



Australian Government

Assessment Requirements for MEM23122

Evaluate computer integrated manufacturing systems

Release: 1

Assessment Requirements for MEM23122 Evaluate computer integrated manufacturing systems

Modification History

Release 1. Supersedes and is equivalent to MEM23122A Evaluate computer integrated manufacturing systems.

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:

- evaluating compliance with work health and safety (WHS), regulatory requirements and risk management, including automation safety
- investigating sustainability implications of computer integrated manufacturing (CIM) systems
- reviewing features and functions of existing or planned CIM systems on at least two occasions
- identifying CIM principles and techniques, analysis, software and software validation techniques
- evaluating parameters of manufacturing operations and the features and suitability of CIM components and systems on at least two occasions
- reporting and documenting processes and results of evaluation including layouts, programs and flow charts.

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:

- computer integrated manufacturing (CIM)
- technical and professional assistance
- types of manufacturing operations, their features and parameters and potential for CIM applications including:
 - continuous, mass, batch and jobbing
 - prototype manufacture
 - cellular manufacturing
 - jobbing
 - just-in-time (JIT) and other lean manufacturing systems and techniques
 - maintenance systems and techniques
- compliance requirements of WHS and regulatory requirements, codes of practice, standards, and risk assessment for CIM systems with emphasis on automation safety

- sustainability implications of CIM systems
- CIM hardware
- CIM principles and techniques required to evaluate systems and select and optimise components
- current options and trends in performance analysis and programming software including underpinning program techniques and algorithms
- data and communications protocols and standards
- local area network (LAN) and wide area network (WAN) communications in CIM applications
- documentation, drawings, specifications and instructions required
- process information and programming
- interdependencies and communications linkages between team members, support functional groups and licensed technical and professional support.
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Assessment Conditions

- Assessors must:
 - have vocational competency in evaluating computer integrated manufacturing systems 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>