handle and prepare chemicals, dyes or other substances used in textile production	

Unit code	Unit title	Prerequisites
LMTTX3001B	Identify quality and types of textile fibres, yarns and fabrics	LMTTX2001B
LMTTX3008B	Select raw materials	
MSAENV472B	Implement and monitor environmentally sustainable work practices	

GROUP C

Other Textile Design and Development units that are available at Certificates IV (maximum 4) or V (maximum 1)

Other TCF Training Package units that are available at Certificates III (maximum 1), IV (maximum 4) and V (maximum 1)

Units from other endorsed Training Packages and accredited courses at Certificates III (maximum 1), IV (maximum 4) and V (maximum 1)

LMT41207 Certificate IV in Fashion and Textiles Merchandising

Modification History

Release 2 - imported units updated to current versions, outcomes equivalent.
Reinstated text from Group D electives in packaging rules.

Description

Job roles/employment outcomes

The Certificate IV in Fashion and Textiles Merchandising covers occupations such as those in marketing and supply chain and account management roles within the fashion and textiles industries.

Application

This qualification is typically used to develop skill and knowledge in the application of specialised fashion and textiles merchandising skills within the TCF supply chain.

Pathways Information

Pathways into the qualification

Direct entry into this qualification requires completion of a total of twenty-five (25) units according to the rules described below.

Credit may be granted for units completed as part of TCF Certificates achieved where they are listed within this qualification, or for equivalent industry experience achieved.

Pathways from the qualification

Further training pathways from this qualification include LMT50607 Diploma of Fashion and Textiles Merchandising or other relevant qualifications.

Licensing/Regulatory Information

There are no specific licences that relate to this qualification. However, some units in this qualification may have licensing or regulatory requirements in some environments. Local regulations should be checked for details.

Entry Requirements

Not applicable.

Employability Skills Summary

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

Employability Skills Summary - Certificate IV in Fashion and Textiles Merchandising

The following table contains a summary of the Employability Skills as identified by the fashion and textiles merchandising industries for this qualification. This table should be interpreted in conjunction with the detailed requirements of each unit of competency packaged in this qualification. The outcomes described here are broad industry requirements that reflect skill requirements for this level.

Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	• maintain effective networks with industry professionals, supply chain personnel and clients • investigate market supply systems and manage supply issues using information technologies • research consumer behaviour using information technologies • calculate cost estimates • interpret calculations and technological information • communicate technical processes • use a range of communication technologies and marketing tools to present and communicate information • complete documentation and maintain records
Teamwork	• network with clients, industry professionals and supply chain personnel • communicate with others in the team to maintain supply chains • provide information to others in the team to facilitate supply processes • gather feedback across supply chain • participate in sustainability improvements
Problem-solving	• undertake analysis of market supply systems • source materials and resources through the supply chain • calculate cost estimates for fashion and textile products

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
	• maintain effective supply chain relationships • identify and address supply chain issues • identify and act on environmental hazards
Initiative and enterprise	• develop continuous improvement of processes • analyse consumer behaviour to inform marketing processes • identify opportunities for improvements in the supply chain • identify opportunities for improvement to environmental performance
Planning and organising	• undertake effective planning of own work to achieve desired outcomes within agreed time-frames • undertake ordering of resources and materials to ensure work flows are met • schedule meetings and correspondences with networks • monitor quality processes and analyse outcomes • determine and implement contingency plans to respond to incidents and problems
Self-management	• manage own work plans and priorities • manage client and industry relationships and networks • manage data flows and record keeping • monitor own work against industry standards • manage marketing process according to marketing principles • monitor use of resources
Learning	• assess own skill requirements and seek further development if required • develop or adjust own processes based on prior experience • maintain currency of skills and knowledge of industry trends and practices • learn about sustainability developments relating to work practice
Technology	• use information and communication technology efficiently to acquire, manage and share data and maintain communication networks

Packaging Rules

To be awarded the Certificate IV in Fashion and Textiles Merchandising, competency must be achieved in twenty-five (25) units of competency.

- Ten (10) core units of competency
- Fifteen (15) elective units of competency as specified below.

Note: Where prerequisite units apply, these have been noted, and must be considered in the total number of units.

CORE UNITS

Complete all ten (10) units from this list

Unit code	Unit title
BSBMKG402B	Analyse consumer behaviour for specific markets
LMTCL2003B	Identify fibres and fabrics
LMTFD4004B	Calculate cost estimates for fashion products
LMTFD4006B	Interact and network with fashion industry participants
LMTFD4017B	Source materials and resources for production of fashion design
LMTGN2009B	Operate computing technology in a Textiles, Clothing and Footwear workplace
LMTGN4018A	Apply textile clothing and footwear market supply systems
LMTGN4019A	Analyse textiles clothing and footwear merchandising and marketing principles
LMTTX2001B	Identify fibres, yarns and textile materials and their uses in textile production
MSAENV272B	Participate in environmentally sustainable work practices

ELECTIVE UNITS

Select fifteen (15) units as specified below.

- A minimum of five (5) units must be selected from Group A
- A minimum of six (6) units must be selected from Group B
- A maximum of four (4) units may be selected from Group C
- The remainder must be selected from Groups A and B.

GROUP A

Unit code	Unit title	Prerequisites
LMTCL3001B	Identify fabric performance and handling requirements	LMTCL2003B
LMTCL3009B	Develop patterns from a block using basic patternmaking principles	
LMTDC2010A	Identify fabric and garment handling requirements	
LMTFD3004B	Draw a trade drawing for fashion design	
LMTFD4003B	Assist in preparation of preliminary design concepts	
LMTFD4005B	Communicate and sell design concepts	
LMTFD4012B	Develop product specifications for fashion design	LMTFD3004B
LMTFD4014B	Identify contemporary fashion influences and construction techniques	
LMTFD4018B	Use and apply sizing	

Unit code	Unit title	Prerequisites
	systems appropriate for fashion design	
LMTFD4020B	Use electronic fashion design tools	
LMTGN2001B	Follow defined OH&S policies and procedures	
LMTTD4006A	Source textile materials and resources	
LMTTD4007A	Analyse textile design influences	
LMTTD4008A	Present and promote textile design concepts	
LMTTD4009A	Assist in the development of textile designs	
LMTTD4011A	Estimate costs for development of textile designs	
LMTTX3001B	Identify quality and types of textile fibres, yarns and fabrics	LMTTX2001B
LMTTX4001A	Interpret and apply textile calculations and specifications	
LMTTX4003A	Perform routine textile testing and analyse results	LMTTX4001A LMTTX4002A

GROUP B

Unit code	Unit title	Prerequisites
BSBCUS401B	Coordinate implementation of customer service strategies	
BSBCUS402B	Address customer needs	
BSBINT405B	Apply knowledge of import and export international conventions, laws and finance	
BSBINT408B	Prepare business advice on the taxes and duties for international trade transactions	
BSBINT409B	Plan for international trade	
BSBMKG408A	Conduct market research	
BSBMKG413A	Promote products and services	
BSBMKG414A	Undertake marketing activities	
BSBMKG415A	Research international markets	
BSBMKG416A	Market goods and services internationally	

Unit code	Unit title	Prerequisites
BSBPMG403A	Apply cost management techniques	
BSBPMG407A	Apply risk management techniques	
BSBPUR401B	Plan purchasing	
BSBPUR402B	Negotiate contracts	
BSBREL401A	Establish networks	
BSBREL402A	Build client relationships and business networks	
BSBREL403A	Implement international client relationship strategies	
BSBRISK401A	Identify risk and apply risk management processes	
BSBWOR401A	Establish effective workplace relationships	
LMTFD4003B	Assist in preparation of preliminary design concepts	
LMTFD4005B	Communicate and sell design concepts	
LMTFD4012B	Develop product specifications for fashion design	LMTFD3004B

Unit code	Unit title	Prerequisites
LMTFD4014B	Identify contemporary fashion influences and construction techniques	
LMTFD4018B	Use and apply sizing systems appropriate for fashion design	
LMTFD4020B	Use electronic fashion design tools	
LMTTD4006A	Source textile materials and resources	
LMTTD4007A	Analyse textile design influences	
LMTTD4008A	Present and promote textile design concepts	
LMTTD4009A	Assist in the development of textile designs	
LMTTD4011A	Estimate costs for development of textile designs	
LMTTX4001A	Interpret and apply textile calculations and specifications	
LMTTX4003A	Perform routine textile testing and analyse results	LMTTX4001A LMTTX4002A
SIRXMER004A	Manage merchandise and store presentation	

Unit code	Unit title	Prerequisites
SIRXPRO002A	Implement product recalls	

GROUP C

Unit code	Unit title	Prerequisites
BSBFLM312C	Contribute to team effectiveness	
BSBINT301B	Apply knowledge of the international trade environment to complete work	
BSBINT302B	Apply knowledge of legislation relevant to international trade to complete work	
BSBINT305B	Prepare business documents for the international trade of goods	
BSBINT306B	Apply knowledge of international finance and insurance to complete work requirements	
MSAENV472B	Implement and monitor environmentally sustainable work practices	
SIRXMER004A	Manage merchandise and store	

Unit code	Unit title	Prerequisites
	presentation	

Group D

Other Fashion and Textiles Merchandising units that are available at Certificates IV (maximum 4) or V (maximum 1)

Other TCF Training Package units that are available at Certificates III (maximum 1), IV (maximum 4) and V (maximum 1)

Units from other endorsed Training Packages and accredited courses at Certificates III (maximum 1), IV (maximum 4) and V (maximum 1)

MSA30107 Certificate III in Process Manufacturing

Modification History

Release 5 - Imported elective units updated

Release 4 - Imported unit updated. MEM09003B replaced by MEM09204A. Prerequisites replaced by an asterisk. Equivalent.

Release 3 - MSACM units replaced by MSS units from MSS11v2 Sustainability Training Package.

Release 2 - Imported unit codes updated. TAADEL301C replaced by TAEDEL301A.

Description

The Certificate III in Process Manufacturing is intended for advanced production workers who use a range of equipment and provide support functions directly related to producing products. They would undertake more advanced roles, working in accordance with the operating procedures and would apply their knowledge to anticipate problems and solve a range of foreseen and unforeseen problems.

This qualification is for:

- production support workers - people working in manufacturing and filling the vital production support roles but who may not have the opportunity to develop competency in sufficient technical units related directly to producing products
- those employees who operate across more than one category within process manufacturing or 'specialised processes' and elsewhere when required.

It is designed for use across the three process manufacturing sectors:

- chemical, hydrocarbons and oil refining
- plastics, rubber and cabling
- manufactured mineral products.

Licensing considerations

There are no specific licenses that relate to this qualification. However, some units in this qualification may have licensing or regulatory requirements depending on the work context. Local regulations should be checked for details.

Pathways Information

Not applicable.

Licensing/Regulatory Information

Not applicable.

Entry Requirements

Not applicable.

Employability Skills Summary

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

MSA30107 Certificate III in Process Manufacturing

The following table contains a summary of the Employability Skills required by the process manufacturing industries for this qualification. The Employability Skills facets described here are broad industry requirements that may vary depending on qualification packaging options.

Due to the high proportion of electives required by this qualification, the industry/enterprise requirements described above for each Employability Skill are representative of the industry in general and may not reflect specific job roles. Learning and assessment strategies for this qualification should be based on the requirements of the units of competency for this qualification.

Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	• complete logs and reports • use technical information and manufacturer's information • collect, analyse and organise information • communicate ideas and information • effective use of workplace documentation • maintain workplace records
Teamwork	• identify and describe own role and role of others • work within a team • resolve conflicts between team members • use teamwork strategies
Problem solving	• recognise a problem or a potential problem • determine problems needing priority action • refer problems outside area of responsibility to appropriate person, with possible causes • seek information and assistance as required to solve problems • solve problems within area of responsibility • follow through items initiated until final resolution has occurred • identify and isolate faults in equipment • use a range of formal problem solving techniques
Initiative and enterprise	• identify the most appropriate equipment

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

	• make adjustments to improve equipment performance • anticipate the impact of the process on the product • determine problems needing action • recommend required action • report problems outside area of responsibility • distinguish between causes of faults
Planning and organising	• plan own work requirements • plan scope of equipment checks • plan and organise activities • identify tasks to achieve team goals • organise allocation of tasks • monitor completion of allocated tasks • develop and adjust a production schedule
Self-management	• plan own work requirements from production requests • operate within appropriate time constraints and work standards • select and use appropriate equipment, materials, processes and procedures • plan to ensure effective production • apply workplace procedures • identify resource requirements, document and monitor • recognise limitations and seek timely advice
Learning	• ask questions to gain information • identify sources of information to expand knowledge and understanding • participate in improvement procedures • participate in development of continuous improvement strategies
Technology	• operation and adjustment of processes • start up and shut down equipment • set up equipment • monitor product/process quality • function and operating principles of equipment, machine components • maintain computer based workplace records

Packaging Rules

Packaging Rules

To be awarded the Certificate III in Process Manufacturing, competency must be achieved in **twenty one (21)** units of competency.

- **four (4)** core units of competency
- **seventeen (17)** elective units of competency, six (6) of which can be selected from this Training Package, other endorsed Training Packages and accredited courses, as specified below.

Note: Where prerequisite units are identified they must be counted in the total number of units required for completion of the qualification.

Core units of competency

- Select all **four (4)** units from the following list.

Unit code	Unit title
MSAENV272B	Participate in environmentally sustainable work practices
MSS402051A	Apply quality standards
MSAPMOHS200A	Work safely
MSAPMSUP210A	Process and record information

Group A - Elective units

- Select a minimum of **five (5)** units from the following list.

Unit code	Unit title	Prerequisites
Support units		
MEM03001B	Perform manual production assembly	
MEM03006B	Set assembly stations	
MEM11005B	Pick and process order	

Unit code	Unit title	Prerequisites
MEM11006B	Perform production packaging	
MEM11007B	Administer inventory procedures	
MEM12023A	Perform engineering measurements	
MEM15001B	Perform basic statistical quality control	
MEM15003B	Use improvement processes in team activities	
MEM15004B	Perform inspection	
MSS402002A	Sustain process improvements	
MSS402020A	Apply quick changeover procedures	
MSS402050A	Monitor process capability	
MSS402060A	Use planning software systems in operations	
MSS402080A	Undertake root cause analysis	
MSAPMOHS300A	Facilitate the implementation of OHS for a work group	*
MSAPMPER300C	Issue work permits	*
MSAPMPER400A	Coordinate permit process	*
MSAPMSUP300A	Identify and implement opportunities to maximise production efficiencies	
MSAPMSUP301A	Apply HACCP to the workplace	
MSAPMSUP303A	Identify equipment faults	
MSAPMSUP309A	Maintain and organise workplace records	
MSAPMSUP310A	Contribute to the development of plant documentation	
MSAPMSUP330A	Develop and adjust a production schedule	

Unit code	Unit title	Prerequisites
MSAPMSUP382A	Provide coaching/mentoring in the workplace	
MSAPMSUP383A	Facilitate a team	
MSAPMSUP390A	Use structured problem solving tools	
MSL973001A	Perform basic tests	
TAEDEL301C	Provide work skill instruction	
Technical units		
MEM09002B	Interpret technical drawing	
MEM09204A	Produce basic engineering detail drawings	*
MSAPMOPS363A	Organise on site work	
A maximum of two (2) relevant units may be selected from this Training Package, other endorsed Training Packages and accredited courses, where those units are available for inclusion at Certificates III or IV.		

Group B - Other electives

- Select a maximum of **twelve (12)** units from the following list.

Unit code	Unit title
Support units	
LMTGN2008B	Coordinate work of team/section
MEM13003B	Work safely with industrial chemicals and materials
MEM16006A	Organise and communicate information
MEM16007A	Work with others in a manufacturing, engineering or related environment
MEM16008A	Interact with computing technology
MEM18001C	Use hand tools

Unit code	Unit title
MEM18002B	Use power tools/hand held operations
MSS402021A	Apply Just in Time procedures
MSS402030A	Apply cost factors to work practices
MSS402040A	Apply 5S procedures
MSAPMOHS100A	Follow OHS procedures
MSAPMOHS110A	Follow emergency response procedures
MSAPMOHS205A	Control minor incidents
MSAPMOHS210A	Undertake first response to non-fire incidents
MSAPMOHS212A	Undertake first response to fire incidents
MSAPMOHS216A	Operate breathing apparatus
MSAPMOHS217A	Gas test atmospheres
MSAPMOHS220A	Provide initial First Aid response
MSAPMOPS100A	Use equipment
MSAPMOPS101A	Make measurements
MSAPMOPS102A	Perform tasks to support production
MSAPMPER200C	Work in accordance with an issued permit
MSAPMPER201A	Monitor and control work permits
MSAPMPER202A	Observe permit work
MSAPMPER205C	Enter confined space
MSAPMSUP100A	Apply workplace procedures
MSAPMSUP101A	Clean workplace or equipment
MSAPMSUP102A	Communicate in the workplace

Unit code	Unit title
MSAPMSUP106A	Work in a team
MSAPMSUP172A	Identify and minimise environmental hazards
MSAPMSUP200A	Achieve work outcomes
MSAPMSUP201A	Receive or despatch goods
MSAPMSUP204A	Pack products or materials
MSAPMSUP205A	Transfer loads
MSAPMSUP230A	Monitor process operations
MSAPMSUP240A	Undertake minor maintenance
MSAPMSUP273A	Handle goods
MSAPMSUP280A	Manage conflict at work
MSAPMSUP291A	Participate in continuous improvement
MSAPMSUP292A	Sample and test materials and product
PMBHAN103C	Shift materials safely by hand
TLID2010A	Operate a forklift
RIIRIS201B	Conduct local risk control
Technical units	
FPICOT2238A	Cut materials with a hand-held chainsaw
MSAPMOPS200A	Operate equipment
MSAPMOPS212A	Use enterprise computers or data systems
A maximum of four (4) relevant units may be chosen from this Training Package, other endorsed Training Packages and accredited courses, where they are available for inclusion at Certificate II.	

MSA30208 Certificate III in Manufacturing Technology

Modification History

Version 4 - MEM elective imported units replaced by current versions. Equivalent.

Version 3 - MSACM units replaced by MSS units from MSS11v2 Sustainability Training Package.

Version 2 - Imported unit codes updated.

Description

This qualification is suitable for delivery as part of a one-year Technology Cadetship, or can be undertaken through an Australian Apprenticeship arrangement.

This qualification has seven specialist streams available. These are:

- CAD/drafting
- Manufacturing operations
- Laboratory operations
- Technical officer
- Metallurgy
- Polymer technology
- Structural steel detailing.

Each stream offers an opportunity for significant choice in electives and each stream requires the same core units to be completed.

Note:

- The minimum requirements for the Certificate III in Manufacturing Technology can also be met by holders of the *Certificate III in Engineering - Technician* from the Metal and Engineering Training Package.
-

Pathways Information

Not applicable.

Licensing/Regulatory Information

Not applicable.

Entry Requirements

Not applicable.

Employability Skills Summary

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

MSA30208 Certificate III in Manufacturing Technology

The following table contains a summary of the employability skills as identified by manufacturing technology related industries for this qualification. This table should be interpreted in conjunction with the detailed requirements of each unit of competency packaged in this qualification. The outcomes described here are broad industry requirements that reflect skill requirements for this level.

Employability skill	Industry/enterprise requirements for this qualification include:
Communication	• use communication technologies efficiently • communicate production abnormalities, documentation and test results • demonstrate effective and appropriate communication and interpersonal skills when dealing with people from a range of backgrounds • read, interpret and communicate work related documents • communicate with all team members
Teamwork	• work cooperatively with people of different ages, gender, race or religion • liaise with and provide support to other team members • work as part of a team • identify team performance required to meet customer needs • provide leadership to others in the team • encourage the sharing of information between team members • plan and support team activities
Problem solving	• identify and report problems and make contributions to their solution • investigate problem causes • implement changes • examine equipment for damage, missing components or other defects • identify and promptly address problems or issues • assess quality of work according to specifications • determine effective work practices • problem solve machine operational requirements

Employability skill	Industry/enterprise requirements for this qualification include:
Initiative and enterprise	• seek and provide feedback on procedures • gather and analyse information • record information on the quality and other indicators of production performance • identify and implement simple process improvements • coordinate work activities and manufacturing processes • use analytical and decision making skills
Planning and organising	• identify hazards and implement appropriate hazard control measures • organise self and others to meet production schedules • sequence work to maximise safety and productivity • select and use appropriate tools and equipment • apply time management skills to ensure work flow
Self management	• plan own work requirements from production requests • operate within appropriate time constraints and work standards • select and use appropriate equipment, materials, processes and procedures • plan to ensure effective production • apply workplace procedures • identify resource requirements, document and monitor • recognise limitations and seek timely advice
Learning	• ask questions to gain information • identify sources of information to expand knowledge and understanding • participate in improvement procedures • participate in development of continuous improvement strategies
Technology	• operate and adjust processes • start up and shut down equipment • set up equipment • monitor product/process quality • function and operating principles of equipment, machine components • maintain computer based workplace records

Packaging Rules

Packaging Rules

To be awarded a Certificate III in Manufacturing Technology, competency must be achieved in **eleven (11)** units of competency:

- **three (3)** core units of competency
- **eight (8)** elective units of competency chosen as described below.

Core units

The following **three (3)** units must be chosen.

Unit code	Unit title
MEM30012A	Apply mathematical techniques in a manufacturing, engineering or related environment
MSS402051A	Apply quality standards
MSAENV272B	Participate in environmentally sustainable work practices

Prerequisites

Note that elective units marked with an asterisk have one or more prerequisite requirements. The prerequisites for these units are to be counted in the total number of units required in the elective group. Please refer to the individual units for details.

Elective units

Group A - specialist streams

Choose **eight (8)** elective units as specified for a specialist stream.

Note:

- All units from each specialist stream are available in Group B as General Electives.
- A maximum of two general elective units may also be chosen from other qualifications in this Training Package, other endorsed Training Packages and accredited courses.

CAD/drafting specialist stream

Select **eight (8)** elective units:

- a minimum of **six (6)** from the list below
- the balance may be chosen from Group B General Electives

Unit code	Unit title	Prerequisites
AUM4003A	Interpret customer requirements	
LMTGN4002A	Participate in product engineering	
MEM12024A	Perform computations	
MEM16006A	Organise and communicate information	
MEM16008A	Interact with computing technology	
MEM30031A	Operate computer-aided design (CAD) systems to produce basic drawing elements	
MEM30032A	Produce basic engineering drawings	
MEM30033A	Use computer-aided design (CAD) to create and display 3-D models	*
MEM30005A	Calculate force systems within simple beam structures	*
MEM30006A	Calculate stresses in simple structures	*
MEM30007A	Select common engineering materials	
MEM30008A	Apply basic economic and ergonomic concepts to evaluate engineering applications	
MEM30010A	Set up basic hydraulic circuits	
MEM30011A	Set up basic pneumatic circuits	
MEM30013A	Assist in the preparation of a basic workplace layout	
MEM30025A	Analyse a simple electrical system circuit	*

Manufacturing operations specialist stream

Select **eight (8)** elective units as follows:

- a minimum of **six (6)** from the list below
- the balance may be chosen from Group B General Electives

Unit code	Unit title	Prerequisites
FDFOP2005A	Work in a socially diverse environment	
MEM15001B	Perform basic statistical quality control	
MEM16006A	Organise and communicate information	
MEM16008A	Interact with computing technology	
MEM30014A	Apply basic just in time systems to the reduction of waste	
MEM30015A	Develop recommendations for basic set up time improvements	
MEM30016A	Assist in the analysis of a supply chain	
MEM30017A	Use basic preventative maintenance techniques and tools	
MEM30018A	Undertake basic process planning	
MEM30019A	Use resource planning software systems in manufacturing	*
MEM30020A	Develop and manage a plan for a simple manufacturing related project	
MEM30021A	Prepare a simple production schedule	
MEM30023A	Prepare a simple cost estimate for a manufactured product	
MEM30024A	Participate in quality assurance techniques	*
MSS402001A	Apply competitive systems and practices	
MSS402002A	Sustain process improvements	
MSS402020A	Apply quick changeover procedures	
MSS402030A	Apply cost factors to work practices	

Unit code	Unit title	Prerequisites
MSS402031A	Interpret product costs in terms of customer requirements	
MSS402050A	Monitor process capability	
MSS402060A	Use planning software systems in operations	
MSS402061A	Use SCADA systems in operations	
MSS402080A	Undertake root cause analysis	
MSS403002A	Ensure process improvements are sustained	
MSS403030A	Improve cost factors in work practices	

Laboratory operations specialist stream

Select **eight (8)** elective units:

- a minimum of **six (6)** from the list below
- the balance may be chosen from Group B General Electives

Unit code	Unit title	Prerequisites
LMTGN4016A	Contribute to the development of products or processes	
MEM15001B	Perform basic statistical quality control	
MEM16006A	Organise and communicate information	
MEM16008A	Interact with computing technology	
MEM30024A	Participate in quality assurance techniques	*
MSL913001A	Communicate with other people	
MSL913002A	Plan and conduct laboratory/field work	
MSL922001A	Record and present data	

Unit code	Unit title	Prerequisites
MSL933001A	Maintain the laboratory/field workplace fit for purpose	
MSL933002A	Contribute to the achievement of quality objectives	
MSL933003A	Apply critical control point requirements	
MSL934002A	Apply quality system and continuous improvement processes	
MSL943001A	Work safely with instruments that emit ionising radiation	
MSL943002A	Participate in laboratory/field workplace safety	
MSL952001A	Collect routine site samples	
MSL952002A	Handle and transport samples or equipment	
MSL953001A	Receive and prepare samples for testing	
MSL954001A	Obtain representative samples in accordance with sampling plan	
MSL963001A	Operate basic handblowing equipment	
MSL963002A	Repair glass apparatus using simple glassblowing equipment	
MSL973001A	Perform basic tests	
MSL973002A	Prepare working solutions	
MSL973003A	Prepare culture media	
MSL973004A	Perform aseptic techniques	
MSL973005A	Assist with fieldwork	
MSL973006A	Prepare trial batches for evaluation	
MSL973007A	Perform microscopic examination	

Technical officer specialist stream

Select **eight (8)** elective units:

- a minimum of **six (6)** from the list below
- the balance may be chosen from Group B General Electives

Unit code	Unit title	Prerequisites
LMTGN4016A	Contribute to the development of products or processes	
MEM15001B	Perform basic statistical quality control	
MEM16006A	Organise and communicate information	
MEM16008A	Interact with computing technology	
MEM30007A	Select common engineering materials	
MEM30008A	Apply basic economic and ergonomic concepts to engineering designs and applications	
MEM30009A	Contribute to the design of basic mechanical systems	*
MEM30010A	Set up basic hydraulic circuits	
MEM30011A	Set up basic pneumatic circuits	
MEM30013A	Assist in the design of basic workplace layout	
MEM30016A	Assist in the analysis of a supply chain	
MEM30017A	Use basic preventative maintenance techniques and tools	
MEM30018A	Undertake basic process planning	
MEM30019A	Use resource planning software systems in manufacturing	*
MEM30020A	Develop and manage a plan for a simple manufacturing related project	

Unit code	Unit title	Prerequisites
MEM30022A	Undertake supervised procurement activities	
MEM30023A	Prepare a simple cost estimate for a manufactured product	
MEM30024A	Participate in quality assurance techniques	
MSS402031A	Interpret product costs in terms of customer requirements	
MSS402060A	Use planning software systems in operations	
MSS402061A	Use SCADA systems	
MSS402080A	Undertake root cause analysis	
MSS403032A	Analyse manual handling processes	

Metallurgy specialist stream

Select **eight (8)** elective units:

- a minimum of **five (5)** from the two groups below
- the balance may be chosen from Group B General Electives
-

Metallurgy group 1

Choose at least three (3) units from this list.

Unit code	Unit title	Prerequisites
MSATCM301A	Test the mechanical properties of materials	
MSATCM302A	Monitor basic ferrous melting and casting processes	
MSATCM303A	Monitor basic non-ferrous melting and casting processes	
MSATCM304A	Interpret basic binary phase diagrams	
MSATCM305A	Demonstrate basic knowledge of casting operations	

Metallurgy group 2

Choose at least two (2) units from this list.

Unit code	Unit title	Prerequisites
MEM09002B	Interpret technical drawing	
MEM13003B	Work safely with industrial chemicals	
MEM13004B	Work safely with molten metals/glass	
MEM16008A	Interact with computing technology	
MEM30007A	Select common engineering materials	*

Polymer technology specialist stream

Select **eight (8)** elective units:

- a minimum of **six (6)** from the list below
- the balance may be chosen from Group B General Electives

Note that either PMBPREP301C or PMBPREP303C may be chosen, but not both.

Unit code	Unit title	Prerequisites
MSAPMSUP303A	Identify equipment faults	
PMAOPS350B	Match and adjust colour	
PMBPREP206C	Prepare materials to formulae	
PMBPREP301C	Set up and prepare for production	
PMBPREP303C	Set up equipment for continuous production	
PMBPREP304C	Set a die	
PMBPROD235C	Use materials and process knowledge to complete work operations	

Unit code	Unit title	Prerequisites
PMBTECH301B	Use material and process knowledge to solve problems	*
PMBTECH302A	Modify existing compounds	
PMBTECH303A	Make minor modifications to products	
MSL973001A	Perform basic tests	
	Up to two (2) relevant units may be chosen from the production units available at Certificate III in the Plastics, Rubber & Cabling Training Package (PMB07), or its endorsed replacement.	

Structural steel detailing specialist stream

Select **eight (8)** elective units:

- a minimum of **six (6)** from the list below
- the balance may be chosen from Group B General Electives

Unit code	Unit title	Prerequisites
MSATCS301A	Interpret architectural and engineering design specifications for structural steel detailing	*
MSATCS302A	Detail bolts and welds for structural steelwork connections	*
MEM05051A	Select welding processes	
MEM09002B	Interpret technical drawing	
MEM16006A	Organise and communicate information	
MEM16008A	Interact with computing technology	
MEM30031A	Operate computer-aided design (CAD) system to produce basic engineering elements	
MEM30032A	Produce basic engineering drawings	
MEM30033A	Use computer-aided design (CAD) to create and display 3-D models	*

Group B - General electives

The balance of units for each specialist stream may be chosen from this list as specified below:

CAD/drafting: Up to two units

Manufacturing operations: Up to two units

Laboratory operations: Up to two units

CAD/drafting:	Up to two units
Technical officer:	Up to two units
Metallurgy:	Up to three units
Polymer technology:	Up to two units
Structural steel detailing:	Up to two units

Unit code	Unit title	Prerequisites
AUM4003A	Interpret customer requirements	
FDFOP2005A	Work in a socially diverse environment	
LMTGN4002A	Participate in product engineering	
LMTGN4016A	Contribute to the development of products or processes	
MEM05051A	Select welding processes	
MEM09002B	Interpret technical drawing	
MEM12024A	Perform computations	
MEM13003B	Work safely with industrial chemicals	
MEM13004B	Work safely with molten metals/glass	
MEM15001B	Perform basic statistical quality control	
MEM16006A	Organise and communicate information	
MEM16008A	Interact with computing technology	
MEM30031A	Use computer-aided design (CAD) systems to produce basic drawing elements	
MEM30032A	Produce basic engineering drawings	
MEM30033A	Use computer-aided design (CAD) to create and	*

Unit code	Unit title	Prerequisites
	display 3-D models	
MEM30005A	Calculate force systems within simple beam structures	*
MEM30006A	Calculate stresses in simple structures	*
MEM30007A	Select common engineering materials	
MEM30008A	Apply basic economic and ergonomic concepts to engineering designs and applications	
MEM30009A	Contribute to the design of basic mechanical systems	*
MEM30010A	Set up basic hydraulic circuits	
MEM30011A	Set up basic pneumatic circuits	
MEM30012A	Apply mathematical techniques in a manufacturing engineering or related environment	
MEM30013A	Assist in the design of basic workplace layout	
MEM30014A	Apply basic just in time systems to the reduction of waste	
MEM30015A	Develop recommendations for basic set up time improvements	
MEM30016A	Assist in the analysis of a supply chain	
MEM30017A	Use basic preventative maintenance techniques and tools	
MEM30018A	Undertake basic process planning	
MEM30019A	Use resource planning software systems in manufacturing	*
MEM30020A	Develop and manage a plan for a simple manufacturing related project	
MEM30021A	Prepare a simple production schedule	

Unit code	Unit title	Prerequisites
MEM30022A	Undertake supervised procurement activities	
MEM30023A	Prepare a simple cost estimate for a manufactured product	
MEM30024A	Participate in quality assurance techniques	
MEM30025A	Analyse a simple electrical system circuit	*
MSS402001A	Apply competitive systems and practices	
MSS402002A	Sustain process improvements	
MSS402020A	Apply quick changeover procedures	
MSS402030A	Apply cost factors to work practices	
MSS402031A	Interpret product costs in terms of customer requirements	
MSS402050A	Monitor process capability	
MSS402060A	Use planning software systems in operations	
MSS402061A	Use SCADA systems in operations	
MSS402080A	Undertake root cause analysis	
MSS403002A	Ensure process improvements are sustained	
MSS403030A	Improve cost factors in work practices	
MSS403032A	Analyse manual handling processes	
MSAPMSUP303A	Identify equipment faults	
MSATCM301A	Test the mechanical properties of materials	
MSATCM302A	Monitor basic ferrous melting and casting processes	
MSATCM303A	Monitor basic non-ferrous melting and casting processes	

Unit code	Unit title	Prerequisites
MSATCM304A	Interpret basic binary phase diagrams	
MSATCM305A	Demonstrate basic knowledge of casting operations	
MSATCS301A	Interpret architectural and engineering design specifications for structural steel detailing	*
MSATCS302A	Detail bolts and welds for structural steelwork connections	*
MSL913001A	Communicate with other people	
MSL913002A	Plan and conduct laboratory/field work	
MSL922001A	Record and present data	
MSL933001A	Maintain the laboratory/field workplace fit for purpose	
MSL933002A	Contribute to the achievement of quality objectives	
MSL933003A	Apply critical control point requirements	
MSL934002A	Apply quality system and continuous improvement processes	
MSL943001A	Work safely with instruments that emit ionising radiation	
MSL943002A	Participate in laboratory/field workplace safety	
MSL952001A	Collect routine site samples	
MSL952002A	Handle and transport samples or equipment	
MSL953001A	Receive and prepare samples for testing	
MSL954001A	Obtain representative samples in accordance with sampling plan	
MSL963001A	Operate basic handblowing equipment	
MSL963002A	Repair glass apparatus using simple glassblowing	

Unit code	Unit title	Prerequisites
	equipment	
MSL973001A	Perform basic tests	
MSL973002A	Prepare working solutions	
MSL973003A	Prepare culture media	
MSL973004A	Perform aseptic techniques	
MSL973005A	Assist with fieldwork	
MSL973006A	Prepare trial batches for evaluation	
MSL973007A	Perform microscopic examination	
PMAOPS350B	Match and adjust colour	
PMBPREP206C	Prepare materials to formulae	
PMBPREP301C	Set up and prepare for production	
PMBPREP303C	Set up equipment for continuous production	
PMBPREP304C	Set a die	
PMBPROD235C	Use materials and process knowledge to complete work operations	
PMBTECH301B	Use material and process knowledge to solve problems	*
PMBTECH302A	Modify existing compounds	
PMBTECH303A	Make minor modifications to products	
	A maximum of two (2) general electives may be imported from other qualifications in this Training Package, other endorsed Training Packages and accredited courses where those units are available at Certificate III.	

MSA30309 Certificate III in Surface Preparation and Coating Application

Modification History

Correction made to one prerequisite code.

Version 3 - Minor formatting. Imported unit coded updated.

Description

This qualification covers the skills and knowledge required to perform the wide range of surface preparation and protective coating application operations which occur across a range of typically heavy industry, ships and infrastructure.

Job roles/employment outcomes

The Certificate III in Surface Preparation and Coating Application has been developed as a trade level qualification for use in MSA07 Manufacturing Training Package. This qualification has been developed in response to an industry request. People with this qualification would be expected to work under routine only supervision, preparing surfaces and/or applying protective coatings in accordance with a provided technical specification. They would be expected to recognise situations where the intended approach was not appropriate/not working and take appropriate action to ensure the final result is satisfactory.

They may work in a manufacturer's factory or they may work as contractors on the site of the plant/ship/infrastructure.

Application

The sector typically prepares surfaces for initial application, or for the reapplication, of protective coatings. In these circumstances it also applies the protective coating which may be liquid or solid. This qualification relates to surface preparation **and** coating and coating units are required.

The surfaces being prepared are typically metal (usually ferrous) and may be structural or have other mechanical requirements.

People with this qualification may be expected to:

- abrasively blast clean surfaces to Australian Standard requirements and in accordance with the specification
- otherwise prepare surfaces for coating as required by the specification
- apply liquid protective surface coatings
- apply solid polymer surface coatings (this is usually a specialised area).

This work may be undertaken:

- in a factory environment
- in an on-site, outdoors environment
- inside a vessel or other confined space
- outside a vessel or structure
- at heights
- some combination of these.

Training programs for this qualification are suitable to be undertaken as part of a formal training contract with an employer under an Australian Traineeship or Apprenticeship arrangement.

Pathways into the qualification

This qualification may be accessed by direct entry.

The units of competency contained within this qualification are common with other qualifications and credit should be granted towards this qualification where competency has already been achieved.

Credit should also be granted towards this qualification where competency has been achieved in units of competency contained within relevant skill sets. The skill set 'Confined Space Work Team Skill Set' was created in PMA08 Chemical, Hydrocarbons and Refining Training Package and is relevant to this qualification. Other skill sets have also been endorsed in MSA07 that relate to this qualification. Details are in 'Skill Sets in this Training Package'.

The units of competency in this qualification reflect competencies which are practiced within the industry and recognition should be granted where there is sufficient evidence of competency from work based experience.

Pathways from the qualification

Further qualification pathways from this qualification include MSA40108 Certificate IV in Manufacturing Technology, MEM40105 Certificate IV in Engineering or other relevant qualifications.

Additional qualification advice

MSA41108 Certificate IV in Competitive Manufacturing is available for team leaders or others who need a more generalist qualification covering the application of good manufacturing practice and lean principles.

Licensing considerations

There are no specific licences that relate to this qualification. However, in some jurisdictions there may be licensing or regulatory requirements associated with the work. Local regulations should be checked for details.

Pathways Information

Not applicable.

Licensing/Regulatory Information

Not applicable.

Entry Requirements

Not applicable.

Employability Skills Summary

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
Employability Skill	Industry/enterprise requirements for this qualification
Communication	• maintain communication about multiple subjects and with multiple audiences • complete incident and other reports • use technical information and manufacturer information • collect, analyse and organise information • communicate ideas and information • use and contribute to workplace documentation • maintain workplace records
Teamwork	• identify and describe own role and role of others • work within a team • resolve conflicts between team members • teamwork strategies
Problem solving	• recognise a problem or a potential problem • determine problems needing priority action • refer problems outside area of responsibility to appropriate person • identify appropriate theory base for problem • seek information and assistance as required to solve problems • solve problems within area of responsibility • follow through items initiated until final resolution has occurred • identify and isolate faults in equipment • use a range of formal problem solving techniques
Initiative and enterprise	• identify the most appropriate process conditions for equipment • determine problems needing action • recommend required action • report problems outside area of responsibility • distinguish between causes of faults
Planning and organising	• prioritise actions to achieve required outcomes • plan own work requirements and assist others to plan theirs • plan and organise activities • identify tasks to achieve team goals • organise allocation of tasks • monitor completion of allocated tasks

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
	develop and adjust a production schedule
Self-management	- plan own work requirements from job requests - operate within appropriate time constraints and work standards - select and use appropriate equipment, materials, processes and procedures - plan to ensure effective production - apply standard procedures - identify resource requirements - recognise limitations and seek timely advice
Learning	- ask questions to gain information - identify sources of information to expand knowledge and understanding - participate in improvement procedures - participate in development of continuous improvement strategies - assist others develop competency
Technology	- operate and adjust equipment - start up and shut down equipment - set up equipment - monitor quality - function and operating principles of equipment - maintain workplace records

Packaging Rules

Packaging Rules

To be awarded the Certificate III in Surface Preparation and Coating Application competency must be achieved in **thirty one (31)** units of competency.

- eleven (11)** core units of competency
- twenty (20)** elective units of competency, five (5) of which may be selected from this Training Package, other endorsed Training Packages and accredited courses, as specified below.

Note: Where prerequisite units are identified they must be counted in the total number of units required for completion of the qualification.

Core units of competency

- Select all **eleven (11)** units of competency from the following list.

Unit Code	Title
MEM12023A	Perform engineering measurements
MEM12024A	Perform computations
MEM14004A	Plan to undertake a routine task
MEM14005A	Plan a complete activity
MEM15002A	Apply quality systems
MEM15024A	Apply quality procedures
MEM16006A	Organise and communicate information
MEM16007A	Work with others in a manufacturing, engineering or related environment
MEM16008A	Interact with computing technology
MSAENV272B	Participate in environmentally sustainable work practices
MSAPMOHS200A	Work safely

Elective units of competency

Group A - Surface Preparation

- Select a minimum of **three (3)** units from the following list.

Unit Code	Title	Prerequisite
MEM08002C	Pre-treat work for subsequent surface coating	MEM13003B
MEM08007B	Control surface finish production and finished product quality	
MEM08011B	Prepare surfaces using solvents and/or	MEM13003B

Unit Code	Title	Prerequisite
	mechanical means	MEM18001C MEM18002B
MEM08012B	Prepare surfaces by abrasive blasting (basic)	MEM08016B MEM13003B
MEM08013B	Prepare surfaces by abrasive blasting (advanced)	MEM08012B MEM08016B MEM13003B
MEM08016B	Control blast coating by-products, materials and emissions	MEM13003B
MSAPMWJ301A	Operate a high pressure water jetting system	
PMBPROD248C	Prepare surfaces for coating	
One (1) relevant technical surface preparation unit which is available for inclusion at Certificate III may be chosen from this Training Package, other endorsed Training Packages and accredited courses.		

Group B - Coating Application

- Select a minimum of **two (2)** units from the following list.

Unit Code	Title	Prerequisite
MEM08014B	Apply protective coatings (basic)	MEM13003B
MEM08015B	Apply protective coatings (advanced)	MEM08014B MEM13003B
MSAPMOPS201A	Cut polymer materials	
MSAPMOPS202A	Fabricate polymer materials	
PMBPROD241C	Lay up rubber lining or lag pulleys	
PMBPROD242A	Bond polymers to surfaces	

Unit Code	Title	Prerequisite
PMBPROD265C	Operate portable vulcanising equipment	
PMBPROD323C	Produce powder coated products	
PMBPROD375B	Vulcanise products using an autoclave	
One (1) relevant technical protective coating application unit which is available for inclusion at Certificate III may be chosen from this Training Package, other endorsed Training Packages and accredited courses.		

Group C - Other elective units

- Select a minimum of **three (3)** units from the following list.

Unit Code	Title	Prerequisite
MEM11001C	Erect/dismantle scaffolding and equipment	MEM18001C
MEM11002C	Erect/dismantle complex scaffolding and equipment	MEM11001C MEM18001C
MEM11003B	Coordinate erection/dismantling of complex scaffolding/equipment	MEM11001C MEM11002C MEM18001C
MEM11004B	Undertake dogging	MEM18001C
MEM11010B	Operate mobile load shifting equipment	
MEM11011B	Undertake manual handling	
MEM11021B	Perform advanced operation of load shifting equipment	MEM11010B
MEM11022B	Operate fixed/moveable load shifting equipment	
MEM13001B	Perform emergency first aid	

Unit Code	Title	Prerequisite
MEM13003B	Work safely with industrial chemicals and materials	
MSAPMOHS216A	Operate breathing apparatus	
MSAPMOHS217A	Gas test atmospheres	
MSAPMPER200C	Work in accordance with an issued permit	
MSAPMPER202A	Observe permit work	
MSAPMPER205C	Enter confined space	MSAPMPER200C
MSAPMPER300C	Issue work permits	RIIRIS201B
RIIOHS204A	Work safely at heights	
RIIRIS201B	Conduct local risk control	

Group D - Other elective units

- Select a minimum of **three (3)** units from the following list.

Unit Code	Title	Prerequisite
MEM07001B	Perform operational maintenance of machines/equipment	MEM18001C
MEM11012B	Purchase materials	
MEM11016B	Order materials	
MEM12001B	Use comparison and basic measuring devices	
MEM15003B	Use improvement processes in team activities	MEM16007A
MEM15004B	Perform inspection	
MEM15005B	Select and control inspection process and	MEM15004B

Unit Code	Title	Prerequisite
	procedures	
MEM16002C	Conduct formal interviews and negotiations	
MEM16005A	Operate as a team member to conduct manufacturing, engineering or related activities	
MEM16011A	Communicate with individuals and small groups	MEM16006A
MEM16013A	Operate in a self directed team	MEM16007A
MEM17001B	Assist in the development and delivery of training in the workplace	
MEM17003A	Assist in the provision of on the job training	
MEM18001C	Use hand tools	
MEM18002B	Use power tools/hand held operations	
MSAPMOPS301A	Treat corrosion	
MSAPMOPS363A	Organise on site work	
MSAPMSUP100A	Apply workplace procedures	
MSAPMSUP303A	Identify equipment faults	
MSAPMSUP390A	Use structured problem solving tools	
MSAPMWJ201A	Use high pressure water jetting equipment	

Group E - Balance of units

The balance of units, to a maximum of **nine (9)**, may be chosen from any combination of:

- units from Groups A, B, C and D above, not already selected
- up to **three (3)** relevant units can be selected from this Training Package, other endorsed Training Packages and accredited courses, where those units are available for inclusion at Certificate III.
-

MSA30510 Certificate III in Recreational Vehicle Service and Repair

Modification History

Release 5 - Imported elective unit updated to current release

Release 4 - AU elective imported units replaced by current versions. Prerequisites replaced by an asterisk. Equivalent.

Release 3 - MSACM units replaced by MSS units from MSS11v2 Sustainability Training Package. Imported unit version code updated.

Release 2 - Imported unit code updated.

Description

This qualification covers the skills and knowledge required to perform the wide range of service and repair tasks performed on recreational vehicles.

Job roles/employment outcomes

The Certificate III in Recreational Vehicle Service and Repair has been developed as a trade level qualification for use in MSA07 Manufacturing Training Package. This qualification has been developed in response to an industry request. People with this qualification would be expected to work under supervision servicing and repairing recreational vehicles, including:

- motor homes
- caravans
- camper trailers
- slide-ons
- fifth wheelers

to meet Australian requirements, such as road worthiness and the Australian Design Rule (ADR). They will analyse the service/repair requirements and then carry them out.

They may work in a service and repair facility or a manufacturer's factory undertaking warranty work. Work may be for an insurance claim, modifying an existing recreational vehicle or undertaking routine servicing.

Application

The sector typically services and repairs any recreational vehicle as required. This may apply to the recreational vehicle body, fittings and running gear. It may be in response to a road (or other) accident, hail damage, vehicle modification or routine servicing. They may also specify and access outside specialist services, for example, for spray painting or licence requirements.

Recreational vehicles may be made from a frame (timber, aluminium or steel) and skin (aluminium or fibre composite) or a manufactured wall panel or some other technology. They are typically mounted on a steel chassis. Fittings are typically timber/particle board but may be any other suitable material.

People with this qualification may be expected to:

- carry out insurance repairs
- carry out other repairs
- work under warranty
- undertake modifications/refits to the recreational vehicle
- undertake routine servicing
- prepare a recreational vehicle for sale/resale.

This work will generally be undertaken in a workshop environment.

Training programs for this qualification are suitable to be undertaken as part of a formal training contract with an employer under an Australian Traineeship or Apprenticeship arrangement.

Pathways into the qualification

This qualification may be accessed by direct entry.

The units of competency contained within this qualification are common with other qualifications and credit should be granted towards this qualification where competency has already been achieved.

Credit should also be granted towards this qualification where competency has been achieved in units of competency contained within relevant skill sets.

The units of competency in this qualification reflect competencies which are practiced within the industry and recognition of prior learning (RPL) should be granted where there is sufficient evidence of competency from work-based experience.

Pathways from the qualification

Further qualification pathways from this qualification include MSA40510 Certificate IV in Recreational Vehicles.

Additional qualification advice

MSA41108 Certificate IV in Competitive Manufacturing is available for team leaders or others who need a more generalist qualification covering the application of good manufacturing practice and lean principles.

Licensing considerations

Units of competency in this qualification provide the underpinning knowledge and skills for various required licenses. Local regulations should be checked for details.

Pathways Information

Not applicable.

Licensing/Regulatory Information

Not applicable.

Entry Requirements

Not applicable.

Employability Skills Summary

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
Employability Skill	Industry/enterprise requirements for this qualification
Communication	• Maintaining communication about multiple subjects and with multiple audiences • Completing incident and other reports • Using technical information and manufacturer information • Collecting, analysing and organising information • Communicating ideas and information • Using and contributing to workplace documentation • Maintaining workplace records
Teamwork	• Identifying and describing own role and role of others • Working within a team • Resolving conflicts between team members • Using teamwork strategies
Problem solving	• Recognising problems or potential problems • Determining problems needing priority action • Referring problems outside area of responsibility to appropriate person with possible causes • Identifying appropriate theory base for problem • Seeking information and assistance as required to solve problems • Solving problems within area of responsibility • Following through items initiated until final resolution has occurred • Identifying and isolating faults in equipment • Using a range of formal problem-solving techniques
Initiative and enterprise	• Identifying the most appropriate process conditions for equipment • Determining problems needing action • Recommending required action • Reporting problems outside area of responsibility • Distinguishing between causes of faults
Planning and organising	• Prioritising actions to achieve required outcomes • Planning own work requirements and assisting others to plan theirs • Planning and organising activities

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
	- Identifying tasks to achieve team goals - Organising allocation of tasks - Monitoring completion of allocated tasks - Developing and adjusting a production schedule
Self-management	- Planning own work requirements from job requests - Operating within appropriate time constraints and work standards - Selecting and using appropriate equipment, materials, processes and procedures - Planning to ensure effective production - Applying standard procedures - Identifying, documenting and monitoring resource requirements - Recognising limitations and seeking timely advice
Learning	- Asking questions to gain information - Identifying sources of information to expand knowledge and understanding - Participating in improvement procedures - Participating in development of continuous improvement strategies - Helping others develop competency
Technology	- Operating and adjusting equipment - Starting up and shutting down equipment - Setting up equipment - Monitoring quality - Understanding function and operating principles of equipment - Maintaining workplace records

Packaging Rules

Packaging Rules

To be awarded the Certificate III in Recreational Vehicle Service and Repair competency must be achieved in **twenty two (22)** units of competency:

- three (3)** core units of competency
- nineteen (19)** elective units of competency, as specified below:

- a minimum of **thirteen (13)** units of competency must be selected from Group A
- the balance of units, to a maximum of **six (6)** may be selected from:
- units not previously selected from Group A
- Group B units listed below.

Note: Up to **four (4)** elective units of competency may be selected from this Training Package, other endorsed Training Packages and accredited courses, as specified in Groups A and B.

Note: Where prerequisite units are identified, they must be counted in the total number of units required for completion of the qualification.

Core units of competency

Unit code	Unit title	Prerequisites
MSAENV272B	Participate in environmentally sustainable work practices	
MSAPMOHS200A	Work safely	
MSAPMSUP102A	Communicate in the workplace	

Elective units of competency

Group A

Unit code	Unit title	Prerequisites
AUMGTT001	Apply trim to vehicle components	
AURETR2015	Inspect and service batteries	
AURETR2012	test and repair basic electrical circuits	
AURETR2010	Fabricate, test and repair wiring harnesses and looms	
AURETB3001	Repair electric braking systems	
AURTTB2001	Inspect and service braking systems	

Unit code	Unit title	Prerequisites
AURTTD2004	Inspect and service suspension systems	
AURTTJ2002	Remove and refit wheel hubs and associated brake components	
AURTTA3017	Carry out vehicle safety and roadworthy inspection	
AURVTN2005	Remove and fit protector mouldings, transfers and decals	
AURVTP2007	Apply paint touch-up techniques	
AURVTS3004	Repair fibreglass and composite material components	
AURTTY3001	Repair chassis, frame and associated components	
AURVTT3015	Fabricate canvas products	
AURVTT3016	Fabricate frame structures	
AURVTT3019	Fabricate and install canopies and curtains	
AURVTG3011	Install side windows	
MEM05005B	Carry out mechanical cutting	*
MEM05012C	Perform routine manual metal arc welding	
MEM05050B	Perform routine gas metal arc welding	
MEM10002B	Terminate and connect electrical wiring	*
MEM12002B	Perform electrical/electronic measurement	
MEM12023A	Perform engineering measurements	
MEM18001C	Use hand tools	
MEM18002B	Use power tools/hand held operations	
MEM18038B	Maintain wheels and tyres	*

Unit code	Unit title	Prerequisites
MEM18045B	Fault find/repair electrical equipment/components up to 250 volts single phase supply	*
MSAPMOPS101A	Make measurements	
MSARVS202A	Repair/service LP gas systems in a recreational vehicle	
Up to two (2) relevant elective units of competency may be selected from this Training Package, other endorsed Training Packages and accredited courses, where they are available for inclusion at Certificate III.		

Group B

Unit code	Unit title	Prerequisites
MEM09002B	Interpret technical drawing	
MEM11011B	Undertake manual handling	
MEM14004A	Plan to undertake a routine task	
MEM15024A	Apply quality procedures	
MSS402021A	Apply Just in Time procedures	
MSS402040A	Apply 5S procedures	
MSS402080A	Undertake root cause analysis	
MSAPMOHS220A	Provide initial first aid response	
MSAPMOPS212A	Use enterprise computers or data systems	
MSAPMSUP100A	Apply workplace procedures	
MSAPMSUP101A	Clean workplace or equipment	
MSAPMSUP106A	Work in a team	

Unit code	Unit title	Prerequisites
MSAPMSUP280A	Manage conflict at work	
MSAPMSUP291A	Participate in continuous improvement	
MSARVS301A	Develop and update caravan industry knowledge	
MSARVG201A	Tow a recreational vehicle safely	
MSARVT201A	Apply technical knowledge of recreational vehicle manufacturing to work activities	
SIRXSLS002A	Advise on products and services	
TAEDEL301A	Provide work skill instruction	
TLID2010A	Operate a forklift	
UEGNSG604B	Fill gas cylinders	
Up to two (2) relevant elective units of competency may be selected from this Training Package, other endorsed Training Packages and accredited courses, where they are available for inclusion at Certificate III.		

MSA30610 Certificate III in Recreational Vehicle Manufacture

Modification History

Release 5 - Imported elective unit updated to current release.

Release 4 - AU imported elective units replaced by current versions. Prerequisites replaced by an asterisk. Equivalent.

Release 3 - MSACM units replaced by MSS units from MSS11v2 Sustainability Training Package.

Release 2 - Imported unit code updated.

Description

This qualification covers the skills and knowledge required to perform the wide range of tasks performed in the manufacture of recreational vehicles.

Job roles/employment outcomes

The Certificate III in Recreational Vehicle Manufacture has been developed as a trade level qualification for use in MSA07 Manufacturing Training Package. This qualification has been developed in response to an industry request. People with this qualification would be expected to work under supervision manufacturing recreational vehicles, including:

- motor homes
- caravans
- camper trailers
- slide-ons
- fifth wheelers

to meet Australian requirements, such as road worthiness and the Australian Design Rule (ADR). They will analyse the manufacturing requirements and then carry them out.

They may work in a large manufacturing organisation or a smaller workshop.

Application

The sector typically manufactures recreational vehicles as required. This may include special/custom orders or standard manufacturer models. They may also specify and access outside specialist services, for example, for spray painting or licence requirements.

Recreational vehicles may be made from a frame (timber, aluminium or steel) and skin (aluminium or fibre composite) or a manufactured wall panel or some other technology. They are typically mounted on a steel chassis. Fittings are typically timber/particle board but may be any other suitable material.

People with this qualification may be expected to:

- carry out the various stages in recreational vehicle manufacture
- undertake modifications/refits to a recreational vehicle
- prepare a recreational vehicle for sale.

This work will generally be undertaken in a factory or workshop environment.

Training programs for this qualification are suitable to be undertaken as part of a formal training contract with an employer under an Australian Traineeship or Apprenticeship arrangement.

Pathways into the qualification

This qualification may be accessed by direct entry.

The units of competency contained within this qualification are common with other qualifications and credit should be granted towards this qualification where competency has already been achieved.

Credit should also be granted towards this qualification where competency has been achieved in units of competency contained within relevant skill sets.

The units of competency in this qualification reflect competencies which are practiced within the industry and recognition of prior learning (RPL) should be granted where there is sufficient evidence of competency from work-based experience.

Pathways from the qualification

Further qualification pathways from this qualification include MSA40510 Certificate IV in Recreational Vehicles.

Additional qualification advice

MSA41108 Certificate IV in Competitive Manufacturing is available for team leaders or others who need a more generalist qualification covering the application of good manufacturing practice and lean principles.

Licensing considerations

Units of competency in this qualification provide the underpinning knowledge and skills for various required licenses. Local regulations should be checked for details.

Pathways Information

Not applicable.

Licensing/Regulatory Information

Not applicable.

Entry Requirements

Not applicable.

Employability Skills Summary

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
Employability Skill	Industry/enterprise requirements for this qualification
Communication	• Maintaining communication about multiple subjects and with multiple audiences • Completing incident and other reports • Using technical and manufacturer information • Collecting, analysing and organising information • Communicating ideas and information • Using and contributing to workplace documentation • Maintaining workplace records
Teamwork	• Identifying and describing own role and role of others • Working within a team • Resolving conflicts between team members • Using teamwork strategies
Problem solving	• Recognising problems or potential problems • Determining problems needing priority action • Referring problems outside area of responsibility to appropriate person, with possible causes • Identifying appropriate theory base for problem • Seeking information and assistance as required to solve problems • Solving problems within area of responsibility • Following through items initiated until final resolution has occurred • Identifying and isolating faults in equipment • Using a range of formal problem-solving techniques
Initiative and enterprise	• Identifying the most appropriate process conditions for equipment • Determining problems needing action • Recommending required action • Reporting problems outside area of responsibility • Distinguishing between causes of faults
Planning and organising	• Prioritising actions to achieve required outcomes • Planning own work requirements and assisting others to plan theirs • Planning and organising activities

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
	- Identifying tasks to achieve team goals - Organising allocation of tasks - Monitoring completion of allocated tasks - Developing and adjusting a production schedule
Self-management	- Planning own work requirements from job requests - Operating within appropriate time constraints and work standards - Selecting and using appropriate equipment, materials, processes and procedures - Planning to ensure effective production - Applying standard procedures - Identifying documenting and monitoring resource requirements - Recognising limitations and seeking timely advice
Learning	- Asking questions to gain information - Identifying sources of information to expand knowledge and understanding - Participating in improvement procedures - Participating in development of continuous improvement strategies - Helping others develop competency
Technology	- Operating and adjusting equipment - Starting up and shutting down equipment - Setting up equipment - Monitoring quality - Understanding function and operating principles of equipment - Maintaining workplace records

Packaging Rules

Packaging Rules

To be awarded the Certificate III in Recreational Vehicle Manufacture competency must be achieved in **twenty two (22)** units of competency:

- three (3)** core units of competency
- nineteen (19)** elective units of competency, as specified below:

- a minimum of **eight (8)** units of competency must be selected from Group A
- the balance of units, to a maximum of **eleven (11)** may be selected from:
- units not previously selected from Group A
- Group B units listed below.

Note: Up to **four (4)** elective units of competency may be selected from this Training Package, other endorsed Training Packages and accredited courses, as specified in Groups A and B.

Note: Where prerequisite units are identified, they must be counted in the total number of units required for completion of the qualification.

Core units of competency

Unit code	Unit title	Prerequisites
MSAENV272B	Participate in environmentally sustainable work practices	
MSAPMOHS200A	Work safely	
MSAPMSUP102A	Communicate in the workplace	

Elective units of competency

Group A

Unit code	Unit title	Prerequisites
AUMGTT001	Apply trim to vehicle components	
AURETR2010	Fabricate, test and repair wiring harnesses and looms	
AURTTA3017	Carry out vehicle safety and roadworthy inspection	
AURVTN2005	Remove and fit protector mouldings, transfers and decals	
AURVTP2007	Apply paint touch-up techniques	
AURVTT3015	Fabricate canvas products	

Unit code	Unit title	Prerequisites
AURVTT3016	Fabricate frame structures	
AURVTT3019	Fabricate and install canopies and curtains	
AURVTG3011	Install side windows	
MEM03001B	Perform manual production assembly	
MEM03003B	Perform sheet and plate assembly	*
MEM05005B	Carry out mechanical cutting	*
MEM05012C	Perform routine manual metal arc welding	
MEM05050B	Perform routine gas metal arc welding	
MEM05052A	Apply safe welding practices	
MEM07015B	Set computer controlled machines/processes	*
MEM07024B	Operate and monitor machine/process	
MEM07028B	Operate computer controlled machines/processes	*
MEM10002B	Terminate and connect electrical wiring	*
MEM11010B	Operate mobile load shifting equipment	
MEM12002B	Perform electrical/electronic measurement	
MEM12006C	Mark off/out (general engineering)	*
MEM12023A	Perform engineering measurements	
MEM18001C	Use hand tools	
MEM18002B	Use power tools/hand held operations	
MSAPMOPS101A	Make measurements	
MSARVS201A	Install LP gas systems in a recreational vehicle	
Up to two (2) relevant elective units of competency may be selected from this Training Package, other endorsed Training Packages and accredited courses, where they are available for		

Unit code	Unit title	Prerequisites
inclusion at Certificate III.		

Group B

Unit code	Unit title	Prerequisites
MEM09002B	Interpret technical drawing	
MEM11011B	Undertake manual handling	
MEM14004A	Plan to undertake a routine task	
MEM15004B	Perform inspection	
MEM15024A	Apply quality procedures	
MSS402021A	Apply Just in Time procedures	
MSS402040A	Apply 5S procedures	
MSS402080A	Undertake root cause analysis	
MSAPMOHS220A	Provide initial first aid response	
MSAPMOPS212A	Use enterprise computers or data systems	
MSAPMSUP100A	Apply workplace procedures	
MSAPMSUP101A	Clean workplace or equipment	
MSAPMSUP106A	Work in a team	
MSAPMSUP280A	Manage conflict at work	
MSAPMSUP291A	Participate in continuous improvement	
MSARVS301A	Develop and update caravan industry knowledge	
MSARVG201A	Tow a recreational vehicle safely	
MSARVT201A	Apply technical knowledge of recreational	

Unit code	Unit title	Prerequisites
	vehicle manufacturing to work activities	
PMBPROD221B	Operate rotational moulding equipment	
PMBPROD321B	Produce rotational moulded products	*
SIRXSLS002A	Advise on products and services	
TAEDEL301A	Provide work skill instruction	
TLID2010A	Operate a forklift	
Up to two (2) relevant elective units of competency may be selected from this Training Package, other endorsed Training Packages and accredited courses, where they are available for inclusion at Certificate III.		

MSA30710 Certificate III in Recreational Vehicle and Accessories Retailing

Modification History

Release 5 - Imported units updated to current releases.

Release 4 - Imported elective units replaced by current versions. Equivalent.

Release 3 - Minor formatting. Imported unit version code updated.

Release 2 - Imported unit code updated.

Description

This qualification covers the skills and knowledge designed to reflect the role of a sales consultant in the retail sales of recreational vehicles and accessories.

Job roles/employment outcomes

The Certificate III in Recreational Vehicle and Accessories Retailing has been developed as a trade level qualification for use in MSA07 Manufacturing Training Package. This qualification has been developed in response to an industry request. People with this qualification would be expected to work under supervision in the sale of recreational vehicles and accessories, including:

- motor homes
- caravans
- camper trailers
- slide-ons
- fifth wheelers

to meet Australian requirements, such as road worthiness and the Australian Design Rule (ADR). They will analyse the customer's requirements and then carry them out.

They may work in a service and repair facility or a manufacturer's factory undertaking sales work. Sales may be for a new recreational vehicle, a second-hand/refurbished recreational vehicle or spare parts and accessories. In some cases selling of the recreational vehicle may also include possible modifications which could be made to the recreational vehicle.

Application

The sector typically manufactures, services and repairs any recreational vehicle as required. Recreational vehicle sales requires specialised knowledge not only of the available range of recreational vehicle models and accessories but of the legal requirements associated with weight, towing and vehicle capacity.

Recreational vehicles may be made from a frame (timber, aluminium or steel) and skin (aluminium or fibre composite) or a manufactured wall panel or some other technology. They are typically mounted on a steel chassis. Fittings are typically timber/particle board but may be any other suitable material.

People with this qualification may be expected to:

- sell a new or second-hand recreational vehicle
- suggest modifications/refits to a recreational vehicle
- prepare a recreational vehicle for sale/resale
- sell spare parts and accessories.

This work will generally be undertaken in a workshop or showroom environment.

Training programs for this qualification are suitable to be undertaken as part of a formal training contract with an employer under an Australian Traineeship or Apprenticeship arrangement.

Pathways into the qualification

This qualification may be accessed by direct entry.

The units of competency contained within this qualification are common with other qualifications and credit should be granted towards this qualification where competency has already been achieved.

Credit should also be granted towards this qualification where competency has been achieved in units of competency contained within relevant skill sets.

The units of competency in this qualification reflect competencies which are practiced within the industry and recognition of prior learning (RPL) should be granted where there is sufficient evidence of competency from work-based experience.

Pathways from the qualification

Further qualification pathways from this qualification include MSA40710 Certificate IV in Recreational Vehicle and Accessories Retailing.

Additional qualification advice

MSA41108 Certificate IV in Competitive Manufacturing is available for team leaders or others who need a more generalist qualification covering the application of good manufacturing practice and lean principles.

Licensing considerations

Units of competency in this qualification provide the underpinning knowledge and skills for various required licenses. Local regulations should be checked for details.

Pathways Information

Not applicable.

Licensing/Regulatory Information

Not applicable.

Entry Requirements

Not applicable.

Employability Skills Summary

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
Employability Skill	Industry/enterprise requirements for this qualification
Communication	• Using questioning and active listening to ascertain and respond to customer needs to ensure customers enjoy a positive experience that reflects business values • Regularly carrying out verbal instructions from other team members and supervisors • Reading and interpreting simple workplace documents, completing simple written workplace forms and sharing work-related information with other team members
Teamwork	• Effectively participating in retail store teams • working independently to complete own tasks and supporting other team members where appropriate • Leading small retail teams, where required, in the context of the job role • Mentoring and supporting other team members
Problem solving	• Demonstrating sensitivity to customer needs and concerns • Anticipating problems and acting to avoid them where possible • Solving a range of operational retail store problems individually or in the context of a team structure where, after clarification, existing policies and infrastructure may be applied to source information and resources and develop practical and sustainable solutions
Initiative and enterprise	• Looking for opportunities to do things better and suggesting ideas to other team members and supervisors in the context of the job role • Translating ideas into action by positively accepting and adapting to changes in procedures or arrangements at the store level
Planning and organising	• Establishing and communicating clear goals and deliverables for self and team members within the context of organisation objectives and the current store situation • Coordinating resources to ensure that work is carried out according to timelines and priorities • Coordinating and/or implementing changes arising from continuous improvement processes
Self-management	• Understanding how a personal job role fits into the context of

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
	the wider business values and directions • Working within the store culture by practising inclusive behaviour, effective management of personal presentation, hygiene and time • Efficiently prioritising and completing delegated tasks • Maintaining own knowledge of the job role, reviewing own performance and actively seeking and acting upon advice and guidance
Learning	• Identifying personal strengths and weaknesses in the context of the job role and recognising how to personally learn best at work • Seeking opportunities for formal education in the context of a current role or future retail job opportunities • Accepting opportunities to learn new ways of doing things and sharing knowledge and skills with other store team members
Technology	• Using of point-of-sale systems and/or selecting and using a range of other retail technology in the context of available equipment and store procedures • Recognising and reporting faulty equipment and following store occupational health and safety (OHS) procedures

Packaging Rules

Packaging Rules

To be awarded the Certificate III in Recreational Vehicle and Accessories Retailing competency must be achieved in **twenty two (22)** units of competency:

- **three (3)** core units of competency
- **nineteen (19)** elective units of competency, as specified below:
 - a minimum of **thirteen (13)** units of competency must be selected from Group A
 - the balance of units, to a maximum of **six (6)** may be selected from:
- units not previously selected from Group A
- Group B units listed below.

Note: Up to **four (4)** elective units of competency may be selected from this Training Package, other endorsed Training Packages and accredited courses, as specified in Groups A and B.

Note: Where prerequisite units are identified, they must be counted in the total number of units required for completion of the qualification.

Core units of competency

Unit code	Unit title	Prerequisites
MSAENV272B	Participate in environmentally sustainable work practices	
MSAPMOHS200A	Work safely	
MSAPMSUP102A	Communicate in the workplace	

Elective units of competency

Group A

Unit code	Unit title	Prerequisites
AUMANA001	Prepare and document quotations	
AURACA2001	Establish relations with customers	
AURC341903A	Apply relevant finance, leasing and insurance contracts/policies	
AURACA3002	Establish customer requirements of a complex nature	
AURACA3003	Build customer relations	
AURAMA3004	Maintain business image	
AURAMA4005	Manage complex customer issues	
AURSCA2002	Present stock and sales area	
AURSCA2003	Apply sales procedures	

Unit code	Unit title	Prerequisites
AURSCA2004	Carry out cash, credit and funds transfers	
AURSCA2005	Sell products	
AURSCA2006	Promote products and services	
AURSAA2001	Process customer complaints	
BSBCUS501C	Manage quality customer service	
SIRXCCS201	Apply point-of-sale handling procedures	
SIRXINV004A	Buy merchandise	
SIRXRSK001A	Minimise theft	
SIRXRSK002A	Maintain store security	
SIRXSLS002A	Advise on products and services	
Up to two (2) relevant elective units of competency may be selected from this Training Package, other endorsed Training Packages and accredited courses, where they are available for inclusion at Certificate III.		

Group B

Unit code	Unit title	Prerequisites
AURSCA2001	Select automotive parts and products	
AURSLA2001	Apply legal requirements relating to product sales	
AURSBA3002	Apply automotive parts interpretation process	
AURTTA3017	Carry out vehicle safety and roadworthy inspection	
MSAPMOHS220A	Provide initial first aid response	

Unit code	Unit title	Prerequisites
MSAPMOPS212A	Use enterprise computers or data systems	
MSAPMSUP100A	Apply workplace procedures	
MSAPMSUP106A	Work in a team	
MSAPMSUP280A	Manage conflict at work	
MSAPMSUP291A	Participate in continuous improvement	
MSARVS301A	Develop and update caravan industry knowledge	
MSARVG201A	Tow a recreational vehicle safely	
SITXMPR401	Coordinate production of brochures and marketing materials	
SITXMPR402	Create a promotional display or stand	
UEGNSG604B	Fill gas cylinders	
Up to two (2) relevant elective units of competency may be selected from this Training Package, other endorsed Training Packages and accredited courses, where they are available for inclusion at Certificate III.		

MSA40108 Certificate IV in Manufacturing Technology

Modification History

Version 4 - Imported elective units replaced by current versions. Equivalent.

Version 3 - MSACM units replaced by MSS units from MSS11v2 Sustainability Training Package.

Description

This qualification is suitable for delivery as part of a two year Technology Cadetship, or can be undertaken through an Australian Apprenticeship arrangement.

This qualification has five specialist streams available. These are:

- CAD/Drafting
- Manufacturing Operations
- Laboratory Operations
- Technical Officer
- Polymer Technology.

Each stream offers an opportunity for significant choice in electives and each stream requires the same core units to be completed.

Note:

- The minimum requirements for the Certificate III in Manufacturing Technology can also be met by holders of the *Certificate III in Engineering - Technician* from the Metal and Engineering Training Package.
-

Pathways Information

Not applicable.

Licensing/Regulatory Information

Not applicable.

Entry Requirements

Not applicable.

Employability Skills Summary

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

Certificate IV in Manufacturing Technology

The following table contains a summary of the Employability Skills as identified by the manufacturing technology related industries for this qualification. This table should be interpreted in conjunction with the detailed requirements of each unit of competency packaged in this qualification. The outcomes described here are broad industry requirements that reflect skill requirements for this level.

Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	• Complete workplace documentation and records • Use communication technologies efficiently • Develop work instructions, specifications and procedures • Demonstrate effective and appropriate communication and interpersonal skills when dealing with people from NESB • Communicate with all team members • Demonstrate effective and appropriate communication and interpersonal skills when dealing with clients • Use most appropriate communication method given priority, cost and customer facilities • Access, interpret and apply technical information
Teamwork	• Work cooperatively with people of different ages, gender, race or religion • Liaise with and provide support to other team members • Work as part of a team • Identify and manage performance required to meet internal and external customer needs in own work and team • Manage technical processes and provide problem solving support to others
Problem solving	• Investigate problem causes • Identify, rectify or report potential difficulties associated with manufacture of products or provision of services • Identify environmental features, regulations, insurance requirements, legal requirements and other factors which may affect the product or service to be provided • Use material and process knowledge to solve problems • Identify hazards and suggest control measures

Employability Skill	Industry/enterprise requirements for this qualification include:
	• Determine production requirements • Conduct tests and analyse results to determine and assess production requirements
Initiative and enterprise	• Seek feedback on products, processes and procedures • Gather and analyse information and apply to work related processes • Record information on the quality and other indicators of products • Support achievement of efficient production processes • Determine and act on situations requiring further information or problem solving
Planning and organizing	• Identify hazards and implement appropriate hazard control measures • Demonstrate time management skills • Source and prepare materials and resources • Sequence work to maximise safety and productivity
Self management	• Interpret and apply relevant acts and regulations • Keep the work area clean and tidy at all times • Monitor own work and work of team and identify and act on any quality issues • Understand own work activities • Manage own time to meet deadlines • Implement workplace procedures and instructions
Learning	• Implement learning activities as appropriate to ensure achievement of specified production requirements • Assess competencies in meeting job requirements • Be supportive, assertive and use interpersonal skills • Identify own training needs and seek skill development if required • Gather feedback to own work to assess effectiveness in meeting objectives and integrate information into own practice
Technology	• Use computer software applications effectively • Work with technology safely and according to workplace standards

Employability Skill	Industry/enterprise requirements for this qualification include:
	• Help others use technology efficiently and safely • Use testing technology

Packaging Rules

Packaging Rules

To be awarded a Certificate IV in Manufacturing Technology, competency must be achieved in **sixteen (16)** units of competency:

- **four (4)** core units of competency
- **twelve (12)** elective units of competency, chosen as described below.

Core units

The following **four (4)** units must be chosen.

Unit code	Unit title
MEM16008A	Interact with computing technology
MEM30012A	Apply mathematical techniques in a manufacturing, engineering or related environment
MSS402051A	Apply quality standards
MSAENV272B	Participate in environmentally sustainable work practices

Prerequisites

Units marked with an asterisk have one or more prerequisite requirements. The prerequisites for these units are to be counted in the total number of units required in the elective group. Please refer to the individual units for details.

Elective units

Group A - specialist streams

Choose **twelve (12)** elective units as specified to achieve a specialist stream.

Note:

- All units from each specialist stream are available in Group B as General Electives.
- Three elective units may also be chosen from other qualifications in this Training Package, other endorsed Training Packages and accredited courses, as specified below.

CAD/drafting specialist stream

Select **twelve (12)** elective units:

- a minimum of **ten (10)** from the list below
- the balance may be chosen from Group B General Electives.

Unit code	Unit title	Prerequisites
AUM4003A	Interpret customer requirements	
LMTGN4002A	Participate in product engineering	
MEM12024A	Perform computations	
MEM16006A	Organise and communicate information	
MEM30031A	Operate computer-aided design (CAD) system to produce basic drawing elements	
MEM30032A	Produce basic engineering drawings	
MEM30033A	Use computer-aided design (CAD) to create and display 3-D models	*
MEM30005A	Calculate force systems within simple beam structures	*
MEM30006A	Calculate stresses in simple structures	*
MEM30007A	Select common engineering materials	
MEM30008A	Apply basic economic and ergonomic concepts to evaluate engineering applications	
MEM30010A	Set up basic hydraulic circuits	
MEM30011A	Set up basic pneumatic circuits	
MEM30013A	Assist in the preparation of a basic workplace layout	

Unit code	Unit title	Prerequisites
MEM30018A	Undertake basic process planning	
MEM30019A	Use resource planning software systems in manufacturing	*
MEM30020A	Develop and manage a plan for a simple manufacturing related project	
MEM30025A	Analyse a simple electrical system circuit	*
MSS402002A	Sustain process improvements	
MSS402030A	Apply cost factors to work practices	
UEPMNT420A	Perform electrical/electronic drafting	
	One (1) relevant specialist elective unit may be chosen from other qualifications in this Training Package, other endorsed Training Packages and accredited courses.	

Manufacturing operations specialist stream

Select **twelve (12)** elective units:

- a minimum of **ten (10)** from the list below
- the balance may be chosen from Group B General Electives.

Unit code	Unit title	Prerequisites
FDFOP2005A	Work in a socially diverse environment	
MEM15001B	Perform basic statistical quality control	
MEM16006A	Organise and communicate information	
MEM30014A	Apply basic just in time systems to the reduction of waste	
MEM30015A	Develop recommendations for basic set up time improvements	
MEM30016A	Assist in the analysis of a supply chain	
MEM30017A	Use basic preventative maintenance techniques and tools	
MEM30018A	Undertake basic process planning	
MEM30019A	Use resource planning software systems in manufacturing	*
MEM30020A	Develop and manage a plan for a simple manufacturing related project	
MEM30021A	Prepare a simple production schedule	
MEM30023A	Prepare a simple cost estimate for a manufactured product	
MEM30024A	Participate in quality assurance techniques	*
MSS402001A	Apply competitive systems and practices	

Unit code	Unit title	Prerequisites
MSS402002A	Sustain process improvements	
MSS402020A	Apply quick changeover procedures	
MSS402030A	Apply cost factors to work practices	
MSS402031A	Interpret product costs in terms of customer requirements	
MSS402050A	Monitor process capability	
MSS402060A	Use planning software systems in operations	
MSS402061A	Use SCADA systems in operations	
MSS402080A	Undertake root cause analysis	
MSS403002A	Ensure process improvements are sustained	
MSS403030A	Improve cost factors in work practices	
MSAENV472B	Implement and monitor environmentally sustainable work practices	
	One relevant specialist elective unit may be chosen from other qualifications in this Training Package, other endorsed Training Packages and accredited courses.	

Laboratory operations specialist stream

Select **twelve (12)** elective units:

- a minimum of **ten (10)** from the list below
- the balance may be chosen from Group B General Electives.

Unit code	Unit title	Prerequisites
LMTGN4016A	Contribute to the development of products or processes	
MEM30012A	Apply mathematical techniques in a manufacturing engineering or related environment	
MEM30019A	Use resource planning software systems in manufacturing	*
MEM30024A	Participate in quality assurance techniques	*
MSS402061A	Use SCADA systems in operations	
MSL913001A	Communicate with other people	
MSL913002A	Plan and conduct laboratory/field work	
MSL922001A	Record and present data	
MSL933001A	Maintain the laboratory/field workplace fit for purpose	
MSL933002A	Contribute to the achievement of quality objectives	
MSL933003A	Apply critical control point requirements	
MSL934001A	Contribute to the ongoing development of HACCP plans	
MSL934002A	Apply quality system and continuous improvement processes	
MSL943001A	Work safely with instruments that emit ionising radiation	

Unit code	Unit title	Prerequisites
MSL943002A	Participate in laboratory/field workplace safety	
MSL952001A	Collect routine site samples	
MSL952002A	Handle and transport samples or equipment	
MSL953001A	Receive and prepare samples for testing	
MSL954001A	Obtain representative samples in accordance with sampling plan	
MSL963001A	Operate basic handblowing equipment	
MSL963002A	Repair glass apparatus using simple glassblowing equipment	
MSL973001A	Perform basic tests	
MSL973002A	Prepare working solutions	
MSL973003A	Prepare culture media	
MSL973004A	Perform aseptic techniques	
MSL973005A	Assist with fieldwork	
MSL973006A	Prepare trial batches for evaluation	
MSL973007A	Perform microscopic examination	
MSL973012A	Assist with geotechnical site investigations	
MSL974001A	Prepare, standardise and use solutions	
MSL974002A	Conduct geotechnical site investigations	*
MSL974003A	Perform chemical tests and procedures	
	One relevant specialist elective unit may be chosen from other qualifications in this Training Package, other endorsed Training Packages and accredited courses.	

Technical officer specialist stream

Select **twelve (12)** elective units:

- a minimum of **ten (10)** from the list below
- the balance may be chosen from Group B General Electives.

Unit code	Unit title	Prerequisites
LMTGN4016A	Contribute to the development of products or processes	
MEM15001B	Perform basic statistical quality control	
MEM16006A	Organise and communicate information	
MEM30031A	Operate computer-aided design (CAD) system to produce basic drawing elements	
MEM30032A	Produce basic engineering drawings	
MEM30007A	Select common engineering materials	
MEM30008A	Apply basic economic and ergonomic concepts to engineering designs and applications	
MEM30009A	Contribute to the design of basic mechanical systems	*
MEM30010A	Set up basic hydraulic circuits	
MEM30011A	Set up basic pneumatic circuits	
MEM30013A	Assist in the design of basic workplace layout	
MEM30016A	Assist in the analysis of a supply chain	
MEM30017A	Use basic preventative maintenance techniques and tools	
MEM30018A	Undertake basic process planning	
MEM30019A	Use resource planning software systems in manufacturing	*

Unit code	Unit title	Prerequisites
MEM30020A	Develop and manage a plan for a simple manufacturing related project	
MEM30022A	Undertake supervised procurement activities	
MEM30023A	Prepare a simple cost estimate for a manufactured product	
MEM30024A	Participate in quality assurance techniques	*
MSS402031A	Interpret product costs in terms of customer requirements	
MSS402060A	Use planning software systems in operations	
MSS402061A	Use SCADA systems in operations	
MSS402080A	Undertake root cause analysis	
MSS403032A	Analyse manual handling processes	
	One relevant specialist elective unit may be chosen from other qualifications in this Training Package, other endorsed Training Packages and accredited courses.	

Polymer technology specialist stream

Select **twelve (12)** elective units:

- a minimum of **six (6)** from the list below
- the balance may be chosen from Group General Electives.

Unit code	Unit title	Prerequisites
LMTGN4016A	Contribute to the development of products or processes	
MEM15001B	Perform basic statistical quality control	
MEM16006A	Organise and communicate information	
MEM30031A	Operate computer-aided design (CAD) system to produce basic drawing elements	
MEM30032A	Produce basic engineering drawings	
MEM30007A	Select common engineering materials	
MEM30008A	Apply basic economic and ergonomic concepts to engineering designs and applications	
MEM30020A	Develop and manage a plan for a simple manufacturing related project	
	Up to two (2) relevant units may be chosen from the production units available at Certificate III or IV in the Plastics, Rubber & Cablemaking Training Package (PMB07), or its endorsed replacement. Note that any prerequisites are to be counted in the total number of units.	
	One (1) relevant specialist elective units may be chosen from other qualifications in this Training Package, other endorsed Training Packages and accredited courses.	

Note that for the polymer technology specialist stream, only one of the following general elective units may be chosen, not both.

Unit code	Unit title	Prerequisites
PMBPREP301C	Set up and prepare for production	
PMBPREP303C	Set up equipment for continuous production	

Group B - General electives

The balance of units for each specialist stream may be chosen from this list as specified below:

CAD/drafting: Up to two units

Manufacturing operations: Up to two units

Laboratory operations: Up to two units

Technical officer: Up to two units

Polymer technology: Up to six units

Unit code	Unit title	Prerequisites
AUM4003A	Interpret customer requirements	
FDFOP2005A	Work in a socially diverse environment	
LMTGN4002A	Participate in product engineering	
LMTGN4016A	Contribute to the development of products or processes	
MEM12024A	Perform computations	
MEM15001B	Perform basic statistical quality control	
MEM16006A	Organise and communicate information	

Unit code	Unit title	Prerequisites
MEM30031A	Operate computer-aided design (CAD) system to produce basic drawing elements	
MEM30032A	Produce basic engineering drawings	
MEM30033A	Use computer-aided design (CAD) to create and display 3-D models	*
MEM30005A	Calculate force systems within simple beam structures	*
MEM30006A	Calculate stresses in simple structures	*
MEM30007A	Select common engineering materials	
MEM30008A	Apply basic economic and ergonomic concepts to engineering designs and applications	
MEM30009A	Contribute to the design of basic mechanical systems	*
MEM30010A	Set up basic hydraulic circuits	
MEM30011A	Set up basic pneumatic circuits	
MEM30012A	Apply mathematical techniques in a manufacturing engineering or related environment	
MEM30013A	Assist in the preparation of a basic workplace layout	
MEM30014A	Apply basic just in time systems to the reduction of waste	
MEM30015A	Develop recommendations for basic set up time improvements	
MEM30016A	Assist in the analysis of a supply chain	
MEM30017A	Use basic preventative maintenance techniques and tools	
MEM30018A	Undertake basic process planning	

Unit code	Unit title	Prerequisites
MEM30019A	Use resource planning software systems in manufacturing	*
MEM30020A	Develop and manage a plan for a simple manufacturing related project	
MEM30021A	Prepare a simple production schedule	
MEM30022A	Undertake supervised procurement activities	
MEM30023A	Prepare a simple cost estimate for a manufactured product	
MEM30024A	Participate in quality assurance techniques	*
MEM30025A	Analyse a simple electrical system circuit	*
MSS402001A	Apply competitive systems and practices	
MSS402002A	Sustain process improvements	
MSS402020A	Apply quick changeover procedures	
MSS402030A	Apply cost factors to work practices	
MSS402031A	Interpret product costs in terms of customer requirements	
MSS402050A	Monitor process capability	
MSS402060A	Use planning software systems in operations	
MSS402061A	Use SCADA systems in operations	
MSS402080A	Undertake root cause analysis	
MSS403002A	Ensure process improvements are sustained	
MSS403030A	Improve cost factors in work practices	
MSS403032A	Analyse manual handling processes	

Unit code	Unit title	Prerequisites
MSAENV472B	Implement and monitor environmentally sustainable work practices	
MSL913001A	Communicate with other people	
MSL913002A	Plan and conduct laboratory/field work	
MSL922001A	Record and present data	
MSL933001A	Maintain the laboratory/field workplace fit for purpose	
MSL933002A	Contribute to the achievement of quality objectives	
MSL933003A	Apply critical control point requirements	
MSL934001A	Contribute to the ongoing development of HACCP plans	
MSL934002A	Apply quality system and continuous improvement processes	
MSL943001A	Work safely with instruments that emit ionising radiation	
MSL943002A	Participate in laboratory/field workplace safety	
MSL952001A	Collect routine site samples	
MSL952002A	Handle and transport samples or equipment	
MSL953001A	Receive and prepare samples for testing	
MSL954001A	Obtain representative samples in accordance with sampling plan	
MSL963001A	Operate basic handblowing equipment	
MSL963002A	Repair glass apparatus using simple glassblowing equipment	
MSL973001A	Perform basic tests	

Unit code	Unit title	Prerequisites
MSL973002A	Prepare working solutions	
MSL973003A	Prepare culture media	
MSL973004A	Perform aseptic techniques	
MSL973005A	Assist with fieldwork	
MSL973006A	Prepare trial batches for evaluation	
MSL973007A	Perform microscopic examination	
MSL973012A	Assist with geotechnical site investigations	
MSL974001A	Prepare, standardise and use solutions	
MSL974002A	Conduct geotechnical site investigations	*
MSL974003A	Perform chemical tests and procedures	
UEPMNT420A	Perform electrical/electronic drafting	
	A maximum of two (2) general electives may be imported from other qualifications in this Training Package, other endorsed Training Packages and accredited courses where those units are available at Certificate III.	

MSA40311 Certificate IV in Process Manufacturing

Modification History

Release 4 - Imported elective units updated to current releases.

Release 3 - Imported elective units updated to current versions. Equivalent.

Release 2 - MSACM units replaced by MSS units from MSS11v2 Sustainability Training Package. Imported unit version code updated.

Release 1 - New qualification

Description

This qualification covers the skills and knowledge required to perform a range of high level technical operations and manufacturing tasks required for producing products.

Job roles/employment outcomes

The MSA40311 Certificate IV in Process Manufacturing is intended for advanced production workers who use a range of equipment and are involved in solving complex problems which require theoretical knowledge, combined with an understanding of operating procedures directly related to producing products.

Application

This qualification is typically used to develop employees performing a technical role that includes the ability to work independently and conduct technical problem solving according to the needs of the work required to produce products.

This qualification is designed to develop employees who operate across more than one category within process manufacturing or other product conversion processes in manufacturing. Typical applications would be in chemical, hydrocarbons, refining, minerals processing, plastics, rubber, cabling, manufactured mineral products, and other areas as appropriate.

Non-technical team leaders, coordinators and supervisors may be better served by a qualification in competitive manufacturing.

Pathways Information

Pathways into the qualification

This qualification may be accessed by direct entry.

The units of competency contained within this qualification are common with other qualifications. In particular, the core units and most of the elective units are common to

qualifications in the three Process Manufacturing Training Packages (coded PMA, PMB and PMC). Where competency has already been achieved, credit will be granted towards this qualification.

The units of competency in this qualification reflect competencies which are practised within the industry and recognition of prior learning (RPL) should be granted where there is sufficient evidence of competency from work-based experience.

Pathways from the qualification

Further qualification pathways from this qualification include MSA50311 Diploma of Production Management.

The MSA51108 Diploma of Competitive Manufacturing (or latest version) is also appropriate for those needing a qualification covering manufacturing practice and lean principles.

Licensing/Regulatory Information

There are no specific licences that relate to this qualification. However, in some jurisdictions some units of competency in this qualification may have regulatory requirements. Local regulations should be checked for details.

Entry Requirements

Not applicable.

Employability Skills Summary

Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	• Complete workplace documentation and records • Use communication technologies efficiently • Develop work instructions, specifications and procedures • Communicate with all team members • Demonstrate effective and appropriate communication and interpersonal skills when dealing with clients • Use most appropriate communication method given priority, cost and customer facilities • Access, interpret and apply technical information
Teamwork	• Work cooperatively with people of different ages, gender, race or religion • Liaise with, and provide support to, other team members • Work as part of a team • Identify and manage performance required to meet internal and external customer needs in own work and team • Manage technical processes and provide problem solving support to others
Problem-solving	• Investigate problem causes • Identify, rectify or report potential difficulties associated with manufacture of products or provision of services • Identify environmental features, regulations, insurance requirements, legal requirements and other factors which may affect the product or service to be provided • Use material and process knowledge to solve problems • Identify hazards and suggest control measures • Determine production requirements • Conduct tests and analyse results to determine and assess production requirements
Initiative and enterprise	• Seek feedback on products, processes and procedures • Gather and analyse information and apply to work-related processes • Record information on the quality and other indicators of products • Support achievement of efficient production processes • Determine and act on situations requiring further

	information or problem solving
Planning and organising	• Identify hazards and implement appropriate hazard control measures • Demonstrate time management skills • Source and prepare materials and resources • Sequence work to maximise safety and productivity
Self-management	• Interpret and apply relevant Acts and regulations • Keep the work area clean and tidy at all times • Monitor own work and work of team and identify and act on any quality issues • Understand own work activities • Manage own time to meet deadlines • Implement workplace procedures and instructions
Learning	• Implement learning activities, as appropriate, to ensure achievement of specified production requirements • Assess competencies in meeting job requirements • Be supportive, assertive and use interpersonal skills • Identify own training needs and seek skill development if required • Gather feedback on own work to assess effectiveness in meeting objectives and integrate information into own practice
Technology	• Use computer software applications effectively • Work with technology safely and according to workplace standards • Help others use technology efficiently and safely • Use testing technology

Packaging Rules

To be awarded the MSA40311 Certificate IV in Process Manufacturing competency must be achieved in a total of **twenty six (26)** units of competency.

- **five (5)** core units of competency
- **twenty one (21)** elective units of competency, as specified below.

Elective units must include:

- a minimum of **four (4)** units from Group A
- the balance of units, to a maximum of **seventeen (17)** may be chosen from Groups A, B and C (with a maximum of eleven (11) units from Group C).

Up to **seven (7)** elective units may be chosen from other qualifications in this Training Package, other endorsed Training Packages and accredited courses, as specified below in Groups B and C.

Note: Units marked with an asterisk have one or more prerequisite requirements. Please refer to the individual units for details. Prerequisites are to be counted towards the total number required to complete the qualification.

Core units of competency

Unit code	Unit title
MSS402051A	Apply quality standards
MSAENV272B	Participate in environmentally sustainable work practices
MSAPMOHS200A	Work safely
MSAPMSUP200A	Achieve work outcomes
MSAPMSUP210A	Process and record information

Elective units of competency

Group A

Unit code	Unit title	Prerequisites
MSS403002A	Ensure process improvements are sustained	
MSS403010A	Facilitate change in an organisation implementing competitive systems and practices	
MSS403011A	Facilitate implementation of competitive systems and practices	
MSS403013A	Lead team culture improvement	
MSS403021A	Facilitate a Just in Time system	
MSS403030A	Improve cost factors in work practices	
MSS403040A	Facilitate and improve implementation of 5S	
MSS403041A	Facilitate breakthrough improvements	
MSS403051A	Mistake proof an operational process	
MSS404050A	Undertake process capability improvements	*
MSS404052A	Apply statistics to operational processes	
MSS404060A	Facilitate the use of planning software systems in a work area or team	
MSS404081A	Undertake proactive maintenance analyses	
MSS404082A	Assist in implementing a proactive maintenance strategy	
MSAENV472B	Implement and monitor environmentally sustainable work practices	
MSAPMOHS400A	Contribute to OHS management system	*
MSAPMOHS401A	Assess risk	
MSAPMOPS400A	Optimise process/plant area	*
MSAPMOPS401A	Trial new process or product	

MSAPMOPS404A	Co-ordinate maintenance	
MSAPMOPS405B	Identify problems in fluid power system	
MSAPMOPS406A	Identify problems in electronic control systems	
MSAPMPER400A	Coordinate permit process	*
MSAPMSUP400A	Develop and monitor quality systems	
MEM15001B	Perform basic statistical quality control	
MSL954001A	Obtain representative samples in accordance with a sampling plan	
MSL974003A	Perform chemical tests and procedures	
PMAOHS420B	Develop First Aid procedures and manage resources	
PMAOMIR407B	Audit incident preparedness and established response system	
PMAOMIR418B	Coordinate incident response	
PMAOMIR424B	Develop and maintain community relationships	
PMAOMIR430B	Conduct and assess incident exercises	
PMAOMIR444B	Develop incident containment tactics	
PMAOMIR449B	Monitor legal compliance obligations during incidents	
PMAOPS402A	Respond to abnormal process situations	*
PMAOPS405A	Operate complex control systems	
PMAOPS410B	Monitor remote production facilities	
PMAOPS411B	Manage plant shutdown and restart	
PMAOPS450B	Solve colour problems	
PMASUP410B	Develop plant documentation	
PMASUP420B	Minimise environmental impact of process	

PMASUP432B	Coordinate pipeline projects	
PMASUP440B	Commission/recommission plant	
PMASUP441C	Decommission plant	
PMASUP445A	Participate in HAZOP studies	*
PMBPROD430B	Trial a new die/tool	
PMBPROD431B	Trial a new, advanced or complex mould	
PMBTECH401B	Predict polymer properties and characteristics	*
PMBTECH402B	Set advanced or complex dies	*
PMBTECH403B	Test fibre-composites materials and laminates	
PMBTECH404B	Mould chemical resistant and/or fire retardant fibre-composites	*
PMBTECH405B	Repair damaged fibre-composites structures	*
PMBTECH406A	Diagnose production equipment problems	
PMC554020D	Design and prepare models, moulds and dies	
PMC554090B	Undertake simple refractory design	
PMC554091B	Analyse refractory failures	
PSPPM402B	Manage simple projects	

Group B

Unit code	Unit title	Prerequisites
MSAPMOHS300A	Facilitate the implementation of OHS for a work group	*
MSAPMOPS363A	Organise on site work	
MSAPMPER300C	Issue work permits	*
MSAPMSUP300A	Identify and implement opportunities to maximise production efficiencies	*
MSAPMSUP301A	Apply HACCP to the workplace	
MSAPMSUP303A	Identify equipment faults	
MSAPMSUP309A	Maintain and organise workplace records	
MSAPMSUP310A	Contribute to the development of plant documentation	
MSAPMSUP330A	Develop and adjust a production schedule	
MSAPMSUP382A	Provide coaching/mentoring in the workplace	
MSAPMSUP383A	Facilitate a team	
MSAPMSUP390A	Use structured problem solving tools	
MEM03001B	Perform manual production assembly	
MEM03006B	Set assembly stations	*
MEM09002B	Interpret technical drawing	
MEM09204A	Produce basic engineering detail drawings	*
MEM11005B	Pick and process order	
MEM11006B	Perform production packaging	
MEM11007B	Administer inventory procedures	
MEM12023A	Perform engineering measurements	
MEM15003B	Use improvement processes in team activities	*

MEM15004B	Perform inspection	
MSL973001A	Perform basic tests	
PMBPREP304C	Set a die	
PMBPROD347B	Produce composites using hand lamination	
PMBPROD380B	Produce composites using chopper gun/depositor	
PMBTECH301B	Use material and process knowledge to solve problems	
TAEASS401B	Plan assessment activities and processes	
TAEASS402B	Assess competence	
TAEASS403B	Participate in assessment validation	
TAEDEL301A	Provide work skill instruction	

A maximum of four (4) units may be selected from this Training Package, other endorsed Training Packages and accredited courses, where those units are aligned at Certificate III or IV.

Group C

Unit code	Unit title	Prerequisites
MSS402002A	Sustain process improvements	
MSS402020A	Apply quick changeover procedures	
MSS402021A	Apply Just in Time procedures	
MSS402030A	Apply cost factors to work practices	
MSS402040A	Apply 5S procedures	
MSS402050A	Monitor process capability	
MSS402060A	Use planning software systems in operations	
MSS402080A	Undertake root cause analysis	
MSAPMOHS100A	Follow OHS procedures	
MSAPMOHS110A	Follow emergency response procedures	
MSAPMOHS205A	Control minor incidents	
MSAPMOHS210B	Undertake first response to non-fire incidents	
MSAPMOHS212A	Undertake first response to fire incidents	
MSAPMOHS216A	Operate breathing apparatus	
MSAPMOHS217A	Gas test atmospheres	
MSAPMOHS220A	Provide initial first aid response	
MSAPMOPS100A	Use equipment	
MSAPMOPS101A	Make measurements	
MSAPMOPS102A	Perform tasks to support production	
MSAPMOPS200A	Operate equipment	
MSAPMOPS212A	Use enterprise computers or data systems	
MSAPMPER200C	Work in accordance with an issued permit	

MSAPMPER201A	Monitor and control work permits	
MSAPMPER202A	Observe permit work	*
MSAPMPER205C	Enter confined space	*
MSAPMSUP100A	Apply workplace procedures	
MSAPMSUP101A	Clean workplace or equipment	
MSAPMSUP102A	Communicate in the workplace	
MSAPMSUP106A	Work in a team	
MSAPMSUP172A	Identify and minimise environmental hazards	
MSAPMSUP201A	Receive or despatch goods	
MSAPMSUP204A	Pack products or materials	
MSAPMSUP205A	Transfer loads	
MSAPMSUP230A	Monitor process operations	
MSAPMSUP240A	Undertake minor maintenance	
MSAPMSUP273A	Handle goods	
MSAPMSUP280A	Manage conflict at work	
MSAPMSUP291A	Participate in continuous improvement	
MSAPMSUP292A	Sample and test materials and product	
FPICOT2238A	Cut materials with a hand-held chainsaw	
LMTGN2008B	Coordinate work of team/section	
MEM03003B	Perform sheet and plate assembly	
MEM03004B	Perform electronic/electrical assembly (production)	
MEM13003B	Work safely with industrial chemicals and materials	
MEM16006A	Organise and communicate information	

MEM16007A	Work with others in a manufacturing, engineering or related environment	
MEM16008A	Interact with computing technology	
MEM18001C	Use hand tools	
MEM18002B	Use power tools/hand held operations	
PMAOPS280B	Interpret process plant schematics	
PMBHAN103C	Shift materials safely by hand	
PMBPROD247C	Hand lay up composites	
RIIRIS201B	Conduct local risk control	
TLID2010A	Operate a forklift	

A maximum of **three (3)** units may be selected from this Training Package, other endorsed Training Packages and accredited courses, where those units are aligned at Certificate II or III.

Custom Content Section

Not applicable.

MSA40510 Certificate IV in Recreational Vehicles

Modification History

Release 5 - Imported elective unit updated to current release.

Release 4 - Imported elective units replaced by current versions. Prerequisites replaced by an asterisk. Equivalent.

Release 3 - MSACM units replaced by MSS units from MSS11v2 Sustainability Training Package. Imported unit version code updated.

Release 2 - Imported unit code updated.

Description

This qualification covers the skills and knowledge required to facilitate the performance of, and to perform, high level manufacturing, service and repair tasks required for recreational vehicles.

Job roles/employment outcomes

The Certificate IV in Recreational Vehicles has been developed as a post-trade level qualification for use in MSA07 Manufacturing Training Package. This qualification has been developed in response to an industry request. People with this qualification would be expected to lead work teams and provide supervision of people undertaking the manufacture, service and repair of recreational vehicles, including:

- motor homes
- caravans
- camper trailers
- slide-ons
- fifth wheelers

to meet Australian requirements, such as road worthiness and the Australian Design Rule (ADR). They will provide technical leadership as well as undertake some tasks themselves.

They may work in a service and repair facility or a manufacturer's factory. Work may include building a new recreational vehicle, repairs for an insurance claim or other repairs, modifying an existing recreational vehicle or undertaking routine servicing.

Application

The sector typically manufactures, services and repairs recreational vehicles as required. This may apply to the recreational vehicle body, fittings and running gear. Repairs may be in response to a road (or other) accident, hail damage, vehicle modification or routine servicing. They may also specify and access outside specialist services, for example, for spray painting or licence requirements.

Recreational vehicles may be made from a frame (timber, aluminium or steel) and skin (aluminium or fibre composite) or a manufactured wall panel or some other technology. They are typically mounted on a steel chassis which may be manufactured by the recreational vehicle manufacturer or bought. Fittings are typically timber/particle board but may be any other suitable material.

People with this qualification may be expected to lead and also undertake one or more of:

- manufacture of a recreational vehicle
- insurance repairs
- other repairs
- work under warranty
- modifications/refits to the recreational vehicle
- routine servicing
- preparation of a recreational vehicle for sale/resale.

This work will generally be undertaken in a workshop environment or factory.

Training programs for this qualification are suitable to be undertaken as part of a formal training contract with an employer under an Australian Traineeship or Apprenticeship arrangement.

Pathways into the qualification

This qualification may be accessed by direct entry.

The units of competency contained within this qualification are common with other qualifications and credit should be granted towards this qualification where competency has already been achieved.

Credit should also be granted towards this qualification where competency has been achieved in units of competency contained within relevant skill sets.

The units of competency in this qualification reflect competencies which are practiced within the industry and recognition of prior learning (RPL) should be granted where there is sufficient evidence of competency from work-based experience.

Pathways from the qualification

Further qualification pathways from this qualification include MSA50510 Diploma of Recreational Vehicles.

Additional qualification advice

MSA41108 Certificate IV in Competitive Manufacturing is available for team leaders or others who need a more generalist qualification covering the application of good manufacturing practice and lean principles.

Licensing considerations

Units of competency in this qualification provide the underpinning knowledge and skills for various required licenses. Local regulations should be checked for details.

Pathways Information

Not applicable.

Licensing/Regulatory Information

Not applicable.

Entry Requirements

Not applicable.

Employability Skills Summary

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
Employability Skill	Industry/enterprise requirements for this qualification
Communication	• Completing workplace documentation and records • Using communication technologies efficiently • Developing work instructions, specifications and procedures • Communicating with all team members • Demonstrating effective and appropriate communication and interpersonal skills when dealing with clients • Using most appropriate communication method given priority, cost and customer facilities • Accessing, interpreting and applying technical information
Teamwork	• Working cooperatively with people of different ages, gender, race or religion • Liaising with and providing support to other team members • Working as part of a team • Identifying and managing performance required to meet internal and external customer needs in own work and team • Managing technical processes and providing problem-solving support to others
Problem solving	• Investigating problem causes • Identifying, rectifying or reporting potential difficulties associated with manufacture of products or provision of services • Identifying environmental features, regulations, insurance requirements, legal requirements and other factors which may affect the product or service to be provided • Using material and process knowledge to solve problems • Identifying hazards and suggesting control measures • Determining production requirements • Conducting tests and analysing results to determine and assess production requirements
Initiative and enterprise	• Seeking feedback on products, processes and procedures • Gathering and analysing information and applying to work-related processes • Recording information on the quality and other indicators of products • Supporting achievement of efficient production processes

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
	• Determining and acting on situations requiring further information or problem solving
Planning and organising	• Identifying hazards and implementing appropriate hazard control measures • Demonstrating time-management skills • Sourcing and preparing materials and resources • Sequencing work to maximise safety and productivity
Self-management	• Interpreting and applying relevant Acts and regulations • Keeping the work area clean and tidy at all times • Monitoring own work and work of team, and identifying and acting on any quality issues • Understanding own work activities • Managing own time to meet deadlines • Implementing workplace procedures and instructions
Learning	• Implementing learning activities as appropriate to ensure achievement of specified production requirements • Assessing competencies in meeting job requirements • Being supportive and assertive, and using interpersonal skills • Identifying own training needs and seeking skill development if required • Gathering feedback on own work to assess effectiveness in meeting objectives and integrating information into own practice
Technology	• Using computer software applications effectively • Working with technology safely and according to workplace standards • Helping others use technology efficiently and safely • Using testing technology

Packaging Rules

Packaging Rules

To be awarded the Certificate IV in Recreational Vehicles competency must be achieved in **thirty two (32)** units of competency:

- **three (3)** core units of competency
- **twenty nine (29)** elective units of competency, as specified below:
 - a minimum of **two (2)** units of competency must be selected from Group A
 - a maximum of **fourteen (14)** units of competency may be selected from Groups C and D, with a maximum of **six (6)** from Group D
 - the balance of units must be selected from Groups A and B to bring the total to twenty nine (29).

Note: Up to **seven (7)** elective units of competency may be selected from this Training Package, other endorsed Training Packages and accredited courses, as specified in Groups A, B, C and D.

Note: Where prerequisite units are identified, they must be counted in the total number of units required for completion of the qualification.

Core units of competency

Unit code	Unit title	Prerequisites
MSAENV272B	Participate in environmentally sustainable work practices	
MSAPMOHS200A	Work safely	
MSAPMSUP102A	Communicate in the workplace	

Elective units of competency

Group A

Unit code	Unit title	Prerequisites
AURATA3005	Estimate complex jobs	
AURANN4001	Prepare a vehicle repair quotation	
AURV365356A	Read and interpret vehicle body repair estimation/quotation	
AURVTN4032	Determine vehicle body damage and recommend	

Unit code	Unit title	Prerequisites
	repair procedures	
MEM03006B	Set assembly stations	*
MEM16012A	Interpret technical specifications and manuals	
MSARVS401A	Assess and quote to service a recreational vehicle	
Up to one (1) relevant elective unit of competency may be selected from this Training Package, other endorsed Training Packages and accredited courses, where it is available for inclusion at Certificate IV.		

Group B

Unit code	Unit title	Prerequisites
AUMGTT001	Apply trim to vehicle components	
AURETR2015	Inspect and service batteries	
AURETR2012	Test and repair basic electrical circuits	
AURETR2010	Fabricate, test and repair wiring harnesses and looms	
AURETB3001	Repair electric braking systems	
AURTTB2001	Inspect and service braking systems	
AURTTD2004	Inspect and service suspension systems	
AURTTJ2002	Remove and refit wheel hubs and associated brake components	
AURTTA3017	Carry out vehicle safety and roadworthy inspection	
AURVTN2005	Remove and fit protector mouldings, transfers and decals	
AURVTP2007	Apply paint touch-up techniques	
AURVTS3004	Repair fibreglass and composite material components	

Unit code	Unit title	Prerequisites
AURTTY3001	Repair chassis, frame and associated components	
AURVTT3015	Fabricate canvas products	
AURVTT3016	Fabricate frame structures	
AURVTT3019	Fabricate and install canopies and curtains	
AURVTG3011	Install side windows	
MEM03001B	Perform manual production assembly	
MEM05005B	Carry out mechanical cutting	*
MEM05012C	Perform routine manual metal arc welding	
MEM05050B	Perform routine gas metal arc welding	
MEM10002B	Terminate and connect electrical wiring	*
MEM12002B	Perform electrical/electronic measurement	
MEM12023A	Perform engineering measurements	
MEM18001C	Use hand tools	
MEM18002B	Use power tools/hand held operations	
MEM18038B	Maintain wheels and tyres	*
MEM18045B	Fault find/repair electrical equipment/components up to 250 volts single phase supply	*
MSAPMOPS101A	Make measurements	
MSARVS202A	Repair/service LP gas systems in a recreational vehicle	
PMBPROD221B	Operate rotational moulding equipment	
PMBPROD321B	Produce rotational moulded products	*

Unit code	Unit title	Prerequisites
Up to two (2) relevant elective units of competency may be selected from this Training Package, other endorsed Training Packages and accredited courses, where they are available for inclusion at Certificate IV.		

Group C

Unit code	Unit title	Prerequisites
AURAF2004	Solve routine problems in an automotive workplace	
AURAKA3002	Adapt work processes to new technologies	
AURAMA5006	Contribute to business improvement	
MEM13002B	Undertake occupational health and safety activities in the workplace	
MEM13010A	Supervise occupational health and safety in an industrial work environment	*
MEM14001B	Schedule material deliveries	
MEM14002B	Undertake basic process planning	
MEM14003B	Undertake basic production scheduling	
MEM15002A	Apply quality systems	
MEM15004B	Perform inspection	
MEM15005B	Select and control inspection processes and procedures	*
MEM16002C	Conduct formal interviews and negotiations	
MEM16006A	Organise and communicate information	

Unit code	Unit title	Prerequisites
MEM22015A	Source and estimate engineering materials requirements	*
MEM30013A	Assist in the preparation of a basic workplace layout	
MSS402002A	Sustain process improvements	
MSS402081A	Contribute to the application of a proactive maintenance strategy	
MSS403002A	Ensure process improvements are sustained	
MSS403011A	Facilitate implementation of competitive systems and practices	
MSS403021A	Facilitate a Just in Time system	
MSS403040A	Facilitate and improve implementation of 5S	
MSS403041A	Facilitate breakthrough improvements	
MSS403051A	Mistake proof an operational process	
MSS404082A	Assist in implementing a proactive maintenance strategy	
MSAENV472B	Implement and monitor environmentally sustainable work practices	
MSAPMSUP200A	Achieve work outcomes	
MSAPMSUP383A	Facilitate a team	
MSAPMSUP390A	Use structured problem solving tools	
PSPGOV408A	Value diversity	
TAEASS401B	Plan assessment activities and processes	
TAEASS402B	Assess competence	

Unit code	Unit title	Prerequisites
TAEASS403B	Participate in assessment validation	
TAEDEL301A	Provide work skill instruction	
Up to two (2) relevant elective units of competency may be selected from this Training Package, other endorsed Training Packages and accredited courses, where they are available for inclusion at Certificate IV.		

Group D

Unit code	Unit title	Prerequisites
MEM09002B	Interpret technical drawing	
MEM11011B	Undertake manual handling	
MEM14004A	Plan to undertake a routine task	
MEM15024A	Apply quality procedures	
MSS402021A	Apply Just in Time procedures	
MSS402040A	Apply 5S procedures	
MSS402080A	Undertake root cause analysis	
MSAPMOHS220A	Provide initial first aid response	
MSAPMOPS212A	Use enterprise computers or data systems	
MSAPMSUP100A	Apply workplace procedures	
MSAPMSUP101A	Clean workplace or equipment	
MSAPMSUP106A	Work in a team	
MSAPMSUP280A	Manage conflict at work	
MSAPMSUP291A	Participate in continuous improvement	

Unit code	Unit title	Prerequisites
MSARVS301A	Develop and update caravan industry knowledge	
MSARVG201A	Tow a recreational vehicle safely	
MSARVT201A	Apply technical knowledge of recreational vehicle manufacturing to work activities	
SIRXSLS002A	Advise on products and services	
TLID2010A	Operate a forklift	
UEGNSG604B	Fill gas cylinders	
Up to two (2) relevant elective units of competency may be selected from this Training Package, other endorsed Training Packages and accredited courses, where they are available for inclusion at Certificate IV.		

MSA40710 Certificate IV in Recreational Vehicle and Accessories Retailing

Modification History

Release 5 - Imported elective unit replaced by current release.

Release 4 - Imported elective units replaced by current versions. Prerequisites replaced by an asterisk. Equivalent.

Release 3 - MSACM unit replaced by MSS unit from MSS11v2 Sustainability Training Package. Imported unit version coded updated.

Release 2 - Imported unit code updated.

Description

This qualification covers the skills and knowledge designed to reflect the role of a supervisor or assistant manager in a recreational vehicle retail outlet.

Job roles/employment outcomes

The Certificate IV in Recreational Vehicle and Accessories Retailing has been developed as a post-trade level qualification for use in MSA07 Manufacturing Training Package. This qualification has been developed in response to an industry request. People with this qualification would be expected to lead sales teams and provide supervision of people in the sale of recreational vehicles and accessories, including:

- motor homes
- caravans
- camper trailers
- slide-ons
- fifth wheelers

to meet Australian requirements, such as road worthiness and the Australian Design Rule (ADR). They will provide technical leadership as well as undertake some tasks themselves.

They may work in a service and repair facility or a manufacturer's factory undertaking sales work. Sales may be for a new recreational vehicle, a second-hand/refurbished recreational vehicle or spare parts and accessories. In some cases selling of the recreational vehicle may also include possible modifications which could be made to the recreational vehicle.

Application

The sector typically manufactures, services and repairs recreational vehicles as required. Recreational vehicle sales requires specialised knowledge not only of the available range of recreational vehicle models and accessories but of the legal requirements associated with weight, towing and vehicle capacity.

Recreational vehicles may be made from a frame (timber, aluminium or steel) and skin (aluminium or fibre composite) or a manufactured wall panel or some other technology. They are typically mounted on a steel chassis which may be manufactured by the recreational vehicle manufacturer or bought. Fittings are typically timber/particle board but may be any other suitable material.

People with this qualification may be expected to:

- sell a new or second-hand recreational vehicle
- suggest modifications/refits to a recreational vehicle
- prepare a recreational vehicle for sale/resale
- sell spare parts and accessories
- manage a sales area/showroom.

This work will generally be undertaken in a workshop or showroom environment.

Training programs for this qualification are suitable to be undertaken as part of a formal training contract with an employer under an Australian Traineeship or Apprenticeship arrangement.

Pathways into the qualification

This qualification may be accessed by direct entry.

The units of competency contained within this qualification are common with other qualifications and credit should be granted towards this qualification where competency has already been achieved.

Credit should also be granted towards this qualification where competency has been achieved in units of competency contained within relevant skill sets.

The units of competency in this qualification reflect competencies which are practiced within the industry and recognition of prior learning (RPL) should be granted where there is sufficient evidence of competency from work-based experience.

Pathways from the qualification

Further qualification pathways from this qualification include MSA50510 Diploma of Recreational Vehicles.

Additional qualification advice

MSA41108 Certificate IV in Competitive Manufacturing is available for team leaders or others who need a more generalist qualification covering the application of good manufacturing practice and lean principles.

Licensing considerations

Units of competency in this qualification provide the underpinning knowledge and skills for various required licenses. Local regulations should be checked for details.

Pathways Information

Not applicable.

Licensing/Regulatory Information

Not applicable.

Entry Requirements

Not applicable.

Employability Skills Summary

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
Employability Skill	Industry/enterprise requirements for this qualification
Communication	• Negotiating effectively with team members and other managers on business values, directions and day-to-day operational matters • Reading, analysing and communicating workplace information to team members and other managers • Writing reports and completing business documentation in the context of the job role
Teamwork	• Leading a retail or wholesale business team, and mentoring and supporting team members in the context of a retail supervision or management role • Effectively participating in wider retail business supervisory/management teams • working independently to complete own tasks and supporting other team members, where appropriate
Problem solving	• Implementing customer service strategies • Anticipating problems and acting to mitigate where possible • Solving a range of operational retail or wholesale operational business problems, individually or in the context of a wider team management structure • Clarifying issues and applying existing policies and infrastructure to source information and resources, and developing practical and sustainable solutions
Initiative and enterprise	• Creating an operational business team customer service and continuous improvement environment across all performance areas • Providing positive feedback, encouraging team members to do things better and be personally receptive to team members ideas • Translating ideas into action by positively accepting and initiating changes in procedures or arrangements at the business level
Planning and organising	• Establishing and communicating clear goals and deliverables for self and team members within the context of organisation objectives and the current business situation • Coordinating resources to ensure that work is carried out according to timelines and priorities

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
	Coordinating and/or implementing changes arising from continuous improvement processes
Self-management	- Understanding how own personal job role fits into the context of the wider business values and directions - Working within the retail or wholesale business culture by practising inclusive behaviour, effective management of personal presentation, hygiene, and time - Efficiently prioritising and completing delegated tasks - Maintaining own knowledge of the job role, reviewing own performance and actively seeking and acting upon advice and guidance
Learning	- Identifying personal strengths and weaknesses in the context of the job role and recognising how to personally learn best at work - Seeking opportunities for formal education in the context of a current role or future retail job opportunities - Accepting opportunities to learn new ways of doing things and sharing knowledge and skills with other business managers and team members
Technology	- Adapting to new business related technology skill requirements - Selecting and using retail or other information and communications technology, where relevant, to support business operations and planning in the context of key business performance objectives and personal job role

Packaging Rules

Packaging Rules

To be awarded the Certificate IV in Recreational Vehicle and Accessories Retailing competency must be achieved in **thirty two (32)** units of competency:

- three (3)** core units of competency
- twenty nine (29)** elective units of competency, as specified below:
 - a minimum of **two (2)** units of competency must be selected from Group A

- a maximum of **fourteen (14)** units of competency may be selected from Groups C and D, with a maximum of **six (6)** from Group D
- the balance of units must be selected from Groups A and B to bring the total to twenty nine (29).

Note: Up to **seven (7)** relevant units of competency may be selected from this Training Package, other endorsed Training Packages and accredited courses, as specified in Groups A, B, C and D.

Note: Where prerequisite units are identified, they must be counted in the total number of units required for completion of the qualification.

Core units of competency

Unit code	Unit title	Prerequisites
MSAENV272B	Participate in environmentally sustainable work practices	
MSAPMOHS200A	Work safely	
MSAPMSUP102A	Communicate in the workplace	

Elective units of competency

Group A

Unit code	Unit title	Prerequisites
AURACA3002	Establish customer requirements of a complex nature	
AURATA3005	Estimate complex jobs	
AURANN4001	Prepare a vehicle repair quotation	
AURV365356A	Read and interpret vehicle body repair estimation/quotation	
AURVTN4032	Determine vehicle body damage and recommend repair procedures	
MEM16003B	Provide advanced customer service	

Unit code	Unit title	Prerequisites
MEM16012A	Interpret technical specifications and manuals	
SIRXMER303	Coordinate merchandise presentation	
SIRXMER004A	Manage merchandise and store presentation	
SITXMPR404	Coordinate marketing activities	
Up to one (1) relevant elective unit of competency may be selected from this Training Package, other endorsed Training Packages and accredited courses, where it is available for inclusion at Certificate IV.		

Group B

Unit code	Unit title	Prerequisites
AUMANA001	Prepare and document quotations	
AURACA2001	Establish relations with customers	
AURC341903A	Apply relevant finance, leasing and insurance contracts/policies	
AURACA3003	Build customer relations	
AURAMA3004	Maintain business image	
AURAMA4005	Manage complex customer issues	
AURSCA2002	Present stock and sales area	
AURSCA2003	Apply sales procedures	
AURSCA2004	Carry out cash, credit and funds transfers	
AURSCA2005	Sell products	
AURSCA2006	Promote products and services	
AURSAA2001	Process customer complaints	
BSBCUS501C	Manage quality customer service	

Unit code	Unit title	Prerequisites
SIRXCCS201	Apply point-of-sale handling procedures	
SIRXINV004A	Buy merchandise	
SIRXRSK001A	Minimise theft	
SIRXRSK002A	Maintain store security	
SIRXSLS002A	Advise on products and services	
Up to two (2) relevant elective units of competency may be selected from this Training Package, other endorsed Training Packages and accredited courses, where they are available for inclusion at Certificate IV.		

Group C

Unit code	Unit title	Prerequisites
AURAAA4002	Determine retail rates for work	
AURAF2004	Solve routine problems in an automotive workplace	
AURAKA3002	Adapt work processes to new technologies	
AURAMA5006	Contribute to business improvement	
MEM13002B	Undertake occupational health and safety activities in the workplace	
MEM13010A	Supervise occupational health and safety in an industrial work environment	*
MEM15002A	Apply quality systems	
MEM15004B	Perform inspection	
MEM16002C	Conduct formal interviews and negotiations	
MEM16006A	Organise and communicate information	

Unit code	Unit title	Prerequisites
MEM22015A	Source and estimate engineering materials requirements	*
MSS403040A	Facilitate and improve implementation of 5S	
MSAENV472B	Implement and monitor environmentally sustainable work practices	
MSAPMSUP200A	Achieve work outcomes	
MSAPMSUP383A	Facilitate a team	
MSAPMSUP390A	Use structured problem solving tools	
MSARVS401A	Assess and quote to service a recreational vehicle	
PSPGOV408A	Value diversity	
SITXMG501	Establish and conduct business relationships	
TAEASS401B	Plan assessment activities and processes	
TAEASS402B	Assess competence	
TAEASS403B	Participate in assessment validation	
TAEDEL301A	Provide work skill instruction	
Up to two (2) relevant elective units of competency may be selected from this Training Package, other endorsed Training Packages and accredited courses, where they are available for inclusion at Certificate IV.		

Group D

Unit code	Unit title	Prerequisites
AURSCA2001	Select automotive parts and products	
AURSLA2001	Apply legal requirements relating to product sales	

Unit code	Unit title	Prerequisites
AURSBA3002	Apply automotive parts interpretation process	
AURTTA3017	Carry out vehicle safety and roadworthy inspection	
MSAPMOHS220A	Provide initial first aid response	
MSAPMOPS212A	Use enterprise computers or data systems	
MSAPMSUP100A	Apply workplace procedures	
MSAPMSUP106A	Work in a team	
MSAPMSUP280A	Manage conflict at work	
MSAPMSUP291A	Participate in continuous improvement	
MSARVS301A	Develop and update caravan industry knowledge	
MSARVG201A	Tow a recreational vehicle safely	
SITXMPR401	Coordinate production of brochures and marketing materials	
SITXMPR402	Create a promotional display or stand	
UEGNSG604B	Fill gas cylinders	
Up to two (2) relevant elective units of competency may be selected from this Training Package, other endorsed Training Packages and accredited courses, where they are available for inclusion at Certificate IV.		

PMB30107 Certificate III in Polymer Processing

Modification History

Release 2 - Addition of five new electives for rubber/tyre sector in Group A. Imported units updated to current version. Equivalent.

Release 1 - Initial release.

Description

Job roles/employment outcomes

The Certificate III in Polymer Processing is intended for advanced operators who use production equipment to directly produce products. They would undertake more advanced operations, typically including start-up and shutdown in accordance with the operating procedures, and would apply their knowledge to anticipate problems. They would be expected to solve a range of foreseen and unforeseen problems, using product and process knowledge to develop solutions to problems which do not have a known solution, or a solution recorded in the procedures.

Certificate III also contains units of competency which are the beginning of the polymer technician stream and which contribute to a deeper knowledge of polymers and processes.

For people working in the industry in production support roles, MSA30107 Certificate III in Process Manufacturing would be appropriate. This Certificate is available in MSA07 Manufacturing Training Package. The relevant MSA units of competency for this Certificate are available as electives in PMB07.

Application

This industry manufactures a wide range of polymer products and components ranging from consumer products to components to be included in other commercial, industrial or consumer products. Much of it is long runs of standard products, but equally it may be short runs/one offs of specialised products. It uses a wide range of natural and synthetic polymers covering thermoplastics as well as thermosetting polymers.

The products from this industry may be components in automobiles, aeroplanes and marine craft as well as domestic appliances and industrial and commercial plant and equipment. It may also be electrical or data cabling. They may equally be consumer products such as paint brushes, tooth brushes, lunch boxes or carry bags.

People with this qualification may be expected to operate and problem solve production equipment and perform a range of support functions

Training programs for this qualification are suitable to be undertaken as part of a formal training contract with an employer under an Australian Traineeship or Apprenticeship arrangement.

Pathways into the qualification

This qualification may be accessed by direct entry, or entry may also be gained through PMB20107 Certificate II in Polymer Processing.

Units of competency contained within this qualification may be common with other manufacturing qualifications and credit should be granted towards this qualification where competency has already been achieved. Credit should also be granted towards this qualification where competency has been achieved in units of competency contained within relevant skill sets.

The units of competency in this qualification reflect competencies which are practiced within the industry and recognition of prior learning (RPL) should be granted where there is sufficient evidence of competency from work-based experience.

Pathways from the qualification

Further qualification pathways from this qualification include PMB40107 Certificate IV in Polymer Technology

Additional qualification advice

MSA31108 Certificate III in Competitive Manufacturing and MSA30107 Certificate III in Process Manufacturing are available for those who need a more generalist qualification covering the application of good manufacturing practice and lean principles.

Licensing considerations

There are no specific licences that relate to this qualification. However, units of competency in this qualification may provide the underpinning knowledge and skills required for various licences. Local regulations should be checked for details.

Pathways Information

Not applicable.

Licensing/Regulatory Information

Not applicable.

Entry Requirements

Not applicable.

Employability Skills Summary

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	• complete logs and reports • use technical information and manufacturer information • collect, analyse and organise information • communicate ideas and information • use workplace documentation effectively • maintain workplace records
Teamwork	• identify and describe own role and role of others • work within a team • resolve conflicts between team members • apply teamwork strategies
Problem solving	• recognise a problem or a potential problem • determine problems needing priority action • refer problems outside area of responsibility to appropriate person, with possible causes • seek information and assistance, as required, to solve problems • solve problems within area of responsibility • follow through items initiated until final resolution has occurred • identify and isolate faults in equipment • use a range of formal problem-solving techniques
Initiative and enterprise	• identify the most appropriate equipment • make adjustments to improve equipment performance • anticipate the impact of the process on the product • determine problems needing action • recommend required action • report problems outside area of responsibility • distinguish between causes of faults
Planning and organising	• plan own work requirements • plan scope of equipment checks • plan and organise activities • identify tasks to achieve team goals • organise allocation of tasks • monitor completion of allocated tasks • develop and adjust a production schedule

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
Self-management	• plan own work requirements from production requests • operate within appropriate time constraints and work standards • select and use appropriate equipment, materials, processes and procedures • plan to ensure effective production • apply workplace procedures • identify, document and monitor resource requirements • recognise limitations and seek timely advice
Learning	• ask questions to gain information • identify sources of information to expand knowledge and understanding • participate in improvement procedures • participate in development of continuous improvement strategies
Technology	• operate and adjust processes • start up and shut down equipment • set up equipment • monitor product/process quality • maintain function and operating principles of equipment and machine components • maintain workplace records

Packaging Rules

Packaging Rules

To be awarded the Certificate III in Polymer Processing competency must be achieved in **twenty one (21)** units of competency.

- **four (4)** core units of competency
- **seventeen (17)** elective units of competency, as specified below.

Note: Where prerequisite units apply, these must be considered in the total number of units chosen. Please refer to individual units for details.

Core units of competency

Unit code	Unit title	Prerequisites
MSS402051A	Apply quality standards	
MSAENV272B	Participate in environmentally sustainable work practices	
MSAPMOHS200A	Work safely	
MSAPMSUP210A	Process and record information	

Elective units of competency

Select **seventeen (17)** units of competency, as specified below:

- a minimum of **four (4)** units from Group A
- a minimum of **one (1)** unit from Group B
- the remainder of units may be chosen from Groups A, B and C, to bring the total number of electives to **seventeen (17)**.

Note: Up to **six (6)** of the elective units of competency can be chosen from other qualifications in this Training Package, other endorsed Training Packages and accredited courses, as specified in Groups B and C.

Group A

Unit code	Unit title	Prerequisites
MEM09002B	Interpret technical drawing	
MEM09003B	Prepare basic engineering drawing	*
MSAPMOPS363A	Organise on site work	
PMBPREP301C	Set up and prepare for production	
PMBPREP303C	Set up equipment for continuous operation	
PMBPREP304C	Set a die	
PMBPREP305B	Change extrusion die and setup	
PMBPROD300B	Produce products	
PMBPROD301C	Draw wire	

Unit code	Unit title	Prerequisites
PMBPROD302C	Bunch and strand wire	
PMBPROD303C	Lay up and tape cables	
PMBPROD304C	Wind products onto drums	
PMBPROD305C	Colour optical fibre	
PMBPROD306B	Prepare and start equipment for production	
PMBPROD307C	Produce calendered products	*
PMBPROD308B	Take a machine out of production	
PMBPROD309C	Produce electroplated products	
PMBPROD310C	Produce injection moulded products	*
PMBPROD311C	Produce blow moulded products	*
PMBPROD312C	Produce continuous thermoforming products	*
PMBPROD313C	Produce extruded products	*
PMBPROD314C	Produce compression moulded products	
PMBPROD315C	Produce polyurethane foam	
PMBPROD316C	Produce blown film	*
PMBPROD317C	Print and decorate rigid products	*
PMBPROD318C	Build first stage tyres	
PMBPROD319C	Build up rollers	
PMBPROD320C	Produce foam injected mouldings	
PMBPROD321B	Produce rotational moulded products	*
PMBPROD323C	Produce powder coated products	

Unit code	Unit title	Prerequisites
PMBPROD324B	Inspect tyres for retreading	
PMBPROD325B	Lay on tyre retreads	
PMBPROD326B	Inspect tyres	
PMBPROD327B	Produce finished tyres	
PMBPROD328C	Produce sheet feed vacuum forming products	
PMBPROD329C	Produce polystyrene shape moulded products	*
PMBPROD330A	Make moulds for formed products	
PMBPROD331C	Produce printed and decorated film	
PMBPROD332C	Produce thermally bent products	
PMBPROD333B	Convert plastic film	*
PMBPROD334A	Produce products using twin screw extruders	
PMBPROD335C	Build second stage tyres	
PMBPROD336A	Inspect heavy off-the-road tyres	
PMBPROD337A	Prepare heavy off-the-road tyres for repair	
PMBPROD338A	Repair heavy off-the-road tyres	
PMBPROD339A	Produce reinforced conveyor belts	*
PMBPROD340A	Cure heavy off-the-road tyre repairs	
PMBPROD341A	Finish heavy off-the-road tyre repairs	
PMBPROD343C	Shut down plant area	
PMBPROD347B	Produce composites using hand lamination	*

Unit code	Unit title	Prerequisites
PMBPROD349B	Produce liquid surface coated products	*
PMBPROD352A	Produce compounded materials	*
PMBPROD353B	Compound materials using an internal mill blender	*
PMBPROD354B	Compound materials using an open mill blender	*
PMBPROD355B	Make pattern/plug for composites moulds	*
PMBPROD356C	Construct moulds for composite products	*
PMBPROD357C	Construct jigs and fixtures	
PMBPROD358C	Develop patterns	*
PMBPROD360B	Produce centrifugally cast polyurethane products	*
PMBPROD362B	Produce gravity cast polyurethane products	*
PMBPROD367B	Remove and replace conveyor belts	
PMBPROD368B	Repair conveyor belt carcass	*
PMBPROD369B	Repair conveyor belt covers	*
PMBPROD370B	Produce injection blow moulded products	*
PMBPROD372B	Produce fibre optic preforms	
PMBPROD373B	Draw optical fibre	
PMBPROD375B	Vulcanise products using an autoclave	
PMBPROD376A	Splice steel cord conveyor belts	*
PMBPROD377A	Splice fabric ply conveyor belts	*
PMBPROD378A	Splice solid woven conveyor belts	*

Unit code	Unit title	Prerequisites
PMBPROD380B	Produce composites using chopper gun/depositor	*
PMBPROD384A	Operate multi-axis router	
PMBPROD385A	Program computer controlled equipment	
PMBPROD387B	Produce welded plastics materials	*
PMBPROD390B	Produce composites using filament winding	*
PMBPROD391B	Produce composites using resin infusion	*
PMBPROD392B	Produce composites using pultrusion	*
PMBPROD393B	Produce composites using vacuum bagging	*
PMBPROD394B	Produce composites using resin transfer moulding	*
PMBPROD395B	Produce composite sheet products	*
PMBPROD396B	Produce composites using centrifugal casting	*
PMBPROD397B	Produce composites using moulding compounds	*
PMBPROD398B	Produce composites using pre-pregs	*
PMBTECH301B	Use material and process knowledge to solve problems	
PMBTECH302A	Modify existing compounds	
PMBTECH303A	Make minor modifications to products	
TLID3011A	Conduct specialised forklift operation	
A maximum of two (2) units of competency may be chosen from the units in Groups A and B of PMB40107 Certificate IV in Polymer Technology (at least one of which must be from Group A).		

Group B

Unit code	Unit title	Prerequisite
MEM03001B	Perform manual production assembly	
MEM03006B	Set assembly stations	*
MEM11005B	Pick and process order	
MEM11006B	Perform production packaging	
MEM11007B	Administer inventory procedures	
MEM12023A	Perform engineering measurements	
MEM15001B	Perform basic statistical quality control	
MEM15003B	Use improvement processes in team activities	*
MEM15004B	Perform inspection	
MSS402002A	Sustain process improvements	
MSS402020A	Apply quick changeover procedures	
MSS402050A	Monitor process capability	
MSS402060A	Use planning software systems in operations	
MSS402080A	Undertake root cause analysis	
MSAPMOHS300A	Facilitate the implementation of OHS for a work group	*
MSAPMPER300C	Issue work permits	*
MSAPMSUP300A	Identify and implement opportunities to maximise production efficiencies	*
MSAPMSUP301A	Apply HACCP to the workplace	

Unit code	Unit title	Prerequisite
MSAPMSUP303A	Identify equipment faults	
MSAPMSUP309A	Maintain and organise workplace records	
MSAPMSUP310A	Contribute to the development of plant documentation	
MSAPMSUP330A	Develop and adjust a production schedule	
MSAPMSUP382A	Provide coaching/mentoring in the workplace	
MSAPMSUP383A	Facilitate a team	
MSAPMSUP390A	Use structured problem solving tools	
PMBWASTE302C	Coordinate waste disposal	
PMBWELD301B	Butt weld polyethylene plastic pipelines	
PMBWELD302B	Electrofusion weld polyethylene pipelines	
PMBWELD303B	Install polyethylene (non-pressure) drainage pipelines	
PMBWELD304B	Design polyethylene (non-pressure) drainage pipelines	*
PMBWELD305B	Install polyethylene plastic pressure pipelines	
PMBWELD306B	Design polyethylene plastic pressure pipelines	*
PMBWELD307B	Install high temperature plastic pressure pipelines	
PMBWELD308B	Install PVC plastic pressure pipelines	
PMBWELD309B	Weld plastic using extrusion techniques	
PMBWELD310B	Design PVC plastic pressure pipelines	*

Unit code	Unit title	Prerequisite
PMBWELD311B	Design high temperature plastic pressure pipelines	*
MSL973001A	Perform basic tests	
TAEDEL301A	Provide work skill instruction	
Up to two (2) relevant units may be chosen from this Training Package, other endorsed Training Packages and accredited courses, where those units are available for inclusion at Certificate III.		

Group C

Unit code	Unit title	Prerequisite
FPICOT2206B	Cross cut materials with a hand-held chainsaw	
LMTGN2008B	Coordinate work of team/section	
MEM13003B	Work safely with industrial chemicals	
MEM16006A	Organise and communicate information	
MEM16007A	Work with others in a manufacturing, engineering or related environment	
MEM16008A	Interact with computer technology	
MEM18001C	Use hand tools	
MEM18002B	Use power tools/hand held operations	
MSS402021A	Apply Just in Time procedures	
MSS402030A	Apply cost factors to work practices	
MSS402040A	Apply 5S procedures	
MSAPMOHS100A	Follow OHS procedures	

Unit code	Unit title	Prerequisite
MSAPMOHS110A	Follow emergency response procedures	
MSAPMOHS205A	Control minor incidents	
MSAPMOHS210B	Undertake first response to non-fire incidents	
MSAPMOHS212A	Undertake first response to fire incidents	
MSAPMOHS216A	Operate breathing apparatus	
MSAPMOHS217A	Gas test atmospheres	
MSAPMOHS220A	Provide initial first aid response	
MSAPMOPS100A	Use equipment	
MSAPMOPS101A	Make measurements	
MSAPMOPS102A	Perform tasks to support production	
MSAPMOPS200A	Operate equipment	
MSAPMOPS212A	Use enterprise computers or data systems	
MSAPMOPS244A	Layout and cut materials	
MSAPMPER200A	Work in accordance with an issued permit	
MSAPMPER201A	Monitor and control work permits	
MSAPMPER205A	Enter confined space	
MSAPMSUP100A	Apply workplace procedures	
MSAPMSUP101A	Clean workplace or equipment	
MSAPMSUP102A	Communicate in the workplace	
MSAPMSUP106A	Work in a team	
MSAPMSUP172A	Identify and minimise environmental hazards	

Unit code	Unit title	Prerequisite
MSAPMSUP200A	Achieve work outcomes	
MSAPMSUP201A	Receive or despatch goods	
MSAPMSUP204A	Pack products or materials	
MSAPMSUP205A	Transfer loads	
MSAPMSUP230A	Monitor process operations	
MSAPMSUP240A	Undertake minor maintenance	
MSAPMSUP273A	Handle goods	
MSAPMSUP280A	Manage conflict at work	
MSAPMSUP291A	Participate in continuous improvement	
MSAPMSUP292A	Sample and test materials and product	
PMBFIN201C	Finish products and components	
PMBFIN202C	Fit attachments to products	
PMBFIN203C	Repair product imperfections	
PMBFIN205C	Hand decorate products	
PMBHAN103C	Shift materials safely by hand	
PMBHAN208C	Store products	
PMBPREP201B	Prepare moulds for composites production	
PMBPREP205C	Assemble materials and equipment for production	
PMBPREP206C	Prepare materials to formulae	
PMBPROD206B	Operate ancillary equipment	
PMBPROD207B	Operate calender	

Unit code	Unit title	Prerequisite
PMBPROD209C	Operate cable winding equipment	
PMBPROD210B	Operate injection moulding equipment	
PMBPROD211B	Operate blow moulding equipment	
PMBPROD212B	Operate thermoforming equipment	
PMBPROD213B	Operate extruders	
PMBPROD216B	Operate blown film equipment	
PMBPROD217B	Operate printing equipment	
PMBPROD221B	Operate rotational moulding equipment	
PMBPROD229B	Operate polystyrene shape moulding equipment	
PMBPROD233B	Operate film conversion equipment	
PMBPROD235C	Use materials and process knowledge to complete work operations	
PMBPROD236C	Operate hand held air/power equipment for production processes	
PMBPROD237C	Splice cables	
PMBPROD238A	Perform creel rack operations	
PMBPROD239A	Build reinforced conveyor belts	
PMBPROD240C	Cut materials	
PMBPROD241C	Lay up rubber lining or lag pulleys	
PMBPROD242A	Bond polymers to surfaces	
PMBPROD245C	Fabricate materials	
PMBPROD246C	Hand mix materials	

Unit code	Unit title	Prerequisite
PMBPROD247C	Hand lay up composites	
PMBPROD248C	Prepare surfaces for coating	
PMBPROD249B	Apply liquid surface coatings	
PMBPROD251B	Apply gel coat or other polymer surface finish	
PMBPROD252C	Operate compounding equipment	
PMBPROD253C	Operate an internal mill blender	
PMBPROD254C	Operate an open mill blender	
PMBPROD255C	Operate mixing equipment	
PMBPROD259C	Operate granulating equipment	
PMBPROD261B	Operate continuous vulcanising equipment	
PMBPROD262B	Operate tyre curing equipment	
PMBPROD263B	Operate retread curing equipment	
PMBPROD264C	Check recycle wash process	
PMBPROD265C	Operate portable vulcanising equipment	
PMBPROD266B	Prepare tyre casings for retreading	
PMBPROD267B	Operate steel cutting equipment	
PMBPROD268B	Operate bead coiling equipment	
PMBPROD270B	Operate injection blow moulding equipment	
PMBPROD280B	Operate resin-glass depositor equipment	
PMBPROD281B	Finish composite products	
PMBPROD282B	Assemble mould	

Unit code	Unit title	Prerequisite
PMBPROD283B	Demould product	
PMBPROD284B	Operate open flame moulding equipment	
PMBPROD285A	Operate computer controlled equipment	
PMBPROD287B	Weld plastics materials	
PMBPROD290B	Operate filament winding equipment	
PMBPROD291B	Operate resin infusion moulding equipment	
PMBPROD292B	Operate pultrusion equipment	
PMBPROD293B	Operate vacuum bagging equipment	
PMBPROD294B	Operate resin transfer moulding equipment	
PMBPROD295B	Operate composite sheeting equipment	
PMBPROD296B	Operate centrifugal casting equipment	
PMBPROD297B	Operate equipment using moulding compounds	
PMBPROD298B	Operate equipment using pre-preg material	
PMBWASTE101C	Collect waste for recycling or safe disposal	
RIIRIS201B	Conduct local risk control	
TLID2010A	Operate a forklift	
Up to four (4) relevant units of competency may be chosen from this Training Package, other endorsed Training Packages and accredited courses, where those units are available for inclusion at Certificates II or III.		

PMB40107 Certificate IV in Polymer Technology

Modification History

Release 2 - Addition of five new elective units for rubber/tyre sector. Imported units updated to latest versions. Equivalent.

Release 1 - Initial release.

Description

Job roles/employment outcomes

The Certificate IV in Polymer Technology is intended for senior operators and polymer technicians. These technicians may be process-based and directly involved in production, or they may be based elsewhere, e.g. in a laboratory, although they will typically still have functions on the production floor.

The technician will typically be involved in trialling and solving more complex problems which require greater theoretical knowledge, combined with an understanding of the production process and equipment.

Application

This industry manufactures a wide range of polymer products and components ranging from consumer products to components to be included in other commercial, industrial or consumer products. Much of it is long runs of standard products, but equally it may be short runs/one offs of specialised products. It uses a wide range of natural and synthetic polymers covering thermoplastics as well as thermosetting polymers.

The products from this industry may be components in automobiles, aeroplanes and marine craft as well as domestic appliances and industrial and commercial plant and equipment. It may also be electrical or data cabling. They may equally be consumer products such as paint brushes, tooth brushes, lunch boxes or carry bags.

People with this qualification may be expected to undertake a technician role on the shop floor, from a base in a laboratory or office. They will be competent to operate production equipment and perform a range of support functions and will also undertake advanced problem solving and will participate in product or process improvement.

Training programs for this qualification are suitable to be undertaken as part of a formal training contract with an employer under an Australian Traineeship or Apprenticeship arrangement.

Pathways into the qualification

This qualification may be accessed by direct entry, or entry may also be gained through PMB30107 Certificate III in Polymer Processing

Units of competency contained within this qualification may be common with other manufacturing qualifications and credit should be granted towards this qualification where competency has already been achieved. Credit should also be granted towards this qualification where competency has been achieved in units of competency contained within relevant skill sets.

The units of competency in this qualification reflect competencies which are practiced within the industry and recognition of prior learning (RPL) should be granted where there is sufficient evidence of competency from work-based experience.

Pathways from the qualification

Further qualification pathways from this qualification include PMB50107 Diploma of Polymer Technology

Additional qualification advice

MSA41108 Certificate IV in Competitive Manufacturing is available for those who need a more generalist qualification covering the application of good manufacturing practice and lean principles.

Licensing considerations

There are no specific licences that relate to this qualification. However, units of competency in this qualification may provide the underpinning knowledge and skills required for various licences. Local regulations should be checked for details.

Pathways Information

Not applicable.

Licensing/Regulatory Information

Not applicable.

Entry Requirements

Not applicable.

Employability Skills Summary

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	• complete logs and reports • document and record information • identify and maintain documentation • consult with key personnel • develop system for communicating • maintain document control system • record and report test results
Teamwork	• work as part of a team • identify own role and responsibility within a team • contribute to development of team work plans • provide support to others in the work area • undertake appropriate and effective communication with team members
Problem solving	• recognise and diagnose problems • implement appropriate corrective action • rectify equipment and quality problems • diagnose production equipment problems • apply knowledge of materials, product purpose and processes • check performance of equipment and make approved adjustments • make adjustments to remedy faults and non-conformity • use material and process knowledge to solve problems
Initiative and enterprise	• develop policies • make adjustments to improve equipment performance • anticipate the impact of the process on the product • determine problems needing action • suggest options for improvement • recommend corrective and/or optimisation actions • monitor and adjust schedules in response to operational variations
Planning and organising	• plan work • organise materials, consumables and personnel • develop work plans

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
	• schedule activities • determine resources required • determine urgency and timeliness factors in planning • prepare for trial • organise polymer tests
Self-management	• operate within appropriate time constraints and work standards • select and use appropriate equipment, materials, processes and procedures • demonstrate consistent performance • locate, interpret and apply relevant information
Learning	• identify sources of information to expand knowledge and understanding • recognise limits of own professional expertise and consult specialists as necessary • participate in improvement procedures • participate in development of continuous improvement strategies • consult with appropriate personnel to refine performance • access manufacturer manuals/specifications to expand knowledge
Technology	• interpret data and information on equipment • identify characteristics and capabilities of equipment • trial equipment, process and product • interpret polymer morphology and phase diagrams • interpret polymer tests • perform material and product tests

Packaging Rules

Packaging Rules

To be awarded the Certificate IV in Polymer Technology competency must be achieved in **twenty eight (28)** units of competency.

- **four (4)** core units of competency
- **twenty four (24)** elective units of competency, as specified below.

Note: Where prerequisite units apply, these must be considered in the total number of units chosen. Please refer to individual units for details.

Core units of competency

Unit code	Unit title	Prerequisites
MSS402051A	Apply quality standards	
MSAENV272B	Participate in environmentally sustainable work practices	
MSAPMOHS200A	Work safely	
MSAPMSUP210A	Process and record information	

Elective units of competency

Select **twenty four (24)** units of competency, as specified below:

- a minimum of **three (3)** units from Group A
- a minimum of **two (2)** units from Group B
- the remainder of units may be chosen from Groups A, B and C, to bring the total number of electives to **twenty four (24)**.

Note: Up to **ten (10)** of the elective units may be chosen from other qualifications in this Training Package, other endorsed Training Packages and accredited courses, as specified in Groups B and C.

Group A

Unit code	Unit title	Prerequisites
MSAPMOPS400A	Optimise process/plant area	*
MSAPMOPS401A	Trial new process or product	
MSAPMOPS404A	Coordinate maintenance	
MSAPMOPS405A	Identify problems in fluid power system	
MSAPMOPS406A	Identify problems in electronic control systems	
PMBPROD430B	Trial a new die/tool	

Unit code	Unit title	Prerequisites
PMBPROD431B	Trial a new, advanced or complex mould	
PMBTECH401B	Predict polymer properties and characteristics	*
PMBTECH402B	Set advanced or complex dies	*
PMBTECH403B	Test fibre-composites materials and laminates	
PMBTECH404B	Mould chemical resistant and/or fire retardant fibre-composites	*
PMBTECH405B	Repair damaged fibre-composites structures	*
PMBTECH406A	Diagnose production equipment problems	
A maximum of two (2) units may be chosen from the units available in Group A of PMB50107 Diploma of Polymer Technology.		

Group B

Unit code	Unit title	Prerequisites
MEM15001B	Perform basic statistical quality control	
MSS403010A	Facilitate change in an organisation implementing competitive systems and practices	
MSS403002A	Ensure process improvements are sustained	
MSS403021A	Facilitate a Just in Time system	
MSS403040A	Facilitate and improve implementation of 5S	
MSS404050A	Undertake process capability improvements	*
MSS403051A	Mistake proof an operational process	
MSS404052A	Apply statistics to operational processes	
MSAENV472B	Implement and monitor environmentally sustainable work practices	

Unit code	Unit title	Prerequisites
MSAPMOHS300A	Facilitate the implementation of OHS for a work group	*
MSAPMOHS400A	Contribute to OHS management system	*
MSAPMOHS401A	Assess risk	
MSAPMSUP300A	Identify and implement opportunities to maximise production efficiencies	*
MSAPMSUP301A	Apply HACCP to the workplace	
MSAPMSUP303A	Identify equipment faults	
MSAPMSUP309A	Maintain and organise workplace records	
MSAPMSUP310A	Contribute to the development of plant documentation	
MSAPMSUP330A	Develop and adjust a production schedule	
MSAPMSUP382A	Provide coaching/mentoring in the workplace	
MSAPMSUP383A	Facilitate a team	
MSAPMSUP390A	Use structured problem solving tools	
MSAPMSUP400A	Develop and monitor quality systems	
MSL973001A	Perform basic tests	
MSL974003A	Perform chemical tests and procedures	
PMBPROD336A	Inspect heavy off-the-road tyres	
PRBPROD337A	Prepare heavy off-the-road tyres for repair	
PMBPROD338A	Repair heavy off-the-road tyres	
PMBPROD340A	Cure heavy off-the-road tyre repairs	
PMBPROD341A	Finish heavy off-the-road tyre repairs	

Unit code	Unit title	Prerequisites
TLID3011A	Conduct specialised forklift operation	
Up to two (2) relevant units may be chosen from this Training Package, other endorsed Training Packages and accredited courses, where those units are available at Certificate IV.		

Group C

Unit code	Unit title	Prerequisite
FPICOT2206B	Cross cut materials with a hand-held chainsaw	
LMTGN2008B	Coordinate work of team/section	
MEM03001B	Perform manual production assembly	
MEM03006B	Set assembly stations	*
MEM09002B	Interpret technical drawing	
MEM09003B	Prepare basic engineering drawing	*
MEM11005B	Pick and process order	
MEM11006B	Perform production packaging	
MEM11007B	Administer inventory procedures	
MEM12023A	Perform engineering measurements	
MEM13003B	Work safely with industrial chemicals	
MEM15001B	Perform basic statistical quality control	
MEM15003B	Use improvement processes in team activities	*
MEM15004B	Perform inspection	
MEM16006A	Organise and communicate information	
MEM16007A	Work with others in a manufacturing, engineering or related environment	

Unit code	Unit title	Prerequisite
MEM16008A	Interact with computing technology	
MEM18001C	Use hand tools	
MEM18002B	Use power tools/hand held operations	
MSS402002A	Sustain process improvements	
MSS402020A	Apply quick changeover procedures	
MSS402021A	Apply Just in Time procedures	
MSS402030A	Apply cost factors to work practices	
MSS402040A	Apply 5S procedures	
MSS402050A	Monitor process capability	
MSS402060A	Use planning software systems in operations	
MSS402080A	Undertake root cause analysis	
MSAPMOHS100A	Follow OHS procedures	
MSAPMOHS110A	Follow emergency response procedures	
MSAPMOHS205A	Control minor incidents	
MSAPMOHS210B	Undertake first response to non-fire incidents	
MSAPMOHS212A	Undertake first response to fire incidents	
MSAPMOHS216A	Operate breathing apparatus	
MSAPMOHS217A	Gas test atmospheres	
MSAPMOHS220A	Provide initial first aid response	
MSAPMOPS100A	Use equipment	
MSAPMOPS101A	Make measurements	
MSAPMOPS102A	Perform tasks to support production	

Unit code	Unit title	Prerequisite
MSAPMOPS200A	Operate equipment	
MSAPMOPS212A	Use enterprise computers or data systems	
MSAPMOPS244A	Layout and cut materials	
MSAPMOPS363A	Organise on site work	
MSAPMPER200C	Work in accordance with an issued permit	
MSAPMPER201A	Monitor and control work permits	
MSAPMPER205C	Enter confined space	*
MSAPMPER300C	Issue work permits	*
MSAPMSUP100A	Apply workplace procedures	
MSAPMSUP101A	Clean workplace or equipment	
MSAPMSUP102A	Communicate in the workplace	
MSAPMSUP106A	Work in a team	
MSAPMSUP172A	Identify and minimise environmental hazards	
MSAPMSUP200A	Achieve work outcomes	
MSAPMSUP201A	Receive or despatch goods	
MSAPMSUP204A	Pack products or materials	
MSAPMSUP205A	Transfer loads	
MSAPMSUP230A	Monitor process operations	
MSAPMSUP240A	Undertake minor maintenance	
MSAPMSUP273A	Handle goods	
MSAPMSUP280A	Manage conflict at work	
MSAPMSUP291A	Participate in continuous improvement	

Unit code	Unit title	Prerequisite
MSAPMSUP292A	Sample and test materials and product	
PMBFIN201C	Finish products and components	
PMBFIN202C	Fit attachments to products	
PMBFIN203C	Repair product imperfections	
PMBFIN205C	Hand decorate products	
PMBHAN103C	Shift materials safely by hand	
PMBHAN208C	Store products	
PMBPREP201B	Prepare moulds for composites production	
PMBPREP205C	Assemble materials and equipment for production	
PMBPREP206C	Prepare materials to formulae	
PMBPREP301C	Set up and prepare for production	
PMBPREP303C	Set up equipment for continuous operation	
PMBPREP304C	Set a die	
PMBPREP305B	Change extrusion die and setup	
PMBPROD206B	Operate ancillary equipment	
PMBPROD207B	Operate calender	
PMBPROD209C	Operate cable winding equipment	
PMBPROD210B	Operate injection moulding equipment	
PMBPROD211B	Operate blow moulding equipment	
PMBPROD212B	Operate thermoforming equipment	
PMBPROD213B	Operate extruders	

Unit code	Unit title	Prerequisite
PMBPROD216B	Operate blown film equipment	
PMBPROD217B	Operate printing equipment	
PMBPROD221B	Operate rotational moulding equipment	
PMBPROD229B	Operate polystyrene shape moulding equipment	
PMBPROD233B	Operate film conversion equipment	
PMBPROD235C	Use materials and process knowledge to complete work operations	
PMBPROD236C	Operate hand held air/power equipment for production processes	
PMBPROD237C	Splice cables	
PMBPROD238A	Perform creel rack operations	
PMBPROD239A	Build reinforced conveyor belts	
PMBPROD240C	Cut materials	
PMBPROD241C	Lay up rubber lining or lag pulleys	
PMBPROD242A	Bond polymers to surfaces	
PMBPROD245C	Fabricate materials	
PMBPROD246C	Hand mix materials	
PMBPROD247C	Hand lay up composites	
PMBPROD248C	Prepare surfaces for coating	
PMBPROD249B	Apply liquid surface coatings	
PMBPROD251B	Apply gel coat or other polymer surface finish	
PMBPROD252C	Operate compounding equipment	
PMBPROD253C	Operate an internal mill blender	

Unit code	Unit title	Prerequisite
PMBPROD254C	Operate an open mill blender	
PMBPROD255C	Operate mixing equipment	
PMBPROD259C	Operate granulating equipment	
PMBPROD261B	Operate continuous vulcanising equipment	
PMBPROD262B	Operate tyre curing equipment	
PMBPROD263B	Operate retread curing equipment	
PMBPROD264C	Check recycle wash process	
PMBPROD265C	Operate portable vulcanising equipment	
PMBPROD266B	Prepare tyre casings for retreading	
PMBPROD267B	Operate steel cutting equipment	
PMBPROD268B	Operate bead coiling equipment	
PMBPROD270B	Operate injection blow moulding equipment	
PMBPROD280B	Operate resin-glass depositor equipment	
PMBPROD281B	Finish composite products	
PMBPROD282B	Assemble mould	
PMBPROD283B	Demould product	
PMBPROD284B	Operate open flame moulding equipment	
PMBPROD285A	Operate computer controlled equipment	
PMBPROD287B	Weld plastics materials	
PMBPROD290B	Operate filament winding equipment	
PMBPROD291B	Operate resin infusion moulding equipment	
PMBPROD292B	Operate pultrusion equipment	

Unit code	Unit title	Prerequisite
PMBPROD293B	Operate vacuum bagging equipment	
PMBPROD294B	Operate resin transfer moulding equipment	
PMBPROD295B	Operate composite sheeting equipment	
PMBPROD296B	Operate centrifugal casting equipment	
PMBPROD297B	Operate equipment using moulding compounds	
PMBPROD298B	Operate equipment using pre-preg material	
PMBPROD300B	Produce products	
PMBPROD301C	Draw wire	
PMBPROD302C	Bunch and strand wire	
PMBPROD303C	Lay up and tape cables	
PMBPROD304C	Wind products onto drums	
PMBPROD305C	Colour optical fibre	
PMBPROD306B	Prepare and start equipment for production	
PMBPROD307C	Produce calendered products	*
PMBPROD308B	Take a machine out of production	
PMBPROD309C	Produce electroplated products	
PMBPROD310C	Produce injection moulded products	*
PMBPROD311C	Produce blow moulded products	*
PMBPROD312C	Produce continuous thermoforming products	*
PMBPROD313C	Produce extruded products	*
PMBPROD314C	Produce compression moulded products	
PMBPROD315C	Produce polyurethane foam	

Unit code	Unit title	Prerequisite
PMBPROD316C	Produce blown film	*
PMBPROD317C	Print and decorate rigid products	*
PMBPROD318C	Build first stage tyres	
PMBPROD319C	Build up rollers	
PMBPROD320C	Produce foam injected mouldings	
PMBPROD321B	Produce rotational moulded products	*
PMBPROD323C	Produce powder coated products	
PMBPROD324B	Inspect tyres for retreading	
PMBPROD325B	Lay on tyre retreads	
PMBPROD326B	Inspect tyres	
PMBPROD327B	Produce finished tyres	
PMBPROD328C	Produce sheet feed vacuum forming products	
PMBPROD329C	Produce polystyrene shape moulded products	*
PMBPROD330A	Make moulds for formed products	
PMBPROD331C	Produce printed and decorated film	
PMBPROD332C	Produce thermally bent products	
PMBPROD333B	Convert plastic film	*
PMBPROD334A	Produce products using twin screw extruders	
PMBPROD335C	Build second stage tyres	
PMBPROD339A	Produce reinforced conveyor belts	*
PMBPROD343C	Shut down plant area	
PMBPROD347B	Produce composites using hand lamination	*

Unit code	Unit title	Prerequisite
PMBPROD349B	Produce liquid surface coated products	*
PMBPROD352A	Produce compounded materials	*
PMBPROD353B	Compound materials using an internal mill blender	*
PMBPROD354B	Compound materials using an open mill blender	*
PMBPROD355B	Make pattern/plug for composites moulds	*
PMBPROD356C	Construct moulds for composite products	*
PMBPROD357C	Construct jigs and fixtures	
PMBPROD358C	Develop patterns	*
PMBPROD360B	Produce centrifugally cast polyurethane products	*
PMBPROD362B	Produce gravity cast polyurethane products	*
PMBPROD367B	Remove and replace conveyor belts	
PMBPROD368B	Repair conveyor belt carcass	*
PMBPROD369B	Repair conveyor belt covers	*
PMBPROD370B	Produce injection blow moulded products	*
PMBPROD372B	Produce fibre optic preforms	
PMBPROD373B	Draw optical fibre	
PMBPROD375B	Vulcanise products using an autoclave	
PMBPROD376A	Splice steel cord conveyor belts	*
PMBPROD377A	Splice fabric ply conveyor belts	*
PMBPROD378A	Splice solid woven conveyor belts	*
PMBPROD380B	Produce composites using chopper gun/depositor	*

Unit code	Unit title	Prerequisite
PMBPROD384A	Operate multi-axis router	
PMBPROD385A	Program computer controlled equipment	
PMBPROD387B	Produce welded plastics materials	*
PMBPROD390B	Produce composites using filament winding	*
PMBPROD391B	Produce composites using resin infusion	*
PMBPROD392B	Produce composites using pultrusion	*
PMBPROD393B	Produce composites using vacuum bagging	*
PMBPROD394B	Produce composites using resin transfer moulding	*
PMBPROD395B	Produce composite sheet products	*
PMBPROD396B	Produce composites using centrifugal casting	*
PMBPROD397B	Produce composites using moulding compounds	*
PMBPROD398B	Produce composites using pre-pregs	*
PMBTECH301B	Use material and process knowledge to solve problems	
PMBTECH302A	Modify existing compounds	
PMBTECH303A	Make minor modifications to products	
PMBWASTE101C	Collect waste for recycling or safe disposal	
PMBWASTE302C	Coordinate waste disposal	
PMBWELD301B	Butt weld polyethylene plastic pipelines	
PMBWELD302B	Electrofusion weld polyethylene pipelines	
PMBWELD303B	Install polyethylene (non-pressure) drainage pipelines	

Unit code	Unit title	Prerequisite
PMBWELD304B	Design polyethylene (non-pressure) drainage pipelines	*
PMBWELD305B	Install polyethylene plastic pressure pipelines	
PMBWELD306B	Design polyethylene plastic pressure pipelines	*
PMBWELD307B	Install high temperature plastic pressure pipelines	
PMBWELD308B	Install PVC plastic pressure pipelines	
PMBWELD309B	Weld plastic using extrusion techniques	
PMBWELD310B	Design PVC plastic pressure pipelines	*
PMBWELD311B	Design high temperature plastic pressure pipelines	*
RIIRIS201B	Conduct local risk control	
TAEASS301B	Contribute to assessment	
TAEASS401B	Plan assessment activities and processes	
TAEASS402B	Assess competence	
TAEASS403B	Participate in assessment validation	
TAEDEL301A	Provide work skill instruction	
TLID2010A	Operate a forklift	
Up to eight (8) relevant units may be chosen from this Training Package, other endorsed Training Packages and accredited courses, where those units are available at Certificates II or III. (Note that a maximum of four (4) of these units can be available at Certificate II).		

PMC30110 Certificate III in Manufactured Mineral Products

Modification History

Release 2 - Imported units updated to current versions. No change in outcomes.
Release 1 - Initial release

Description

This qualification covers the skills and knowledge required to perform a range of advanced operations within the manufactured mineral products industries.

Job roles/employment outcomes

The Certificate III in Manufactured Mineral Products is intended for advanced operators and operations technicians who use production equipment to directly produce products. At this level, operators/technicians would undertake more advanced operations, typically including startup and shutdown in accordance with the operating procedures, and would apply their knowledge to anticipate problems. They would be expected to solve a range of foreseen and unforeseen problems, using product and process knowledge to develop solutions to problems which do not have a known solution, or a solution recorded in the procedures.

Application

This qualification is typically used to develop employees performing an advanced operational role that includes an ability to work independently and conduct technical problem solving according to the needs of the work in the manufactured mineral products industries.

Operators may specialise in one of the following areas:

- cement
- precast concrete
- premixed concrete
- clay products
- ceramic products
- float (flat) glass
- glass containers
- refractories
- plaster (both fibrous plaster and plaster boards)
- fibre cement boards
- ground minerals
- abrasive grinding wheels and cutting discs
- other areas.

Specialisations must be reflected by the selection of units identified for specialised streams.

Training programs for this qualification are suitable to be undertaken as part of a formal training contract with an employer under an Australian Traineeship or Apprenticeship arrangement.

Pathways into the qualification

This qualification may be accessed by direct entry. Credit may be granted towards this qualification by those who have completed MSA20107 Certificate II in Process Manufacturing, PMC20110 Certificate II in Manufactured Mineral Products or other relevant qualifications. Credit for this qualification may also include units contained within relevant skill sets.

Pathways from the qualification

Further training pathways from this qualification include PMC40110 Certificate IV in Manufactured Mineral Products, MSS40312 Certificate IV in Competitive Systems and Practices or MSA40108 Certificate IV in Manufacturing Technology or other relevant qualifications.

Additional qualification advice

An industry specialisation should include a range of units (typically production or other units relevant to the specialisation) that focus more on the industry speciality than a generic qualification.

An industry specialisation does not change the title of the qualification although RTOs may choose to record the specialisation.

MSA30107 Certificate III in Process Manufacturing, in the MSA07 Manufacturing Training Package is available for production support employees at this level and should be used where the job requirements do not allow for the development of competency in sufficient technical units of competency.

MSS40312 Certificate III in Competitive Systems and Practices is available for employees at this level who already possess technical skills and who require additional manufacturing practice skills above those available in this qualification.

Pathways Information

Not applicable.

Licensing/Regulatory Information

Licensing considerations

There are no specific licences that relate to this qualification. However, some units of competency in this qualification may have licensing or regulatory requirements. Local regulations should be checked for details.

Entry Requirements

Not applicable.

Employability Skills Summary

Employability Skill	Industry/enterprise requirements for this qualification
Communication	• maintain communication about multiple subjects and with multiple audiences • complete incident and other reports • use technical information and manufacturer information • collect, analyse and organise information • communicate ideas and information • use and contribute to workplace documentation • maintain workplace records
Teamwork	• identify and describe own role and role of others • work within a team • resolve conflicts between team members • teamwork strategies
Problem solving	• recognise a problem or a potential problem • determine problems needing priority action • refer problems outside area of responsibility to appropriate person • identify appropriate theory base for problem • seek information and assistance as required to solve problems • solve problems within area of responsibility • follow through items initiated until final resolution has occurred • identify and isolate faults in equipment • use a range of formal problem solving techniques
Initiative and enterprise	• identify the most appropriate process conditions for equipment • determine problems needing action • recommend required action • report problems outside area of responsibility • distinguish between causes of faults
Planning and organising	• prioritise actions to achieve required outcomes • plan own work requirements and assist others to plan theirs • plan and organise activities • identify tasks to achieve team goals • organise allocation of tasks • monitor completion of allocated tasks • develop and adjust a production schedule

Self-management	• plan own work requirements from job requests • operate within appropriate time constraints and work standards • select and use appropriate equipment, materials, processes and procedures • plan to ensure effective production • apply standard procedures • identify resource requirements • recognise limitations and seek timely advice
Learning	• ask questions to gain information • identify sources of information to expand knowledge and understanding • participate in improvement procedures • participate in development of continuous improvement strategies • assist others develop competency
Technology	• operate and adjust equipment • start up and shut down equipment • set up equipment • monitor quality • function and operating principles of equipment • maintain workplace records

Packaging Rules

Packaging Rules

To be awarded the Certificate III in Manufactured Mineral Products competency must be achieved in **twenty (20)** units of competency:

- **six (6)** core units of competency
- **fourteen (14)** elective units of competency from Groups A and B, chosen as specified below.

Note

Where prerequisite units apply, these must be considered in the total number of units chosen.

Core units of competency

Select **six (6)** core units of competency as specified below.

All **five (5)** of these units must be chosen.

Unit code	Title	Prerequisites
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Unit code	Title	Prerequisites
MSAENV272B	Participate in environmentally sustainable work practices	
MSAPMOHS200A	Work safely	
MSAPMSUP100A	Apply workplace procedures	
MSAPMSUP101A	Clean workplace or equipment	
MSAPMSUP102A	Communicate in the workplace	

Select **one (1)** of the following units. Note that only MSAPMOPS101A **OR** PMAOPS101C may be included in this qualification, not both.

Unit code	Title	Prerequisites
MSAPMOPS101A	Make measurements	
PMAOPS101C	Read dials and indicators	

Elective units of competency

Group A - Specialist electives

A minimum of **one (1)** unit must be selected from the list below.

Unit code	Title	Prerequisites
MSL974005A	Perform physical tests	
PMAOPS305B	Operate process control systems	
PMC553000C	Set up and tune a process	
PMC553010C	Process raw meal into product	PMC552010C
PMC553020C	Prepare moulds and dies	
PMC553021C	Set up and tune glazing equipment	
PMC553040C	Set up and optimise glass forming process	
PMC553041C	Set up and optimise glass furnace process	

Unit code	Title	Prerequisites
PMC553042C	Set up and optimise secondary process	
PMC553050C	Produce architectural precast concrete	
PMC553051B	Produce structural precast concrete	
PMC553070B	Design and construct moulds for fibrous plaster products	PMC552024C
PMC553072B	Model fibrous plaster products	
PMC553080B	Set up and optimise finishing process	
Up to one (1) specialist elective unit may be chosen from Group A in PMC40110 Certificate IV in Manufactured Mineral Products		

Group B - Other electives

The balance of units, to a maximum of **thirteen (13)**, may be drawn in any combination from:

- units not already chosen from Group A above
- Group B units listed below, with a maximum of **nine (9)** from Group B2

Group B1

Unit code	Title	Prerequisites
MEM09002B	Interpret technical drawing	
MSAPMOHS300A	Facilitate the implementation of OHS for a work group	MSAPMOHS200A
MSAPMPER300C	Issue work permits	RIIRIS201B
MSAPMSUP300A	Identify and implement opportunities to maximise production efficiencies	MSAPMSUP200A
MSAPMSUP303A	Identify equipment faults	
MSAPMSUP310A	Contribute to development of plant documentation	
MSAPMSUP330A	Develop and adjust a production schedule	

Unit code	Title	Prerequisites
MSAPMSUP382A	Provide coaching/mentoring in the workplace	
MSAPMSUP390A	Use structured problem solving tools	
MSL973001A	Perform basic tests	
PMC563081C	Carry out stock control	
TAEASS301B	Contribute to assessment	
TAEDEL301A	Provide work skill instruction	
Up to two (2) relevant units may be chosen from this Training Package, other endorsed Training Packages and accredited courses where those units are available at Certificate III or IV.		

Group B2

Unit code	Title	Prerequisites
RIIRIS201B	Conduct local risk control	
MSS402030A	Apply cost factors to work practices	
MSS402031A	Interpret product costs in terms of customer requirements	
MSS402040A	Apply 5S procedures	
MSS402050A	Monitor process capability	
MSS402051A	Apply quality standards	
MSS402060A	Use planning software systems in operations	
MSS402080A	Undertake root cause analysis	
MSS402081A	Contribute to the application of a proactive maintenance strategy	
MSAPMOHS110A	Follow emergency response procedures	

Unit code	Title	Prerequisites
MSAPMOPS100A	Use equipment	
MSAPMOPS200A	Operate equipment	
MSAPMOPS212A	Use enterprise computers or data systems	
MSAPMPER200C	Work in accordance with an issued permit	
MSAPMPER201A	Monitor and control work permits	
MSAPMPER202A	Observe permit work	
MSAPMPER205C	Enter confined space	
MSAPMSUP106A	Work in a team	
MSAPMSUP200A	Achieve work outcomes	
MSAPMSUP201A	Receive or despatch goods	
MSAPMSUP210A	Process and record information	
MSAPMSUP230A	Monitor process operations	
MSAPMSUP240A	Undertake minor maintenance	
MSAPMSUP280A	Manage conflict at work	
MSAPMSUP292A	Sample and test materials and product	
MSL952001A	Collect routine site samples	
PMAOPS105C	Select and prepare materials	
PMAOPS216B	Operate local control system	
PMBHAN103C	Shift materials safely by hand	
PMC552002C	Operate equipment to blend/mix materials	
PMC552003C	Operate grinding equipment	
PMC552004C	Prepare for production	

Unit code	Title	Prerequisites
PMC552005C	Process greenware/green products	
PMC552006C	Operate an autoclave	
PMC552007B	Heat accelerate the curing of precast concrete	
PMC552008B	Operate crushing equipment	
PMC552010C	Operate a calcining kiln	
PMC552020C	Operate slip casting equipment	
PMC552021C	Operate manual glazing equipment	
PMC552022C	Prepare materials for clay and ceramic production	
PMC552023C	Finish products after firing	
PMC552024C	Hand mould products	
PMC552030C	Operate a firing kiln	
PMC552031C	Operate extrusion equipment	
PMC552032C	Operate pressing equipment	
PMC552040C	Operate glass melting process	
PMC552041C	Operate process ovens	
PMC552042C	Operate blown insulation equipment	
PMC552043C	Operate float forming equipment	
PMC552044C	Operate fibre forming equipment	
PMC552045C	Operate container forming equipment	
PMC552046C	Operate glass printing equipment	
PMC552047C	Operate primary annealing equipment	

Unit code	Title	Prerequisites
PMC552048C	Operate glass finishing equipment	
PMC552049C	Operate on-line stacking and assembly equipment	
PMC552050C	Schedule, cut and bend reinforcement	
PMC552051C	Finish green concrete products	
PMC552052C	Cast moulded concrete products	
PMC552053C	Finish cured concrete products	
PMC552054C	Spin concrete pipes	
PMC552055C	Conduct benching operations	
PMC552056B	Assemble, fabricate and place reinforcement	
PMC552057B	Finish casting operation	
PMC552058B	Demould concrete products	
PMC552060C	Batch mix concrete	
PMC552061C	Deliver concrete to site	
PMC552065B	Prepare asphalt	
PMC552070B	Operate forming equipment	
PMC552071B	Operate wet and dry end equipment	
PMC552072B	Produce fibrous plasterboard	
PMC552090B	Use and maintain tools and equipment for refractory operations	
PMC552091B	Prepare for, install and repair refractory brickwork/blockwork	
PMC552092B	Prepare for and install mouldable refractory materials	

Unit code	Title	Prerequisites
PMC552093B	Prepare for and cast refractory materials	
PMC552094B	Prepare for and apply shotcrete for installation	
PMC561072C	Store materials for production	
PMC561080B	Organise self	
PMC562070B	Move materials	
PMC562071C	Operate bulk materials handling equipment	
PMC562075B	Maintain kiln refractory	
PMC562081B	Deliver customer service	
PMC562083C	Allocate and complete team tasks	
TLIC30003A	Drive medium rigid vehicle	
TLIC3004A	Drive heavy rigid vehicle	
TLID2010A	Operate a forklift	
Note: Only one of TLIC3003A or TLIC3004A may be included in this qualification, not both. Up to four (4) relevant units may be selected from this Training Package, other endorsed Training Packages and accredited courses, where those units are available at Certificate II, III or IV.		

PMC40110 Certificate IV in Manufactured Mineral Products

Modification History

Release 2 - Imported units updated to current versions. No change in outcomes.

Release 1 - Initial release

Description

This qualification covers the skills and knowledge required to perform a range of high level technical operations within the manufactured mineral products industries.

Job roles/employment outcomes

The Certificate IV in Manufactured Mineral Products is intended for plant technicians.

The technician will typically be involved in solving complex problems which require theoretical knowledge, combined with an understanding of the production process and equipment across the plant.

Application

This qualification is typically used to develop employees performing a technical role that includes an ability to work independently and conduct technical problem solving according to the needs of the work in the manufactured mineral products industries.

Non-technical team leaders, coordinators and supervisors may be better served by a qualification in competitive systems and practices.

People with this qualification may be expected to work in one of the following sectors:

- cement
- precast concrete
- premixed concrete
- clay products
- ceramic products
- float (flat) glass
- glass containers
- refractories
- plaster (both fibrous plaster and plaster boards)
- fibre cement boards
- ground minerals
- abrasive grinding wheels and cutting discs
- other areas.

Training programs for this qualification are suitable to be undertaken as part of a formal training contract with an employer under an Australian Traineeship or Apprenticeship arrangement.

Pathways into the qualification

This qualification may be accessed by direct entry. Credit may be granted towards this qualification by those who have completed PMC30110 Certificate III in Manufactured Mineral Products, MSA30107 Certificate III in Process Manufacturing, MSA30208 Certificate III in Manufacturing Technology or other relevant qualifications. Credit for this qualification may also include units contained within relevant skill sets.

Pathways from the qualification

Further training pathways from this qualification include PMC50110 Diploma of Manufactured Mineral Products, MSS50312 Diploma of Competitive Systems and Practices, MSA50108 Diploma of Manufacturing Technology or other relevant qualifications, including appropriate vocational graduate qualifications.

Additional qualification advice

MSS40312 Certificate IV in Competitive Systems and Practices is available for team leaders at this level who already possess technical skills and who require additional manufacturing practice skills above those available in this qualification.

Pathways Information

Not applicable.

Licensing/Regulatory Information

Licensing considerations

There are no specific licences that relate to this qualification. However, some units of competency in this qualification may have licensing or regulatory requirements. Local regulations should be checked for details.

Entry Requirements

Not applicable.

Employability Skills Summary

Employability Skill	Industry/enterprise requirements for this qualification
Communication	• initiate communication about multiple subjects and with multiple audiences • complete incident, technical and other reports • use technical information and manufacturer information • collect, analyse and organise information • communicate problem solutions, ideas and information • use and contribute to workplace documentation • maintain workplace records
Teamwork	• identify and describe own role and role of others • work within and lead a team • resolve conflicts between team members • develop teamwork strategies
Problem solving	• recognise a problem or a potential problem • determine problems needing priority action • refer problems outside area of responsibility to appropriate person • identify appropriate theory base for problem • seek information and assistance as required to solve problems • solve problems within area of responsibility • follow through items initiated until final resolution has occurred • identify and isolate faults in equipment • use a range of formal problem solving techniques
Initiative and enterprise	• identify the most appropriate process conditions for equipment • determine problems needing action • recommend required action • report problems outside area of responsibility • distinguish between causes of faults • recommend new and improved ways of doing things
Planning and organising	• prioritise actions to achieve required outcomes • plan own work requirements and assist others to plan theirs • plan and organise activities • identify tasks to achieve team goals • organise allocation of tasks • monitor completion of allocated tasks • develop and adjust a production schedule

Self-management	• plan own work requirements • operate within appropriate time constraints, work standards and other requirements • select, use and improve appropriate equipment, materials, processes and procedures • plan to ensure effective production/projects • select and apply standard procedures • identify resource requirements • recognise limitations and seek timely advice
Learning	• ask questions to gain information • identify sources of information to expand knowledge and understanding • lead improvement procedures • lead the development of continuous improvement strategies • assist others develop competency
Technology	• operate, adjust and optimise the operation of equipment • start up and shut down equipment • set up equipment • monitor quality • function and operating principles of equipment • maintain workplace records

Packaging Rules

Packaging Rules

To be awarded the Certificate IV in Manufactured Mineral Products competency must be achieved in **twenty four (24)** units of competency:

- **seven (7)** core units of competency
- **seventeen (17)** elective units of competency from Groups A and B, chosen as specified below.

Note

Where prerequisite units apply, these must be considered in the total number of units chosen.

Core units of competency

Select **seven (7)** core units of competency as specified below.

All **six (6)** of these units must be chosen.

Unit code	Title	Prerequisites
MSAENV272B	Participate in environmentally sustainable work practices	
MSAPMOHS200A	Work safely	
MSAPMSUP100A	Apply workplace procedures	
MSAPMSUP101A	Clean workplace or equipment	
MSAPMSUP102A	Communicate in the workplace	
MSAPMSUP200A	Achieve work outcomes	

Select **one (1)** of the following units. Note that only one of MSAPMOPS101A **OR** PMAOPS101C may be included in this qualification, not both.

Unit code	Title	Prerequisites
MSAPMOPS101A	Make measurements	
PMAOPS101C	Read dials and indicators	

Elective units of competency

Group A - Specialist electives

A minimum of **one (1)** specialist elective unit must be chosen from the list below.

Unit Code	Title	Prerequisite unit
MSAPMOPS400A	Optimise process/plant area	MSAPMSUP390A
MSAPMOPS401A	Trial new process or product	
MSAPMOPS404A	Co-ordinate maintenance	
MSAPMOPS405A	Identify problems in fluid power system	
MSAPMOPS406A	Identify problems in electronic control systems	
PMAOPS402A	Respond to abnormal process situations	MSAPMSUP390A
PMAOPS405A	Operate complex control systems	

Unit Code	Title	Prerequisite unit
PMC554020D	Design and prepare models, moulds and dies	
PMC554090B	Undertake simple refractory design	
PMC554091B	Analyse refractory failures	

Group B - Other electives

The balance of units, to a maximum of **sixteen (16)**, may be drawn in any combination from:

- units not already chosen from Group A above
- Group B units listed below, with a maximum of **thirteen (13)** from Group B2

Group B1

Unit code	Title	Prerequisites
MSS403011A	Facilitate implementation of competitive systems and practices	
MSS403013A	Lead team culture improvement	
MSS403002A	Ensure process improvements are sustained	
MSS403030A	Improve cost factors in work practices	
MSS403040A	Facilitate and improve implementation of 5S	
MSS403041A	Facilitate breakthrough improvements	
MSS404050A	Undertake process capability improvements	MSS404052A
MSS403051A	Mistake proof an operational process	
MSS404052A	Apply statistics to operational processes	
MSS404060A	Facilitate the use of planning software systems in a work area or team	MSS402060A
MSS404081A	Undertake proactive maintenance analyses	
MSS404082A	Assist in implementing a proactive maintenance strategy	

Unit code	Title	Prerequisites
MSAENV472B	Implement and monitor environmentally sustainable work practices	
MSAPMOHS400A	Contribute to OHS management system	MSAPMOHS300A MSAPMOHS200A
MSAPMOHS401A	Assess risk	
MSAPMPER400A	Coordinate permit process	MSAPMPER300C
PMASUP420B	Minimise environmental impact of process	
PSPPM402B	Manage simple projects	
TAEASS401B	Plan assessment activities and processes	
TAEASS402B	Assess competence	
TAEASS502B	Design and develop assessment tools	
TAEASS403B	Participate in assessment validation	
Up to two (2) relevant units may be chosen from this Training Package, other endorsed Training Packages and accredited courses, where those units are available at Certificate IV or Diploma.		

Group B2

Unit code	Title	Prerequisites
MEM09002B	Interpret technical drawing	
RIIRIS201B	Conduct local risk control	
MSS402030A	Apply cost factors to work practices	
MSS402031A	Interpret product costs in terms of customer requirements	
MSS402040A	Apply 5S procedures	
MSS402050A	Monitor process capability	

Unit code	Title	Prerequisites
MSS402051A	Apply quality standards	
MSS402060A	Use planning software systems in operations	
MSS402080A	Undertake root cause analysis	
MSS402081A	Contribute to the application of a proactive maintenance strategy	
MSAPMOHS110A	Follow emergency response procedures	
MSAPMOHS300A	Facilitate the implementation of OHS for a work group	MSAPMOHS200A
MSAPMOPS100A	Use equipment	
MSAPMOPS200A	Operate equipment	
MSAPMOPS212A	Use enterprise computers or data systems	
MSAPMPER200C	Work in accordance with an issued permit	
MSAPMPER201A	Monitor and control work permits	
MSAPMPER202A	Observe permit work	
MSAPMPER205C	Enter confined space	
MSAPMPER300C	Issue work permits	RIIRIS201B
MSAPMSUP106A	Work in a team	
MSAPMSUP201A	Receive or despatch goods	
MSAPMSUP210A	Process and record information	
MSAPMSUP230A	Monitor process operations	
MSAPMSUP240A	Undertake minor maintenance	
MSAPMSUP280A	Manage conflict at work	
MSAPMSUP292A	Sample and test materials and product	

Unit code	Title	Prerequisites
MSAPMSUP300A	Identify and implement opportunities to maximise production efficiencies	MSAPMSUP200A
MSAPMSUP303A	Identify equipment faults	
MSAPMSUP310A	Contribute to development of plant documentation	
MSAPMSUP330A	Develop and adjust a production schedule	
MSAPMSUP382A	Provide coaching/mentoring in the workplace	
MSAPMSUP390A	Use structured problem solving tools	
MSL952001A	Collect routine site samples	
MSL973001A	Perform basic tests	
MSL974005A	Perform physical tests	
PMAOPS105C	Select and prepare materials	
PMAOPS216B	Operate local control system	
PMAOPS305B	Operate process control systems	
PMBHAN103C	Shift materials safely by hand	
PMC552002C	Operate equipment to blend/mix materials	
PMC552003C	Operate grinding equipment	
PMC552004C	Prepare for production	
PMC552005C	Process greenware/green products	
PMC552006C	Operate an autoclave	
PMC552007B	Heat accelerate the curing of precast concrete	
PMC552008B	Operate crushing equipment	
PMC552010C	Operate a calcining kiln	

Unit code	Title	Prerequisites
PMC552020C	Operate slip casting equipment	
PMC552021C	Operate manual glazing equipment	
PMC552022C	Prepare materials for clay and ceramic production	
PMC552023C	Finish products after firing	
PMC552024C	Hand mould products	
PMC552030C	Operate a firing kiln	
PMC552031C	Operate extrusion equipment	
PMC552032C	Operate pressing equipment	
PMC552040C	Operate glass melting process	
PMC552041C	Operate process ovens	
PMC552042C	Operate blown insulation equipment	
PMC552043C	Operate float forming equipment	
PMC552044C	Operate fibre forming equipment	
PMC552045C	Operate container forming equipment	
PMC552046C	Operate glass printing equipment	
PMC552047C	Operate primary annealing equipment	
PMC552048C	Operate glass finishing equipment	
PMC552049C	Operate on-line stacking and assembly equipment	
PMC552050C	Schedule, cut and bend reinforcement	
PMC552051C	Finish green concrete products	
PMC552052C	Cast moulded concrete products	
PMC552053C	Finish cured concrete products	

Unit code	Title	Prerequisites
PMC552054C	Spin concrete pipes	
PMC552055C	Conduct benching operations	
PMC552056B	Assemble, fabricate and place reinforcement	
PMC552057B	Finish casting operation	
PMC552058B	Demould concrete products	
PMC552060C	Batch mix concrete	
PMC552061C	Deliver concrete to site	
PMC552065B	Prepare asphalt	
PMC552070B	Operate forming equipment	
PMC552071B	Operate wet and dry end equipment	
PMC552072B	Produce fibrous plasterboard	
PMC552090B	Use and maintain tools and equipment for refractory operations	
PMC552091B	Prepare for, install and repair refractory brickwork/blockwork	
PMC552092B	Prepare for and install mouldable refractory materials	
PMC552093B	Prepare for and cast refractory materials	
PMC552094B	Prepare for and apply shotcrete for installation	
PMC552095B	Prepare for, install and repair ceramic fibre	
PMC553000C	Set up and tune a process	
PMC553010C	Process raw meal into product	PMC552010C
PMC553020C	Prepare moulds and dies	

Unit code	Title	Prerequisites
PMC553021C	Set up and tune glazing equipment	
PMC553040C	Set up and optimise glass forming process	
PMC553041C	Set up and optimise glass furnace process	
PMC553042C	Set up and optimise secondary process	
PMC553050C	Produce architectural precast concrete	
PMC553051B	Produce structural precast concrete	
PMC553070B	Design and construct moulds for fibrous plaster products	PMC552024C
PMC553072B	Model fibrous plaster products	
PMC553080B	Set up and optimise finishing process	
PMC561072C	Store materials for production	
PMC561080B	Organise self	
PMC562070B	Move materials	
PMC562071C	Operate bulk materials handling equipment	
PMC562075B	Maintain kiln refractory	
PMC562081B	Deliver customer service	
PMC562083C	Allocate and complete team tasks	
PMC563081C	Carry out stock control	
TAEASS301B	Contribute to assessment	
TAEDEL301A	Provide work skill instruction	
TLIC3003A	Drive medium rigid vehicle	
TLIC3004A	Drive heavy rigid vehicle	

Unit code	Title	Prerequisites
TLID2010A	Operate a forklift	
Note: Only one of TLIC3003A or TLIC3004A may be included in this qualification, not both. Up to six (6) relevant units may be chosen from this Training Package, other endorsed Training Packages and accredited courses, where those units are available at Certificate II, III, IV or Diploma.		

RII20909 Certificate II in Drilling Operations

Modification History

Not applicable.

Description

This qualification reflects the role of employees such as drillers' assistants who undertake a prescribed range of functions involving known routines and procedures and who take some responsibility for the quality of work outcomes.

Pathways Information

Not applicable.

Licensing/Regulatory Information

Not applicable.

Entry Requirements

Not applicable.

Employability Skills Summary

The following table includes a summary of the employability skills as identified by the resources and infrastructure industry for this qualification. The table should be interpreted in conjunction with the detailed requirements of each unit of competency packaged in this qualification. The outcomes required here are broad industry requirements that may vary depending on packaging options.

Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	• speak clearly and directly • listen carefully to instructions and information • read and interpret work instructions and safety signs • calculate basic weights, distances and volumes • complete incident and maintenance reports • adjust communication style to meet the needs of people with diverse backgrounds
Teamwork	• apply teamwork in a range of situations, particularly in a safety context • contribute to the planning and execution of operations • work cooperatively with people of different ages, gender, race, religion or political persuasion and people with disability • recognise and respond sensitively to people from culturally and linguistically diverse backgrounds
Problem-solving	• adjust work methods in response to changing weather and site conditions • participate in team solutions to safety issues
Initiative and enterprise	• independently adapt to changing work conditions or different work areas • identify potential improvements to working practice and conditions • identify and assess risks in the workplace
Planning and organising	• manage time and priorities to complete work • identify and obtain appropriate equipment and permits • identify potential hazards and prepare appropriate responses • follow procedures and techniques relevant to the equipment and work being done
Self-management	• take responsibility for planning and organising own work priorities and completing assigned tasks

	• monitor own performance to ensure work will be completed well and on time • understand the standard of work expected at a work site
Learning	• be willing to learn new ways of working • seek information to improve performance from people and workplace documents like policies, procedures etc • understand equipment characteristics, technical capabilities, limitations and procedures
Technology	• use technology to monitor and report on work progress • use communications technology appropriate to the workplace (email, mobile, radio, etc) • operate equipment safely

Packaging Rules

Requirements for completion of the qualification

The following table provides the packaging rules for this qualification, followed by the list of relevant units of competency.

Successful completion of twelve (12) units of competency made up of:

- eight (8) Core units, and
- four (4) elective units of which:
- at least one (1) must come from the Group A electives listed below
- up to three (3) may come from the Group B electives listed below
- up to one (1) unit may come from AQF level II or III from this, or any other, Training Package

Units of competency chosen must be relevant to the competency requirements for the job function.

Care must be taken to ensure that all prerequisites specified within imported units, or units chosen as electives, are complied with.

Core units of competency	
<i>Unit code</i>	<i>Unit title</i>
BSBWOR203B	Work effectively with others
RIICOM201A	Communicate in the workplace
RIIENV201A	Identify and assess environmental and heritage concerns
RIINHB201B	Load, secure and unload drilling equipment and materials
RIINHB202A	Set up/pack up drill site
RIINHB203A	Support drilling process
RIIOHS201A	Work safely and follow OHS policies and procedures
RIIRIS201B	Conduct local risk control
Group A electives	
<i>Unit code</i>	<i>Unit title</i>
RIINHB205A	Assist continuous flight auger drilling
RIINHB206A	Assist large diameter auger drilling
RIINHB208B	Assist diamond core drilling

RIINHB209A	Assist guided boring
RIINHB210B	Assist surface directional drilling
RIINHB211A	Assist mud rotary drilling
RIINHB213A	Assist cable tool drilling
RIINHB216A	Assist underground in-seam directional drilling
RIINHB218A	Assist grouting or cementing operations
RIINHB219A	Assist with air drilling
Group B electives	
<i>Unit code</i>	<i>Unit title</i>
HLTFA301C	Apply first aid
RIIERR202A	Contribute to the control of emergencies and critical situations
RIIHAN201A	Operate a forklift
RIIHAN206A	Transport plant, equipment and personnel
RIIHAN307A	Operate a vehicle loading crane
RIIHAN208A	Perform dogging
RIIHAN213A	Work effectively in the drilling industry
RIIOHS204A	Work safely at heights
RIIQUA201A	Maintain and monitor site quality standards
RIISAM202A	Isolate and access plant
RIISAM205A	Cut, weld and bend materials
RIIVEH203B	Operate a light vehicle underground
RIISTD202A	Collect routine site samples
RIIUND206A	Install hand held underground ground support

RIIVEH201B	Operate light vehicle
RIIVEH305A	Operate and maintain a four wheel drive vehicle

RII21009 Certificate II in Drilling Oil/Gas (Off shore)

Modification History

Not applicable.

Description

This qualification reflects the role of employees such as a floorman, who undertake a prescribed range of functions involving known routines and procedures and who take some responsibility for the quality of work outcomes.

Pathways Information

Not applicable.

Licensing/Regulatory Information

Not applicable.

Entry Requirements

Not applicable.

Employability Skills Summary

The following table includes a summary of the employability skills as identified by the resources and infrastructure industry for this qualification. The table should be interpreted in conjunction with the detailed requirements of each unit of competency packaged in this qualification. The outcomes required here are broad industry requirements that may vary depending on packaging options.

Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	• speak clearly and directly • listen carefully to instructions and information • read and interpret work instructions and safety signs • calculate basic weights, distances and volumes • complete incident and maintenance reports • adjust communication style to meet the needs of people with diverse backgrounds
Teamwork	• apply teamwork in a range of situations, particularly in a safety context • contribute to the planning and execution of operations • work cooperatively with people of different ages, gender, race, religion or political persuasion and people with disability • recognise and respond sensitively to people from culturally and linguistically diverse backgrounds
Problem-solving	• adjust work methods in response to changing weather and site conditions • participate in team solutions to safety issues
Initiative and enterprise	• independently adapt to changing work conditions or different work areas • identify potential improvements to working practice and conditions • identify and assess risks in the workplace
Planning and organising	• manage time and priorities to complete work • identify and obtain appropriate equipment and permits • identify potential hazards and prepare appropriate responses • follow procedures and techniques relevant to the equipment and work being done
Self-management	• take responsibility for planning and organising own work priorities and completing assigned tasks

	• monitor own performance to ensure work will be completed well and on time • understand the standard of work expected at a work site
Learning	• be willing to learn new ways of working • seek information to improve performance from people and workplace documents like policies, procedures etc • understand equipment characteristics, technical capabilities, limitations and procedures
Technology	• use technology to monitor and report on work progress • use communications technology appropriate to the workplace (email, mobile, radio, etc) • operate equipment safely

Packaging Rules

Requirements for completion of the qualification

The following table provides the packaging rules for this qualification, followed by the list of relevant units of competency.

Successful completion of fifteen (15) units of competency made up of:

- thirteen (13) Core units, and
- two (2) elective units of which:
- at least one (1) must come from the Group A electives listed below
- up to one (1) from the Group B electives listed below
- up to one (1) unit may come from AQF level II or III level from this, or any other, Training Package.

Units of competency chosen must be relevant to the competency requirements for the job function.

Care must be taken to ensure that all prerequisites specified within imported units, or units chosen as electives, are complied with.

Core units of competency	
<i>Unit code</i>	<i>Unit title</i>
MSAPMSUP172 A	Identify and minimise environmental hazards
BSBWOR203A	Work effectively with others
RIICOM201A	Communicate in the workplace
RIIERR202A	Contribute to the control of emergencies and critical situations
RIIOGD201A	Assist in maintaining rig safety and emergency procedures
RIIOGD202A	Carry out equipment and basic rig maintenance
RIIOGD203A	Prepare and operate drilling fluid systems
RIIOGD204A	Perform rig floor operations
RIIOHS201A	Work safely and follow OHS policies and procedures
RIIOHS202A	Enter and work in confined spaces
RIIOHS204A	Work safely at heights
RIIQUA201A	Maintain and monitor site quality standards
RIIRIS201B	Conduct local risk control

Group A electives	
<i>Unit code</i>	<i>Unit title</i>
RIIHAN202A	Handle and store cargo
RIIOGF201A	Carry out deck operations
RIIOGF202A	Assist in the transfer of passengers and freight during helicopter operations
Group B electives	
<i>Unit code</i>	<i>Unit title</i>
HLTFA301C	Apply first aid
RIIBEF201B	Plan and organise work
RIIHAN205A	Secure cargo
RIISAM203B	Use hand and power tools

RII21109 Certificate II in Drilling Oil/Gas (On shore)

Modification History

Not applicable.

Description

This qualification reflects the role of employees such as a floorman, who undertake a prescribed range of functions involving known routines and procedures and who take some responsibility for the quality of work outcomes.

Pathways Information

Not applicable.

Licensing/Regulatory Information

Not applicable.

Entry Requirements

Not applicable.

Employability Skills Summary

The following table includes a summary of the employability skills as identified by the resources and infrastructure industry for this qualification. The table should be interpreted in conjunction with the detailed requirements of each unit of competency packaged in this qualification. The outcomes required here are broad industry requirements that may vary depending on packaging options.

Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	• speak clearly and directly • listen carefully to instructions and information • read and interpret work instructions and safety signs • calculate basic weights, distances and volumes • complete incident and maintenance reports • adjust communication style to meet the needs of people with diverse backgrounds
Teamwork	• apply teamwork in a range of situations, particularly in a safety context • contribute to the planning and execution of operations • work cooperatively with people of different ages, gender, race, religion or political persuasion and people with disability • recognise and respond sensitively to people from culturally and linguistically diverse backgrounds
Problem-solving	• adjust work methods in response to changing weather and site conditions • participate in team solutions to safety issues
Initiative and enterprise	• independently adapt to changing work conditions or different work areas • identify potential improvements to working practice and conditions • identify and assess risks in the workplace
Planning and organising	• manage time and priorities to complete work • identify and obtain appropriate equipment and permits • identify potential hazards and prepare appropriate responses • follow procedures and techniques relevant to the equipment and work being done
Self-management	• take responsibility for planning and organising own work priorities and completing assigned tasks

	• monitor own performance to ensure work will be completed well and on time • understand the standard of work expected at a work site
Learning	• be willing to learn new ways of working • seek information to improve performance from people and workplace documents like policies, procedures etc • understand equipment characteristics, technical capabilities, limitations and procedures
Technology	• use technology to monitor and report on work progress • use communications technology appropriate to the workplace (email, mobile, radio, etc) • operate equipment safely

Packaging Rules

Requirements for completion of the qualification

The following table provides the packaging rules for this qualification, followed by the list of relevant units of competency.

Successful completion of twelve(12) units of competency made up of:

- eight (8) Core units, and
- four (4) elective units of which:
 - at least two (2) must come from the Group A electives listed below
 - up to two (2) units may come from AQF level II or III from this, or any other, Training Package

Units of competency chosen must be relevant to the competency requirements for the job function.

Care must be taken to ensure that all prerequisites specified within imported units, or units chosen as electives, are complied with.

Core units of competency	
<i>Unit code</i>	<i>Unit title</i>
MSAPMSUP172A	Identify and minimise environmental hazards
RIICOM201A	Communicate in the workplace
RIIERR202A	Contribute to the control of emergencies and critical situations
RIIOGD204A	Perform rig floor operations
RIIOGN201A	Carry out rig lease operations
RIIOHS201A	Work safely and follow OHS policies and procedures
RIIRIS201B	Conduct local risk control
RIISAM209A	Carry out operational maintenance
Group A electives	
<i>Unit code</i>	<i>Unit title</i>
HLTFA301C	Apply first aid
MSAPMPER200C	Work in accordance with an issued permit
RIIHAN201A	Operate a forklift
RIIHAN208A	Perform dogging

RIIHAN209A	Perform basic rigging
RIIHAN307A	Operate a vehicle loading crane
RIIHAN309A	Conduct telescopic materials handler operations
RIIMPO304B	Conduct wheel loader operations
RIIOGD202A	Carry out equipment and basic rig maintenance
RIIOGD205A	Support blow out prevention operations
RIIOGD206A	Assist with coal seam gas control
RIIOHS202A	Enter and work in confined spaces
RIIOHS204A	Work safely at heights
RIISAM205A	Cut, weld and bend materials

RII30112 Certificate III in Surface Extraction Operations

Modification History

Not applicable.

Description

This qualification reflects the role of employees such as production operators in an open cut mine or quarry, who perform tasks involving a broad range of skilled applications in a varied work context, using some discretion and judgement in selecting equipment, services or contingency measures.

Pathways Information

Not applicable.

Licensing/Regulatory Information

Not applicable.

Entry Requirements

Not applicable.

Employability Skills Summary

The following table includes a summary of the employability skills as identified by the resources and infrastructure industry for this qualification. The table should be interpreted in conjunction with the detailed requirements of each unit of competency packaged in this qualification. The outcomes required here are broad industry requirements that may vary depending on packaging options.

Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	• speak clearly and directly • listen carefully to instructions and information • read and interpret work instructions and safety signs • calculate basic weights, distances and volumes • complete incident and maintenance reports • adjust communication style to meet the needs of people with diverse backgrounds
Teamwork	• apply teamwork in a range of situations, particularly in a safety context • contribute to the planning and execution of operations • work cooperatively with people of different ages, gender, race, religion or political persuasion and people with disability • recognise and respond sensitively to people from culturally and linguistically diverse backgrounds
Problem-solving	• adjust work methods in response to changing weather and site conditions • participate in team solutions to safety issues
Initiative and enterprise	• independently adapt to changing work conditions or different work areas • identify potential improvements to working practice and conditions • identify and assess risks in the workplace
Planning and organising	• manage time and priorities to complete work • identify and obtain appropriate equipment and permits • identify potential hazards and prepare appropriate responses • follow procedures and techniques relevant to the equipment and work being done
Self-management	• take responsibility for planning and organising own work priorities and completing assigned tasks

	• monitor own performance to ensure work will be completed well and on time • understand the standard of work expected at a work site
Learning	• be willing to learn new ways of working • seek information to improve performance from people and workplace documents like policies, procedures etc • understand equipment characteristics, technical capabilities, limitations and procedures
Technology	• use technology to monitor and report on work progress • use communications technology appropriate to the workplace (email, mobile, radio, etc) • operate equipment safely

Packaging Rules

Requirements for completion of the qualification

The following table provides the packaging rules for this qualification, followed by the list of relevant units of competency.

Successful completion of thirteen (13) units of competency made up of:

five (5) Core units, and

eight (8) elective units of which:

- at least three (3) must come from the Group A electives listed below

- up to three (3) from the Group B electives listed below

- up to two (2) from AQF level II, III or IV from this, or any other, Training Package

Units of competency chosen must be relevant to the competency requirements for the job function.

Care must be taken to ensure that all prerequisites specified within imported units, or units chosen as electives, are complied with.

The unit RIICOM301B is part of the Communicate information S1, S2, S3 suite of competencies required in Queensland for supervisors in the coal sector.

Core units of competency	
Unit code	Unit title
RIIOHS201A	Work safely and follow OHS policies and procedures
RIIENV201A	Identify and assess environmental and heritage concerns
RIIRIS301B	Apply risk management processes
RIICOM302A	Communicate workplace information
	<i>Either</i>
RIIGOV201A	Comply with site work processes/procedures (Coal)
	<i>OR</i>

RIIQUA201A	Maintain and monitor site quality standards
Group A electives	
<i>Unit code</i>	<i>Unit title</i>
MSAPMPER300C	Issue work permits
RIIBHD301A	Conduct surface blast hole drilling operations
RIIBHD304B	Set up and prepare for open cut drilling operations
RIIBHD305	Conduct down-hole hammer drilling
RIIBLA301A	Conduct surface shotfiring operations
RIIMCO301A	Conduct control centre operations
RIIMCO302A	Conduct surface miner operations
RIIMCO303A	Conduct auger miner operations
RIIMEX301A	Conduct dredging operations
RIIMEX302B	Assess ground conditions
RIIMPG301A	Control and monitor automated plant/machinery
RIIMPO206B	Conduct bulk water truck operations
RIIMPO301C	Conduct hydraulic excavator operations
RIIMPO302B	Conduct hydraulic shovel operations
RIIMPO303A	Conduct rope shovel operations
RIIMPO304B	Conduct wheel loader operations
RIIMPO305B	Conduct coal stockpile dozer operations
RIIMPO306A	Operate plant/machinery on live stockpiles
RIIMPO308B	Conduct tracked dozer operations
RIIMPO309A	Conduct wheeled dozer operations

RIIMPO310B	Conduct grader operations
RIIMPO311A	Conduct haul truck operations
RIIMPO312A	Conduct scraper operations
RIIMPO313B	Conduct face loading operations
RIIMPO329A	Conduct dragline operations
RIIMPO331A	Conduct stockpile dozer operations
RIINHB307B	Conduct conventional core drilling
RIIPEO301A	Conduct conveyor-car high wall mining operations
RIIPRO301C	Conduct crushing and screening plant operations
RIIPRO302A	Perform process control room operations
RIIPRO303A	Conduct sand wash plant operations
RIISAM202A	Isolate and access plant
RIISAM301A	Test operational functions of vehicles and equipment
RIISRM301B	Blend stockpile materials
RIISRM302B	Conduct stockpile reclaiming operations
RIISRM303B	Move and position materials to form stockpiles
RIISRM304B	Maintain stockpiles
RIIVEH201B	Operate light vehicle
RIIVEH307A	Operate heavy rigid vehicle
Group B electives	
<i>Unit code</i>	<i>Unit title</i>
BSBINN301A	Promote innovation in a team environment
BSBPUR301B	Purchase goods and services

HLTFA301B	Apply first aid
MSL925001A	Process and interpret data
PMLOHS301B	Work safely with instruments that emit ionizing radiation
PMLORG301A	Plan and conduct laboratory/field work
MSL973001A	Perform basic tests
RIIBEF302A	Monitor site production activities
RIIBLA201A	Support shotfiring operations
RIIBLA205A	Store, handle and transport explosives
RIIBLA304A	Conduct underground production shotfiring
RIIBLA305A	Conduct secondary blasting
RIIBLA306A	Conduct accretion firing
RIIBLA307A	Conduct blast survey
RIICOM301B	Communicate information
RIICRC310A	Construct and maintain roads
RIIERR301A	Respond to mine incident
RIIERR302A	Respond to local emergencies and incidents
RIIERR308A	Extricate and transport people involved in incidents
RIIERR310A	Provide support for rescue operations
RIIHAN208A	Perform dogging
RIIHAN301B	Operate elevating work platforms
RIIHAN302A	Conduct intermediate scaffolding operations
RIIHAN304A	Conduct slewing crane operations
RIIHAN305A	Operate a gantry or overhead crane

RIIHAN306A	Carry out lifting using multiple cranes
RIIHAN307A	Operate a vehicle loading crane
RIIHAN311A	Conduct operations with integrated tool carrier
RIIOHS301A	Conduct safety and health investigations
RIIPEO206A	Lay and recover cables and hoses
RIISAM303A	Shut down dredge for operator maintenance
RIISAM304A	Install, commission and maintain major conveyor equipment and systems
RIISAM305A	Repair and splice conveyor belting
RIISAM306A	Service and maintain conveyors, feeders and hoppers
RIISAM307A	Service and maintain crushers
RIISAM308A	Service and maintain screens
RIISAM309A	Service and maintain pumps
RIISTD301A	Take environmental samples and measurements
RIIVEH302A	Operate multi-combination vehicle
RIIVEH303A	Drive heavy combination vehicle
RIIVEH306A	Operate mine services vehicle
AHCNAR303A	Implement revegetation works
AHCSAW301A	Construct conservation earthworks
TLIC3004A	Drive heavy rigid vehicle
TLID2022A	Conduct weighbridge operations

RII30212 Certificate III in Underground Coal Operations

Modification History

Not applicable.

Description

This qualification reflects the role of employees such as production operators in an underground coal mine, who perform tasks involving a broad range of skilled applications in a varied work context, using some discretion and judgement in selecting equipment, services or contingency measures.

Pathways Information

Not applicable.

Licensing/Regulatory Information

Not applicable.

Entry Requirements

Not applicable.

Employability Skills Summary

The following table includes a summary of the employability skills as identified by the resources and infrastructure industry for this qualification. The table should be interpreted in conjunction with the detailed requirements of each unit of competency packaged in this qualification. The outcomes required here are broad industry requirements that may vary depending on packaging options.

Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	• speak clearly and directly • listen carefully to instructions and information • read and interpret work instructions and safety signs • calculate basic weights, distances and volumes • complete incident and maintenance reports • adjust communication style to meet the needs of people with diverse backgrounds
Teamwork	• apply teamwork in a range of situations, particularly in a safety context • contribute to the planning and execution of operations • work cooperatively with people of different ages, gender, race, religion or political persuasion and people with disability • recognise and respond sensitively to people from culturally and linguistically diverse backgrounds
Problem-solving	• adjust work methods in response to changing weather and site conditions • participate in team solutions to safety issues • identifies and comprehends relevant mathematical information in familiar activities or texts • selects and uses appropriate familiar mathematical problem-solving strategies to solve problems in familiar contexts
Initiative and enterprise	• independently adapt to changing work conditions or different work areas • identify potential improvements to working practice and conditions • identify and assess risks in the workplace
Planning and organising	• manage time and priorities to complete work • identify and obtain appropriate equipment and permits • identify potential hazards and prepare appropriate responses • follow procedures and techniques relevant to the equipment and

	work being done
Self-management	• take responsibility for planning and organising own work priorities and completing assigned tasks • monitor own performance to ensure work will be completed well and on time • understand the standard of work expected at a work site
Learning	• be willing to learn new ways of working • seek information to improve performance from people and workplace documents like policies, procedures etc • understand equipment characteristics, technical capabilities, limitations and procedures
Technology	• use technology to monitor and report on work progress • use communications technology appropriate to the workplace (email, mobile, radio, etc) • operate equipment safely

Packaging Rules

Requirements for completion of the qualification

The following table provides the packaging rules for this qualification, followed by the list of relevant units of competency.

Successful completion of sixteen (16) units of competency made up of:

- six (6) Core units, and
- ten (10) elective units of which:
- at least five (5) must come from the Group A electives listed below
- up to five (5) from the Group B electives listed below
- up to one (1) unit may come from AQF level II, III or IV from this, or any other, Training Package.

Units of competency chosen must be relevant to the competency requirements for the job function.

Care must be taken to ensure that all prerequisites specified within imported units, or units chosen as electives, are complied with.

Core units of competency	
<i>Unit code</i>	<i>Unit title</i>
RIICOM302A	Communicate workplace information
RIIERR201A	Conduct fire team operations
RIIGOV201A	Comply with site work processes/procedures
RIIMCU208A	Conduct basic strata control operations
RIIMCU214A	Conduct face ventilation operations
RIIRIS301B	Apply risk management processes
Group A electives	
<i>Unit code</i>	<i>Unit title</i>
RIIMCU209A	Conduct roadway maintenance
RIIMCU301A	Conduct specialised strata control operations
RIIMCU302A	Construct and maintain ventilation devices
RIIMCU303A	Conduct continuous miner operations
RIIMCU304A	Conduct shuttle car operations

RIIMCU305A	Conduct outburst mining operations
RIIMCU306A	Conduct shearer operations
RIIMCU307A	Conduct longwall face equipment operations
RIIMCU308A	Install and recover longwall equipment
RIIMCU309A	Operate breaker line supports
RIIMCU310A	Conduct flexible conveyor train (FCT) operations
RIIMCU311A	Monitor control processes
RIIMCU401A	Conduct special roadway operations
RIIMCU402A	Apply spontaneous combustion management measures
RIINHB304B	Conduct air drilling
RIINHB310A	Conduct surface directional drilling
Group B electives	
<i>Unit code</i>	<i>Unit title</i>
RIIBLA302A	Conduct shotfiring operations in underground coal mines
RIICOM301B	Communicate information
RIIENV301A	Conduct atmospheric monitoring
RIIERR203B	Escape from hazardous situation unaided
RIIERR204A	Provide aided rescue to endangered personnel
RIIERR205A	Apply initial response first aid
RIIERR301A	Respond to mine incident
RIIERR302A	Respond to local emergencies and incidents
RIIERR303A	Operate in self-contained regenerative oxygen breathing apparatus
RIIERR304A	Control emergencies and critical situations

RIIERR305A	Control underground fires
RIIERR306A	Conduct underground search
RIIERR307A	Extricate casualties from underground incident
RIIERR308A	Extricate and transport people involved in incidents
RIIERR309A	Establish and operate from fresh air base
RIIERR310A	Provide support for rescue operations
RIIHAN304A	Conduct slewing crane operations
RIIOHS301A	Conduct safety and health investigations
RIIPEO202A	Provide deck support for conveyor-car high wall mining operations
RIIPEO301A	Conduct conveyor-car high wall mining operations
RIISAM304A	Install, commission and maintain major conveyor equipment and systems
RIISAM305A	Repair and splice conveyor belting
RIISAM311A	Maintain winder equipment
RIISAM312A	Inspect and maintain shafts and structures
RIISAM313A	Monitor, inspect and service ropes and attachments
RIIUND205A	Respond to a workforce incident
RIIUND208A	Conduct skip operations
RIIUND209A	Operate automated winder
RIIUND301A	Operate manual winder
RIIUND302A	Conduct cage operations
RIIUND303A	Operate winder for shaft sinking

RII30311 Certificate III in Underground Metalliferous Mining

Modification History

Not applicable.

Description

This qualification reflects the role of employees such as production operators in an underground metalliferous mine, who perform tasks involving a broad range of skilled applications in a varied work context, using some discretion and judgement in selecting equipment, services or contingency measures.

Pathways Information

Not applicable.

Licensing/Regulatory Information

Not applicable.

Entry Requirements

Not applicable.

Employability Skills Summary

The following table includes a summary of the employability skills as identified by the resources and infrastructure industry for this qualification. The table should be interpreted in conjunction with the detailed requirements of each unit of competency packaged in this qualification. The outcomes required here are broad industry requirements that may vary depending on packaging options.

Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	• speak clearly and directly • listen carefully to instructions and information • read and interpret work instructions and safety signs • calculate basic weights, distances and volumes • complete incident and maintenance reports • adjust communication style to meet the needs of people with diverse backgrounds
Teamwork	• apply teamwork in a range of situations, particularly in a safety context • contribute to the planning and execution of operations • work cooperatively with people of different ages, gender, race, religion or political persuasion and people with disability • recognise and respond sensitively to people from culturally and linguistically diverse backgrounds
Problem-solving	• adjust work methods in response to changing weather and site conditions • participate in team solutions to safety issues
Initiative and enterprise	• independently adapt to changing work conditions or different work areas • identify potential improvements to working practice and conditions • identify and assess risks in the workplace
Planning and organising	• manage time and priorities to complete work • identify and obtain appropriate equipment and permits • identify potential hazards and prepare appropriate responses • follow procedures and techniques relevant to the equipment and work being done
Self-management	• take responsibility for planning and organising own work priorities and completing assigned tasks

	• monitor own performance to ensure work will be completed well and on time • understand the standard of work expected at a work site
Learning	• be willing to learn new ways of working • seek information to improve performance from people and workplace documents like policies, procedures etc • understand equipment characteristics, technical capabilities, limitations and procedures
Technology	• use technology to monitor and report on work progress • use communications technology appropriate to the workplace (email, mobile, radio, etc) • operate equipment safely

Packaging Rules

Requirements for completion of the qualification

The following table provides the packaging rules for this qualification, followed by the list of relevant units of competency.

Successful completion of fourteen (14) units of competency made up of:

- six (6) Core units, and
- eight (8) elective units of which:
 - at least five (5) must come from the Group A electives listed below
 - up to three (3) from the Group B electives listed below
 - up to one (1) unit may come from Certificate II, Certificate III or Certificate IV level from this, or any other Training Package

Units of competency chosen must be relevant to the competency requirements for the job function.

Care must be taken to ensure that all prerequisites specified within imported units, or units chosen as electives, are complied with.

Core units of competency	
<i>Unit code</i>	<i>Unit title</i>
RIIOHS201A	Work safely and follow OHS policies and procedures
RIIENV302A	Apply environmentally sustainable work practices
RIICOM302A	Communicate workplace information
RIIMEX302B	Assess ground conditions
RIIQUA201A	Maintain and monitor site quality standards
RIIRIS301B	Apply risk management processes
Group A electives	
<i>Unit code</i>	<i>Unit title</i>
BSBFLM305C	Support operational plan

RIIBEF301A	Run on-site operations
RIIBEF401A	Manage non-routine, complex technical situations
RIIBHD302A	Conduct underground development drilling
RIIBHD303A	Conduct long hole drilling
RIIBLA303A	Conduct underground development shotfiring
RIIBLA304A	Conduct underground production shotfiring
RIIBLA305A	Conduct secondary blasting
RIIERR203B	Escape from hazardous situation unaided
RIIMPG301A	Control and monitor automated plant/machinery
RIIMPO307B	Conduct wheel grader operations in underground mines
RIIMPO333	Conduct underground load, haul and dump truck operations
RIINHB307B	Conduct conventional core drilling
RIINHB310A	Conduct surface directional drilling
RIINHB312A	Conduct raise boring
RIIOHS301A	Conduct safety and health investigation
RIISAM202A	Isolate and access plant
RIISAM306A	Service and maintain conveyors, feeders and hoppers
RIISAM307A	Service and maintain crushers
RIISAM312A	Inspect and maintain shafts and structures
RIISRM302B	Conduct stockpile reclaiming operations
RIIUMM301A	Conduct wet filling activities
RIIUMM302A	Install sets
RIIUMM303A	Conduct hand held mining

RIIUMM304A	Construct and maintain underground roads
RIIUMM305A	Install and remove a secondary fan
RIIUMM306A	Conduct mechanical scaling
RIIUMM307A	Maintain underground stockpiles
RIIUND205A	Respond to a workforce incident
RIIUND301A	Operate manual winder
RIIUND302A	Conduct cage operations
RIIUND303A	Operate winder for shaft sinking
RIIUND304A	Recover equipment
RIIUND305A	Recover underground equipment
RIIUND306A	Conduct line of sight remote operations
RIIUND307A	Conduct tele-remote operations
RIIUND308A	Conduct control room operations
RIIUND309A	Conduct mechanical underground ground support drilling and installation
RIIVEH306A	Operate mine service vehicle
Group B electives	
<i>Unit code</i>	<i>Unit title</i>
BSBINN301A	Promote innovation in a team environment
MSAPMPER300C	Issue work permits
RIIBEF302A	Monitor site production activities
RIIBLA306A	Conduct accretion firing
RIIERR204A	Provide aided rescue to endangered personnel
RIIERR302A	Respond to local emergencies and incidents

RIIHAN304A	Conduct slewing crane operations
RIIHAN306A	Carry out lifting using multiple cranes
RIIHAN309A	Conduct telescopic materials handler operations
RIIHAN310A	Conduct crane operations underground
RIIHAN311A	Conduct operations with integrated tool carrier
RIIMPO332A	Conduct operations with skid steer loader
RIISAM311A	Maintain winder equipment
RIISAM313A	Monitor, inspect and service ropes and attachments
RIISTD301A	Take environmental samples and measurements
RIIUND310	Apply shot-crete underground
RIIVEH301A	Conduct rail haulage operations

RII30411 Certificate III in Resource Processing

Modification History

Not applicable.

Description

This qualification reflects the role of employees such as production operators in a metalliferous processing facility or a coal preparation and treatment plant, who perform tasks involving a broad range of skilled applications in a varied work context, using some discretion and judgement in selecting equipment, services or contingency measures.

Pathways Information

Not applicable.

Licensing/Regulatory Information

Not applicable.

Entry Requirements

Not applicable.

Employability Skills Summary

The following table includes a summary of the employability skills as identified by the resources and infrastructure industry for this qualification. The table should be interpreted in conjunction with the detailed requirements of each unit of competency packaged in this qualification. The outcomes required here are broad industry requirements that may vary depending on packaging options.

Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	• speak clearly and directly • listen carefully to instructions and information • read and interpret work instructions and safety signs • calculate basic weights, distances and volumes • complete incident and maintenance reports • adjust communication style to meet the needs of people with diverse backgrounds
Teamwork	• apply teamwork in a range of situations, particularly in a safety context • contribute to the planning and execution of operations • work cooperatively with people of different ages, gender, race, religion or political persuasion and people with disability • recognise and respond sensitively to people from culturally and linguistically diverse backgrounds
Problem-solving	• adjust work methods in response to changing weather and site conditions • participate in team solutions to safety issues
Initiative and enterprise	• independently adapt to changing work conditions or different work areas • identify potential improvements to working practice and conditions • identify and assess risks in the workplace
Planning and organising	• manage time and priorities to complete work • identify and obtain appropriate equipment and permits • identify potential hazards and prepare appropriate responses • follow procedures and techniques relevant to the equipment and work being done
Self-management	• take responsibility for planning and organising own work priorities and completing assigned tasks

	• monitor own performance to ensure work will be completed well and on time • understand the standard of work expected at a work site
Learning	• be willing to learn new ways of working • seek information to improve performance from people and workplace documents like policies, procedures etc • understand equipment characteristics, technical capabilities, limitations and procedures
Technology	• use technology to monitor and report on work progress • use communications technology appropriate to the workplace (email, mobile, radio, etc) • operate equipment safely

Packaging Rules

Requirements for completion of the qualification

The following table provides the packaging rules for this qualification, followed by the list of relevant units of competency.

Note about regulations: RIIERR302A and RIIGOV201A are **Mandatory in NSW**

Successful completion of thirteen (13) units of competency made up of:

- five (5) Core units, and
- eight (8) elective units of which:
- at least six (6) must come from the Group A listed below
- up to two (2) from the Group B electives listed below or from Certificate II, Certificate III or Certificate IV level from this, or any other Training Package

Units of competency chosen must be relevant to the competency requirements for the job function.

Care must be taken to ensure that all prerequisites specified within imported units, or units chosen as electives, are complied with.

Core units of competency	
<i>Unit code</i>	<i>Unit title</i>
RIIENV302A	Apply environmentally sustainable work practices
RIICOM201A	Communicate in the workplace
RIIOHS201A	Work safely and follow OHS policies and procedures
RIIRIS301B	Apply risk management processes
	<i>And either</i>
RIIQUA201A	Maintain and monitor site quality standards
	<i>OR</i>

RIIGOV201A	Comply with site work processes/procedures (<i>Coal sector only, Mandatory in NSW</i>)
Group A electives	
<i>Unit code</i>	<i>Unit title</i>
FPPSTM320A	Manage steam boiler startup
FPPSTM330A	Shut down and bank steam boiler
PMAOPS206B	Operate separation equipment
PMAOPS307B	Transfer bulk fluids into/out of storage facility
PMAOPS330B	Communicate pipeline control centre operations
MSAPMPER300C	Issue work permits
RIICOM301B	Communicate information
RIICOM302A	Communicate workplace information
RIIERR302A	Respond to local emergencies and incidents (<i>Mandatory in Coal sector in NSW</i>)
RIIHAN311A	Conduct operations with integrated tool carrier
RIIMCP301A	Monitor coal preparation plant operations
RIIMPG301A	Control and monitor automated plant/machinery
RIIMPO304B	Conduct wheel loader operations
RIIMPO305B	Conduct coal stockpile dozer operations
RIIMPO306A	Operate plant/machinery on live stockpiles
RIIMPO308B	Conduct tracked dozer operations
RIIMPO309A	Conduct wheeled dozer operations
RIIMPO310B	Conduct grader operations
RIIMPO311A	Conduct haul truck operations

RIIMPO331A	Conduct stockpile dozer operations
RIIOHS301A	Conduct safety and health investigation
RIIPBE301A	Conduct calcinations activities
RIIPBE302A	Conduct bacterial oxidation
RIIPBE303B	Conduct filtering process
RIIPBE304B	Conduct heavy media separation
RIIPBE305A	Conduct high tension separation
RIIPBE306A	Conduct leaching process
RIIPBE307A	Conduct pressure oxidation
RIIPBE308B	Conduct thickening and clarifying process
RIIPBE309B	Conduct wet gravity separation
RIIPBE310B	Conduct flotation process
RIIPBE311B	Conduct magnetic separation
RIIPBP301A	Process lime products
RIIPBP302A	Control acid plant operations
RIIPEO201B	Conduct conveyor operations
RIIPEO203B	Conduct stacker operations
RIIPEO205A	Conduct ship loading operations
RIIPEO302	Operate and monitor ore car dumpers
RIIPGP201A	Conduct pump operations
RIIPGP202A	Handle reagents
RIIPGP301A	Conduct drying activities
RIIPGP302A	Monitor and operate auxiliary plant and equipment

RIIPHA301A	Conduct milling/grinding
RIIPHA302A	Operate and monitor filter processes
RIIPRE301A	Conduct electrowinning/electrorefining operations
RIIPRE302A	Conduct elution processes
RIIPRE303A	Conduct gold room operations
RIIPRE304A	Monitor casting quality
RIIPRO301C	Conduct crushing and screening plant operations
RIIPRO302A	Perform processing control room operations
RIIPSM301A	Cast a blast furnace
RIIPSM302A	Cast ingots
RIIPSM303A	Operate a blast furnace
RIIPSM304A	Operate furnaces
RIIPSM305A	Operate converters
RIIPSM306A	Supply molten metal and additives to furnaces
RIIPSM307A	Control molten metal in holding furnace/vessel
RIIPSM308A	Monitor and maintain furnace gas efficiency
RIIPSM309A	Monitor and maintain flue gas efficiency
RIISAM202A	Isolate and access plant
RIISRM301B	Blend stockpile materials
RIISRM302B	Conduct stockpile reclaiming operations
RIISRM304B	Maintain stockpiles
RIIWBP203B	Monitor tailings dam environment
RIIWMG302A	Reclaim and treat water system

UEPOPS316B	Operate and monitor boiler steam/water cycle
Group B electives	
<i>Unit code</i>	<i>Unit title</i>
BSBPUR301B	Purchase goods and services
BSBRKG304B	Maintain business records
PMAOPS223B	Operate and monitor valve systems
PMAOPS230B	Monitor, operate and maintain pipeline stations and equipment
PMAOPS335A	Conduct pipeline pigging
PMAOPS202B	Operate fluid mixing equipment
PMAOPS205B	Operate heat exchangers
PMAOPS207B	Operate powered separation equipment
PMAOPS208B	Operate chemical separation equipment
PMLOHS301B	Work safely with instruments that emit ionizing radiation
RIIBLA306A	Conduct accretion firing
RIIERR205A	Apply initial response First Aid
RIIERR301A	Respond to mine incident
RIIERR302A	Respond to local emergencies and incidents
RIIERR303A	Operate in self-contained regenerative oxygen breathing apparatus
RIIERR308A	Extricate and transport people involved in incidents
RIIHAN305A	Operate a gantry or overhead crane
RIIHAN307A	Operate a vehicle loading crane
RIIMCP202A	Conduct rail dispatch operations
RIIMEX203B	Break oversize rock

RIIMPG201A	Connect and disconnect reefer units
RIIMPO206B	Conduct bulk water truck operations
RIIMPO208A	Operate support equipment
RIIMPO332A	Conduct operations with skid steer loader
RIIOHS202A	Enter and work in confined spaces
RIIOHS204A	Work safely at heights
RIIPBE201A	Conduct aeration process
RIIPBE202A	Conduct digestion process
RIIPBE203A	Conduct precipitation operations
RIIPBE204A	Conduct reduction process
RIIPBE205B	Conduct roasting operations
RIIPBP202A	Conduct air cleaning activities
RIIPEO204A	Conduct shore side mooring operations
RIIPGP201A	Conduct pump operations
RIIPGP204A	Carry out bore-field operations
RIIPHA201A	Operate raw material feed systems
RIIPRE201A	Conduct solvent extraction
RIIPRE202A	Prepare and carry out electrolytic cleaning process
RIIPRE203A	Prepare for sintering activities
RIIPRE204A	Sinter materials
RIIPRO202A	Conduct screening and conveying operations
RIIPRO204A	Bulk package and store product
RIIPRO205A	Conduct blending plant operations

RIIPSM201A	Tap furnaces
RIIPSM202A	Prepare for pelletising activities
RIIPSM203A	Produce pellets
RIISAM214A	Provide support to electrical tradesperson
RIISAM301A	Test operational functions of vehicles and equipment
RIISAM304A	Install, commission and maintain major conveyor equipment and systems
RIISAM305A	Repair and splice conveyor belting
RIISTD301A	Take environmental samples and measurements
RIIVEH201B	Operate light vehicle
RIIVEH302A	Operate multi-combination vehicle
RIIWBP201A	Treat and dispose of rejects and tailings
RIIWBP202A	Distribute tailings
TLIA2009A	Complete and check import/export documentation

RII30509 Certificate III in Mining Exploration

Modification History

Not applicable.

Description

This qualification reflects the role of exploration geological technicians or mining geological technicians who perform tasks involving a broad range of skilled applications applied in a wide variety of contexts, which may involve application of some discretion and judgement in selecting equipment, services or contingency measures.

Pathways Information

Not applicable.

Licensing/Regulatory Information

Not applicable.

Entry Requirements

Not applicable.

Employability Skills Summary

The following table includes a summary of the employability skills as identified by the resources and infrastructure industry for this qualification. The table should be interpreted in conjunction with the detailed requirements of each unit of competency packaged in this qualification. The outcomes required here are broad industry requirements that may vary depending on packaging options.

Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	• speak clearly and directly • listen carefully to instructions and information • read and interpret work instructions and safety signs • calculate basic weights, distances and volumes • complete incident and maintenance reports • adjust communication style to meet the needs of people with diverse backgrounds
Teamwork	• apply teamwork in a range of situations, particularly in a safety context • contribute to the planning and execution of operations • work cooperatively with people of different ages, gender, race, religion or political persuasion and people with disability • recognise and respond sensitively to people from culturally and linguistically diverse backgrounds
Problem-solving	• adjust work methods in response to changing weather and site conditions • participate in team solutions to safety issues
Initiative and enterprise	• independently adapt to changing work conditions or different work areas • identify potential improvements to working practice and conditions • identify and assess risks in the workplace
Planning and organising	• manage time and priorities to complete work • identify and obtain appropriate equipment and permits • identify potential hazards and prepare appropriate responses • follow procedures and techniques relevant to the equipment and work being done
Self-management	• take responsibility for planning and organising own work priorities and completing assigned tasks

	• monitor own performance to ensure work will be completed well and on time • understand the standard of work expected at a work site
Learning	• be willing to learn new ways of working • seek information to improve performance from people and workplace documents like policies, procedures etc • understand equipment characteristics, technical capabilities, limitations and procedures
Technology	• use technology to monitor and report on work progress • use communications technology appropriate to the workplace (email, mobile, radio, etc) • operate equipment safely

Packaging Rules

Requirements for completion of the qualification

The following table provides the packaging rules for this qualification, followed by the list of relevant units of competency.

Successful completion of eighteen (18) units of competency made up of:

- seven (7) Core units, and
- eleven (11) elective units of which:
 - at least six (6) must come from the Group A electives listed below
 - up to five (5) from the Group B electives listed below
 - up to one (1) unit may come from AQF level II, III or IV in this, or any other, Training Package or accredited course.

Units of competency chosen must

- be relevant to the competency requirements for the job function
- reflect the competency profile for the occupation at the enterprise level
- in the case of accredited course units of competency, not duplicate in part or in whole any unit from a Training Package.

Care must be taken to ensure that all prerequisites specified within imported units, or units chosen as electives, are complied with.

Core units of competency	
<i>Unit code</i>	<i>Unit title</i>
RIIENV201A	Identify and assess environmental and heritage concerns
HLTFA301C	Apply First Aid
RIICOM201A	Communicate in the workplace
RIIOHS201A	Work safely and follow OHS policies and procedures
RIIQUA201A	Maintain and monitor site quality standards
RIIRIS201B	Conduct local risk control
RIISTD202A	Collect routine site samples
Group A electives	
<i>Unit code</i>	<i>Unit title</i>
CPPSIS3016A	Provide field support services
RIICAR301A	Rehabilitate exploration site

RIIEGS201A	Operate in isolated and remote situations
RIIEGS301A	Operate and maintain instruments and field equipment
RIIEGS302A	Plan and undertake field trip
RIIEGS303A	Provide geological field assistance
RIIEGS304A	Mobilise equipment and materials
RIIEGS305B	Navigate in remote or trackless areas
RIIEGS306A	Prepare drill site
RIISTD302A	Process data and maintain accurate records
Group B electives	
<i>Unit code</i>	<i>Unit title</i>
HLTFA402C	Apply advanced first aid
BSBSUS301A	Implement and monitor environmentally sustainable work practices
RIISAM209A	Carry out operational maintenance
RIISTD301A	Take environmental samples and measurements
RIIVEH305A	Operate and maintain a four wheel drive vehicle

RII30611 Certificate III in Small Mining Operations

Modification History

Not applicable.

Description

This qualification reflects the role of individuals working in an underground or open cut soft rock small mine, such as an opal mine. They perform tasks involving a broad range of skilled applications applied in a wide variety of contexts, which may involve application of some discretion and judgment in selecting equipment, services or contingency measures.

Pathways Information

Not applicable.

Licensing/Regulatory Information

Not applicable.

Entry Requirements

Not applicable.

Employability Skills Summary

The following table includes a summary of the employability skills as identified by the resources and infrastructure industry for this qualification. The table should be interpreted in conjunction with the detailed requirements of each unit of competency packaged in this qualification. The outcomes required here are broad industry requirements that may vary depending on packaging options.

Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	• speak clearly and directly • listen carefully to instructions and information • read and interpret work instructions and safety signs • calculate basic weights, distances and volumes • complete incident and maintenance reports • adjust communication style to meet the needs of people with diverse backgrounds
Teamwork	• apply teamwork in a range of situations, particularly in a safety context • contribute to the planning and execution of operations • work cooperatively with people of different ages, gender, race, religion or political persuasion and people with disability • recognise and respond sensitively to people from culturally and linguistically diverse backgrounds
Problem-solving	• adjust work methods in response to changing weather and site conditions • participate in team solutions to safety issues
Initiative and enterprise	• independently adapt to changing work conditions or different work areas • identify potential improvements to working practice and conditions • identify and assess risks in the workplace
Planning and organising	• manage time and priorities to complete work • identify and obtain appropriate equipment and permits • identify potential hazards and prepare appropriate responses • follow procedures and techniques relevant to the equipment and work being done
Self-management	• take responsibility for planning and organising own work priorities and completing assigned tasks

	• monitor own performance to ensure work will be completed well and on time • understand the standard of work expected at a work site
Learning	• be willing to learn new ways of working • seek information to improve performance from people and workplace documents like policies, procedures etc • understand equipment characteristics, technical capabilities, limitations and procedures
Technology	• use technology to monitor and report on work progress • use communications technology appropriate to the workplace (email, mobile, radio, etc) • operate equipment safely

Packaging Rules

Requirements for completion of the qualification

The following table provides the packaging rules for this qualification, followed by the list of relevant units of competency.

Successful completion of fifteen (15) units of competency made up of:

- three (3) Core units, and
- twelve (12) elective units of which:
- at least five (5) must come from the Group A electives listed below
- up to seven (7) from the Group B electives listed below
- up to one (1) unit may come from AQF level II, III or IV level from this, or any other, Training Package.

Units of competency chosen must be relevant to the competency requirements for the job function.

Care must be taken to ensure that all prerequisites specified within imported units, or units chosen as electives, are complied with.

Core units of competency	
<i>Unit code</i>	<i>Unit title</i>
RIICOM201A	Communicate in the workplace
RIIOHS201A	Work safely and follow OHS policies and procedures
RIIRIS201B	Conduct local risk control
Group A electives	
<i>Unit code</i>	<i>Unit title</i>
RIICAR302A	Rehabilitate small mine site
RIIMEX201A	Suppress dust in open-cut environment
RIIMEX203B	Break oversize rock
RIIMEX302B	Assess ground conditions
RIIMPO301C	Conduct hydraulic excavator operations
RIIMPO304B	Conduct wheel loader operations
RIIMPO311A	Conduct haul truck operations
RIIMPO314A	Operate small open cut mine equipment

RIIMSM301A	Establish a mining claim
RIIMSM302A	Plan small mine operations
RIIMSM303A	Install underground shaft
RIIMSM304A	Inspect small mines operations
RIIMSM305A	Conduct materials extraction operations underground
RIIMSM306A	Design and maintain pillar system and ground control
RIIMSM307A	Install and maintain ventilation systems and equipment
RIISRM303B	Move and position materials to form stockpiles
RIISRM304B	Maintain stockpiles
RIIUMM201A	Install ground support
RIIUMM203A	Prepare and perform manual scaling operations
AHCNAR201A	Carry out natural area restoration works
AHCSAW201A	Conduct erosion and sediment control activities
AHCNAR303A	Implement revegetation works
AHCSAW301A	Construct conservation earthworks
Group B electives	
<i>Unit code</i>	<i>Unit title</i>
HLTFA301C	Apply first aid
RIIENV201A	Identify and assess environmental and heritage concerns
RIIERR302A	Respond to local emergencies and incidents
RIIHAN203A	Conduct lifting operations
RIIHAN208A	Perform dogging
RIIHAN209A	Perform basic rigging

RIIOHS204A	Work safely at heights
RIIPEO201B	Conduct conveyor operations
RIIRIS301B	Apply risk management processes
RIISAM207A	Apply operational maintenance skills
RIISAM212A	Service mine plant and equipment
RIISAM213A	Position and set up mobile lighting
RIISAM310A	Install and commission small mine plant, machinery and services

RII30709 Certificate III in Mine Emergency Response and Rescue

Modification History

Not applicable.

Description

This qualification reflects the role of response and rescue team members who work in a mine site or a construction site, who perform tasks involving a broad range of skilled applications applied in a wide variety of contexts, which may involve application of some discretion and judgement in selecting equipment, services or contingency measures.

Pathways Information

Not applicable.

Licensing/Regulatory Information

Not applicable.

Entry Requirements

Not applicable.

Employability Skills Summary

The following table includes a summary of the employability skills as identified by the resources and infrastructure industry for this qualification. The table should be interpreted in conjunction with the detailed requirements of each unit of competency packaged in this qualification. The outcomes required here are broad industry requirements that may vary depending on packaging options.

Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	• speak clearly and directly • listen carefully to instructions and information • read and interpret work instructions and safety signs • calculate basic weights, distances and volumes • complete incident and maintenance reports • adjust communication style to meet the needs of people with diverse backgrounds
Teamwork	• apply teamwork in a range of situations, particularly in a safety context • contribute to the planning and execution of operations • work cooperatively with people of different ages, gender, race, religion or political persuasion and people with disability • recognise and respond sensitively to people from culturally and linguistically diverse backgrounds
Problem-solving	• adjust work methods in response to changing weather and site conditions • participate in team solutions to safety issues
Initiative and enterprise	• independently adapt to changing work conditions or different work areas • identify potential improvements to working practice and conditions • identify and assess risks in the workplace
Planning and organising	• manage time and priorities to complete work • identify and obtain appropriate equipment and permits • identify potential hazards and prepare appropriate responses • follow procedures and techniques relevant to the equipment and work being done
Self-management	• take responsibility for planning and organising own work priorities and completing assigned tasks

	• monitor own performance to ensure work will be completed well and on time • understand the standard of work expected at a work site
Learning	• be willing to learn new ways of working • seek information to improve performance from people and workplace documents like policies, procedures etc • understand equipment characteristics, technical capabilities, limitations and procedures
Technology	• use technology to monitor and report on work progress • use communications technology appropriate to the workplace (email, mobile, radio, etc) • operate equipment safely

Packaging Rules

Requirements for completion of the qualification

The following table provides the packaging rules for this qualification, followed by the list of relevant units of competency.

Successful completion of sixteen (16) units of competency made up of:

- five (5) Core units, and
- eleven (11) elective units of which:
 - at least nine (9) must come from the Group A electives listed below
 - up to two (2) units may come from AQF level II, III or IV in this, or any other, Training Package or accredited course.

Units of competency chosen must

- be relevant to the competency requirements for the job function
- reflect the competency profile for the occupation at the enterprise level
- in the case of accredited course units of competency, not duplicate in part or in whole any unit from a Training Package.

Care must be taken to ensure that all prerequisites specified within imported units, or units chosen as electives, are complied with.

Core units of competency	
<i>Unit code</i>	<i>Unit title</i>
HLTFA301C	Apply First Aid
RIICOM201A	Communicate in the workforce
RIIOHS201A	Work safely and follow OHS policies and procedures
RIIRIS201B	Conduct local risk control
	<i>And either</i>
RIIQUA201A	Maintain and monitor site quality standards
	<i>OR</i>

RIIGOV201A	Comply with site work processes/procedures (Coal)
Group A electives	
<i>Unit code</i>	<i>Unit title</i>
HLTFA402C	Apply advanced first aid
PMAOHS211B	Prepare equipment for emergency response
PMAOMIR444 B	Develop incident containment tactics
PUAAMS007B	Coordinate search and rescue operations
PUAFIR207B	Operate breathing apparatus open circuit
PUAFIR320	Render hazardous materials safe
PUAFIR316	Identify, detect and monitor hazardous materials at an incident
PUASAR024A	Undertake road crash rescue
PUASAR032A	Undertake vertical rescue
PUASAR025A	Undertake confined space rescue
PUASAR027A	Undertake land search rescue
RIIERR201A	Conduct fire team operations
RIIERR205A	Apply initial response First Aid
RIIERR301A	Respond to mine incident
RIIERR302A	Respond to local emergencies and incidents
RIIERR303A	Operate in self-contained regenerative oxygen breathing apparatus
RIIERR304A	Control emergencies and critical situations
RIIERR305A	Control underground fires
RIIERR306A	Conduct underground search
RIIERR307A	Extricate casualties from underground incident

RIIERR308A	Extricate and transport people involved in incidents
RIIERR309A	Establish and operate from fresh air base
RIIERR310A	Provide support for rescue operations
RIIRIS301B	Apply risk management processes

RII40109 Certificate IV in Surface Extraction Operations

Modification History

Not applicable.

Description

This qualification reflects the role of employees such as a supervisor or team leader working in an open cut mine or quarry. They perform tasks involving a broad range of varied activities most of which are complex and non-routine. They are responsible for the quantity and quality of the output of others, contribute to the development of technical solutions to non-routine problems and apply safety management plans to the workplace.

Pathways Information

Not applicable.

Licensing/Regulatory Information

Not applicable.

Entry Requirements

Not applicable.

Employability Skills Summary

The following table includes a summary of the employability skills as identified by the resources and infrastructure industry for this qualification. The table should be interpreted in conjunction with the detailed requirements of each unit of competency packaged in this qualification. The outcomes required here are broad industry requirements that may vary depending on packaging options.

Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	• provide clear and direct feedback • listen carefully to instructions and information • read and interpret project plans and safety signs • calculate basic weights, distances and volumes • complete accurate work plans, technical reports, risk assessments, etc • negotiate solutions to customer and workplace based issues • negotiate project details with clients • network with other professionals working in the same field • adjust communication style to meet the needs of people with diverse backgrounds
Teamwork	• plan and lead team performance and operations • coordinate project activities and timelines with clients • work cooperatively with people of different ages, gender, race, religion or political persuasion and people with disability • recognise and respond sensitively to people from culturally and linguistically diverse backgrounds • provide feedback and advice to staff • participate in site-wide planning and coordination activities
Problem-solving	• re-allocate staff and resources in response to changing weather, site conditions and priorities • work with staff to solve problems and coordinate team members' responsibilities and activities • work cooperatively with clients to resolve contract and operational issues • participate in ongoing review and adjustment of operations against performance indicators and project milestones
Initiative and enterprise	• act independently to identify potential improvements to working

	practice and conditions • identify and take steps to resolve risks in the workplace • encourage the exploration and application of innovative approaches to improve on operational performance
Planning and organising	• manage and coordinate time and priorities for self and team • identify and obtain appropriate personnel and resources for work • ensure that risks are assessed and appropriate emergency plans are in place • ensure that project planning incorporates the possibility of adapting to future changes
Self-management	• take responsibility for ensuring team targets and goals are achieved • understand the standard of work expected at the work site • proactively manage team performance • develop trust and confidence in staff and customers
Learning	• be willing to learn new ways of working • seek information to improve performance from people and workplace documents like policies, procedures etc • understand equipment characteristics, technical capabilities, limitations and procedures • participate in and, where appropriate, lead change processes • work with staff to create learning and development plans • prepare and lead formal or informal training sessions
Technology	• apply a range of basic IT skills in monitoring and reporting on systems • operate equipment safely and according to manufacturer and workplace guidelines • use communications technology appropriate to the workplace (email, mobile, radio, etc) • use computer technology to monitor and communicate project status • use IT to create documents and maintain records of work activities

Packaging Rules

Requirements for completion of the qualification

The following table provides the packaging rules for this qualification, followed by the list of relevant units of competency.

Successful completion of thirteen (13) units of competency made up of:

- five (5) core units, and
- eight (8) elective units of which:
 - at least two (2) must come from the Group A electives listed below
 - up to four (4) from the Group B electives listed below
 - up to two (2) unit may come from AQF level III, IV or Diploma in this, or any other Training Package.

Units of competency chosen must be relevant to the competency requirements for the job function.

Care must be taken to ensure that all prerequisites specified within imported units, or units chosen as electives, are complied with.

Core units of competency	
Unit code	Unit title
BSBSUS301A	Implement and monitor environmentally sustainable work practices
RIICOM301B	Communicate information
RIIGOV401B	Apply, monitor and report on compliance systems
RIIRIS401B	Apply site risk management system
	<i>And either</i>
BSBOHS407A	Monitor a safe workplace
	<i>OR</i>

RIIOHS402A	Examine and maintain mine safety
Group A electives	
<i>Unit code</i>	<i>Unit title</i>
RIIBLA401A	Manage blasting operations
RIIBHD401A	Supervise blast hole drilling operations
RIICAR401A	Supervise rehabilitation operations
RIIERR302A	Respond to local emergencies and incidents <i>(Mandatory for Coal)</i>
RIIERR401B	Apply and monitor surface operations emergency preparedness and response systems <i>(Mandatory for Coal)</i>
RIIMEX401A	Apply pit plan
RIIMEX402A	Supervise dredging operations
RIIMEX404B	Apply and monitor systems for stable mining
RIIMEX405A	Apply and monitor systems and methods of surface coal mining
RIIMPO401A	Supervise mobile plant operations
RIIMPO403A	Monitor the interaction of heavy and light vehicles and mining equipment
RIIPRO401A	Supervise processing operations
RIIPRO402A	Supervise recycled materials operations
RIIRAI401A	Apply and monitor mine services and infrastructure systems
RIIRAI402A	Apply and monitor site plant and resource management plan
RIISRM401A	Apply and monitor the site stockpile management plan
RIIWBP401A	Apply and monitor site waste and by-products management plan
RIIWMG401A	Apply and monitor the site water management plan
Group B electives	
<i>Unit code</i>	<i>Unit title</i>

BSBCUS401B	Coordinate implementation of customer service strategies
BSBFIA402A	Report on financial activity
BSBINM401A	Implement workplace information system
BSBLED401A	Develop teams and individuals
BSBMGT401A	Show leadership in the workplace
BSBMGT402A	Implement operational plan
BSBSMB403A	Market the small business
BSBSMB404A	Undertake small business planning
BSBSMB402A	Plan small business finances
BSBWOR404B	Develop work priorities
HLTFA301C	Apply first aid
	OR

RIIERR205A	Apply initial response first aid (<i>Mandatory for Coal</i>)
ICAICT308A	Use advanced features of computer applications
RIIBLA301A	Conduct surface shotfiring operations
RIIBLA402A	Monitor and control the effects of blasting on the environment
RIICCR401A	Develop and maintain positive community relations
RIIENV401A	Supervise dust and noise control
RIIERR201A	Conduct fire team operations
RIIERR301A	Respond to mine incident
RIIERR310A	Provide support for rescue operations
RIIERR403A	Lead rescue team
RIIOHS301A	Conduct safety and health investigations
RIIOHS401A	Supervise work in confined spaces
RIIQUA401A	Apply quality management system on site
RIIRIS301B	Apply risk management processes
RIISAM401A	Apply site plant, equipment and infrastructure maintenance management plan
RIISAM402A	Supervise operation of electrical equipment and installations
RIISAM403A	Commission/recommission plant
TAEASS301B	Contribute to assessment
TAEASS401A	Plan and organise assessment
TAEASS402B	Assess competence
TAEASS403B	Participate in assessment validation
TAEDEL301A	Provide work skill instruction

RII40212 Certificate IV in Surface Coal Mining (Open Cut Examiner)

Modification History

Change to packaging rule for imported or other units

Description

This qualification reflects the role of employees working as an open cut examiner in a surface coal mine. They perform tasks involving a broad range of varied activities most of which are complex and non-routine. They are responsible for the quantity and quality of the output of others and contribute to the development of technical solutions to non-routine problems.

Pathways Information

Not applicable.

Licensing/Regulatory Information

Not applicable.

Entry Requirements

Not applicable.

Employability Skills Summary

The following table includes a summary of the employability skills as identified by the resources and infrastructure industry for this qualification. The table should be interpreted in conjunction with the detailed requirements of each unit of competency packaged in this qualification. The outcomes required here are broad industry requirements that may vary depending on packaging options.

Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	• provide clear and direct feedback • listen carefully to instructions and information • read and interpret project plans and safety signs • calculate basic weights, distances and volumes • complete accurate work plans, technical reports, risk assessments, etc • negotiate solutions to customer and workplace based issues • negotiate project details with clients • network with other professionals working in the same field • adjust communication style to meet the needs of people with diverse backgrounds
Teamwork	• plan and lead team performance and operations • coordinate project activities and timelines with clients • work cooperatively with people of different ages, gender, race, religion or political persuasion and people with disability • recognise and respond sensitively to people from culturally and linguistically diverse backgrounds • provide feedback and advice to staff • participate in site-wide planning and coordination activities
Problem-solving	• re-allocate staff and resources in response to changing weather, site conditions and priorities • work with staff to solve problems and coordinate team members' responsibilities and activities • work cooperatively with clients to resolve contract and operational issues • participate in ongoing review and adjustment of operations against performance indicators and project milestones • identifies and comprehends relevant mathematical information in familiar activities or texts • selects and uses appropriate familiar mathematical problem-

	solving strategies to solve problems in familiar contexts
Initiative and enterprise	• act independently to identify potential improvements to working practice and conditions • identify and take steps to resolve risks in the workplace • encourage the exploration and application of innovative approaches to improve on operational performance
Planning and organising	• manage and coordinate time and priorities for self and team • identify and obtain appropriate personnel and resources for work • ensure that risks are assessed and appropriate emergency plans are in place • ensure that project planning incorporates the possibility of adapting to future changes
Self-management	• take responsibility for ensuring team targets and goals are achieved • understand the standard of work expected at the work site • proactively manage team performance • develop trust and confidence in staff and customers
Learning	• be willing to learn new ways of working • seek information to improve performance from people and workplace documents like policies, procedures etc • understand equipment characteristics, technical capabilities, limitations and procedures • participate in and, where appropriate, lead change processes • work with staff to create learning and development plans • prepare and lead formal or informal training sessions
Technology	• apply a range of basic IT skills in monitoring and reporting on systems • operate equipment safely and according to manufacturer and workplace guidelines • use communications technology appropriate to the workplace (email, mobile, radio, etc) • use computer technology to monitor and communicate project status • use IT to create documents and maintain records of work activities

Packaging Rules

Requirements for completion of the qualification

The following table provides the packaging rules for this qualification, followed by the list of relevant units of competency.

Successful completion of fourteen (14) units of competency made up of:

- ten (10) Core units, and
- four (4) elective units of which:
 - at least three (3) must come from the Group A electives listed below
 - up to one (1) from the Group B electives listed below, or from AQF level III, IV or Diploma in this, or any other Training Package .

Units of competency chosen must be relevant to the competency requirements for the job function.

Care must be taken to ensure that all prerequisites specified within imported units, or units chosen as electives, are complied with.

Core units of competency	
<i>Unit code</i>	<i>Unit title</i>
RIIBLA201A	Support shotfiring operations
	OR
RIIBLA301A	Conduct surface shotfiring operations
RIIBLA205A	Store, handle and transport explosives
BSBSUS301B	Implement and monitor environmentally sustainable work practices
RIIERR401B	Apply and monitor surface operations emergency preparedness and response procedures
RIIMEX405A	Apply and monitor systems and methods of surface coal mining
RIIMPO403A	Monitor interaction of heavy and light vehicles and mining equipment
RIIOHS301A	Conduct safety and health investigations

RIIOHS402A	Examine and maintain mine safety
RIIOHS404A	Implement and monitor health and hygiene management systems
RIIRIS402A	Carry out the risk management processes
Group A electives	
<i>Unit code</i>	<i>Unit title</i>
RIIBHD301A	Conduct surface blast hole drilling operations
RIIMPO301C	Conduct hydraulic excavator operations
RIIMPO302B	Conduct hydraulic shovel operations
RIIMPO303A	Conduct rope shovel operations
RIIMPO304B	Conduct wheel loader operations
RIIMPO308B	Conduct tracked dozer operations
RIIMPO310B	Conduct grader operations
RIIMPO311B	Conduct haul truck operations
RIIMPO312A	Conduct scraper operations
RIIMPO329A	Conduct dragline operations
Group B Electives	
<i>Unit code</i>	<i>Unit title</i>
BSBCUS401A	Coordinate implementation of customer service strategies
BSBINM401A	Implement workplace information system
BSBINN301A	Promote innovation in a team environment
BSBLED401A	Develop teams and individuals
BSBMGT401A	Show leadership in the workplace
BSBMGT402A	Implement operational plan

BSBWOR404B	Develop work priorities
RIICOM301B	Communicate information
RIIERR403A	Lead rescue team
RIIMPO401A	Supervise mobile plant operations
RIIMPO402A	Apply the principles of earthworks construction
TAEASS401A	Plan and organise assessment
TAEASS402B	Assess competence

RII40311 Certificate IV in Metalliferous Mining Operations (Underground)

Modification History

Not applicable.

Description

This qualification reflects the role of employees such as a supervisor/team leader in an underground metalliferous mine. They perform tasks involving a broad range of varied activities most of which are complex and non-routine. They are responsible for the quantity and quality of the output of others, contribute to the development of technical solutions to non-routine problems and apply mine management plans to the workplace. This qualification is not applicable to coal mining.

Pathways Information

Not applicable.

Licensing/Regulatory Information

Not applicable.

Entry Requirements

Not applicable.

Employability Skills Summary

The following table includes a summary of the employability skills as identified by the resources and infrastructure industry for this qualification. The table should be interpreted in conjunction with the detailed requirements of each unit of competency packaged in this qualification. The outcomes required here are broad industry requirements that may vary depending on packaging options.

Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	• provide clear and direct feedback • listen carefully to instructions and information • read and interpret project plans and safety signs • calculate basic weights, distances and volumes • complete accurate work plans, technical reports, risk assessments, etc • negotiate solutions to customer and workplace based issues • negotiate project details with clients • network with other professionals working in the same field • adjust communication style to meet the needs of people with diverse backgrounds
Teamwork	• plan and lead team performance and operations • coordinate project activities and timelines with clients • work cooperatively with people of different ages, gender, race, religion or political persuasion and people with disability • recognise and respond sensitively to people from culturally and linguistically diverse backgrounds • provide feedback and advice to staff • participate in site-wide planning and coordination activities
Problem-solving	• re-allocate staff and resources in response to changing weather, site conditions and priorities • work with staff to solve problems and coordinate team members' responsibilities and activities • work cooperatively with clients to resolve contract and operational issues • participate in ongoing review and adjustment of operations against performance indicators and project milestones
Initiative and enterprise	• act independently to identify potential improvements to working practice and conditions • identify and take steps to resolve risks in the workplace

	• encourage the exploration and application of innovative approaches to improve on operational performance
Planning and organising	• manage and coordinate time and priorities for self and team • identify and obtain appropriate personnel and resources for work • ensure that risks are assessed and appropriate emergency plans are in place • ensure that project planning incorporates the possibility of adapting to future changes
Self-management	• take responsibility for ensuring team targets and goals are achieved • understand the standard of work expected at the work site • proactively manage team performance • develop trust and confidence in staff and customers
Learning	• be willing to learn new ways of working • seek information to improve performance from people and workplace documents like policies, procedures etc • understand equipment characteristics, technical capabilities, limitations and procedures • participate in and, where appropriate, lead change processes • work with staff to create learning and development plans • prepare and lead formal or informal training sessions
Technology	• apply a range of basic IT skills in monitoring and reporting on systems • operate equipment safely and according to manufacturer and workplace guidelines • use communications technology appropriate to the workplace (email, mobile, radio, etc) • use computer technology to monitor and communicate project status • use IT to create documents and maintain records of work activities

Packaging Rules

Requirements for completion of the qualification

The following table provides the packaging rules for this qualification, followed by the list of relevant units of competency.

Successful completion of a total of fifteen (15) units of competency, made up of:

- eight (8) Core units of competency, and
- seven (7) Group A electives units, including at least six (6) from the list of Group A electives, and up to one (1) from AQF level III, IV or Diploma in this or any other, Training Package.

Units of competency chosen must be relevant to the competency requirements for the job function..

Care must be taken to ensure that all prerequisites specified within imported units, or units chosen as electives, are complied with.

Core units of competency	
<i>Unit code</i>	<i>Unit title</i>
RIICOM301B	Communicate information
RIIQUA201A	Maintain and monitor site quality standards
RIIGOV401B	Apply, monitor and report on compliance systems
RIIMEX404B	Apply and monitor systems for stable mining
BSBOHS407A	Monitor a safe workplace
RIIOHS301A	Conduct safety and health investigations
RIIRIS301B	Apply risk management processes
BSBSUS301A	Implement and monitor environmentally sustainable work practices
Group A electives	
<i>Unit code</i>	<i>Unit title</i>

BSBINM401A	Implement workplace information system
BSBINN301A	Promote innovation in a team environment
BSBLED401A	Develop teams and individuals
BSBMGT401A	Show leadership in the workplace
BSBMGT402A	Implement operational plan
BSBMGT403A	Implement continuous improvement
BSBWOR404B	Develop work priorities
HLTFA301C	Apply first aid
RIIBLA304A	Conduct underground production shotfiring
RIIBLA303A	Conduct underground development shotfiring
RIIBLA401A	Manage blasting operations
RIIBLA402A	Monitor and control the effects of blasting on the environment
RIICOM201A	Communicate in the workplace
RIIERR404A	Apply and monitor underground metalliferous mine emergency preparedness and response systems
RIIERR403A	Lead rescue team
RIIMEX406A	Apply and monitor mine transport system and production equipment
RIIOHS401A	Supervise work in confined spaces
RIIRAI401A	Apply and monitor mine services and infrastructure systems
RIIRIS402A	Carry out the risk management processes
RIISAM403A	Commission/recommission plant
RIIUND401B	Apply and monitor the ventilation management plan

TAEASS301B	Contribute to assessment
TAEASS401A	Plan and organise assessment
TAEASS402B	Assess competence
TAEASS403B	Participate in assessment validation
TAEDEL301A	Provide work skill instruction

RII40412 Certificate IV in Underground Coal Operations

Modification History

Not applicable.

Description

This qualification reflects the role of employees such as mine supervisor, team leader or deputy, in an underground coal mine who perform tasks involving a broad range of varied activities most of which are complex and non-routine. They are responsible for the quantity and quality of the output of others, contribute to the development of technical solutions to non-routine problems and apply safety management plans to the workplace.

Pathways Information

Not applicable.

Licensing/Regulatory Information

Not applicable.

Entry Requirements

Not applicable.

Employability Skills Summary

The following table includes a summary of the employability skills as identified by the resources and infrastructure industry for this qualification. The table should be interpreted in conjunction with the detailed requirements of each unit of competency packaged in this qualification. The outcomes required here are broad industry requirements that may vary depending on packaging options.

Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	• provide clear and direct feedback • listen carefully to instructions and information • read and interpret project plans and safety signs • calculate basic weights, distances and volumes • complete accurate work plans, technical reports, risk assessments, etc • negotiate solutions to customer and workplace based issues • negotiate project details with clients • network with other professionals working in the same field • adjust communication style to meet the needs of people with diverse backgrounds
Teamwork	• plan and lead team performance and operations • coordinate project activities and timelines with clients • work cooperatively with people of different ages, gender, race, religion or political persuasion and people with disability • recognise and respond sensitively to people from culturally and linguistically diverse backgrounds • provide feedback and advice to staff • participate in site-wide planning and coordination activities
Problem-solving	• re-allocate staff and resources in response to changing weather, site conditions and priorities • work with staff to solve problems and coordinate team members' responsibilities and activities • work cooperatively with clients to resolve contract and operational issues • participate in ongoing review and adjustment of operations against performance indicators and project milestones
Initiative and enterprise	• act independently to identify potential improvements to working practice and conditions • identify and take steps to resolve risks in the workplace

	• encourage the exploration and application of innovative approaches to improve on operational performance
Planning and organising	• manage and coordinate time and priorities for self and team • identify and obtain appropriate personnel and resources for work • ensure that risks are assessed and appropriate emergency plans are in place • ensure that project planning incorporates the possibility of adapting to future changes
Self-management	• take responsibility for ensuring team targets and goals are achieved • understand the standard of work expected at the work site • proactively manage team performance • develop trust and confidence in staff and customers
Learning	• be willing to learn new ways of working • seek information to improve performance from people and workplace documents like policies, procedures etc • understand equipment characteristics, technical capabilities, limitations and procedures • participate in and, where appropriate, lead change processes • work with staff to create learning and development plans • prepare and lead formal or informal training sessions
Technology	• apply a range of basic IT skills in monitoring and reporting on systems • operate equipment safely and according to manufacturer and workplace guidelines • use communications technology appropriate to the workplace (email, mobile, radio, etc) • use computer technology to monitor and communicate project status • use IT to create documents and maintain records of work activities

Packaging Rules

Requirements for completion of the qualification

The following table provides the packaging rules for this qualification, followed by the list of relevant units of competency.

Successful completion of thirteen (13) units of competency made up of:

- ten (10) core units, and
- three (3) elective units of which:
- at least one (1) must come from the Group A electives listed below
- up to two (2) from the Group B electives listed below
- up to one (1) unit may come from AQF level III, IV or Diploma in this, or any other Training Package.

Units of competency chosen must be relevant to the competency requirements for the job function.

Care must be taken to ensure that all prerequisites specified within imported units, or units chosen as electives, are complied with.

Core units of competency	
<i>Unit code</i>	<i>Unit title</i>
RIIBLA202B	Support underground shotfiring operations
	OR

RIIBLA302A	Conduct shotfiring operations in underground coal mines
RIIERR402A	Apply and monitor underground coal mine emergency preparedness and response systems
RIIMCU403A	Apply and monitor the gas management plan
RIIMCU406A	Apply and monitor the inrush management plan
RIIMCU407A	Apply and monitor the strata management plan
RIIMCU408A	Apply the spontaneous combustion management plan
RIIMEX406A	Apply and monitor mine transport system and production equipment
RIIRAI401A	Apply and monitor mine services and infrastructure systems
RIIRIS402A	Carry out the risk management processes
RIIUND401B	Apply and monitor the ventilation management plan
Group A	
<i>Unit code</i>	<i>Unit title</i>
RIIMCU303A	Conduct continuous miner operations
RIIMCU304A	Conduct shuttle car operations
RIIMCU305A	Conduct outburst mining operations
RIIMCU306A	Conduct shearer operations
RIIMCU307A	Conduct longwall face equipment operations
RIIMCU401A	Conduct special roadway operations
RIIMCU404A	Apply and monitor the gas drainage management plan
RIIMCU405A	Apply and monitor the outburst management plan
RIIUND304A	Recover equipment
Group B electives	
<i>Unit code</i>	<i>Unit title</i>

BSBCUS401B	Coordinate implementation of customer service strategies
BSBINN301A	Promote innovation in a team environment
BSBLED401A	Develop teams and individuals
BSBMGT401A	Show leadership in the workplace
BSBMGT402A	Implement operational plan
BSBMGT403A	Implement continuous improvement
BSBOHS407A	Monitor a safe workplace
BSBWOR404B	Develop work priorities
RIICOM301B	Communicate information
RIIERR403A	Lead rescue team
RIILAT401A	Provide leadership in the supervision of Indigenous Australian employees
RIIOHS301A	Conduct safety and health investigations

RII40509 Certificate IV in Resource Processing

Modification History

Not applicable.

Description

This qualification reflects the role of employees such as a supervisor or team leader working in a metal or coal processing facility. They perform tasks involving a broad range of varied activities most of which are complex and non-routine. They are responsible for the quantity and quality of the output of others, contribute to the development of technical solutions to non-routine problems and apply safety management plans to the workplace.

Pathways Information

Not applicable.

Licensing/Regulatory Information

Not applicable.

Entry Requirements

Not applicable.

Employability Skills Summary

The following table includes a summary of the employability skills as identified by the resources and infrastructure industry for this qualification. The table should be interpreted in conjunction with the detailed requirements of each unit of competency packaged in this qualification. The outcomes required here are broad industry requirements that may vary depending on packaging options.

Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	• provide clear and direct feedback • listen carefully to instructions and information • read and interpret project plans and safety signs • calculate basic weights, distances and volumes • complete accurate work plans, technical reports, risk assessments, etc • negotiate solutions to customer and workplace based issues • negotiate project details with clients • network with other professionals working in the same field • adjust communication style to meet the needs of people with diverse backgrounds
Teamwork	• plan and lead team performance and operations • coordinate project activities and timelines with clients • work cooperatively with people of different ages, gender, race, religion or political persuasion and people with disability • recognise and respond sensitively to people from culturally and linguistically diverse backgrounds • provide feedback and advice to staff • participate in site-wide planning and coordination activities
Problem-solving	• re-allocate staff and resources in response to changing weather, site conditions and priorities • work with staff to solve problems and coordinate team members' responsibilities and activities • work cooperatively with clients to resolve contract and operational issues • participate in ongoing review and adjustment of operations against performance indicators and project milestones
Initiative and enterprise	• act independently to identify potential improvements to working practice and conditions • identify and take steps to resolve risks in the workplace

	• encourage the exploration and application of innovative approaches to improve on operational performance
Planning and organising	• manage and coordinate time and priorities for self and team • identify and obtain appropriate personnel and resources for work • ensure that risks are assessed and appropriate emergency plans are in place • ensure that project planning incorporates the possibility of adapting to future changes
Self-management	• take responsibility for ensuring team targets and goals are achieved • understand the standard of work expected at the work site • proactively manage team performance • develop trust and confidence in staff and customers
Learning	• be willing to learn new ways of working • seek information to improve performance from people and workplace documents like policies, procedures etc • understand equipment characteristics, technical capabilities, limitations and procedures • participate in and, where appropriate, lead change processes • work with staff to create learning and development plans • prepare and lead formal or informal training sessions
Technology	• apply a range of basic IT skills in monitoring and reporting on systems • operate equipment safely and according to manufacturer and workplace guidelines • use communications technology appropriate to the workplace (email, mobile, radio, etc) • use computer technology to monitor and communicate project status • use IT to create documents and maintain records of work activities

Packaging Rules

Requirements for completion of the qualification

The following table provides the packaging rules for this qualification, followed by the list of relevant units of competency.

Successful completion of twelve (12) units of competency made up of:

- five (5) Core units, and
- seven (7) elective units of which:
 - at least one (1) must come from the Group A electives listed below
 - up to four (4) from the Group B listed below
 - up to two (2) units may come from AQF level III, IV or Diploma in this, or any other Training Package

Units of Competency chosen must be relevant to the competency requirements for the job function.

Care must be taken to ensure that all prerequisites specified within imported units, or units chosen as electives, are complied with.

Core units of competency	
<i>Unit code</i>	<i>Unit title</i>
RIICOM301B	Communicate information
RIIERR401B	Apply and monitor surface operations emergency preparedness and response systems
RIIGOV401B	Apply, monitor and report on compliance systems
RIIOHS301A	Conduct safety and health investigations
	<i>And</i>
RIIRIS301B	Apply risk management processes
	<i>OR</i>

RIIRIS402A	Carry out the risk management processes
Group A electives	
<i>Unit code</i>	<i>Unit title</i>
PMAOPS411B	Manage plant shutdown and restart
RIIRAI401A	Apply and monitor mine services and infrastructure systems
RIIWMG402A	Monitor and coordinate waste and process water treatment
Group B electives	
<i>Unit code</i>	<i>Unit title</i>
BSBCUS401B	Coordinate implementation of customer service strategies
BSBINM401A	Implement workplace information system
BSBINN301A	Promote innovation in a team environment
BSBLED401A	Develop teams and individuals
BSBMGT401A	Show leadership in the workplace
BSBMGT402A	Implement operational plan
BSBMGT403A	Implement continuous improvement
BSBOHS407A	Monitor a safe workplace
BSBWOR404B	Develop work priorities
HLTFA301C	Apply first aid
HLTFA402C	Apply advanced first aid
PMASUP441C	Decommission plant
MSL925001A	Analyse data and report results
RIIERR205A	Apply initial response First Aid
RIIERR403A	Lead rescue team

RIIHAN401A	Organise and monitor wharf/terminal operations
RIIHAN402A	Process movement of containers and cargo
RIIOHS401A	Supervise work in confined spaces
RIISAM403A	Commission/recommission plant
TAEASS301B	Contribute to assessment
TAEASS401A	Plan and organise assessment
TAEASS402B	Assess competence
TAEASS403B	Participate in assessment validation
TAEDEL301A	Provide work skill instruction

RII40909 Certificate IV in Drilling Operations

Modification History

Not applicable.

Description

This qualification reflects the role of employees such as senior drillers. They perform tasks involving a broad range of varied activities most of which are complex and non-routine. They are responsible for the quantity and quality of the output of others and contribute to the development of technical solutions to non-routine problems.

Pathways Information

Not applicable.

Licensing/Regulatory Information

Not applicable.

Entry Requirements

Not applicable.

Employability Skills Summary

The following table includes a summary of the employability skills as identified by the resources and infrastructure industry for this qualification. The table should be interpreted in conjunction with the detailed requirements of each unit of competency packaged in this qualification. The outcomes required here are broad industry requirements that may vary depending on packaging options.

Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	• provide clear and direct feedback • listen carefully to instructions and information • read and interpret project plans and safety signs • calculate basic weights, distances and volumes • complete accurate work plans, technical reports, risk assessments, etc • negotiate solutions to customer and workplace based issues • negotiate project details with clients • network with other professionals working in the same field • adjust communication style to meet the needs of people with diverse backgrounds
Teamwork	• plan and lead team performance and operations • coordinate project activities and timelines with clients • work cooperatively with people of different ages, gender, race, religion or political persuasion and people with disability • recognise and respond sensitively to people from culturally and linguistically diverse backgrounds • provide feedback and advice to staff • participate in site-wide planning and coordination activities
Problem-solving	• re-allocate staff and resources in response to changing weather, site conditions and priorities • work with staff to solve problems and coordinate team members' responsibilities and activities • work cooperatively with clients to resolve contract and operational issues • participate in ongoing review and adjustment of operations against performance indicators and project milestones
Initiative and enterprise	• act independently to identify potential improvements to working practice and conditions • identify and take steps to resolve risks in the workplace

	• encourage the exploration and application of innovative approaches to improve on operational performance
Planning and organising	• manage and coordinate time and priorities for self and team • identify and obtain appropriate personnel and resources for work • ensure that risks are assessed and appropriate emergency plans are in place • ensure that project planning incorporates the possibility of adapting to future changes
Self-management	• take responsibility for ensuring team targets and goals are achieved • understand the standard of work expected at the work site • proactively manage team performance • develop trust and confidence in staff and customers
Learning	• be willing to learn new ways of working • seek information to improve performance from people and workplace documents like policies, procedures etc • understand equipment characteristics, technical capabilities, limitations and procedures • participate in and, where appropriate, lead change processes • work with staff to create learning and development plans • prepare and lead formal or informal training sessions
Technology	• apply a range of basic IT skills in monitoring and reporting on systems • operate equipment safely and according to manufacturer and workplace guidelines • use communications technology appropriate to the workplace (email, mobile, radio, etc) • use computer technology to monitor and communicate project status • use IT to create documents and maintain records of work activities

Packaging Rules

Requirements for completion of the qualification

The following table provides the packaging rules for this qualification, followed by the list of relevant units of competency.

Successful completion of eleven (11) units of competency made up of:

- seven (7) Core units, and
- four (4) elective units of which:
- at least one (1) must come from the Group A electives listed below
- up to three (3) from the Group B electives listed below
- up to one (1) unit may come from AQF level III, IV or Diploma in this, or any other Training Package

Units of competency chosen must be relevant to the competency requirements for the job function.

Core units of competency	
<i>Unit code</i>	<i>Unit title</i>
BSBMGT401A	Show leadership in the workplace
BSBMGT402A	Implement operational plan
BSBOHS407A	Monitor a safe workplace
RIIBEF402A	Supervise on-site operations
RIIENV402A	Implement and monitor environmental policies
RIINHB401A	Plan and supervise mobilization of equipment, crew and materials
RIIRIS401A	Apply site risk management system
Group A electives	
<i>Unit code</i>	<i>Unit title</i>
RIIBEF401A	Manage non-routine complex technical situations
RIINHB402A	Supervise mineral exploration drilling operations
RIINHB403A	Supervise geotechnical drilling operations

RIINHB404A	Supervise seismic drilling operations
RIINHB405A	Supervise water well drilling operations
RIINHB406A	Supervise foundation drilling operations
RIINHB407A	Supervise horizontal directional drilling operations
RIINHB408A	Supervise environmental drilling operations
RIINHB409A	Supervise mineral production and development drilling operations
RIINHB410A	Supervise surface directional drilling operations
RIINHB411A	Construct artesian (flowing) aquifer production bores
RIINHB412B	Construct geothermal wells
RIINHB413A	Supervise underground in-seam directional drilling operations
Group B electives	
<i>Unit code</i>	<i>Unit title</i>
BSBCUS401B	Coordinate implementation of customer service strategies
BSBFIM501A	Manage budgets and financial plans
BSBLED401A	Develop teams and individuals
BSBRKG403 C	Set up a business or records system for a small office
BSBSMB403 A	Market the small business
BSBSMB404 A	Undertake small business planning
BSBSMB402 A	Plan small business finances

BSBSMB405 A	Monitor and manage small business operations
HLTFA301C	Apply first aid
HLTFA402C	Apply advanced first aid
RIIERR401B	Apply and monitor surface operations emergency preparedness and response systems
RIIFIA401A	Manage financial records
RIIOGD405A	Carry out well control and blow out prevention
RIIQUA401A	Apply a quality management system on site
RIISAM401A	Apply site plant, equipment and infrastructure maintenance plan
TAEASS401A	Plan and organise assessment
TAEASS402B	Assess competence
TAEASS403B	Participate in assessment validation

RII41009 Certificate IV in Drilling Oil/Gas (Off shore)

Modification History

Not applicable.

Description

This qualification reflects the role of employees such as senior drillers working in an oil/gas context. They perform tasks involving a broad range of varied activities most of which are complex and non-routine. They are responsible for the quantity and quality of the output of others and contribute to the development of technical solutions to non-routine problems.

Pathways Information

Not applicable.

Licensing/Regulatory Information

Not applicable.

Entry Requirements

Not applicable.

Employability Skills Summary

The following table includes a summary of the employability skills as identified by the resources and infrastructure industry for this qualification. The table should be interpreted in conjunction with the detailed requirements of each unit of competency packaged in this qualification. The outcomes required here are broad industry requirements that may vary depending on packaging options.

Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	• provide clear and direct feedback • listen carefully to instructions and information • read and interpret project plans and safety signs • calculate basic weights, distances and volumes • complete accurate work plans, technical reports, risk assessments, etc • negotiate solutions to customer and workplace based issues • negotiate project details with clients • network with other professionals working in the same field • adjust communication style to meet the needs of people with diverse backgrounds
Teamwork	• plan and lead team performance and operations • coordinate project activities and timelines with clients • work cooperatively with people of different ages, gender, race, religion or political persuasion and people with disability • recognise and respond sensitively to people from culturally and linguistically diverse backgrounds • provide feedback and advice to staff • participate in site-wide planning and coordination activities
Problem-solving	• re-allocate staff and resources in response to changing weather, site conditions and priorities • work with staff to solve problems and coordinate team member's responsibilities and activities • work cooperatively with clients to resolve contract and operational issues • participate in ongoing review and adjustment of operations against performance indicators and project milestones
Initiative and enterprise	• act independently to identify potential improvements to working practice and conditions • identify and take steps to resolve risks in the workplace

	• encourage the exploration and application of innovative approaches to improve on operational performance
Planning and organising	• manage and coordinate time and priorities for self and team • identify and obtain appropriate personnel and resources for work • ensure that risks are assessed and appropriate emergency plans are in place • ensure that project planning incorporates the possibility of adapting to future changes
Self-management	• take responsibility for ensuring team targets and goals are achieved • understand the standard of work expected at the work site • proactively manage team performance • develop trust and confidence in staff and customers
Learning	• be willing to learn new ways of working • seek information to improve performance from people and workplace documents like policies, procedures etc • understand equipment characteristics, technical capabilities, limitations and procedures • participate in, and where appropriate, lead change processes • work with staff to create learning and development plans • prepare and lead formal or informal training sessions
Technology	• apply a range of basic IT skills in monitoring and reporting on systems • operate equipment safely and according to manufacturer and workplace guidelines • use communications technology appropriate to the workplace (email, mobile, radio, etc) • computer technology is used to monitor and communicate project status • use IT to create documents and maintain records of work activities

Packaging Rules

Requirements for completion of the qualification

The following table provides the packaging rules for this qualification, followed by the list of relevant units of competency.

Successful completion of thirteen (13) units of competency made up of:

- twelve (12) Core units, and
- one (1) elective units of which:
- up to one (1) from the Group A electives listed below
- up to one (1) unit may come from AQF level III, IV or Diploma in this, or any other Training Package

Units of competency chosen must be relevant to the competency requirements for the job function.

Care must be taken to ensure that all prerequisites specified within imported units, or units chosen as electives, are complied with.

Core units of competency	
<i>Unit code</i>	<i>Unit title</i>
BSBMGT401A	Show leadership in the workplace
BSBOHS407A	Monitor a safe workplace
BSBSUS201A	Participate in environmentally sustainable work practices
RIIERR304A	Control emergencies and critical situations
RIIOGD401A	Rig up, conduct pre-spud operations and rig down
RIIOGD402A	Participate in nipping-up and pressure test
RIIOGD403A	Conduct drilling operations
RIIOGD404A	Coordinate air drilling operations
RIIOGD405A	Carry out well control and blowout prevention
RIIQUA401A	Apply a quality management system on site
RIIRIS402A	Carry out risk management processes
RIISAM314A	Manage oil and gas drilling equipment maintenance
Group A electives	
<i>Unit code</i>	<i>Unit title</i>

HLTFA301C	Apply First Aid
HLTFA402C	Apply advanced First Aid
RIIERR311A	Assess and implement life support systems and stabilise casualties

RII41109 Certificate IV in Drilling Oil/Gas (On shore)

Modification History

Not applicable.

Description

This qualification reflects the role of employees such as senior drillers working in an on shore oil/gas context. They perform tasks involving a broad range of varied activities most of which are complex and non-routine. They are responsible for the quantity and quality of the output of others and contribute to the development of technical solutions to non-routine problems.

Pathways Information

Not applicable.

Licensing/Regulatory Information

Not applicable.

Entry Requirements

Not applicable.

Employability Skills Summary

The following table includes a summary of the employability skills as identified by the resources and infrastructure industry for this qualification. The table should be interpreted in conjunction with the detailed requirements of each unit of competency packaged in this qualification. The outcomes required here are broad industry requirements that may vary depending on packaging options.

Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	• provide clear and direct feedback • listen carefully to instructions and information • read and interpret project plans and safety signs • calculate basic weights, distances and volumes • complete accurate work plans, technical reports, risk assessments, etc • negotiate solutions to customer and workplace based issues • negotiate project details with clients • network with other professionals working in the same field • adjust communication style to meet the needs of people with diverse backgrounds
Teamwork	• plan and lead team performance and operations • coordinate project activities and timelines with clients • work cooperatively with people of different ages, gender, race, religion or political persuasion and people with disability • recognise and respond sensitively to people from culturally and linguistically diverse backgrounds • provide feedback and advice to staff • participate in site-wide planning and coordination activities
Problem-solving	• re-allocate staff and resources in response to changing weather, site conditions and priorities • work with staff to solve problems and coordinate team members' responsibilities and activities • work cooperatively with clients to resolve contract and operational issues • participate in ongoing review and adjustment of operations against performance indicators and project milestones
Initiative and enterprise	• act independently to identify potential improvements to working practice and conditions • identify and take steps to resolve risks in the workplace

	• encourage the exploration and application of innovative approaches to improve on operational performance
Planning and organising	• manage and coordinate time and priorities for self and team • identify and obtain appropriate personnel and resources for work • ensure that risks are assessed and appropriate emergency plans are in place • ensure that project planning incorporates the possibility of adapting to future changes
Self-management	• take responsibility for ensuring team targets and goals are achieved • understand the standard of work expected at the work site • proactively manage team performance • develop trust and confidence in staff and customers
Learning	• be willing to learn new ways of working • seek information to improve performance from people and workplace documents like policies, procedures etc • understand equipment characteristics, technical capabilities, limitations and procedures • participate in and, where appropriate, lead change processes • work with staff to create learning and development plans • prepare and lead formal or informal training sessions
Technology	• apply a range of basic IT skills in monitoring and reporting on systems • operate equipment safely and according to manufacturer and workplace guidelines • use communications technology appropriate to the workplace (email, mobile, radio, etc) • use computer technology to monitor and communicate project status • use IT to create documents and maintain records of work activities

Packaging Rules

Requirements for completion of the qualification

The following table provides the packaging rules for this qualification, followed by the list of relevant units of competency.

Successful completion of twelve (12) units of competency made up of:

- eight (8) Core units, and
- four (4) elective units of which:
- up to four (4) units may come from the Group A Electives listed, AQF level III, IV or Diploma level from this, or any other, Training Package

Units of competency chosen must be relevant to the competency requirements for the job function.

Care must be taken to ensure that all prerequisites specified within imported units, or units chosen as electives, are complied with.

Core units of competency	
<i>Unit code</i>	<i>Unit title</i>
BSBLED401A	Develop teams and individuals
RIIOHS405A	Maintain standard procedures and safe working practices
RIIERR304A	Control emergencies and critical situations
RIIOGD401A	Rig up, conduct pre-spud operations and rig down
RIIOGD402A	Participate in nipping-up and pressure test
RIIOGD403A	Conduct drilling operations
RIIOGD405A	Carry out well control and blow out prevention
RIIRIS301B	Apply risk management processes
Group A Electives	
<i>Unit code</i>	<i>Unit title</i>
RIIOGD304A	Apply effective coal seam gas control practices
RIIOGD305A	Apply blow out prevention operational procedures
RIIOGD404A	Coordinate air drilling operations
BSBCUS401B	Coordinate implementation of customer service strategies

HLTFA301C	Apply first aid
HLTFA402C	Apply advanced first aid
MSAPMPER300C	Issue work permits
RIIERR401B	Apply and monitor surface operations emergency preparedness and response procedures
RIIQUA401A	Apply a quality management system on site
RIISAM314A	Manage oil and gas drilling equipment maintenance
TAEASS401A	Plan and organise assessment
TAEASS402B	Assess competence
TAEASS403B	Participate in assessment validation

