



**Australian Government**

# **Assessment Requirements for MEM22001 Perform engineering activities**

**Release: 1**

# Assessment Requirements for MEM22001 Perform engineering activities

## Modification History

Release 1. Supersedes and is equivalent to MEM22001A Perform engineering activities.

## Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include:

- following work instructions, standard operating procedures (SOPs) and safe work practices
- researching and evaluating factors, conditions and contexts integral to effective engineering practices
- researching and evaluating the application of management practices and regulatory and legal systems integral to effective engineering practices
- consulting with technical experts and specialists and ranking and evaluating engineering options on at least two occasions
- complying with work health and safety (WHS) and environmental regulations, codes of practice and statutory requirements, identifying and analysing hazards and risks
- researching and evaluating engineering career options based on current engineering activities.

*Note: Where a volume and/or frequency is not specified, demonstration must be provided at least once.*

## Knowledge Evidence

Evidence required to demonstrate the required knowledge for this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include knowledge of:

- safe work practices and procedures
- political, social and environmental context and possible engineering activities
- need for continual review and maintenance of factors relevant to the practice of engineering
- significance and applicability of engineering activities
- methods for evaluation and ranking of engineering options including the use of decision-making and problem-solving tools
- significance of documented processes and outcomes-based performance measures in the context of client requirements, industrial, social, political and economic environments
- documented work instructions in the context of the objectives of the engineering activity
- negotiating principles
- use of a risk matrix in assessing risk
- long term environmental and sustainability issues associated with the engineering activity

- documentation and conclusion procedures
- relevance of current engineering activities to future career options and the value of a curriculum vitae (CV) or portfolio in contributing to future career options in engineering.
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## Assessment Conditions

- Assessors must:
  - have vocational competency in performing engineering activities at least to the level being assessed with relevant industry knowledge and experience
  - satisfy the assessor requirements in the Standards for Registered Training Organisations 2015 or its replacement and comply with the National Vocational Education and Training Regulator Act 2011, its replacement or equivalent legislation covering VET regulation in a non-referring state/territory as the case requires.
- Where possible, assessment must occur in operational workplace situations. Where this is not possible or where personal safety or environmental damage are limiting factors, assessment must occur in a sufficiently rigorous simulated environment that reflects realistic operational workplace conditions that cover all aspects of workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required including relevant workplace procedures, product and manufacturing specifications.
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
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## Links

Companion Volume implementation guides are found in VETNet -

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