

AUTOMOTIVE MANUFACTURING TRAINING PACKAGE

AUM08

PURCHASING GUIDE

Western Australian Department of Education and Training

June 2009

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Foreword

This Purchasing Guide has been generated to enable the stakeholders in the Automotive Manufacturing Industry in Western Australia to participate in the managed implementation of the National Automotive Manufacturing Training Package AUM08.

Information within this Guide should provide guidance on how competency standards may be selected and applied to achieve suitable outcomes and qualifications, for and within an industry.

The Automotive Manufacturing Training Package AUM08 was endorsed by Ministers for vocational education and training on 6 October 2008 and the training package was released by the National Training Information Service (NTIS) on the **TBA**.

Introduction

This Guide provides information that will facilitate the implementation of the Automotive Manufacturing Training Package AUM08 in Western Australia. This Guide is designed to aid Registered Training Organisations (RTOs) to convert from 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 Automotive Manufacturing Training Package AUM08.

The Guide provides information on:

- Transition arrangements
- Licensing requirements (if any)
- Advice on Employability Skills
- Funding
- A mapping of current publicly funded qualifications to Training Package qualifications
- An allocation of nominal hours to units of competency and total hours for qualifications
- A mapping of current Traineeship and Apprenticeship courses to new qualifications
- A set of appropriate sample, or model, training programs at each AQF level

Obtaining the Training Package

The Automotive Industry Training Package can be purchased from:

TVET Australia Product Services

Level 21

390 St Kilda Road

Melbourne VIC 3000

Telephone: (03) 9832 8188

Facsimile: (03) 9832 8199

Email: enquiries@tvetaustralia.com.au

Web: www.tvetaustralia.com.au

Information on National Training Packages is also available through the National Training Information Service (NTIS), which can be located on the Internet at:

www.ntis.gov.au

All RTOs who have Training Package qualifications on their Scope of Delivery must obtain a copy of the relevant Training Package.

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 the National Training Information Service (NTIS) by the National Quality Council (NQC). A current accredited course, however, may be used until its accreditation expires.

An RTO with the scope of registration authorising delivery of existing accredited courses in a defined industry area will be deemed to have the resources and facilities to deliver the new qualification/s in that industry area.

An Amendment to Scope will be necessary where the industry area is not within scope. The Training Accreditation Council (TAC) will need to be advised of any new qualifications from the Training Package being delivered.

Transition to New Qualifications

Students currently enrolled in a Training Package qualification in the Automotive Manufacturing 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.

Funding

Some learners may only achieve a Statement of Attainment during their enrolment period with the RTO. Separate funding is not provided to assess the learner who has left his/her studies and then, at a later date, wants to complete an integrated assessment to achieve a certificate qualification. The RTO will be required to make special arrangements to issue the final qualification. This process may involve an invitation to the employer (if applicable) to participate in the assessment in the workplace.

Nominal Duration of Qualifications

The maximum nominal hours are identified for each Training Package qualification. Nominal hours may vary within a qualification depending on the units of competency selected and the delivery strategies used; however, training delivery will not be funded beyond the maximum nominal hours indicated. Nominal hours are for structured training only and include both delivery and assessment.

Definition of nominal hours

Nominal hours are the hours of training nationally required to achieve the outcomes of the Unit of Competency. In Western Australia, nominal hours are used as a mechanism for funding allocation.

Employability Skills

What are the employability skills?

Employability skills are non-technical skills and competencies which have always been an important part of an individual's effective and successful participation in the workplace. Their explicit inclusion in Training Packages represents the progression of competency based training into a system which develops the full range of transferable skills, attitudes and behaviour required for successful participation in the workplace.

Employability skills have been developed from a business and industry need for a broader range of skills beyond the Mayer Key Competencies that were developed in 1992. The 2002 report, *Employability Skills for the Future*, published by the Business Council of Australia and the Australian Chamber of Commerce and Industry, outlined an 'Employability Skills Framework' which identifies eight employability skills. They are:

- **communication skills**, which contribute to productive and harmonious relations between employees and customers
- **teamwork skills**, which contribute to productive working relationships and outcomes
- **problem-solving skills**, which contribute to productive outcomes
- **initiative and enterprise skills**, which contribute to innovative outcomes
- **planning and organising skills**, which contribute to long-term and short-term strategic planning
- **self-management skills**, which contribute to employee satisfaction and growth

- **learning skills**, which contribute to ongoing improvement and expansion in employee and company operations and outcomes
- **technology skills**, which contribute to effective execution of tasks.

The Employability Skills Framework

The Employability Skills Framework details the employability skills and the elements, or facets, of those skills that employers identified as important. Facets are examples of skills and behaviour which contribute to the overall application of each particular employability skill. The nature, emphasis and context of these facets vary across industries.

Employability skills and Training Packages

The National Quality Council endorsed the approach to explicitly embed the applicable employability skills into each individual unit of competency. In 2005 and 2006 specifically developed tools were used by Industry Skills Councils to review and embed employability skills into Training Package qualifications.

In many cases the skills and knowledge identified by the Employability Skills Framework already existed in Training Packages. Industry Skills Councils reviewed each Training Package and, where gaps existed or changes were required, modified the competency standards. For some Training Packages, the Framework was further modified to capture industry specific requirements. These requirements were then mapped to existing Training Packages and embedded and strengthened in units of competency.

Employability skills are said to be explicitly embedded when units of competency are written in a manner which makes the relationships between employability skills and the other performance requirements clear and readily identifiable.

Employability skills summary

Once the units of competency in a qualification have been mapped against the Framework, an Employability Skills Summary is created for every qualification in a Training Package. Summaries broadly identify the application of each employability skill in the context of the job role(s) covered by the qualification. They are designed to assist in identifying and including relevant industry applications of the employability skills into learning and assessment strategies.

Reporting employability skills

The National Quality Council Working Group on Employability Skills has agreed to a draft model for reporting employability skills. The draft model is yet to be presented to the National Quality Council for endorsement.

The Working Group recommends that:

- employability skills summaries will be available for downloading from a central internet repository (yet to be determined while NTIS 3 is under development)
- a brief statement with a URL to a user-friendly repository of employability skills summaries, from where the relevant summary can be downloaded to be printed on each qualification
- learners use the URL to download the relevant employability skills summary for their qualification
- RTOs will include generic text and the URL on all qualification testamurs.

Version Modification History

The version details of this endorsed Training Package are in the table below. The latest information is at the top of the table.

Version	Release Date	Modification History
1.0	6 October 2008	Primary release total review of AUM00

Qualifications and Nominal Hours

The following table provides a summary of the qualifications and nominal hours in the AUM08 Training Package Automotive Manufacturing

National ID	Training Package Qualification Title	Maximum Nominal Hours
AUM10108	Certificate I in Automotive Manufacturing (Passenger Motor Vehicle)	98
AUM20108	Certificate II in Automotive Manufacturing (Passenger Motor Vehicle)	321
AUM25108	Certificate II in Automotive Manufacturing (Bus/Truck/Trailer)	430
AUM30108	Certificate III in Automotive Manufacturing - Manufacturing Specialist (Passenger Motor Vehicle)	205
AUM35108	Certificate III in Automotive Manufacturing (Bus/Truck/Trailer)	864
AUM40108	Certificate IV in Automotive Manufacturing - Automotive Development (Passenger Motor Vehicle)	430
AUM45108	Certificate IV in Automotive Manufacturing (Bus/Truck/Trailer)	524
AUM50108	Diploma of Automotive Manufacturing - Automotive Development (Passenger Motor Vehicle)	358

Units of Competency and Nominal Hours

The following table provides a summary of the units of competency and nominal hours in the industry Automotive Manufacturing Training Package AUM08

National ID	Training Package Unit Title	Maximum Nominal Hours
AUM1001A	Manage personal career goals	15
AUM1002A	Select and use tools and equipment in an automotive manufacturing environment	15
AUM2001B	Monitor and maintain workplace environment	36
AUM2002B	Receive and dispatch material, equipment and tools	54
AUM2003B	Prepare and process materials and components	64
AUM2004B	Prepare and use/operate equipment, tools and/or machinery	28
AUM2005B	Monitor and maintain continuous improvement systems	64
AUM2006B	Monitor and maintain equipment, tools and machinery	36
AUM2007B	Manage personal workplace	12
AUM2008B	Manage effective workplace relations	15
AUM2009B	Work effectively with others in teams	12
AUM2901B	Develop and produce documentation and procedures	40
AUM3003B	Document designs	60
AUM3020A	Influence and lead work groups in an automotive manufacturing environment	25
AUM3021A	Sustain quality standards	30
AUM3022A	Reduce cycle time in work processes	30
AUM3023A	Reduce waste in work processes	30
AUM3024A	Undertake preliminary fault finding and machine reset	35
AUM3025A	Apply visual factory principles and practices to an automotive manufacturing environment	30
AUM3026A	Maintain a safe automotive manufacturing work environment	25
AUM3401B	Plan and organise production	25
AUM4001A	Analyse a vehicle for research purposes	30
AUM4002A	Provide technical advice	35
AUM4004A	Use measuring equipment	25
AUM4005A	Use sensors to acquire motor vehicle data for development purposes	25
AUM4006A	Calibrate measuring equipment in automotive development	35
AUM4007A	Test plant, tooling, equipment, product or systems	35
AUM4008A	Install plant, equipment or systems	60
AUM4009A	Maintain plant, tooling, equipment or systems	40
AUM4010A	Repair plant, tooling, equipment or systems	40
AUM4011A	Manufacture or modify plant, tooling, equipment or systems	40
AUM4012A	Apply quality assurance techniques	50
AUM4013A	Interpret manuals, drawings and/or circuits for plant, tooling, equipment or systems	40
AUM4014A	Program and monitor computerised equipment	90
AUM5001A	Coordinate project activities	40
AUM5002A	Establish a test/trial for components of plant, tooling, equipment or systems	45

National ID	Training Package Unit Title	Maximum Nominal Hours
AUM5003A	Create new product designs	55
AUM5004A	Produce research reports	40
AUM5005A	Develop conceptual models	50
AUM5006A	Seek, evaluate, organize and prepare information	20
AUM5301B	Produce drawings manually	35
AUM5403B	Produce computer-aided drawings (CAD)	60
AUM8001B	Contribute to workplace relationships and processes	16
AUM8011B	Provide customer service	16
AUM8012B	Prepare and document quotation	15
AUM8013A	Participate in improving workplace productivity	30
AUM8021B	Inspect work and apply company technical quality Standards	24
AUM8031B	Receive and store parts	24
AUM8032B	Control stock	40
AUM8033B	Select and dispatch parts	36
AUM8041B	Prepare materials for fabrication using jigs/fixtures	40
AUM8042B	Prepare materials for fabrication using manual processes	36
AUM8043B	Read and interpret working drawings and work orders	36
AUM8044B	Read and interpret engineering drawings and job specifications	40
AUM8051B	Conduct basic welding, thermal cutting, heating and gouging operations	36
AUM8052B	Conduct mechanical cutting operations	28
AUM8053B	Perform manual metal arc welding operations (MMAW)	40
AUM8054B	Perform submerged arc welding operations (SAW)	36
AUM8055B	Perform oxyacetylene welding operations (OAW)	54
AUM8056B	Perform gas tungsten arc welding operations (GTAW)	40
AUM8057B	Perform gas metal arc welding operations (GMAW)	54
AUM8061B	Fabricate plugs	52
AUM8062B	Stamp and press parts	36
AUM8063B	Fabricate parts for sub-assemblies	36
AUM8064B	Machine parts	36
AUM8071B	Finish surfaces for painting	24
AUM8072B	Paint chassis or panels	28
AUM8073B	Control oven baking cycle	4
AUM8074B	Rework paint faults	12
AUM8081B	Apply trim to components	12
AUM8082B	Assemble components	20
AUM8083B	Assemble frame and axle	26
AUM8084B	Install engine and drive train	24
AUM8085B	Mount and Install assembled component to chassis or frame	64
AUM8086B	Service after assembly	24
AUM8087B	Assemble and install hydraulic system kit	40
AUM8088B	Assemble and install pneumatic system kit	40
AUM8089B	Assemble and install braking system kit	40
AUM8090B	Install fixed and moveable glass components	28
AUM8091B	Install or replace mechanical units/assemblies	36
AUM8092B	Install/fit out components	36
AUM8093B	Test, service and replace battery	16
AUM8094B	Install or Replace electrical / electronic units / assemblies	40
AUM8095B	Perform wheel alignment operations	40

National ID	Training Package Unit Title	Maximum Nominal Hours
AUM8101B	Modify or repair chassis/frame and associated components	48
AUM8102B	Manufacture or modify wiring harnesses	48
AUM8103B	Rectify/replace vehicle body panels and ancillary fittings	64
AUM8104B	Bond/repair components using fibreglass reinforced plastic techniques	36
AUM8105B	Perform minor modifications/repairs to electrical circuits/systems	24
AUM8111B	Perform forklift driving and lifting operations	40
AUM8112B	Operate load shifting equipment	12
AUM8121B	Conduct final inspections and functional tests	24
AUM8122B	Conduct simulated or road performance test	24
AUM8123B	Conduct welding inspection	30
AUM8131B	Install and commission air conditioning system kit	36
AUM8132B	Install and commission refrigeration system kit	36
AUM8133B	Remove and replace air conditioning system	28
AUM8134B	Remove and replace refrigeration system	28
AUM8141B	Prepare new product designs	50
AUMNT3001B	Rectify faults in vehicle components	40
AUMNT3002B	Rectify paintwork	25
AUMNT3003B	Control paint line production process	35
AUMNT3004B	Conduct engine hot test	35
AUMNT3005B	Rework production engines	50
AUMNT3006B	Rectify mechanical faults on assembled vehicles	40
AUMNT3007B	Rectify electrical faults in assembled vehicles	50
AUMNT3008B	Rectify assembly faults in assembled vehicles	35
AUMNT3009B	Conduct die coating	30
AUMNT3010B	Conduct structural rectification of vehicle bodies	40
AUMNT3011B	Test welds ultrasonically	55
AUMNT3012B	Conduct tool setting	30
AUMNT3013B	Monitor and maintain metals treatment plant operations	55

Qualifications which replace qualifications from an existing version of a training package

The following table provides an overview of the qualifications from the Automotive Manufacturing - AUM08 which replace qualifications from the existing version of the Automotive Industry Manufacturing Training Package - AUM00

Existing Training Package AUM00 Current Qualification			Revised Training Package AUM08 Replacement Qualification		
National ID	Qualification Title	Hours	National ID	Qualification Title	Hours
	No Previous Equivalent		AUM10108	Certificate I in Automotive Manufacturing (Passenger Motor Vehicle)	98
AUM20100	Certificate II in Automotive Manufacturing	0	AUM20108	Certificate II in Automotive Manufacturing (Passenger Motor Vehicle)	321
AUM25101	Certificate II in Automotive Manufacturing (Bus, Truck & Trailer)	430	AUM25108	Certificate II in Automotive Manufacturing (Bus/Truck/Trailer)	430
	No Previous Equivalent	0	AUM30108	Certificate III in Automotive Manufacturing - Manufacturing Specialist (Passenger Motor Vehicle)	205
AUM35101	Certificate III in Automotive Manufacturing (Bus, Truck & Trailer)	864	AUM35108	Certificate III in Automotive Manufacturing (Bus/Truck/Trailer)	864
	No Previous Equivalent	0	AUM40108	Certificate IV in Automotive Manufacturing - Automotive Development (Passenger Motor Vehicle)	430
AUM45101	Certificate IV in Automotive Manufacturing (Bus, Truck & Trailer)	0	AUM45108	Certificate IV in Automotive Manufacturing (Bus/Truck/Trailer)	524
	No Previous Equivalent	0	AUM50108	Diploma of Automotive Manufacturing - Automotive Development (Passenger Motor Vehicle)	358

Existing units of competency which are replaced by units of competency from the revised Automotive Manufacturing - AUM08

The following table provides an overview of the units of competency from the Automotive Industry Manufacturing Training Package - AUM00 which are replaced by the units of competency from the Automotive Manufacturing - AUM08

Automotive Industry Manufacturing Training Package AUM00			Automotive Manufacturing Training Package AUM08		
National ID	Units of Competency Title	Hours	National ID	Units of Competency Title	Hours
	No Previous Equivalent		AUM1001A	Manage personal career goals	15
	No Previous Equivalent		AUM1002A	Select and use tools and equipment in an automotive manufacturing environment	15
AUM9001A	Monitor and maintain workplace environment	36	AUM2001B	Monitor and maintain workplace environment	36
AUM9002A	Receive and dispatch materials, equipment and tools	54	AUM2002B	Receive and dispatch material, equipment and tools	54
AUM9003A	Prepare and process materials and components	64	AUM2003B	Prepare and process materials and components	64
AUM9004A	Prepare and use/operate equipment, tools and/or machinery	28	AUM2004B	Prepare and use/operate equipment, tools and/or machinery	28
AUM9005A	Monitor and maintain continuous improvement of systems and processes	64	AUM2005B	Monitor and maintain continuous improvement systems	64
AUM9006A	Monitor and maintain equipment, tools and machinery	36	AUM2006B	Monitor and maintain equipment, tools and machinery	36
AUM9007A	Manage personal work priorities	12	AUM2007B	Manage personal workplace	12
AUM9008A	Maintain effective workplace relationships	0	AUM2008B	Manage effective workplace relations	15
AUM9009A	Work effectively with others in teams	12	AUM2009B	Work effectively with others in teams	12
AUM2901A	Develop and produce documentation and procedures	0	AUM2901B	Develop and produce documentation and procedures	40
AUM3003A	Document designs	0	AUM3003B	Document designs	60
	No Previous Equivalent		AUM3020A	Influence and lead work groups in an automotive manufacturing environment	25

Automotive Industry Manufacturing Training Package AUM00			Automotive Manufacturing Training Package AUM08		
National ID	Units of Competency Title	Hours	National ID	Units of Competency Title	Hours
	No Previous Equivalent		AUM3021A	Sustain quality standards	30
	No Previous Equivalent		AUM3022A	Reduce cycle time in work processes	30
	No Previous Equivalent		AUM3023A	Reduce waste in work processes	30
	No Previous Equivalent		AUM3024A	Undertake preliminary fault finding and machine reset	35
	No Previous Equivalent		AUM3025A	Apply visual factory principles and practices to an automotive manufacturing environment	30
	No Previous Equivalent		AUM3026A	Maintain a safe automotive manufacturing work environment	25
AUM3401A	Plan and organise production	0	AUM3401B	Plan and organise production	25
	No Previous Equivalent		AUM4001A	Analyse a vehicle for research purposes	30
	No Previous Equivalent		AUM4002A	Provide technical advice	35
	No Previous Equivalent		AUM4004A	Use measuring equipment	25
	No Previous Equivalent		AUM4005A	Use sensors to acquire motor vehicle data for development purposes	25
	No Previous Equivalent		AUM4006A	Calibrate measuring equipment in automotive development	35
	No Previous Equivalent		AUM4007A	Test plant, tooling, equipment, product or systems	35
AUM2103A	Maintain plant, tooling, equipment or systems - Complex	0	AUM4008A	Install plant, equipment or systems	60
AUM2103A	Maintain plant, tooling, equipment or systems - Complex	0	AUM4009A	Maintain plant, tooling, equipment or systems	40
AUM2203A	Repair plant, tooling, equipment or systems - Complex	0	AUM4010A	Repair plant, tooling, equipment or systems	40
AUM2303A	Manufacture or modify plant, tooling, equipment or systems - Complex	0	AUM4011A	Manufacture or modify plant, tooling, equipment or systems	40
AUM2403A	Apply quality assurance techniques - Complex	0	AUM4012A	Apply quality assurance techniques	50
AUM3903A	Interpret manuals, drawings and/or circuits for plant, tooling, equipment or systems	0	AUM4013A	Interpret manuals, drawings and/or circuits for plant, tooling, equipment or systems	40
AUM4703A	Program and monitor PLCs, robots and	0	AUM4014A	Program and monitor computerised equipment	90

Automotive Industry Manufacturing Training Package AUM00			Automotive Manufacturing Training Package AUM08		
National ID	Units of Competency Title	Hours	National ID	Units of Competency Title	Hours
	other computerised equipment - Complex No Previous Equivalent				
	No Previous Equivalent		AUM5001A	Coordinate project activities	40
	No Previous Equivalent		AUM5002A	Establish a test/trial for components of plant, tooling, equipment or systems	45
AUM1503A	Create new product designs	0	AUM5003A	Create new product designs	55
AUM5503A	Produce research reports	0	AUM5004A	Produce research reports	40
AUM5603A	Develop stylistic models and prototypes	0	AUM5005A	Develop conceptual models	50
AUM5903A	Seek, evaluate, organise and prepare information	0	AUM5006A	Seek, evaluate, organize and prepare information	20
AUM5301A	Produce drawings manually	0	AUM5301B	Produce drawings manually	35
	No Previous Equivalent		AUM5403B	Produce computer-aided drawings (CAD)	60
AUM8001A	Contribute to workplace relationships and processes	16	AUM8001B	Contribute to workplace relationships and processes	16
AUM8011A	Provide customer service	16	AUM8011B	Provide customer service	16
AUM8012A	Prepare and document quotation	0	AUM8012B	Prepare and document quotation	15
	No Previous Equivalent		AUM8013A	Participate in improving workplace productivity	30
AUM8021A	Inspect work and apply company technical quality standards	24	AUM8021B	Inspect work and apply company technical quality Standards	24
AUM8031A	Receive and store parts	24	AUM8031B	Receive and store parts	24
AUM8032A	Control stock	40	AUM8032B	Control stock	40
AUM8033A	Select and dispatch parts	36	AUM8033B	Select and dispatch parts	36
AUM8041A	Prepare materials for fabrication using jigs/fixtures	40	AUM8041B	Prepare materials for fabrication using jigs/fixtures	40
AUM8042A	Prepare materials for fabrication using manual processes	36	AUM8042B	Prepare materials for fabrication using manual processes	36
AUM8043A	Read and interpret working drawings and work orders	36	AUM8043B	Read and interpret working drawings and work orders	36
AUM8044A	Read and interpret engineering drawings and job specifications	40	AUM8044B	Read and interpret engineering drawings and job specifications	40
AUM8051A	Conduct basic welding, thermal cutting, heating and gouging operations	36	AUM8051B	Conduct basic welding, thermal cutting, heating and gouging operations	36
AUM8052A	Conduct mechanical cutting operations	28	AUM8052B	Conduct mechanical cutting operations	28

Automotive Industry Manufacturing Training Package AUM00			Automotive Manufacturing Training Package AUM08		
National ID	Units of Competency Title	Hours	National ID	Units of Competency Title	Hours
AUM8053A	Perform manual metal arc welding operations (MMAW)	40	AUM8053B	Perform manual metal arc welding operations (MMAW)	40
AUM8054A	Perform submerged arc welding operations (SAW)	36	AUM8054B	Perform submerged arc welding operations (SAW)	36
AUM8055A	Perform oxy acetylene welding operations (OAW)	54	AUM8055B	Perform oxyacetylene welding operations (OAW)	54
AUM8056A	Perform gas tungsten arc welding operations (GTAW)	40	AUM8056B	Perform gas tungsten arc welding operations (GTAW)	40
AUM8057A	Perform gas metal arc welding operations (GMAW)	54	AUM8057B	Perform gas metal arc welding operations (GMAW)	54
AUM8061A	Fabricate plug	52	AUM8061B	Fabricate plugs	52
AUM8062A	Stamp and press parts	36	AUM8062B	Stamp and press parts	36
AUM8063A	Fabricate parts for sub-assemblies	36	AUM8063B	Fabricate parts for sub-assemblies	36
AUM8064A	Machine parts	36	AUM8064B	Machine parts	36
AUM8071A	Finish surfaces for painting	24	AUM8071B	Finish surfaces for painting	24
AUM8072A	Paint chassis or panels	28	AUM8072B	Paint chassis or panels	28
AUM8073A	Control oven baking cycle	4	AUM8073B	Control oven baking cycle	4
AUM8074A	Re-work paint faults	12	AUM8074B	Rework paint faults	12
AUM8081A	Apply trim to components	12	AUM8081B	Apply trim to components	12
AUM8082A	Assemble components	20	AUM8082B	Assemble components	20
AUM8083A	Assemble frame and axle	26	AUM8083B	Assemble frame and axle	26
AUM8084A	Install engine and drive train	24	AUM8084B	Install engine and drive train	24
AUM8085A	Mount and install assembled component to chassis or frame	64	AUM8085B	Mount and Install assembled component to chassis or frame	64
AUM8086A	Service after assembly	24	AUM8086B	Service after assembly	24
AUM8087A	Assemble and install hydraulic system kit	40	AUM8087B	Assemble and install hydraulic system kit	40
AUM8088A	Assemble and install pneumatic system kit	40	AUM8088B	Assemble and install pneumatic system kit	40
AUM8089A	Assemble and install braking system kit	40	AUM8089B	Assemble and install braking system kit	40
AUM8090A	Install fixed and moveable glass components	28	AUM8090B	Install fixed and moveable glass components	28
AUM8091A	Install or replace mechanical units/assemblies	36	AUM8091B	Install or replace mechanical units/assemblies	36

Automotive Industry Manufacturing Training Package AUM00			Automotive Manufacturing Training Package AUM08		
National ID	Units of Competency Title	Hours	National ID	Units of Competency Title	Hours
AUM8092A	Install/fit out components	36	AUM8092B	Install/fit out components	36
AUM8093A	Test, service and replace battery	16	AUM8093B	Test, service and replace battery	16
AUM8094A	Install or replace electrical/ electronic units/assemblies	40	AUM8094B	Install or Replace electrical / electronic units / assemblies	40
AUM8095A	Perform wheel alignment operations	40	AUM8095B	Perform wheel alignment operations	40
AUM8101A	Modify or rectify chassis/frame and associated components	48	AUM8101B	Modify or repair chassis/frame and associated components	48
AUM8102A	Manufacture or modify wiring harnesses	48	AUM8102B	Manufacture or modify wiring harnesses	48
AUM8103A	Rectify / replace vehicle body panels and ancillary fittings	64	AUM8103B	Rectify/replace vehicle body panels and ancillary fittings	64
AUM8104A	Bond/repair components using fibreglass reinforced plastics techniques	36	AUM8104B	Bond/repair components using fibreglass reinforced plastic techniques	36
AUM8105A	Perform minor modifications/repairs to electrical circuits/systems	24	AUM8105B	Perform minor modifications/repairs to electrical circuits/systems	24
AUM8111A	Perform forklift driving and lifting operations	40	AUM8111B	Perform forklift driving and lifting operations	40
AUM8112A	Operate load shifting equipment	12	AUM8112B	Operate load shifting equipment	12
AUM8121A	Conduct final inspections and functional tests	24	AUM8121B	Conduct final inspections and functional tests	24
AUM8122A	Conduct simulated or road performance test	0	AUM8122B	Conduct simulated or road performance test	24
AUM8123A	Conduct welding inspection	0	AUM8123B	Conduct welding inspection	30
AUM8131A	Install and commission air conditioning system kit	36	AUM8131B	Install and commission air conditioning system kit	36
AUM8132A	Install and commission refrigeration system kit	36	AUM8132B	Install and commission refrigeration system kit	36
AUM8133A	Remove and replace air conditioning system	28	AUM8133B	Remove and replace air conditioning system	28
AUM8134A	Remove and replace refrigeration system	28	AUM8134B	Remove and replace refrigeration system	28
AUM8141A	Prepare new product designs	0	AUM8141B	Prepare new product designs	50
AUMNT3001A	Rectify faults in vehicle metal components	0	AUMNT3001B	Rectify faults in vehicle components	40
AUMNT3002A	Rectify paintwork	0	AUMNT3002B	Rectify paintwork	25
AUMNT3003A	Control paint line production processes	0	AUMNT3003B	Control paint line production process	35
AUMNT3004A	Conduct engine hot test	0	AUMNT3004B	Conduct engine hot test	35
AUMNT3005A	Rework production engines	0	AUMNT3005B	Rework production engines	50

Automotive Industry Manufacturing Training Package AUM00			Automotive Manufacturing Training Package AUM08		
National ID	Units of Competency Title	Hours	National ID	Units of Competency Title	Hours
AUMNT3006A	Rectify mechanical faults on assembled vehicles	0	AUMNT3006B	Rectify mechanical faults on assembled vehicles	40
AUMNT3007A	Rectify electrical faults on assembled vehicles	0	AUMNT3007B	Rectify electrical faults in assembled vehicles	50
AUMNT3008A	Rectify assembly faults in assembled vehicles	0	AUMNT3008B	Rectify assembly faults in assembled vehicles	35
AUMNT3009A	Conduct die coating	0	AUMNT3009B	Conduct die coating	30
AUMNT3010A	Conduct structural rectification of vehicle bodies	0	AUMNT3010B	Conduct structural rectification of vehicle bodies	40
AUMNT3011A	Test welds ultrasonically	0	AUMNT3011B	Test welds ultrasonically	55
AUMNT3012A	Conduct tool setting	0	AUMNT3012B	Conduct tool setting	30
AUMNT3013A	Monitor and maintain metals treatment plant operations	0	AUMNT3013B	Monitor and maintain metals treatment plant operations	55

Traineeships, Apprenticeships and Pre-Apprenticeships

The following table provides a summary of the qualifications in the Automotive Manufacturing Training Package AUM08 and the accredited traineeship, apprenticeship and pre-apprenticeship courses they will replace.

Automotive Manufacturing Training Package AUM00				Automotive Manufacturing Training Package AUM08		
National ID	Qualification Title	APPRENTICESHIP	Hours	National ID	Qualification Title	Hours
Apprenticeship						
AUM31501	Cert III in Automotive Manufacturing (Bus/Truck/Trailer)	Vehicle Body Builder	864	AUM35108	Cert III in Automotive Manufacturing (Bus/Truck/Trailer)	864

Examples of Training Package Programs

Units of competency may be customised so that the tasks involved in demonstrating competence are designed to meet the requirements of an individual enterprise or to satisfy regulations in a particular state or territory.

Each qualification in the Automotive Manufacturing Training Package AUM08 may be customised to meet the context in which the training is taking place. A qualification can also be customised to accommodate a learner's chosen career pathway.

The following are examples of suitable training programs for Automotive Manufacturing Training Package AUM08. The examples are not intended to be prescriptive but illustrate ways that qualifications can be achieved.

AUM10108 - Certificate I in Automotive Manufacturing (Passenger Motor Vehicle)

Qualification Title	Certificate I in Automotive Manufacturing (Passenger Motor Vehicle)
Qualification Code	AUM10108
Qualification Packaging Rules	6 competency units are required for this qualification, including: - 3 core units plus; - 3 elective units

The following table outlines ONE example of a training program for this qualification. Please refer to the Automotive Manufacturing Training Package for the full details of available options.

EXAMPLE PROGRAM		
Unit Code	Unit Title	Nominal Hours
Core Units		
AUM1001A	Manage personal career goals	15
AUM1002A	Select and use tools and equipment in an automotive manufacturing environment	15
MEM13014A	Apply principles of occupational health and safety in the work environment	4
Elective Units		
AUM2007B	Manage personal workplace	12
AUM2009B	Work effectively with others in teams	12
BSBCMM101A	Apply basic communication skills	40
Total		98

AUM20108 - Certificate II in Automotive Manufacturing (Passenger Motor Vehicle)

Qualification Title	Certificate II in Automotive Manufacturing (Passenger Motor Vehicle)
Qualification Code	AUM20108
Qualification Packaging Rules	9 competency units are required for this qualification, including: - 9 core units

Unit Code	Unit Title	Nominal Hours
Core Units		
AUM2001B	Monitor and maintain workplace environment	36
AUM2002B	Receive and dispatch material, equipment and tools	54
AUM2003B	Prepare and process materials and components	64
AUM2004B	Prepare and use/operate equipment, tools and/or machinery	28
AUM2005B	Monitor and maintain continuous improvement systems	64
AUM2006B	Monitor and maintain equipment, tools and machinery	36
AUM2007B	Manage personal workplace	12
AUM2008B	Manage effective workplace relations	15
AUM2009B	Work effectively with others in teams	12
Total		321

AUM25108 - Certificate II in Automotive Manufacturing (Bus/Truck/Trailer)

Qualification Title	Certificate II in Automotive Manufacturing (Bus/Truck/Trailer)
Qualification Code	AUM25108
Qualification Packaging Rules	14 units of competency are required for this qualification, including: - 4 core units plus; - 10 elective units

The following table outlines ONE example of a training program for this qualification. Please refer to the Automotive Manufacturing Training Package for the full details of available options.

EXAMPLE PROGRAM		
Unit Code	Unit Title	Nominal Hours
Core Units		
AUM2001B	Monitor and maintain workplace environment	36
AUM2004B	Prepare and use/operate equipment, tools and/or machinery	28
AUM2006B	Monitor and maintain equipment, tools and machinery	36
AUM8043B	Read and interpret working drawings and work orders	36
Elective Units		
AUM8001B	Contribute to workplace relationships and processes	16
AUM8011B	Provide customer service	16
AUM8021B	Inspect work and apply company technical quality standards	24
AUM8041B	Prepare materials for fabrication using jigs / fixtures	40
AUM8042B	Prepare materials for fabrication using manual processes	36
AUM8052B	Conduct mechanical cutting operations	28
AUM8082B	Assemble components	20
AUM8083B	Assemble frame and axle	26
AUM8091B	Install or replace mechanical units / assemblies	36
AUM8092B	Install / fit out components	36
Total		414

AUM30108 - Certificate III in Automotive Manufacturing - Manufacturing Specialist (Passenger Motor Vehicle)

Qualification Title	Certificate III in Automotive Manufacturing - Manufacturing Specialist (Passenger Motor Vehicle)
Qualification Code	AUM30108
Qualification Packaging Rules	8 competency units are required for this qualification, including: - 3 core units plus; - 5 electives

The following table outlines ONE example of a training program for this qualification. Please refer to the Automotive Manufacturing Training Package for the full details of available options.

EXAMPLE PROGRAM		
Unit Code	Unit Title	Nominal Hours
Core Units		
AUM3026A	Maintain a safe automotive manufacturing work environment	25
AUM8001B	Contribute to workplace relationships and processes	16
AUM8021B	Inspect work and apply company technical quality Standards	24
Elective Units		
AUM3025A	Apply visual factory principles and practices to an automotive manufacturing environment	30
AUM8013A	Participate in improving workplace productivity	30
AUMNT3001B	Rectify faults in vehicle components	40
BSBCMN311B	Maintain workplace safety	20
PMASUP390A	Use structured problem solving tools	20
Total		205

AUM35108 - Certificate III in Automotive Manufacturing (Bus/Truck/Trailer)

Qualification Title	Certificate III in Automotive Manufacturing (Bus/Truck/Trailer)
Qualification Code	AUM35108
Qualification Packaging Rules	<p>PREREQUISITE REQUIREMENTS There are no prerequisites for this qualification.</p> <p>Note: There are two pathways into this qualification; (a) Option 1 for individuals with the Certificate II in Automotive Manufacturing (Bus/Truck/Trailer) and (b) Option 2 direct entry for individuals without the Certificate II in Automotive Manufacturing (Bus/Truck/Trailer)</p> <p>OPTION 2 PACKAGING RULES 25 competency units are required for this qualification, including: - 9 core unit plus; - 16 elective units</p> <p>Up to 6 of the electives may be drawn from any other training package at Certificate III or higher level</p> <p>Elective units must be relevant to the work outcome, industry requirements and the qualification level.</p> <p>Units selected from other Training Packages must not duplicate units selected from or available within AUM08</p>

The following table outlines ONE example of a training program for this qualification. Please refer to the Automotive Manufacturing Training Package for the full details of available options.

OPTION 2 - EXAMPLE PROGRAM		
Unit Code	Unit Title	Nominal Hours
Core Units		
AUM2001B	Monitor and maintain workplace environment	36
AUM2004B	Prepare and use/operate equipment, tools and/or machinery	28
AUM2006B	Monitor and maintain equipment, tools and machinery	36
AUM8001B	Contribute to workplace relationships and processes	16
AUM8011B	Provide customer service	16
AUM8013A	Participate in improving workplace productivity	30
AUM8021B	Inspect work and apply company technical quality standards	24
AUM8043B	Read and interpret working drawings and work orders	36

AUM8044B	Read and interpret engineering drawings and job specifications	40
Elective Units		
AUM2002B	Receive and dispatch material, equipment and tools	54
AUM2003B	Prepare and process materials and components	64
AUM2009B	Work effectively with others in teams	12
AUM8033B	Select and dispatch parts	36
AUM8041B	Prepare materials for fabrication using jigs / fixtures	40
AUM8042B	Prepare materials for fabrication using manual processes	36
AUM8051B	Conduct basic welding, thermal cutting, heating and gouging operations	36
AUM8052B	Conduct mechanical cutting operations	28
AUM8064B	Machine parts	36
AUM8082B	Assemble components	20
AUM8083B	Assemble frame and axle	26
AUM8087B	Assemble and install hydraulic system kit	40
AUM8091B	Install or replace mechanical units / assemblies	36
AUM8092B	Install / fit out components	36
AUM8111B	Perform forklift driving and lifting operations	40
AURE224008A	Carry out soldering of electrical wiring/circuits	20
Total		822

AUM40108 - Certificate IV in Automotive Manufacturing - Automotive Development (Passenger Motor Vehicle)

Qualification Title	Certificate IV in Automotive Manufacturing - Automotive Development (Passenger Motor Vehicle)
Qualification Code	AUM40108
Qualification Packaging Rules	<p>10 competency units are required for this qualification, including:</p> <ul style="list-style-type: none"> - at least 4 specialist units plus - up to 6 elective units <p>There are no core units for this qualification</p> <p>In selecting electives:</p> <ul style="list-style-type: none"> - a maximum of 2 units may be drawn from the Certificate III in this or any other nationally endorsed training package - a maximum of 2 units may be drawn from the Certificate IV level from any other nationally endorsed training package - a maximum of 2 units may be drawn from the Diploma level in this or any other nationally endorsed training package <p>Elective units must be relevant to the work outcome, industry requirements and the qualification level.</p> <p>Units selected from other Training Packages must not duplicate units selected from or available within AUM08</p>

The following table outlines ONE example of a training program for this qualification. Please refer to the Automotive Manufacturing Training Package for the full details of available options.

EXAMPLE PROGRAM		
Unit Code	Unit Title	Nominal Hours
Core Units		
AUM4004A	Use measuring equipment	25
AUM4006A	Calibrate measuring equipment in automotive development	35
AUM4012A	Apply quality assurance techniques	50
AUM4014A	Program and monitor computerised equipment	90
Elective Units		
AURM441293A	Analyse and repair complex performance driveline systems	36
AURM441393A	Analyse and repair complex performance fuel systems	36
AURM441976A	Test engines using a dynamometer	32
AURT466208A	Carry out diagnosis of complex system faults	40
AURT477093A	Analyse and evaluate gas fuel system faults	36
BSBOHS401B	Contribute to the implementation of a systematic approach to managing OHS	50
Total		430

AUM45108 - Certificate IV in Automotive Manufacturing (Bus/Truck/Trailer)

Qualification Title	Certificate IV in Automotive Manufacturing (Bus/Truck/Trailer)
Qualification Code	AUM45108
Qualification Packaging Rules	<p>ENTRY REQUIREMENTS This qualification is a post-trade level qualification in the industry</p> <p>It is designed for a range of specialised functions in the Bus/Truck/Trailer manufacturing area of the industry. As an entry requirement, individuals must hold a Certificate III in Automotive Manufacturing (Bus/Truck/Trailer) prior to attempting this qualification, or demonstration of equivalent competencies</p> <p>PACKAGING RULES 14 competency units are required for this qualification, including: - 4 core units plus; - 10 elective units</p>

The following table outlines ONE example of a training program for this qualification. Please refer to the Automotive Manufacturing Training Package for the full details of available options.

EXAMPLE PROGRAM		
Unit Code	Unit Title	Nominal Hours
Core Units		
AUM3401B	Plan and organise production	25
MCMC410A	Lead change in a manufacturing environment	50
MCMS401A	Ensure process improvements are sustained	50
MCMT251A	Apply quality standards	30
Elective Units		
AUM2901B	Develop and produce documentation and procedures	40
AUM8012B	Prepare and document quotation	15
AUM8032B	Control stock	40
AUM8121B	Conduct final inspections and functional tests	24
AUM8123B	Conduct welding inspection	30
MCMS201A	Sustain process improvements	40
MCMT280A	Undertake root cause analysis	30
MCMT421A	Facilitate a Just in Time (JIT) system	50
MCMT432A	Analyse manual handling processes	50
MCMT452A	Apply statistics to processes in manufacturing	50
Total		524

AUM50108 - Diploma of Automotive Manufacturing - Automotive Development (Passenger Motor Vehicle)

Qualification Title	Diploma of Automotive Manufacturing - Automotive Development (Passenger Motor Vehicle)
Qualification Code	AUM50108
Qualification Packaging Rules	<p>ENTRY REQUIREMENTS The entry requirement for this qualification is the demonstration of the acquisition of the skills and knowledge as specified in the Certificate IV in Automotive Manufacturing (Automotive Development), or equivalent competencies. There are no prerequisite requirements for individual units of competency</p> <p>PACKAGING RULES 9 competency units are required for this qualification, including: - at least 3 specialist units plus - up to 6 elective units There are no core units for this qualification</p> <p>In selecting electives: - a maximum of 2 units may be drawn from the Certificate IV in this or any other nationally endorsed training package - a maximum of 2 units may be drawn from the Diploma level from any other nationally endorsed training package - a maximum of 2 units may be drawn from the Advanced Diploma level in this or any other nationally endorsed training package</p> <p>Elective units must be relevant to the work outcome, industry requirements and the qualification level.</p> <p>Units selected from other Training Packages must not duplicate units selected from or available within AUM08</p>

The following table outlines ONE example of a training program for this qualification. Please refer to the Automotive Manufacturing Training Package for the full details of available options.

EXAMPLE PROGRAM		
Unit Code	Unit Title	Nominal Hours
Core Units		
AUM5001A	Coordinate project activities	40
AUM5002A	Establish a test/trial for components of plant, tooling, equipment or systems	45
AUM5003A	Create new product designs	55
AUM5004A	Produce research reports	40
AUM5005A	Develop conceptual models	50
AUM5006A	Seek, evaluate, organize and prepare information	20
Elective Units		
AURT570093A	Analyse and evaluate light vehicle steering and suspension system faults	36
AURT570193A	Analyse and evaluate light vehicle driveline system faults	36
AURT570293A	Analyse and evaluate light vehicle engine and fuel system faults	36
Total		358

