



Australian Government

MEM16009 Research and analyse engineering information

Release: 1

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Modification History

Release 1. Supersedes and is equivalent to MEM16009A Research and analyse engineering information

Application

This unit of competency defines the skills and knowledge required to research and analyse engineering information and prepare the information for dissemination.

Applications of this unit would typically be found in manufacturing and engineering work environments with materials and documents based on the relevant knowledge of the employee competency level.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Band: B

Unit Weight: 2

Pre-requisite Unit

MEM13015	Work safely and effectively in manufacturing and engineering
MEM16006	Organise and communicate information
MEM16012	Interpret technical specifications and manuals

Competency Field

Communication

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1	Research information	1.1	Follow standard operating procedures and comply with work health and safety (WHS) requirements at all times
		1.2	Identify research requirements and clarify with appropriate persons

Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
	1.3 Identify sources of research data/information and verify for currency and accuracy 1.4 Compile information, record and store using research techniques appropriate to the task requirements 1.5 Sort information for relevance to research and analysis requirements 1.6 Conduct research within given timeframe, resource and quality constraints
2 Analyse information	2.1 Determine scope, criteria and method for analysis and verify, if necessary, with appropriate persons 2.2 Analyse information accurately according to established criteria 2.3 Document analysis in an appropriate format according to workplace requirements
3 Establish findings and conclusions	3.1 Ensure findings are factual and accurate and describe the results of the analysis 3.2 Reach conclusions that are logical and based on objective analysis of available data 3.3 Verify research data, analysis, findings and conclusions with appropriate persons where required
4 Summarise and organise technical data	4.1 Record information in suitable form according to workplace requirements 4.2 Summarise information and organise for ease of reference, using established communication principles 4.3 Disseminate information to others according to workplace procedures

Foundation Skills

This section describes those required skills (reading, writing, oral communication and numeracy) that are essential to workplace performance in this unit of competency.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Research requirements include one (1) or more of the following:

- purpose
- expected outcomes
- scope and nature
- timeframe
- required resources

Sources of research data/information include one (1) or more of the following:

- surveys
- interview
- observation
- test results
- data records
- reference books and journals
- technical manuals
- job histories
- internal/external databases

Research techniques include one (1) or more of the following:

- surveying/scanning
- skimming
- questioning
- note-taking
- summarising
- relationship diagrams
- tabling

Communication principles include one (1) or more of the following:

- avoidance of ambiguity, redundancy, verbosity and circumlocution
- writing in plain English
- use of headings

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

- logical ordering
- summarising
- layout
- customising material to audience
- use of graphics and tables

Unit Mapping Information

Release 1. Supersedes and is equivalent to MEM16009A Research and analyse engineering information

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b7050d37-5fd0-4740-8f7d-3b7a49c10bb2>