Summary of change

Review of AUR30420 Certificate III in Agricultural Mechanical Technology and related units of competency. Draft for public and government consultation.

Key to mapping tables

Code	Term	Definition
E	**Equivalent**	Where the workplace outcomes of the superseded and superseding training package components are equivalent.
NA	**Not applicable**	Where mapping information is not applicable. Minor updates do not require an equivalence determination.
NE	**Not equivalent**	Where a training package component is superseded, and the workplace outcome of the component has changed.
NC	**Newly created**	Where a training package component has been created to address an emerging skill or task required by industry.
D	**Deleted**	Where a training package component is deleted as the skill or task is no longer required by industry.

Overview of changes

Major changes	
1 updated qualification	
AUR3042X	Certificate III in Agricultural Mechanical Technology (supersedes AUR30420)
7 updated units of competency	
AURKTAX01	Synchronise plant and equipment
AURKTAX02	Inspect, service and repair crop harvesting equipment
AURKTAX03	Inspect, service and repair crop planting and seeding equipment
AURKTAX04	Inspect, service and repair spraying and spreading equipment
AURKTAX10	Inspect, service and repair hay cutting, raking and baling equipment

Major changes	
AURTTFX02	Inspect and service diesel fuel injection systems
AURHTEX01	Remove and install heavy vehicle engine assemblies

Minor changes	
7 qualifications updated to include the superseding equivalent units	
AUR20520	Certificate II in Automotive Servicing Technology
AUR30520	Certificate III in Marine Mechanical Technology
AUR30620	Certificate III in Light Vehicle Mechanical Technology
AUR31120	Certificate III in Heavy Commercial Vehicle Mechanical Technology
AUR31220	Certificate III in Mobile Plant Technology
AUR31420	Certificate III in Automotive Diesel Fuel Technology
AUR31520	Certificate III in Automotive Diesel Engine Technology

Qualifications and mapping

Current		Proposed (AUR Release 12.0)				
Code	**Title**	**Code**	**Title**	**Proposed changes**	**Rationale**	**Mapping**
AUR30420	Certificate III in Agricultural Mechanical Technology	**AUR3042X**	Certificate III in Agricultural Mechanical Technology	Supersedes and is equivalent to AUR30420 Certificate III in Agricultural Mechanical Technology. Total units unchanged (36 units: 21 core + 15 elective). **Qualification description** rewritten to the TPOF 2025 template, covering the agricultural service and repair industry, workshop and field settings, and WHS and OHS requirements. **Packaging rules** • New Agricultural Machinery Electives group (5 units). A minimum of 2 units must be selected from this group. • Units that may be selected from other qualifications reduced from 6 to 3. **Core units** • AURTTFX02 Inspect and service diesel fuel injection systems replaces AURTTF102 Inspect and service diesel fuel injection systems. **Agricultural Machinery Electives** • AURKTAX01 Synchronise plant and equipment replaces AURKTA001. • AURKTAX02 Inspect, service and repair crop harvesting equipment replaces AURKTA002. • AURKTAX03 Inspect, service and repair crop planting and seeding equipment replaces AURKTA003. • AURKTAX04 Inspect, service and repair spraying and spreading equipment replaces AURKTA004. • AURKTAX10 Inspect, service and repair hay cutting, raking and baling equipment replaces AURKTA010. **General Electives** • AURHTEX01 Remove and install heavy vehicle engine assemblies replaces AURHTE001.	The Technical Committee supported keeping the qualification as a standalone qualification. Consultation found the qualification can currently be issued without any agricultural machinery units, as none are core. Five of the 11 Technical Committee survey respondents proposed a dedicated agricultural elective group with a minimum selection. The Technical Committee preferred this approach to making the units core. Most respondents (7 to 8 of 11) supported keeping the agricultural machinery units as electives rather than core, because not all RTOs have access to the equipment. The minimum selection does not force specific units, so RTOs can choose units that suit their region and equipment. Reducing imported electives keeps the elective selection focused on the agricultural outcome. Seven of 11 respondents recommended removing the CNG, LPG and LNG fuel system units. AURETK002, AURHTB101 and AURKTR101 were recommended by RTO members to address electrical diagnostic confidence and electro-hydraulic systems on current machinery. AURETR051 Diagnose, repair and replace precision agriculture systems was removed from the elective	**E**

Current		Proposed (AUR Release 12.0)				
Code	**Title**	**Code**	**Title**	**Proposed changes**	**Rationale**	**Mapping**
				• Added: AURETK002 Use and maintain electrical test equipment in an automotive workplace; AURHTB101 Diagnose and repair heavy vehicle air braking systems; AURKTR101 Diagnose and repair electronic over hydraulic control systems. • Removed: AURTTL003 Install CNG fuel systems; AURTTL009 Install LPG fuel systems; AURTTL104 Inspect and service LNG fuel systems; AURTTL105 Diagnose and repair LNG fuel systems. • Removed: AURETR051 Diagnose, repair and replace precision agriculture systems (unit previously deleted from the training package). **Superseded units updated to their current equivalent versions** • Core: AURETR112 to AURETR212; AURETR125 to AURETR225; AURETR129 to AURETR229; AURETR130 to AURETR230; AURHTE102 to AURHTE202; AURHTF102 to AURHTF202; AURKTA111 to AURKTA211; AURKTB101 to AURKTB201; AURKTD102 to AURKTD202; AURKTQ101 to AURKTQ201; AURKTX101 to AURKTX201; AURTTA104 to AURTTA204; AURTTA118 to AURTTA218; AURTTB101 to AURTTB201; AURTTC103 to AURTTC203; AURTTE104 to AURTTE204. • Electives: AURETR124 to AURETR224; AURHTQ103 to AURHTQ203; AURKTA005 to AURKTA105; AURTTA006 to AURTTA106; AURTTA105 to AURTTA205; AURTTF105 to AURTTF205; AURVTW101 to AURVTW201; AURVTW109 to AURVTW209.	bank because it has been deleted from the training package due to zero enrolments. The occupational outcome of the qualification has not changed, so it remains equivalent.	

Qualifications with minor changes

These qualifications use one or more of the updated units. Each superseded unit is replaced by its equivalent unit in the same core or elective position. Packaging rules and qualification outcomes are unchanged.

Current		Proposed (AUR Release 12.0)				
Code	**Title**	**Code**	**Title**	**Proposed changes**	**Rationale**	**Mapping**
AUR20520	Certificate II in Automotive Servicing Technology	**AUR20520**	Certificate II in Automotive Servicing Technology	Elective: AURTTFX02 replaces AURTTF102.	Superseded units replaced by their equivalent units. No change to the packaging rules or qualification outcome.	**E**
AUR30520	Certificate III in Marine Mechanical Technology	**AUR30520**	Certificate III in Marine Mechanical Technology	Elective: AURTTFX02 replaces AURTTF102.	Superseded units replaced by their equivalent units. No change to the packaging rules or qualification outcome.	**E**
AUR30620	Certificate III in Light Vehicle Mechanical Technology	**AUR30620**	Certificate III in Light Vehicle Mechanical Technology	Elective: AURTTFX02 replaces AURTTF102.	Superseded units replaced by their equivalent units. No change to the packaging rules or qualification outcome.	**E**
AUR31120	Certificate III in Heavy Commercial Vehicle Mechanical Technology	**AUR31120**	Certificate III in Heavy Commercial Vehicle Mechanical Technology	Core: AURTTFX02 replaces AURTTF102. Elective: AURHTEX01 replaces AURHTE001.	Superseded units replaced by their equivalent units. No change to the packaging rules or qualification outcome.	**E**
AUR31220	Certificate III in Mobile Plant Technology	**AUR31220**	Certificate III in Mobile Plant Technology	Electives: AURKTAX01 replaces AURKTA001; AURTTFX02 replaces AURTTF102; AURHTEX01 replaces AURHTE001.	Superseded units replaced by their equivalent units. No change to the packaging rules or qualification outcome.	**E**

Current		Proposed (AUR Release 12.0)				
Code	**Title**	**Code**	**Title**	**Proposed changes**	**Rationale**	**Mapping**
AUR31420	Certificate III in Automotive Diesel Fuel Technology	**AUR31420**	Certificate III in Automotive Diesel Fuel Technology	Core: AURTTFX02 replaces AURTTF102. Elective: AURHTEX01 replaces AURHTE001.	Superseded units replaced by their equivalent units. No change to the packaging rules or qualification outcome.	**E**
AUR31520	Certificate III in Automotive Diesel Engine Technology	**AUR31520**	Certificate III in Automotive Diesel Engine Technology	Electives: AURTTFX02 replaces AURTTF102; AURHTEX01 replaces AURHTE001.	Superseded units replaced by their equivalent units. No change to the packaging rules or qualification outcome.	**E**

Units of competency and mapping

Changes common to all updated units: performance criteria rewritten in active voice; a step to isolate and stabilise equipment, including lockout and tagout (LOTO), added to the agricultural machinery units; work health and safety (WHS) and occupational health and safety (OHS) requirements stated; foundation skills reviewed against each unit's own tasks; knowledge evidence on locating information, workplace procedures and housekeeping added where missing; assessment conditions updated to the TPOF 2025 template, with the workplace or simulated environment statement moved to Mandatory Workplace Requirements.

Current			Proposed (AUR Release 12.0)					
Code	**Title**	**Pre-req**	**Code**	**Title**	**Pre-req**	**Proposed changes**	**Rationale**	**Mapping**
AURKTA001	Synchronise plant and equipment	Nil	**AURKTAX01**	Synchronise plant and equipment	Nil	**Application** rewritten: synchronise and calibrate machinery (agricultural power units and mobile plant) with the implements or attachments it powers or tows. **Performance criteria:** isolation and LOTO added; synchronising and calibration procedures specified. **Range of conditions:** safety requirements updated (stored energy and hydraulic pressure, moving, cutting and crushing components, test-run exclusion zones, fire prevention).	The Technical Committee found the unit hard to interpret and noted that 'plant' could be read as fixed plant. Members recommended the wording 'synchronise and calibrate machinery with implements or attachments', as calibration is done mostly through in-cab electronics.	**E**

Current			Proposed (AUR Release 12.0)					
Code	**Title**	**Pre-req**	**Code**	**Title**	**Pre-req**	**Proposed changes**	**Rationale**	**Mapping**
						Performance evidence: synchronise and calibrate machinery with two different implements, including documenting and reporting results. **Knowledge evidence** adds calibration through in-cab displays, implement sensor calibration, GPS guidance and data connectivity, hydraulic pressure and flow adjustment, coupling inspection, weight packs and ballast, synchronisation faults and incompatibilities, field safety hazards, PPE, spill containment and machine hygiene.	Members identified hydraulic flow, coupling condition, weight packs and field hazards (PTO, stored hydraulic energy, fire, chemicals) as missing. The unit remains applicable to mobile plant, where it is an elective. The occupational outcome has not changed.	
AURKTA002	Inspect, service and repair crop harvesting equipment	Nil	**AURKTAX02**	Inspect, service and repair crop harvesting equipment	Nil	**Application:** equipment defined as combine harvesters for broadacre crops and purpose-built harvesters for other crops. **Performance criteria:** isolation and LOTO added; post-repair testing consolidated into element 3. **Range of conditions:** safety requirements updated, consistent with the other agricultural machinery units. **Performance evidence:** list of crop types removed. Now two different types of crop harvesting equipment. **Knowledge evidence** adds cleaning and separating grain, residue management including weed seed destruction, automated control systems, confirming guards and safety systems, overhead powerline and field hazards, fire prevention near crop residue, chemical residues, PPE and machine hygiene.	The Technical Committee agreed to remove the crop list, as it could not cover every crop (for example grapes and nuts) and would limit RTOs to equipment they may not have. The Technical Committee advised adding a separate step to isolate the equipment before work begins. Survey feedback also asked for clearer WHS and PPE requirements across the agricultural machinery units. Members added grain cleaning and weed seed destruction. Performance optimisation was considered and left out as beyond AQF 3.	**E**

Current			Proposed (AUR Release 12.0)					
Code	**Title**	**Pre-req**	**Code**	**Title**	**Pre-req**	**Proposed changes**	**Rationale**	**Mapping**
							The Technical Committee agreed the unit remains equivalent.	
AURKTA003	Inspect, service and repair crop planting and seeding equipment	Nil	**AURKTAX03**	Inspect, service and repair crop planting and seeding equipment	Nil	**Application:** minor wording update. **Performance criteria:** isolation and LOTO added; post-repair testing consolidated into element 3. **Range of conditions:** safety requirements updated, consistent with the other agricultural machinery units. **Performance evidence:** unchanged. **Knowledge evidence** adds variable rate and section control, metering drive types (mechanical, hydraulic and electric), air seeder primary and secondary delivery and the effect of airflow, product flow and hose size and length, and treated seed and fertiliser exposure, plus the common safety and environmental content. **Foundation skills** include seed and product rate calculations.	Technical Committee members advised that product rate calibration belongs in the seeding unit rather than in AURKTAX01. Knowledge evidence updated to reflect current seeding technology, and safety content aligned with the other agricultural machinery units following survey feedback on WHS and PPE. The occupational outcome has not changed.	**E**
AURKTA004	Inspect, service and repair spraying and spreading equipment	Nil	**AURKTAX04**	Inspect, service and repair spraying and spreading equipment	Nil	**Application:** minor wording update. **Performance criteria:** isolation and LOTO added; post-repair testing consolidated into element 3. **Range of conditions:** equipment entries removed (now covered in knowledge evidence); safety requirements updated. **Knowledge evidence** adds rate and section control (flow meters, electric control valves, pressure relief valves), conventional and pulse width modulation (PWM) nozzle systems, camera-based weed detection (green-on-brown and green-on-green), automatic boom height	AURKTA004 received the most feedback in the initial survey, along with AURKTA002. Industry members described the sprayer as the most used machine on the farm. Knowledge evidence updated to reflect current spraying technology. Chemical hazards were raised by the Technical Committee for both safety and environmental requirements.	**E**

Current			Proposed (AUR Release 12.0)					
Code	**Title**	**Pre-req**	**Code**	**Title**	**Pre-req**	**Proposed changes**	**Rationale**	**Mapping**
						control, spreader rate and section control, and chemical residues in tanks, lines and booms. **Assessment conditions:** PPE added to resources.	The occupational outcome has not changed.	
AURKTA010	Inspect, service and repair hay cutting, raking and baling equipment	Nil	**AURKTAX10**	Inspect, service and repair hay cutting, raking and baling equipment	Nil	**Application:** minor wording update. **Performance criteria:** isolation and LOTO added; post-repair testing consolidated into element 3. **Range of conditions:** equipment entry removed (covered in performance and knowledge evidence); safety requirements updated. **Performance evidence:** unchanged. **Knowledge evidence** adds self-propelled windrowers, mower-conditioners, rotary rakes, bale wrapping systems, PTO drivelines, overload protection, chain and belt drives, hydraulic circuits, timing and adjusting knotting and wrapping systems, and hay preservative exposure.	Knowledge evidence updated to reflect current hay and forage equipment. The Technical Committee agreed that the same safety and environmental requirements should apply across the agricultural machinery units. The occupational outcome has not changed.	**E**
AURTTF102	Inspect and service diesel fuel injection systems	Nil	**AURTTFX02**	Inspect and service diesel fuel injection systems	Nil	**Application:** unchanged. **Performance criteria:** reworded; final inspection extended to vehicle, machinery or vessel. **Performance evidence** and resources extended to vehicles, machines or vessels. **Knowledge evidence** adds inspecting fuel tank breathers, testing low-pressure fuel supply, air pre-cleaners, fuel vapour and ventilation in enclosed engine compartments, PPE, and preventing fuel discharge to land and waterways. Component lists restructured into mechanically and electronically controlled systems.	Reviewed as part of this project, as it is a core unit in AUR30420. The application already includes marine vessels, so the performance evidence and resources now match it. Knowledge evidence updated to reflect current service practice. The occupational outcome has not changed, so the unit remains equivalent in the eight qualifications that use it.	**E**

Current			Proposed (AUR Release 12.0)					
Code	**Title**	**Pre-req**	**Code**	**Title**	**Pre-req**	**Proposed changes**	**Rationale**	**Mapping**
						Assessment conditions: low-pressure fuel test equipment added to resources.		
AURHTE001	Remove and install heavy vehicle engine assemblies	Nil	**AURHTEX01**	Remove and install heavy vehicle engine assemblies	Nil	**Application:** unchanged. **Performance criteria:** reworded; lifting equipment added to tool and equipment checks. **Range of conditions:** retained; post-installation checks simplified (cylinder head bolt retensioning sits in knowledge evidence). **Performance evidence:** two different heavy vehicles, machinery or vessels. **Knowledge evidence** adds tilting and securely propping cabs.	Reviewed as part of this project, as it is an elective in AUR30420. The application already covers agricultural machinery, marine vessels and mobile plant, so the performance evidence and resources now match it. The occupational outcome has not changed, so the unit remains equivalent in the five qualifications that use it.	**E**