



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **AUM3003B Document designs**

**Revision Number: 1**

## AUM3003B Document designs

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit describes the application of the required skills and knowledge to document the design details and associated aspects required for the development and production of bus/truck/trailers.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
------------------------	--

### Application of the Unit

<b>Application of the unit</b>	<p>This unit applies to the automotive and related component manufacturing environment and involves application of skills and knowledge at a <i>specialist</i> level. These skills and knowledge are to be used within the scope of the person's job and authority.</p>
--------------------------------	---

### Licensing/Regulatory Information

Not applicable.

### Pre-Requisites

<b>Prerequisite units</b>		
	Nil	Nil
	Nil	Nil

## Employability Skills Information

<b>Employability skills</b>	This unit contains Employability Skills.
-----------------------------	--

## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the required performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge and/or the range statement. Assessment of performance is to be consistent with the evidence guide.
---	--

## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Identify and achieve work production goals	1.1. The design requirements of a product or sub-assembly are identified in consultation with design, engineering, marketing and other <i>appropriate personnel</i> 1.2. All design drawings and information on technical specifications for the product or sub-assembly are identified and obtained 1.3. The steps involved in the manufacture of the product or sub-assembly are identified 1.4. An inventory of required equipment, parts and components is established in accordance with <i>organisation requirements</i> , including an assessment of their current availability or the need to either manufacture them or purchase/lease them 1.5. Any fabrication/machining processes and instructions are determined and clarified with participating departments/ sections/areas 1.6. The timetable, budget, resource requirements, staffing and purchase/supply schedule for the manufacture of the product or sub-assembly are drawn up and confirmed with designated staff 1.7. The approved plan is communicated to all relevant staff in management, production, engineering and other sections of the organisation concerned
2. Specify critical product quality parameters	2.1. Critical product or sub-assembly quality and technical parameters are identified and documented in accordance with the <i>work quality goals</i> of the organisation 2.2. Draft documentation on product or sub-assembly quality and technical parameters are approved by relevant staff
3. Specify materials requirements	3.1. Required materials and components for the manufacture and assembly of the product or sub-assembly are identified and documented 3.2. Draft documentation on the required materials and components for the manufacture and assembly of the product or sub-assembly is approved by relevant staff
4. Specify production processes	4.1. Processes, plant and equipment required for the manufacture and assembly of the product or sub-assembly are identified and documented

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
	4.2. Draft documentation on the processes, plant and equipment required for the manufacture and assembly of the product or sub-assembly is approved by relevant staff
5. Specify testing requirements	5.1. Required testing and quality assurance procedures for the manufacture and assembly of the product or sub-assembly are identified and documented 5.2. Draft documentation on the required testing and quality assurance procedures for the manufacture and assembly of the product or sub-assembly is approved by relevant staff
6. Specify cost estimates	6.1. All direct and indirect costs involved in the manufacture and assembly of the product or sub-assembly are estimated with consultation from relevant finance, design, engineering, purchasing and other relevant staff
7. Disseminate documentation	7.1. All documentation related to the specification, costing, manufacture and assembly of the product or sub-assembly is processed for approval 7.2. The documentation on product or sub-assembly design specifications, costs and manufacture and assembly processes is stored and distributed

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the essential skills and knowledge and their level, required for this unit.

#### Required skills

- speak clearly and directly in order to communicate design plans
- apply teamwork to a range of situations, including design consultation processes
- solve problems particularly in teams in order to meet performance indicators
- show initiative in adapting to changing work conditions or contexts particularly when working across a variety of work areas
- access, interpret and apply information on relevant organisation policies, procedures and instructions, particularly to ensure design documentation meets organisation templates and standards
- manage time when planning, preparing and organising work priorities
- take responsibility for organising own work priorities.

#### Required knowledge

- relevant Occupational Health and Safety and Environmental regulations and organisation policies and procedures needed to carry out work in a manner which ensures the safety of people, equipment and the environment.
- technical work documentation covering procedures, specifications and schedules
- quality system documentation covering instructions, procedures, performance indicators and review processes or equivalent
- cost minimisation/waste avoidance policies, procedures and practices
- environmental protection requirements relating to the disposal of waste material
- established communication channels and protocols
- problem identification and resolution techniques
- process to identify design requirements
- processes to identify critical product quality, materials, tests and costing
- processes for disseminating and storing documentation
- drawing principles and processes.

## Evidence Guide

<b>EVIDENCE GUIDE</b>	
<p>The Evidence Guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for this Training Package.</p>	
<b>Overview of assessment</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>Evidence of the following is essential:</p> <ul style="list-style-type: none"> <li>• compliance with relevant legislative, regulations, standards, codes of practice and establish safe practices and organisation policies and procedures for managing personal work priorities</li> <li>• maintaining a working knowledge of current work systems and practices</li> <li>• working and communicating effectively and positively with others involved in the work</li> <li>• applying, within authority, the requirements of the job or work role in relation to: <ul style="list-style-type: none"> <li>• achieving production goals</li> <li>• achieving work quality goals</li> <li>• responding positively to changing work requirements</li> <li>• contributing effectively to cost reduction initiatives</li> <li>• effectively applying problem solving techniques</li> <li>• modify activities to cater for variations in organisation context and environment</li> <li>• identify design requirements</li> <li>• design requirements incorporated involving quality, materials, production processes, testing and costing</li> <li>• documentation stored - paper based / electronic.</li> </ul> </li> </ul>
<b>Context of and specific resources for assessment</b>	<ul style="list-style-type: none"> <li>• assessment of the competency should take place in a safe working environment in a passenger motor vehicle manufacturing plant or simulated environment using tools/equipment/machinery required for the production process without undue disruption to the production process</li> <li>• assessment is to occur under standard and authorised work practices, safety requirements and environmental constraints.</li> </ul>
<b>Method of assessment</b>	<p>A range of assessment methods should be used to assess practical skills and knowledge. The following</p>

**EVIDENCE GUIDE**

examples are appropriate for this unit:

- assessment methods must confirm consistency and accuracy of performance (over time and in a range of organisation relevant contexts) together with application of underpinning knowledge
- assessment methods must be by direct observation of tasks and include questioning on underpinning knowledge to ensure its correct interpretation and application
- assessment may be applied under project related conditions (real or simulated) and require evidence of process
- assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances.



## Range Statement

### RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording in the Performance Criteria is detailed below. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts.

<p><b><i>Appropriate personnel</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• clients and managers</li> <li>• supervisors</li> <li>• suppliers</li> <li>• team leaders</li> <li>• team members.</li> </ul>
<p><b><i>Organisation requirements</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• access and equity principles and practices</li> <li>• environmental management (waste disposal, recycling and re-use guidelines)</li> <li>• emergency and evacuation procedures</li> <li>• equipment use procedures</li> <li>• ethical standards</li> <li>• legal obligations</li> <li>• maintenance and storage procedures</li> <li>• OHS requirements</li> <li>• organisational and site guidelines</li> <li>• policies and procedures relating to own role and responsibility</li> <li>• procedural manuals</li> <li>• quality assurance guidelines</li> <li>• quality and continuous improvement processes and standards</li> <li>• recording and reporting guidelines.</li> </ul>
<p><b><i>Work quality goals</i></b> may include:</p>	<p>those established within a quality system and may include identification, minimisation and elimination of defects, product/component specifications, tolerances, inspection systems, packaging specifications and non-conforming parts or products.</p>

## Unit Sector(s)

<b>Unit sector</b>	Automotive Manufacturing
--------------------	--------------------------

## Competency field

<b>Competency field</b>	Truck/Bus/Trailer Manufacture and Assembly
-------------------------	--

## Co-requisite units

<b>Co-requisite units</b>		
	Nil	Nil
	Nil	Nil