



Australian Government

Assessment Requirements for MEM30026

Select and test components for simple electronic switching and timing circuits

Release: 1

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Modification History

Release 1. Supersedes and is equivalent to MEM30026A Select and test components for simple electronic switching and timing circuits.

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:

- performing basic electronic calculations
- selecting, testing and using simple electronic switching circuits on at least two occasions
- selecting, testing and using simple electronic timing circuits on at least two occasions
- selecting common power supplies and power control devices.

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:

- electronic concepts and units
- simple electronic switching circuits
- voltage
- current
- resistance and capacitance
- power
- frequency and period
- common electronic instruments
- multimeters
- power supplies
- signal generators
- oscilloscopes
- timing circuits and oscillators
- semiconductor devices
- diodes including:
 - zener diodes
 - light emitting diodes (LEDs)
- transistors

- linear integrated circuits
- power control devices including:
 - silicon controlled rectifiers (SCRs)
 - triode for alternating current (TRIACs)
- power supplies
- hazards and control measure associated with selecting and test components for simple electronic switching and timing circuits, including housekeeping
- safe work practices and procedures.

Assessment Conditions

- Assessors must:
 - have vocational competency in selecting and testing components for simple electronic switching and timing circuits 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>