



Australian Government

Assessment Requirements for MSS015044

Design sustainable product or process

Release: 1

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Modification History

Release 1. Unit code changed. Application changed. Elements changed. Performance Criteria changed. Foundation Skills populated. Assessment Requirements changed. Supersedes and is not equivalent to MSS015023 Design sustainable product or process.

Performance Evidence

There must be evidence the candidate has completed the tasks outlined in the elements and performance criteria of this unit, and demonstrated the ability to:

- develop and evaluate sustainability impact of at least 2 sets of design options which include both product design and production design
- negotiate and confirm design specifications for optimal sustainability outcomes for at least one process, product or service.

Knowledge Evidence

There must be evidence the candidate has knowledge of:

- sustainability impacts from using different materials and different processes and to produce products of different specifications
- current and emerging design approaches to improve sustainability and the impact throughout the life of a process, product or service including:
 - human-centred and iterative design
 - designing out waste and pollution
 - choice of materials, resources and energy
 - reduction of material, resources and energy usage including digitalisation, dematerialisation, shared resources, service-based ‘products’
 - extended product life including modularity, repairability, stewardship, remanufacturing
- alternative sources of materials and components related to the product design and the sustainability differences of each
- alternative processes related to the production design and the sustainability differences of each
- current and emerging approaches to quantifying and evaluating costs, benefits, impacts and risks in relation to sustainability, including direct, indirect and intangible factors
- carbon equivalence and conversion factors
- design documentation and approvals requirements.
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Assessment Conditions

Skills must have been demonstrated in the workplace or in a simulated environment that reflects workplace conditions and contingencies. The following conditions must be met for this unit:

- use of suitable facilities, equipment and resources
- modelling of industry operating conditions.

Assessors must satisfy the NVR/AQTF mandatory competency requirements for assessors.

Links

Companion Volume Implementation Guides are found in VETNet - -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>