



Australian Government

MSTGN4020 Contribute to the development of products or processes

Release: 1

MSTGN4020 Contribute to the development of products or processes

Modification History

Release 1. Unit Code and Application changed. Elements and Performance Criteria simplified with Element 1 removed. Foundation Skills field populated. Range of Conditions removed with relevant information moved to Knowledge Evidence. Assessment Requirements clarified with generic foundation skills statements moved to appropriate section and duplication with Performance Criteria removed. Supersedes and is equivalent to MSTGN4007 Contribute to the development of products or processes.

Application

This unit describes the skills and knowledge required to participate in workplace activities used to adapt or develop products and work processes. It includes conducting and reporting on trials.

This unit applies to individuals who use judgement to plan and select processes for self and others to achieve work outcomes.

No licensing or certification requirements exist at the time of publication. Relevant legislation, industry standards and codes of practice within Australia must be applied.

Competency Field

Generic

Elements and Performance Criteria

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
1. Prepare for development of products or processes	1.1 Identify and interpret provisional specifications and determine feasibility study requirements in consultation with others 1.2 Follow processes for selected feasibility study and provide input that is based on outcomes
2. Assist in development process	2.1 Develop preliminary specifications from feasibility study 2.2 Use specifications as the basis for product development and engineering 2.3 Investigate and select raw materials to meet requirements 2.4 Determine equipment and skill availability to meet requirements

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
3. Conduct trials	3.1 Confirm and clarify requirements for trials to establish procedures and parameters as per workplace policies and procedures 3.2 Liaise with production areas to organise and conduct trials as per workplace policies and procedures
4. Interpret and report results	4.1 Analyse results of trials and determine if performance is suitable for production to proceed 4.2 Prepare reports on performance that include data needed for production implementation 4.3 Maintain trial records in accordance with workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance but not explicit in the performance criteria.

- Reading skills to integrate information from a range of sources and use logical structure in drafting options and recommendations
- Writing skills to integrate information from a range of sources and use logical structure in drafting reports
- Oral communication skills to liaise with others and contribute ideas in a team environment
- Numeracy skills to interpret trial data.

Other foundation skills essential to performance are explicit in the performance criteria of this unit.

Unit Mapping Information

Supersedes and is equivalent to MSTGN4007 Contribute to the development of products or processes.

Links

Companion Volume implementation guides are found in VETNet –

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a203ec5c-de7d-406b-b3e1-8f1a9b76e92e>

Assessment Requirements for MSTGN4020 Contribute to the development of products or processes

Modification History

Release 1. Unit Code and Application changed. Elements and Performance Criteria simplified with Element 1 removed. Foundation Skills field populated. Range of Conditions removed with relevant information moved to Knowledge Evidence. Assessment Requirements clarified with generic foundation skills statements moved to appropriate section and duplication with Performance Criteria removed. Supersedes and is equivalent to MSTGN4007 Contribute to the development of products or processes.

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:

- contribute to the development of at least two different products or processes.
-

Knowledge Evidence

There must be evidence the candidate has knowledge of:

- key workplace considerations for sector of work and type of product, including:
 - product and process development procedures
 - equipment operation and capabilities
 - skill capabilities
 - materials features and performance
 - work health and safety and environmental considerations
- feasibility study and sampling procedures and considerations for their use, including:
 - sampling
 - trial run production
 - consideration of machine capabilities
 - availability of resources
 - required quality
 - cost
- types of trials used assess if production can proceed, and how they are conducted, including:
 - confirming and clarifying requirements
 - liaising with production area
 - allocating work
 - reviewing and evaluating processes and products
 - performing trials

- interpreting data and analysing results
- reporting processes.
-

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, including:
 - provisional specifications on which development is based
 - textile production facility, equipment and materials
 - a work team
 - workplace procedures.

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=a203ec5c-de7d-406b-b3e1-8f1a9b76e92e>