



Australian Government

Assessment Requirements for MEM19030 Research and recommend sustainable design improvements

Release: 1

Assessment Requirements for MEM19030 Research and recommend sustainable design improvements

Modification History

Release 1. Supersedes and is equivalent to MEM19030A Research and design sustainable objects.

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
- applying principles of environmental conservation
- applying principles of sustainable design
- complying with the design brief requirements, including evaluating sustainability credentials of relevant resource materials and completing design documentation on at least two occasions
- creating and utilising appropriate criteria
- undertaking relevant research and documenting findings
- defining and quantifying the main benefits of using sustainable materials
- researching and selecting processes and materials that support sustainability for two different products on at least two occasions.

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
- principles of environmental conservation
- principles of sustainable design
- criteria to evaluate materials and processes
- manufacturing, processes and materials used in production
- design processes
- common features of design specifications
- benefits of sustainable practices and methods of qualifying them
- commonly used research methodologies.
-

Assessment Conditions

- Assessors must:
 - have vocational competency in researching and designing sustainable objects 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. This must 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.
-

Links

Companion Volume implementation guides are found in VETNet -

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