

# **AUR12 AUTOMOTIVE INDUSTRY RETAIL, SERVICE AND REPAIR TRAINING PACKAGE**

**Version 2.1**

**WA NOMINAL HOURS GUIDE**

## **Introduction**

This Guide has been generated to enable the stakeholders in the industry in Western Australia to participate in the managed implementation of the National AUR12 Automotive Retail, Service and Repair Training Package.

This Guide is designed to aid Registered Training Organisations (RTOs) to convert from existing Training Package qualifications to new Training Package qualifications within the scope of their training delivery.

The Guide should be read in conjunction with the endorsed components of the Training Package.

Version 2.1 of the AUR12 Automotive Retail, Service and Repair Training Package was released by Training.Gov.Au (TGA) on the 27 January 2015

## **Transition Arrangements**

Registered Training Organisations (RTOs) are required to deliver Training Package qualifications within 12 months of the release date of the Training Package on to Training.gov.au (TGA).

Students currently enrolled in an existing version of the Training Package qualification should be permitted to complete the program they enrolled in initially, unless the move to the related qualification from a Training Package can be made without disadvantage to a student.

## **Nominal Hours**

Nominal hours are the hours of training notionally required to achieve the outcomes of units of competency.

Nominal hours are identified for nationally endorsed qualifications. Nominal hours may vary for a qualification depending on the selection of units of competency.

In Western Australia, nominal hours are used as a mechanism for funding allocation.

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## Qualifications and Nominal Hours

The following table provides a summary of the qualifications and nominal hours in version 2.1 of the AUR12 Automotive Industry Retail, Service and Repair Training Package

National Code	National Title	Nominal Hours
AUR10112	Certificate I in Automotive Vocational Preparation	140
AUR20112	Certificate II in Automotive Administration	220
AUR20212	Certificate II in Automotive Air Conditioning Technology	316
AUR20312	Certificate II in Bicycle Mechanical Technology	355
AUR20412	Certificate II in Automotive Electrical Technology	297
AUR20512	Certificate II in Automotive Servicing Technology	365
AUR20612	Certificate II in Marine Mechanical Technology	359
AUR20712	Certificate II in Automotive Vocational Preparation	230
AUR20812	Certificate II in Outdoor Power Equipment Technology	286
AUR20912	Certificate II in Automotive Body Repair Technology	317
AUR21012	Certificate II in Motorsport Technology	303
AUR21112	Certificate II in Automotive Sales	265
AUR21212	Certificate II in Automotive Underbody Technology	290
AUR21312	Certificate II in Automotive Braking System Technology	256
AUR21412	Certificate II in Automotive Cooling System Technology	334
AUR21512	Certificate II in Automotive Cylinder Head Reconditioning	400
AUR21612	Certificate II in Automotive Driveline System Technology	297
AUR21712	Certificate II in Automotive Exhaust System Technology	320
AUR21812	Certificate II in Automotive Steering and Suspension System Technology	250
AUR21913	Certificate II in Automotive Tyre Servicing Technology	266
AUR30112	Certificate III in Automotive Administration	400
AUR30212	Certificate III in Bicycle Workshop Operations	674
AUR30312	Certificate III in Automotive Electrical Technology	940
AUR30412	Certificate III in Agricultural Mechanical Technology	1020
AUR30612	Certificate III in Light Vehicle Mechanical Technology	985
AUR30713	Certificate III in Outdoor Power Equipment Technology	870
AUR30812	Certificate III in Motorcycle Mechanical Technology	942
AUR30912	Certificate III in Motorsport Technology	906
AUR31012	Certificate III in Automotive Sales	490
AUR31212	Certificate III in Mobile Plant Technology	1099
AUR31312	Certificate III in Automotive Engine Reconditioning	1045
AUR31412	Certificate III in Automotive Diesel Fuel Technology	591
AUR31512	Certificate III in Automotive Diesel Engine Technology	919
AUR31612	Certificate III in Automotive Drivetrain Technology	667
AUR31712	Certificate III in Forklift Technology	721

<b>National Code</b>	<b>National Title</b>	<b>Nominal Hours</b>
AUR31812	Certificate III in Heavy Commercial Trailer Technology	740
AUR31912	Certificate III in Elevating Work Platform Technology	851
AUR32012	Certificate III in Automotive Alternative Fuel Technology	636
AUR32112	Certificate III in Automotive Body Repair Technology	902
AUR32212	Certificate III in Automotive Glazing Technology	675
AUR32312	Certificate III in Automotive and Marine Trimming Technology	900
AUR32412	Certificate III in Automotive Refinishing Technology	900
AUR32512	Certificate III in Automotive Underbody Technology	612
AUR40112	Certificate IV in Automotive Management	340
AUR40212	Certificate IV in Automotive Mechanical Diagnosis	377
AUR40312	Certificate IV in Motorsport Technology	389
AUR40412	Certificate IV in Automotive Performance Enhancement	354
AUR40612	Certificate IV in Automotive Electrical Technology	330
AUR40712	Certificate IV in Automotive Body Repair Technology	295
AUR40812	Certificate IV in Automotive Mechanical Overhauling	390
AUR50112	Diploma of Automotive Management	500
AUR50212	Diploma of Automotive Technology	440
AUR50312	Diploma of Motorsport Technology	382

## Units of Competency and Nominal Hours

The following table provides a summary of the units of competency and nominal hours in version 2.1 of the AUR12 Automotive Industry Retail, Service and Repair Training Package

National Code	National Title	Nominal Hours
AURAAA2001	Work in an automotive administration environment	20
AURAAA4002	Determine retail rates for work	32
AURACA2001	Establish relations with customers	20
AURACA3002	Establish customer requirements of a complex nature	24
AURACA3003	Build customer relations	30
AURAEA1001	Identify environmental requirements in an automotive workplace	16
AURAEA2002	Apply environmental and sustainability best practice in an automotive workplace	20
AURAEA3003	Monitor environmental and sustainability best practice in the automotive mechanical industry	20
AURAEA4004	Manage environmental compliance in an automotive workplace	32
AURAF2001	Use numbers in an automotive workplace	20
AURAF2002	Read in an automotive workplace	12
AURAF2003	Communicate effectively in an automotive workplace	20
AURAF2004	Solve routine problems in an automotive workplace	20
AURAF2005	Write routine texts in an automotive workplace	20
AURAF3008	Read and apply automotive repair instructions	18
AURAF5006	Prepare technical reports	40
AURAF5007	Develop and document specifications and procedures	40
AURAKA2001	Use information technology systems	20
AURAKA3002	Adapt work processes to new technologies	30
AURALA3001	Determine legal aspects of an automotive service and repair contract	30
AURAMA2001	Work effectively with others	20
AURAMA2002	Communicate business information	16
AURAMA3003	Conduct information sessions	24
AURAMA3004	Maintain business image	30
AURAMA4005	Manage complex customer issues	32
AURAMA5006	Contribute to business improvement	32
AURANN4001	Prepare a vehicle repair quotation	32
AURAQ2001	Contribute to quality work outcomes	20
AURAQ3002	Inspect technical quality of work	30
AURAQ3003	Maintain quality systems	30
AURASA1001	Apply automotive workplace safety fundamentals	10
AURASA2002	Apply safe working practices in an automotive workplace	20
AURATA2001	Identify basic automotive faults using troubleshooting processes	24

National Code	National Title	Nominal Hours
AURATA2002	Read and interpret engineering drawings	20
AURATA2003	Produce drawings from design concepts	20
AURATA3004	Provide technical guidance	30
AURATA3005	Estimate complex jobs	30
AURBCA2001	Work in a retail bicycle environment	20
AURBCA2002	Select and adjust bicycle to fit rider	5
AURBSA3001	Conduct cycling proficiency training	15
AURBTA1001	Remove and tag bicycle components	12
AURBTA1002	Adjust bicycles	10
AURBTA2003	Assemble bicycles	30
AURBTA2004	Assemble box bicycles for retail sale	20
AURBTA3005	Restore bicycles	30
AURBTA3006	Identify and select components for custom bicycles	20
AURBTA3007	Provide mechanical support to cycling events	20
AURBTB2001	Service and repair bicycle mechanical braking systems	20
AURBTB2002	Service bicycle hydraulic braking systems	20
AURBTB3003	Repair bicycle hydraulic braking systems	30
AURBTD2001	Service bicycle steering systems	20
AURBTD2002	Service bicycle suspension systems	20
AURBTD3003	Repair and overhaul bicycle steering systems	30
AURBTD3004	Repair and overhaul bicycle suspension systems	30
AURBTJ2001	Remove, repair and fit bicycle tyres	20
AURBTJ2002	Service bicycle wheels and hubs	20
AURBTJ3003	Design and build bicycle wheels	30
AURBTJ3004	Repair and overhaul bicycle wheels and hubs	20
AURBTK2001	Use and maintain specialised bicycle repair tools	10
AURBTQ2001	Service bicycle drivetrain systems	20
AURBTQ3002	Repair bicycle drivetrain systems	30
AURBTR3001	Service electric power assist bicycles	20
AURBTV2001	Fit and adjust bicycle accessories	20
AURBTY3001	Service and repair bicycle frames	30
AURBTY4002	Design and build bicycle frames	30
AURBTY4003	Assess carbon fibre frames for repair	30
AURETA5001	Analyse and evaluate electrical and electronic faults in electric over-hydraulic systems	36
AURETA5002	Analyse and evaluate electrical and electronic faults in safety systems	32
AURETA5003	Analyse and evaluate electrical and electronic faults in monitoring and protection systems	36
AURETA5004	Analyse and evaluate electrical and electronic faults in convenience and entertainment systems	36
AURETA5005	Analyse and evaluate electrical and electronic faults in theft-deterrent systems	32
AURETA5006	Analyse and evaluate electrical and electronic faults in climate-control systems	32

National Code	National Title	Nominal Hours
AURETB3001	Repair electric braking systems	30
AURETB5002	Analyse and evaluate electrical and electronic faults in braking systems	32
AURETD3001	Service and repair electronically controlled steering systems	30
AURETD5002	Analyse and evaluate electrical and electronic faults in stability, steering and suspension systems	36
AURETE5001	Analyse and evaluate electrical and electronic faults in engine management systems	36
AURETH3001	Depower battery electric vehicles	10
AURETH3002	Service and maintain battery electric vehicles	20
AURETH4003	Test and repair high voltage battery systems in battery electric vehicles	30
AURETH4004	Diagnose and repair traction motor speed control device in battery electric vehicles	30
AURETH4005	Diagnose and repair high voltage traction motors in battery electric vehicles	50
AURETH4006	Diagnose and repair auxiliary motors and associated components in battery electric vehicles	40
AURETH4007	Diagnose and repair system instrumentation and safety interlocks in battery electric vehicles	40
AURETH4008	Diagnose and repair high voltage cabin heating and cooling systems in battery electric vehicles	40
AURETH4009	Diagnose and repair DC to DC converters in battery electric vehicles	40
AURETH4010	Test high voltage batteries in hybrid electric vehicles	15
AURETH4011	Deactivate and reinitialise power supply in hybrid electric vehicles	20
AURETH4012	Service and maintain electrical components in hybrid electric vehicles	30
AURETH4014	Diagnose complex faults in battery electric and hybrid electric vehicle systems	45
AURETH5013	Analyse and evaluate electrical and electronic faults in electric and hybrid vehicle systems	36
AURETK1001	Identify, select and use low voltage electrical test equipment	10
AURETK2002	Use and maintain automotive electrical test equipment	18
AURETR1001	Remove and tag automotive electrical system components	22
AURETR1002	Test, service and maintain battery storage systems	20
AURETR1003	Apply automotive electrical system fundamentals	10
AURETR2005	Install, test and repair electrical security systems and components	20
AURETR2006	Carry out soldering of electrical wiring and circuits	20
AURETR2007	Demonstrate knowledge of automotive electrical circuits and wiring systems	18
AURETR2008	Remove and replace electrical units and assemblies	15
AURETR2009	Install, test and repair vehicle lighting and wiring systems	20
AURETR2010	Fabricate, test and repair wiring harnesses and looms	55
AURETR2011	Install and test basic ancillary electrical components	20
AURETR2012	Test and repair basic electrical circuits	30
AURETR2013	Inspect and service charging systems	10
AURETR2014	Inspect and service starting systems	10
AURETR2015	Inspect and service batteries	20
AURETR2016	Read and apply vehicle wiring schematics and drawings	10
AURETR2035	Demonstrate knowledge of petrol and diesel engine operation	10
AURETR2042	Remove, refit and test electrical componentry for operation following body repair activities	20
AURETR3017	Overhaul charging system alternators	40

National Code	National Title	Nominal Hours
AURETR3018	Overhaul starting motors	30
AURETR3019	Inspect, service and repair AC electric motor drive systems	30
AURETR3020	Repair electronic systems	45
AURETR3021	Inspect, service and repair electronic management, monitoring and tracking systems	30
AURETR3022	Diagnose and repair vehicle dynamic control systems	50
AURETR3023	Diagnose and repair electronic spark ignition engine management systems	55
AURETR3024	Diagnose and repair electronic compression ignition engine management systems	45
AURETR3025	Test, charge and replace batteries	20
AURETR3026	Remove, replace and program electrical and electronic units and assemblies	20
AURETR3027	Install ancillary electronic control unit systems and components	35
AURETR3028	Diagnose and repair instruments and warning systems	30
AURETR3029	Diagnose and repair charging systems	25
AURETR3030	Diagnose and repair starting systems	30
AURETR3031	Diagnose and repair ignition systems	30
AURETR3032	Repair electrical systems	44
AURETR3036	Service and repair electronically controlled suspension systems	30
AURETR3043	Service and repair electronic body management systems	45
AURETR3044	Service and repair electronic drive management systems	45
AURETR4004	Diagnose complex electrical and electronic faults in vehicle convenience and entertainment systems	45
AURETR4037	Diagnose complex electrical and electronic faults in light vehicle safety systems	45
AURETR4038	Diagnose complex faults in motorcycle electrical and electronic systems	45
AURETR4039	Diagnose complex electrical and electronic faults in light vehicle theft deterrent systems	45
AURETR4040	Diagnose complex electrical and electronic faults in vehicle monitoring and protection systems	45
AURETR5033	Develop and apply electronic systems modification	36
AURETR5034	Develop and apply electrical systems modification	36
AURETU2001	Install air conditioning systems	20
AURETU2002	Recover vehicle refrigerants	10
AURETU2003	Service air conditioning and HVAC systems	20
AURETU3004	Diagnose and repair air conditioning and HVAC systems	30
AURETU3005	Retrofit and modify air conditioning and HVAC systems	30
AURETU4006	Diagnose complex faults in air conditioning and HVAC systems	45
AURETU4007	Overhaul air conditioning system components	36
AURETX5001	Analyse and evaluate electrical and electronic faults in transmission and driveline systems	36
AURHTA1001	Carry out heavy vehicle pre-repair operations	10
AURHTA2003	Remove and replace heavy commercial vehicle ancillary components and accessories	18
AURHTA3002	Service and repair trailers in excess of 4.5 tonnes	20
AURHTB3001	Repair air braking systems	40
AURHTB3002	Diagnose and repair heavy vehicle hydraulic braking systems	30
AURHTB3007	Diagnose and repair heavy vehicle electronic braking systems	35



National Code	National Title	Nominal Hours
AURHTB4003	Overhaul braking system components (heavy)	36
AURHTB4004	Overhaul air braking systems and components	40
AURHTB4006	Diagnose complex faults in heavy commercial vehicle braking systems	45
AURHTB5005	Analyse and evaluate heavy vehicle braking system faults	36
AURHTD2001	Inspect and service heavy commercial vehicle suspension systems	10
AURHTD3002	Repair steering systems (heavy vehicle)	40
AURHTD3003	Repair suspension systems (heavy vehicle)	40
AURHTD3004	Carry out wheel alignment operations (heavy vehicle)	30
AURHTD4006	Diagnose complex faults in heavy commercial vehicle steering and suspension systems	45
AURHTD5005	Analyse and evaluate heavy vehicle steering and suspension system faults	36
AURHTE2001	Remove and install heavy vehicle engine assemblies	24
AURHTE3002	Repair engines and associated engine components (heavy vehicle)	50
AURHTE4003	Diagnose complex faults in heavy vehicle diesel engines	45
AURHTE5004	Analyse and evaluate heavy vehicle engine and fuel system faults	36
AURHTF2001	Inspect heavy commercial vehicle fuel systems and components	18
AURHTJ1001	Inspect heavy commercial vehicle wheels and tyres	10
AURHTJ2002	Select heavy vehicle tyres and rims for specific applications	25
AURHTJ2003	Remove, inspect, and refit heavy vehicle wheel assemblies	20
AURHTJ2004	Demount, inspect, repair and mount agricultural equipment tyres and tubes	35
AURHTJ2006	Remove, inspect, repair and fit tyres and tubes (heavy)	20
AURHTJ3005	Identify and apply pneumatic wheeled traction performance enhancement systems (heavy vehicle)	30
AURHTL4001	Inspect, repair and diagnose alternative fuel systems for heavy vehicle engines	60
AURHTQ2001	Inspect heavy commercial vehicle driveline components	5
AURHTQ3002	Repair final drive assemblies (heavy vehicle)	30
AURHTQ3003	Repair final drive - driveline (heavy vehicle)	30
AURHTR3005	Diagnose and repair heavy trailer electronically controlled roll stability systems	20
AURHTX3001	Repair transmissions - manual (heavy vehicle)	40
AURHTX3002	Inspect, test and replace transmissions - automatic (heavy vehicle)	70
AURHTX3003	Repair transmissions - automatic (heavy vehicle)	30
AURHTX3004	Diagnose and repair heavy vehicle clutch systems	30
AURHTX4006	Diagnose complex faults in heavy commercial vehicle transmission and driveline systems	45
AURHTX5005	Analyse and evaluate heavy vehicle transmission system faults	36
AURHTY2001	Inspect and service mechanical connections of heavy vehicles and trailers over 4.5 tonnes	5
AURHTY3002	Diagnose and repair mechanical connections of heavy vehicles and trailers over 4.5 tonnes	10
AURHTZ3001	Diagnose and repair heavy vehicle emission control systems	30
AURJTA1001	Perform minor adjustments to motorcycles	10
AURJTA1002	Remove and replace motorcycle components and accessories	10
AURJTA5003	Analyse and evaluate motorcycle engine and transmission system faults	36
AURJTB3001	Diagnose and repair motorcycle braking systems	35

National Code	National Title	Nominal Hours
AURJTB5002	Analyse and evaluate motorcycle braking system faults	36
AURJTD2001	Inspect and service motorcycle suspension systems	10
AURJTD2002	Inspect and service motorcycle steering systems	10
AURJTD3003	Diagnose and repair motorcycle suspension systems	25
AURJTD3004	Diagnose and repair motorcycle steering systems	25
AURJTD4005	Diagnose complex faults in motorcycle steering and suspension systems	45
AURJTD5006	Analyse and evaluate motorcycle steering, suspension and frame system faults	36
AURJTE3001	Diagnose and repair motorcycle engines	55
AURJTE4002	Diagnose complex faults in motorcycle engine and transmission systems	45
AURJTJ2001	Remove, inspect and fit motorcycle wheel assemblies	18
AURJTQ2001	Inspect and service motorcycle driveline systems	5
AURJTQ3002	Diagnose and repair motorcycle driveline systems	20
AURJTR5001	Analyse and evaluate motorcycle electrical and electronic system faults	36
AURJTX3001	Diagnose and repair motorcycle clutch systems	30
AURJTX3002	Diagnose and repair motorcycle manual transmissions	35
AURJTX3003	Diagnose and repair motorcycle automatic transmissions	45
AURJTY3001	Repair and align motorcycle frames	20
AURKTA3001	Synchronise plant and equipment	30
AURKTA3002	Inspect, service and repair harvesting equipment	20
AURKTA3003	Inspect, service and repair crop planting and seeding equipment	20
AURKTA3004	Inspect, service and repair spraying and spreading equipment	20
AURKTA3005	Inspect, service and repair tracked type drive and support systems	30
AURKTA4009	Diagnose complex faults in mobile plant hydraulic systems	45
AURKTA5006	Analyse and evaluate tracked mobile plant transmission, steering and braking systems faults	36
AURKTA5007	Analyse and evaluate mobile plant hydraulic system faults	36
AURKTB3001	Diagnose and repair mobile plant braking systems	40
AURKTB4003	Diagnose complex faults in mobile plant braking systems	45
AURKTB5002	Analyse and evaluate wheeled mobile plant braking system faults	36
AURKTD3001	Diagnose and repair mobile plant suspension systems	35
AURKTD3002	Diagnose and repair mobile plant steering systems	35
AURKTD4005	Diagnose complex faults in mobile plant steering and suspension systems	45
AURKTD5003	Analyse and evaluate wheeled mobile plant steering and suspension system faults	36
AURKTD5004	Analyse and evaluate tracked mobile plant undercarriage and suspension system faults	36
AURKTE5001	Analyse and evaluate mobile plant engine and fuel system faults	36
AURKTQ3001	Diagnose and repair mobile plant final drive assemblies	30
AURKTR3001	Diagnose and repair electric-over-hydraulic control systems	35
AURKTX3001	Diagnose and repair powershift transmissions	50
AURKTX4003	Diagnose complex faults in mobile plant transmission systems	45
AURKTX5002	Analyse and evaluate wheeled mobile plant transmission system faults	36

National Code	National Title	Nominal Hours
AURLLD3001	Determine compliance of steering and suspension modifications	30
AURLTA1001	Apply automotive mechanical system fundamentals	15
AURLTB3003	Diagnose and repair light vehicle hydraulic braking systems	30
AURLTB4001	Overhaul braking system components (light)	32
AURLTB4004	Diagnose complex faults in light vehicle braking systems	45
AURLTB5002	Analyse and evaluate light vehicle braking system faults	36
AURLTD3001	Select and install performance enhanced suspension system products	30
AURLTD3002	Service and rectify faults in lift assisted suspension systems	30
AURLTD3003	Reset steering system alignment adjustments to customer specifications	30
AURLTD3004	Repair steering systems (light vehicle)	30
AURLTD3005	Repair suspension systems (light vehicle)	30
AURLTD3006	Carry out wheel alignment operations (light vehicle)	30
AURLTD4009	Diagnose complex faults in light vehicle steering and suspension systems	45
AURLTD5007	Analyse and evaluate light vehicle steering and suspension system faults	36
AURLTE2001	Remove and install light vehicle engine assemblies	24
AURLTE3002	Repair engines and associated engine components (light vehicle)	50
AURLTE4004	Diagnose complex faults in light vehicle petrol engines	45
AURLTE4005	Diagnose complex faults in light vehicle diesel engines	45
AURLTE5003	Analyse and evaluate light vehicle engine and fuel system faults	36
AURLTF3001	Diagnose and repair mechanical fuel injection systems	30
AURLTJ2001	Select tyres and rims for specific applications (light)	20
AURLTJ2002	Remove, inspect, repair and fit tyres and tubes (light)	12
AURLTJ2003	Remove, inspect, and refit light vehicle wheel assemblies	20
AURLTJ3004	Provide advice on the effects of wheel and tyre combinations	10
AURLTQ3001	Repair final drive assemblies (light vehicle)	30
AURLTQ3002	Repair final drive - driveline (light vehicle)	20
AURLTQ5003	Analyse and evaluate light vehicle driveline system faults	36
AURLTX3001	Repair transmissions - manual (light vehicle)	30
AURLTX3002	Repair transmissions - automatic (light vehicle)	30
AURLTX3003	Diagnose and repair light vehicle clutch systems	30
AURLTX4004	Diagnose complex faults in light vehicle transmission and driveline systems	45
AURLTZ3001	Diagnose and repair light vehicle emission control systems	30
AURMBA2001	Transport a light competition vehicle and support equipment	10
AURMBA3002	Load and unload a competition vehicle and support equipment	18
AURMCA5001	Manage motorsport team media liaison	40
AURMCA5002	Manage motorsport team promotional partnerships and marketing	40
AURMDA2001	Develop and update motorsport industry knowledge	10
AURMDA2002	Assist with motorsport officiating duties	5
AURMDA3004	Recover a motorsport vehicle	10

National Code	National Title	Nominal Hours
AURMDA3005	Act as a marshal in a motorsport event	15
AURMDA3006	Communicate using flags and signals in a motorsport event	5
AURMDA3007	Act as a steward in a motorsport event	20
AURMGA2001	Set up and dismantle temporary work location and equipment	16
AURMGA4002	Manage personal presentation and development	32
AURMKA4001	Manage motorsport data	40
AURMLA2001	Comply with motorsport rules and regulations when officiating	10
AURMLA3002	Monitor compliance with motorsport rules and regulations	15
AURMLA3003	Inspect motorsport vehicles and equipment for compliance	20
AURMMA2001	Operate in a motorsport environment	20
AURMMA3007	Follow motorsport event and team safety requirements	20
AURMMA3008	Coordinate operations of a motorsport team	30
AURMMA4002	Manage the preparation of a competition vehicle	40
AURMMA5003	Manage motorsport operations	50
AURMMA5004	Manage motorsport team development	40
AURMMA5005	Manage team pit lane and service area operations	40
AURMMA5006	Prepare and implement race strategies	50
AURMSA2001	Follow motorsport safety and risk management procedures	10
AURMSA3002	Implement and monitor safety and risk management in a motorsport environment	20
AURMTA2001	Prepare and service a light competition vehicle	20
AURMTA3002	Assemble and prepare a competition vehicle	24
AURMTA3004	Perform competition vehicle preparation procedures at an event	18
AURMTA3005	Perform pit lane and service area operations	16
AURMTA3006	Perform torquing and fastening	18
AURMTA3007	Conduct non-destructive testing	30
AURMTA3009	Collect and log motorsport data	20
AURMTA5003	Determine material suitability for competition vehicle components	40
AURMTA5008	Apply aerodynamic and vehicle dynamic principles and effects to competition vehicles	50
AURMTD4001	Test suspension dampers using a dynamometer	32
AURMTD4002	Prepare competition vehicle suspension	32
AURMTE4001	Test engines using a dynamometer	32
AURMTF4001	Analyse and repair complex performance carburetted fuel systems	36
AURMTF4002	Analyse and repair performance fuel injection systems	36
AURMTJ4001	Select and prepare tyres and wheels for motorsport applications	26
AURMTQ4001	Analyse and repair complex performance driveline systems	36
AURMTS3001	Construct hose and pipe assemblies for competition vehicles	20
AURNTA3001	Inspect, service and repair lift truck mast assemblies	30
AURPTA1001	Carry out pre-repair operations to outdoor power equipment	5
AURPTA1002	Perform minor adjustments to outdoor power equipment	10

National Code	National Title	Nominal Hours
AURPTA2003	Service and repair rotary cutting systems	16
AURPTA2004	Service and repair drum cutting systems	20
AURPTA2005	Service and repair chainsaw cutting systems	20
AURPTA2006	Service line trimming systems and components	8
AURPTA2007	Service and repair post-boring systems	16
AURPTA2008	Service and repair post-hole digging systems	16
AURPTA2009	Service and repair reciprocating cutting systems	16
AURPTA2010	Service pumping systems	20
AURPTA3011	Repair pumping systems	30
AURPTE2002	Service engines and engine components (outdoor power equipment)	20
AURPTE3003	Repair engines and engine components (outdoor power equipment)	26
AURPTE4004	Overhaul engines and engine components (outdoor power equipment)	32
AURPTR2002	Test and service outdoor electric powered equipment	20
AURPTR3001	Test and service 240V portable generators	10
AURREA2001	Apply environmental and sustainability best practice in a marine workplace	20
AURREA3002	Monitor environmental and sustainability best practice in the marine mechanical industry	25
AURREA4004	Manage environmental compliance in a marine workplace	36
AURRGA3001	Launch and recover a vessel using a trailer	20
AURRGA3002	Launch and recover a vessel from crane, gantry and forklift	26
AURRGA3003	Moor a motor-driven vessel	22
AURRTA2001	Service deck, hull and cabin equipment	20
AURRTA3002	Carry out hull repairs	30
AURRTA3003	Winterise vessel and engine systems	25
AURRTA3004	Recommission vessel systems	20
AURRTA3005	Repair deck, hull and cabin equipment	30
AURRTA3006	Water test a vessel	16
AURRTA5007	Analyse and evaluate light marine hydraulic system faults	36
AURRTA5008	Analyse and evaluate light marine hull performance and stability system faults	36
AURRTD3001	Diagnose and repair marine steering systems	24
AURRTE1001	Prepare outboard engines for wet-run testing	10
AURRTE2002	Service outboard engines and components	20
AURRTE2003	Service inboard engines and components	20
AURRTE3005	Diagnose and repair marine electrical systems and components	30
AURRTE3006	Diagnose and repair outboard engines and components	40
AURRTE3007	Diagnose and repair inboard engines and components	40
AURRTE3008	Install marine engines, controls and instruments	30
AURRTE3009	Recommission marine engine systems	20
AURRTE3010	Water test engines in tanks	16
AURRTE4011	Overhaul two and four cycle outboard engines	40

National Code	National Title	Nominal Hours
AURRTE5012	Analyse and evaluate light marine engine and powerhead system faults	36
AURRTQ2001	Service inboard propeller drive systems	30
AURRTQ2002	Service jet drive propulsion systems	20
AURRTQ3003	Install inboard propeller drive systems	30
AURRTQ3004	Diagnose and repair inboard propeller drive systems	30
AURRTQ3005	Install jet drive propulsion systems	30
AURRTQ3006	Diagnose and repair jet drive propulsion systems	25
AURRTR1001	Inspect, service and maintain marine battery storage systems	10
AURRTR3002	Install marine electronic systems and components	50
AURRTR3003	Test, diagnose and repair marine electronic systems and components	30
AURRTR3004	Install marine electrical systems and components	30
AURRTX2001	Service marine outboard and stern drive transmissions	20
AURRTX2002	Service marine inboard transmissions	16
AURRTX3003	Diagnose and repair marine outboard and stern drive transmissions	30
AURRTX3004	Diagnose and repair marine inboard transmissions	30
AURRTX5005	Analyse and evaluate light marine transmission system faults	36
AURSAA2001	Process customer complaints	16
AURSAA2002	Maintain customer aftermarket relations	15
AURSBA2001	Carry out warehousing procedures	16
AURSBA3002	Apply automotive parts interpretation process	30
AURSCA2001	Select automotive parts and products	20
AURSCA2002	Present stock and sales area	16
AURSCA2003	Apply sales procedures	16
AURSCA2004	Carry out cash, credit and funds transfers	20
AURSCA2005	Sell products	20
AURSCA2006	Promote products and services	20
AURSCA3007	Determine used motor vehicle stock requirements	24
AURSCA3008	Wholesale used motor vehicle stock	30
AURSCA3009	Provide vehicle technology information	15
AURSCA3010	Appraise and purchase used motor vehicles to supplement stock for sale	30
AURSCP2001	Provide information to customers on automotive refinishing products	12
AURSLA2001	Apply legal requirements relating to product sale	20
AURTEA4001	Manage environmental compliance in the mechanical repair industry	40
AURTGA3001	Drive and manoeuvre trailers	30
AURTNA5001	Estimate and calculate costs to repair, maintain or modify a vehicle	36
AURTTA1001	Remove and tag steering, suspension and brake system components	16
AURTTA1002	Carry out workshop practice activities	36
AURTTA1003	Use and maintain basic measuring devices	16
AURTTA2004	Carry out servicing operations	40

National Code	National Title	Nominal Hours
AURTTA2005	Select and use bearings, seals, gaskets, sealants and adhesives	20
AURTTA2006	Service hydraulic systems	30
AURTTA2007	Inspect, service and repair pneumatic systems	20
AURTTA2008	Produce patterns and templates	20
AURTTA2009	Carry out pre-repair operations (mechanical)	20
AURTTA2010	Service and repair trailers up to 4.5 tonnes	20
AURTTA3011	Install hydraulic systems to specified applications	30
AURTTA3012	Manufacture and install fluid power hose assemblies	30
AURTTA3013	Repair hydraulic systems	40
AURTTA3014	Assemble and install pneumatic systems and components	30
AURTTA3015	Prepare engineering drawings	30
AURTTA3017	Carry out vehicle safety and roadworthy inspections	16
AURTTA3018	Carry out diagnostic procedures	30
AURTTA3019	Carry out advanced diagnostic procedures	30
AURTTA3020	Apply heat-induction processes	15
AURTTA4021	Carry out diagnosis of complex system faults	40
AURTTA4025	Diagnose complex faults in vehicle integrated stability control systems	45
AURTTA4026	Diagnose complex faults in vehicle electric-over-hydraulic systems	45
AURTTA5022	Develop and apply mechanical system modifications	40
AURTTA5023	Develop and apply hydraulic system modifications	40
AURTTA5024	Develop and apply pneumatic system modifications	40
AURTTB2001	Inspect and service braking systems	20
AURTTB2002	Attach friction materials and radius grind	20
AURTTB2003	Machine brake drums and brake disc rotors	16
AURTTB2004	Inspect and service air braking systems	20
AURTTB3005	Assemble and fit braking systems and components	30
AURTTB3006	Inspect, service and repair auxiliary braking systems	30
AURTTC2001	Inspect and service cooling systems	20
AURTTC2002	Carry out radiator repairs	20
AURTTC3003	Diagnose and repair cooling systems	20
AURTTD2001	Inspect steering systems	20
AURTTD2002	Inspect and service steering systems	20
AURTTD2003	Inspect suspension systems	16
AURTTD2004	Inspect and service suspension systems	20
AURTTD4005	Overhaul steering system components	36
AURTTE1003	Remove and tag engine system components	22
AURTTE2004	Inspect and service engines	20
AURTTE4005	Overhaul engines and associated engine components	60
AURTTF2001	Service petrol fuel systems	20

National Code	National Title	Nominal Hours
AURTTF2002	Service diesel fuel injection systems	16
AURTTF3004	Repair diesel fuel injection systems	50
AURTTF3005	Inspect and repair engine forced induction systems	24
AURTTF3006	Diagnose and repair petrol carburettor systems	30
AURTTF4003	Overhaul diesel fuel injection systems	36
AURTTF4007	Overhaul petrol fuel system components	32
AURTTJ2001	Balance wheels and tyres	10
AURTTJ2002	Remove and refit wheel hubs and associated brake components	20
AURTTK2001	Use and maintain measuring equipment in an automotive workplace	16
AURTTK2002	Use and maintain workplace tools and equipment	20
AURTTL3001	Service CNG fuel systems	30
AURTTL3002	Diagnose and repair CNG fuel systems	31
AURTTL3003	Install CNG fuel systems	30
AURTTL3004	Service LNG fuel systems	30
AURTTL3005	Diagnose and repair LNG fuel systems	31
AURTTL3006	Install LNG fuel systems	30
AURTTL3007	Service LPG fuel systems	30
AURTTL3008	Diagnose and repair LPG fuel systems	31
AURTTL3009	Install LPG fuel systems	30
AURTTL3010	Install LPG, CNG and LNG electrical control equipment	30
AURTTL4011	Diagnose complex faults in CNG fuel systems	45
AURTTL4012	Diagnose complex faults in LNG fuel systems	45
AURTTL4013	Diagnose complex faults in LPG fuel systems	45
AURTTL5014	Analyse and evaluate gas fuel system faults	36
AURTTL5015	Develop and apply gas fuel system modifications	40
AURTTQ2001	Service final drive assemblies	15
AURTTQ2002	Remove and refit driveline components	12
AURTTQ2003	Service final drive (driveline)	16
AURTTQ4004	Overhaul final drive assemblies	32
AURTR4001	Diagnose complex faults in engine management systems	45
AURTTS2001	Fabricate exhaust system and components	24
AURTTW2001	Carry out soft soldering techniques	30
AURTTW3002	Set, operate and monitor specialist machines	30
AURTTW3003	Carry out machining operations	30
AURTTX1001	Remove and tag transmission system components	16
AURTTX2002	Inspect and service transmissions (manual)	20
AURTTX2003	Inspect and service transmissions (automatic)	20
AURTTX2004	Service transmissions (hydrostatic)	24
AURTTX2005	Inspect and service clutch systems	10



National Code	National Title	Nominal Hours
AURTTX3006	Repair transmissions (hydrostatic)	40
AURTTX4007	Overhaul clutch assemblies	40
AURTTX4008	Overhaul transmissions (manual)	32
AURTTX4009	Overhaul transmissions (automatic)	40
AURTTX4010	Overhaul transmissions (hydrostatic)	40
AURTTX4011	Overhaul torque converters	25
AURTTY3001	Repair chassis, frame and associated components	20
AURTTZ2001	Inspect and service emission control systems	10
AURTTZ2002	Repair exhaust system components	20
AURVEN2001	Apply environmental regulations and best practice in the body repair industry	20
AURVEN3002	Monitor environmental and sustainability best practice in the automotive body repair industry	30
AURVEN4003	Plan and manage compliance with environmental regulations in the body repair industry	40
AURVGA3001	Determine vehicle rescue method and costs	30
AURVGA3002	Recover vehicles	30
AURVLN2001	Apply legal requirements for vehicle dismantlers	20
AURVTA2001	Prepare vehicle, components and equipment for customer use	20
AURVTA3002	Remove and replace supplementary restraint systems	30
AURVTA3003	Inspect paint, trim and accessories and recommend repair procedures	40
AURVTA3004	Inspect vehicle systems and determine preferred repair action	30
AURVTG2001	Repair laminated glass	20
AURVTG2002	Remove and install rubber glazed windscreens	20
AURVTG2003	Remove and install butyl sealed windscreens	20
AURVTG2004	Remove and install direct glazed windscreens	20
AURVTG2005	Remove and install framed type windscreens	20
AURVTG2006	Apply window tinting	20
AURVTG2007	Clean glass surfaces	10
AURVTG3008	Cut and process flat laminated glass	30
AURVTG3009	Remove and install fixed body glass	30
AURVTG3010	Remove and install movable body glass	30
AURVTG3011	Install side windows	30
AURVTG3012	Remove and install heavy vehicle rubber and urethane glazed windscreens	30
AURVTG3013	Remove and install large vehicle windscreens	30
AURVTK2001	Use and maintain vehicle body repair hand tools	15
AURVTN1001	Remove and tag vehicle body system components	22
AURVTN2002	Carry out panel repairs	30
AURVTN2003	Carry out pre-repair vehicle body operations	24
AURVTN2004	Remove, replace and realign bolt-on panels, sections and fittings	58
AURVTN2005	Remove and fit protector mouldings, transfers and decals	20
AURVTN2006	Remove and replace mechanical units and assemblies	20

National Code	National Title	Nominal Hours
AURVTN2007	Remove salvageable components	20
AURVTN2008	Clean vehicle body and door cavities	20
AURVTN2009	Clean vehicle engine and engine compartment	20
AURVTN2010	Clean vehicle underbody	20
AURVTN2011	Remove and install rear vision mirrors	10
AURVTN2030	Service air compressors and air lines	16
AURVTN2033	Service, repair and replace air compressors and components	20
AURVTN2037	Disassemble and test vehicle units and components	20
AURVTN3012	Install vehicle sunroofs	30
AURVTN3013	Carry out paint-less dent repairs	30
AURVTN3014	Repair body panels by beating and split repair	30
AURVTN3015	Repair body panels using metal finishing techniques	40
AURVTN3016	Repair body panels incorporating filler	30
AURVTN3017	Repair body panels and thermoplastic components	30
AURVTN3018	Repair and replace structural damage by welding	58
AURVTN3019	Repair and replace structural damage by riveting	30
AURVTN3020	Replace major welded panels	48
AURVTN3021	Repair body components using lead wiping	30
AURVTN3022	Repair vehicle body misalignment	48
AURVTN3023	Remove and replace adhesive bonded panels and structures	30
AURVTN3024	Install vehicle body component seals	30
AURVTN3025	Repair corroded panels and components	32
AURVTN3026	Repair aluminium body panels (finishing)	30
AURVTN3027	Repair aluminium body panels (filling)	30
AURVTN3028	Identify and repair high strength steel components	40
AURVTN3029	Set up and operate universal measuring systems	20
AURVTN3031	Conduct major sectional repairs	54
AURVTN3035	Apply original equipment manufacturer repair procedures	15
AURVTN4032	Determine vehicle damage and recommended repair procedures	34
AURVTN5034	Evaluate and select bodywork materials, equipment and processes	36
AURVTP2001	Apply paint removal methods	20
AURVTP2002	Carry out masking procedures	32
AURVTP2003	Prepare spray painting materials and equipment	24
AURVTP2004	Apply fundamental colour matching techniques	24
AURVTP2005	Apply rust prevention and sound deadening materials	16
AURVTP2006	Prepare vehicle components for paint repairs	40
AURVTP2007	Apply paint touch-up techniques	16
AURVTP2008	Clean and polish vehicle exterior paint	20
AURVTP2009	Apply vehicle body film wrapping	15

National Code	National Title	Nominal Hours
AURVTP2026	Carry out basic airbrush application techniques	40
AURVTP2027	Carry out custom graphics design and layout techniques	40
AURVTP3010	Prepare spray booths and paint drying equipment	30
AURVTP3011	Apply solid acrylic enamel refinishing materials using two component systems	48
AURVTP3012	Apply air dry and polyurethane enamel refinishing materials	32
AURVTP3013	Prepare substrate for refinishing	32
AURVTP3014	Apply multi-layer and clear over-base colour matching techniques	36
AURVTP3015	Apply solid colour matching techniques	30
AURVTP3016	Carry out paint rectification and touch-up work for solids using two component systems	36
AURVTP3017	Carry out paint rectification and touch-up work for clear over base using two component systems	36
AURVTP3018	Carry out paint rectification for multi-layer and pearl using two component system	36
AURVTP3019	Prepare and paint plastic components	24
AURVTP3020	Carry out denibbing, buffing and polishing	30
AURVTP3021	Restore vehicle exterior paint	30
AURVTP3022	Carry out custom painting techniques	80
AURVTP3023	Mix and apply clear over-base refinishing materials in two-component systems	48
AURVTP3024	Mix and apply clear over-base multi-layer pearl refinishing materials	56
AURVTP3025	Mix and apply water-based refinishing materials	54
AURVTS2006	Carry out fabrication of components	20
AURVTS3001	Carry out wood working operations for fabrication	40
AURVTS3002	Repair plugs, moulds, frames and flooring using wood materials	30
AURVTS3003	Fabricate composite material components	30
AURVTS3004	Repair fibreglass and composite material components	30
AURVTS3005	Fabricate vehicle body panels and components	35
AURVTT2001	Carry out sewing repairs and alterations	40
AURVTT2002	Carry out trim repairs and alterations	40
AURVTT2003	Remove and replace vehicle interior trim components	20
AURVTT2004	Trim vehicle components	68
AURVTT2005	Select and apply trim and fabric materials	20
AURVTT2006	Select and apply trim and fabric adhesives	12
AURVTT2007	Clean and finish plastic trim and fittings	20
AURVTT2008	Clean and finish vehicle interior trim and seats	20
AURVTT2009	Remove and replace seats and internal fittings	20
AURVTT3010	Remove and replace vehicle head lining	44
AURVTT3011	Repair seat frames	20
AURVTT3012	Carry out sewing operations	40
AURVTT3013	Fabricate loose and fitted covers	40
AURVTT3014	Fabricate marine covers	40
AURVTT3015	Fabricate canvas products	40

National Code	National Title	Nominal Hours
AURVTT3016	Fabricate frame structures	24
AURVTT3017	Fabricate and install floor coverings	40
AURVTT3018	Fabricate and install soft tops hoods	40
AURVTT3019	Fabricate and install canopies and curtains	30
AURVTT3020	Select and use leather in trimming	70
AURVTT3021	Select and use adhesives	15
AURVTV2001	Remove, replace, fit and test components and accessories	20
AURVTW2001	Carry out manual metal arc welding procedures	20
AURVTW2002	Carry out brazing procedures	20
AURVTW2003	Carry out gas metal arc welding procedures	30
AURVTW2004	Carry out gas tungsten arc welding procedures	20
AURVTW2005	Carry out spot welding procedures	20
AURVTW2007	Conduct oxy-acetylene, thermal heating and cutting	15
AURVTW2008	Carry out oxy acetylene welding, thermal cutting and thermal heating procedures	30
AURVTW3006	Carry out thermoplastic welding procedures	30
AURETH3001	Depower battery electric vehicles	10
AURETH3002	Service and maintain battery electric vehicles	20
AURETH4003	Test and repair high voltage battery systems in battery electric vehicles	30
AURETH4004	Diagnose and repair traction motor speed control device in battery electric vehicles	30
AURETH4005	Diagnose and repair high voltage traction motors in battery electric vehicles	50
AURETH4006	Diagnose and repair auxiliary motors and associated components in battery electric vehicles	40
AURETH4007	Diagnose and repair system instrumentation and safety interlocks in battery electric vehicles	40
AURETH4008	Diagnose and repair high voltage cabin heating and cooling systems in battery electric vehicles	40
AURETH4009	Diagnose and repair DC to DC converters in battery electric vehicles	40
AURETH4010	Test high voltage batteries in hybrid electric vehicles	15
AURETH4011	Deactivate and reinitialise power supply in hybrid electric vehicles	20
AURETH4012	Service and maintain electrical components in hybrid electric vehicles	30
AURTTE3001	Apply knowledge of engine science	40
AURTTM3001	Operate and monitor computer numerical control machines	30
AURTTM3002	Repair bearing tunnels and connecting rods in engines	40
AURTTM3003	Apply metal to rebuild engine components	60
AURTTM3004	Assemble engine blocks and sub-assemblies	70
AURTTM3005	Balance rotating and reciprocating engine components	40
AURTTM3006	Perform advanced machining and blueprinting of engine components	40
AURTTM3007	Carry out grinding operations	60
AURTTM3008	Dismantle and evaluate engine blocks and sub-assemblies	70
AURTTM3009	Fit sleeves and bore and hone engine cylinders	60
AURTTM3010	Heat treat, straighten and reclaim engine components	40
AURTTM3011	Recondition engine cylinder heads	120

## Mapping Qualifications

The following table provides an overview of the qualifications from version 2.1 which replace qualifications from the existing version of the AUR12 Automotive Industry Retail, Service and Repair Training Package

v2.0 Current Qualification				v2.1 Replacement Qualification		
National Code	National Title	Hours	E/NE	National Code	National Title	Hours
AUR30512	Certificate III in Marine Mechanical Technology	814			Removed in this version	
AUR31112	Certificate III in Heavy Commercial Mechanical Technology	1031			Removed in this version	
AUR40512	Certificate IV in Vehicle Loss Assessing	665			Removed in this version	

## Mapping Units of Competency

The following table provides an overview of the units from version 2.1 which replace units from the existing version of the AUR12 Automotive Industry Retail, Service and Repair Training Package.

v2.0 Current Unit				v2.1 Replacement Unit		
National Code	National Title	Hours	E/NE	National Code	National Title	Hours
AURVLA4001	Identify and report vehicle claim fraud	30			Removed in this version	
AURVNA4001	Provide vehicle loss assessment and identify repair requirements	80			Removed in this version	
AURVNA4002	Provide vehicle total loss assessment	30			Removed in this version	
AURVNA4003	Review a vehicle repair quotation	40			Removed in this version	
AURVNA4004	Apply insurance industry knowledge to vehicle loss assessment	80			Removed in this version	
AURVNA4005	Inspect quality of vehicle repair work	20			Removed in this version	
AURVNA4006	Identify and value vehicle salvage	30			Removed in this version	
AURVNA4007	Apply automotive mechanical and electrical knowledge to vehicle loss assessment	40			Removed in this version	
AURVNA4008	Apply automotive body and paint knowledge to vehicle loss assessment	40			Removed in this version	
AURVNN4001	Evaluate vehicle bodywork for damage and identify repair requirements	40			Removed in this version	
AURVNP4001	Evaluate vehicle paintwork for damage and identify refinish requirements	40			Removed in this version	