
Summary of draft training product changes

Automotive Industry

Heavy Vehicle stream of work

*PwC's Skills for
Australia*

Automotive Industry

June 2019

Introduction

The purpose of this document is to outline the proposed recommendations for changes to the Automotive Retail, Service and Repair (AUR) and Automotive Manufacturing (AUM) training packages. The proposed changes to training products fall under 17 individual projects which are described in further detail in the attached *Recommendations Report*, put forward before the 5 automotive Industry Reference Committees in January 2019.

This report specifically focusses on the proposed changes to training products relevant to the heavy vehicle sector.

About the project

The Cases for Change for the 17 projects were established as a result of initial research and consultations outlined in the Automotive Industry Skills Forecast and Proposed Schedule of Work 2018. PwC's Skills for Australia prepared the Case for Change for this project on behalf of the 5 automotive Industry Reference Committees and submitted it to the Australian Industry and Skills Committee (AISC) in June, 2018. The AISC endorsed this project on 5th June 2018.

On behalf of the 5 automotive IRCs, PwC's Skills for Australia carried out industry consultations for these project from July – December 2018. Consultation focused on identifying the key changes to training products required to more closely align training in the automotive industry with the skills needs of industry.

Following the IRCs' review of our key findings from consultation and the recommendations we proposed for changes to training products, we have developed draft training products to address skills gaps.

We are now publishing these draft training products for a final round of consultation.

The next step is to develop a Case for Endorsement for changes to the AUR Training Package, which is to be provided to the 5 automotive IRCs for approval and submitted to the AISC early next year. *This is the final chance for you to provide feedback on draft training products before they are published on training.gov.au.*

How to provide your feedback

We want to hear from you. We will be accepting feedback on the draft training products in the scope of this project up until **COB Thursday 25th July 2019**. We cannot guarantee that feedback received after this date will be considered.

Please provide your feedback by emailing our team at info@skillsforaustralia.com. You can:

- Provide general comments on training products via email
- Provide detailed comments on training products via 'tracked change' comments on the word documents included in the zip file
- Arrange a time to speak to a member of our team to provide detailed feedback.

Please note: The 5 automotive IRCs have approved the key findings and recommendations for changes to training products outlined in this document. We do not intend to review these findings or recommendations. As such, ***feedback will only be considered which is on the content of the draft training products included in the scope of this project.***

Draft training products for your review

This zip file contains the following draft training products for your review:

Training product code	Training product type	Training product title	New / existing training product
AUR20420	Qualification	Certificate II in Automotive Electrical Technology	Existing
AUR30320	Qualification	Certificate III in Automotive Electrical Technology	Existing
AUR20220	Qualification	Certificate II in Automotive Air Conditioning Technology	Existing
AUR20520	Qualification	Certificate II in Automotive Servicing Technology	Existing
AUR30420	Qualification	Certificate III in Agricultural Mechanical Technology	Existing
AUR31120	Qualification	Certificate III in Heavy Commercial Vehicle Mechanical Technology	Existing
AUR31220	Qualification	Certificate III in Mobile Plant Technology	Existing
AUR31420	Qualification	Certificate III in Automotive Diesel Fuel Technology	Existing
AUR31520	Qualification	Certificate III in Automotive Diesel Engine Technology	Existing
AUR31820	Qualification	Certificate III in Heavy Commercial Trailer Technology	Existing
AUR20420	Qualification	Certificate II in Automotive Electrical Technology	Existing
AURAF103	UoC	Communicate effectively in an automotive workplace	Existing
AURAF108	UoC	Interpret and apply automotive repair instructions	Existing
AURAS102	UoC	Follow safe working practices in an automotive workplace	Existing
AURETB101	UoC	Diagnose and repair electric braking systems	Existing
AURETD101	UoC	Diagnose and repair electronically controlled steering systems	Existing
AURETH101	UoC	Depower and reinitialise battery electric vehicles	Existing
AURETH103	UoC	Diagnose and repair high voltage rechargeable energy storage systems in battery electric vehicle	Existing
AURETH104	UoC	Diagnose and repair traction motor speed control systems in battery electric vehicles	Existing
AURETH105	UoC	Diagnose and repair high voltage traction motors in battery electric vehicles	Existing
AURETH106	UoC	Diagnose and repair auxiliary motors and associated components in battery electric vehicles	Existing
AURETH107	UoC	Diagnose and repair system instrumentation and safety interlocks in battery electric vehicles	Existing
AURETH108	UoC	Diagnose and repair HVAC and rechargeable energy storage cooling systems in battery electric vehicle	Existing
AURETH109	UoC	Diagnose and repair DC to DC converters in battery electric vehicles	Existing
AURETH110	UoC	Diagnose and repair high voltage rechargeable energy storage systems in hybrid electric vehicles	Existing
AURETH114	UoC	Diagnose complex faults in hybrid and battery electric vehicle network management systems	Existing
AURETR103	UoC	Identify automotive electrical systems and components	Existing
AURETR112	UoC	Test and repair basic electrical circuits	Existing
AURETR115	UoC	Inspect, test and service batteries	Existing
AURETR116	UoC	Read and apply vehicle wiring schematics and drawings	Existing
AURETR120	UoC	Diagnose and repair network electronic control systems	Existing
AURETR122	UoC	Diagnose and repair vehicle dynamic control systems	Existing
AURETR123	UoC	Diagnose and repair spark ignition engine management	Existing
AURETR124	UoC	Diagnose and repair compression ignition engine management	Existing

Training product code	Training product type	Training product title	New / existing training product
AURETR125	UoC	Test, charge and replace batteries and jump-start vehicles	Existing
AURETR128	UoC	Diagnose and repair instruments and warning systems	Existing
AURETR129	UoC	Diagnose and repair charging systems	Existing
AURETR130	UoC	Diagnose and repair starting systems	Existing
AURETR131	UoC	Diagnose and repair ignition systems	Existing
AURETR132	UoC	Diagnose and repair automotive electrical systems	Existing
AURETR135	UoC	Apply knowledge of petrol and diesel engine operation	Existing
AURETR136	UoC	Diagnose and repair electronically controlled suspension systems	Existing
AURETR140	UoC	Diagnose complex faults in vehicle monitoring and protection systems	Existing
AURETR143	UoC	Diagnose and repair electronic body management systems	Existing
AURETR144	UoC	Diagnose and repair integrated engine and transmission management systems	Existing
AURETR146	UoC	Remove and refit vehicle batteries	Existing
AURETR147	UoC	Recharge vehicle batteries	Existing
AURETU102	UoC	Recover vehicle refrigerants	Existing
AURETU103	UoC	Service air conditioning and HVAC systems	Existing
AURETU104	UoC	Diagnose and repair air conditioning and HVAC systems	Existing
AURETU105	UoC	Retrofit and modify air conditioning and HVAC systems	Existing
AURETU106	UoC	Diagnose complex faults in air conditioning and HVAC systems	Existing
AURHTB101	UoC	Diagnose and repair heavy vehicle air braking systems	Existing
AURHTB106	UoC	Diagnose complex faults in heavy commercial vehicle braking systems	Existing
AURHTB107	UoC	Diagnose and repair heavy commercial vehicle electronic braking systems	Existing
AURHTD102	UoC	Diagnose and repair heavy commercial vehicle steering systems	Existing
AURHTD103	UoC	Diagnose and repair heavy commercial vehicle suspension systems	Existing
AURHTD104	UoC	Carry out heavy vehicle wheel alignment operations	Existing
AURHTD106	UoC	Diagnose complex faults in heavy commercial vehicle steering and suspension systems	Existing
AURHTE102	UoC	Diagnose and repair heavy vehicle compression ignition engines	Existing
AURHTE103	UoC	Diagnose complex faults in heavy vehicle diesel engines	Existing
AURHTF102	UoC	Diagnose and repair heavy vehicle diesel fuel injection systems	Existing
AURHTJ102	UoC	Select heavy vehicle tyres, wheels and rims for specific applications	Existing
AURHTJ103	UoC	Remove, inspect and refit heavy vehicle wheel and tyre assemblies	Existing
AURHTJ104	UoC	Remove, inspect, repair and re-fit agricultural equipment tyres and tubes	Existing
AURHTJ106	UoC	Remove, inspect, repair and re-fit heavy vehicle tyres and tubes	Existing
AURHTL101	UoC	Inspect, diagnose and repair alternative fuel systems in heavy vehicle engines	Existing

Training product code	Training product type	Training product title	New / existing training product
AURHTQ102	UoC	Diagnose and repair heavy commercial vehicle final drive assemblies	Existing
AURHTQ103	UoC	Diagnose and repair heavy vehicle drive shafts	Existing
AURHTR105	UoC	Diagnose and repair heavy commercial trailer electronically controlled roll stability systems	Existing
AURHTX101	UoC	Diagnose and repair heavy vehicle manual transmissions	Existing
AURHTX103	UoC	Diagnose and repair heavy vehicle automatic transmissions	Existing
AURHTX104	UoC	Diagnose and repair heavy vehicle clutch systems	Existing
AURHTX106	UoC	Diagnose complex faults in heavy commercial vehicle transmission and driveline systems	Existing
AURHTY102	UoC	Diagnose and repair mechanical connections of heavy vehicles and trailers over 4.5 tonnes	Existing
AURHTZ101	UoC	Diagnose and repair heavy vehicle emission control systems	Existing
AURKKJ101	UoC	Manage use of tyre management software	Existing
AURKTA109	UoC	Diagnose complex faults in mobile plant hydraulic systems	Existing
AURKTA111	UoC	Diagnose and repair mobile plant hydraulic systems	Existing
AURKTB101	UoC	Diagnose and repair mobile plant braking systems	Existing
AURKTB103	UoC	Diagnose complex faults in mobile plant braking systems	Existing
AURKTD101	UoC	Diagnose and repair mobile plant suspension systems	Existing
AURKTD102	UoC	Diagnose and repair mobile plant steering systems	Existing
AURKTD105	UoC	Diagnose complex faults in mobile plant steering and suspension systems	Existing
AURKTQ101	UoC	Diagnose and repair mobile plant final drive assemblies	Existing
AURKTR101	UoC	Diagnose and repair electronic over hydraulic control systems	Existing
AURKTX101	UoC	Diagnose and repair powershift transmissions	Existing
AURKTX103	UoC	Diagnose complex faults in mobile plant transmission and driveline systems	Existing
AURKTX104	UoC	Diagnose and repair continuously variable transmissions	Existing
AURLTA101	UoC	Identify automotive mechanical systems and components	Existing
AURNTB101	UoC	Diagnose and repair forklift hydraulic braking systems	Existing
AURNTD101	UoC	Diagnose and repair forklift hydrostatic steering systems	Existing
AURTTA104	UoC	Carry out servicing operations	Existing
AURTTA105	UoC	Select and use bearings, seals, gaskets, sealants and adhesives	Existing
AURTTA113	UoC	Diagnose and repair hydraulic systems	Existing
AURTTA118	UoC	Develop and carry out diagnostic test strategies	Existing
AURTTA121	UoC	Diagnose complex system faults	Existing
AURTTA126	UoC	Diagnose complex faults in electronic over hydraulic systems	Existing
AURTTB101	UoC	Inspect and service braking systems	Existing
AURTTC103	UoC	Diagnose and repair cooling systems	Existing
AURTTE104	UoC	Inspect and service engines	Existing
AURTTF105	UoC	Diagnose and repair engine forced-induction systems	Existing

Training product code	Training product type	Training product title	New / existing training product
AURTTK102	UoC	Use and maintain tools and equipment in an automotive workplace	Existing
AURTTL102	UoC	Diagnose and repair CNG fuel systems	Existing
AURTTQ103	UoC	Inspect and service drive shafts	Existing
AURTTIS101	UoC	Fabricate exhaust systems and components	Existing
AURTTX106	UoC	Diagnose and repair hydrostatic transmissions	Existing
AURVTW101	UoC	Carry out manual metal arc welding on components	Existing
AURVTW103	UoC	Carry out advanced gas metal arc welding on vehicle body sections	Existing
AURVTW109	UoC	Carry out basic gas metal arc welding	Existing

Additional Information

Please find a summary of detailed findings from consultation and recommendations for changes to training products, within the attached *Recommendations Report*. This information was used to inform and develop frameworks for the draft training products.

