



Australian Government

MSS405076 Facilitate the development of a new product

Release: 1

MSS405076 Facilitate the development of a new product

Modification History

Release 1. Unit code changed. Application changed. Performance Criteria changed. Foundation Skills populated. Range of Conditions removed. Assessment Requirements changed. Workplace outcome changed. Supersedes and is not equivalent to MSS405075 Facilitate the development of a new product.

Application

This unit of competency covers the skills and knowledge required to interpret a new product design and determine how the product will be manufactured, balancing the business and technical sides of the new product design.

This unit applies to technical experts, managers or similar roles who have been given the responsibility to consult with customer, management and other stakeholders, determine the materials, components and production processes to be used for the new product; determine process capability; oversee production trials; and facilitate procedures for ongoing production of the product.

This unit applies to any organisation that is implementing a new product design in a competitive systems and practices environment.

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

Pre-requisite Unit

MSS404056 Apply statistics to operational processes.

Competency Field

Competitive systems and practices

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. Confirm design brief for new product	1.1 Review product design with customer and other key stakeholders to determine technical specifications, timelines, aesthetic, cost, sustainability and customer perceived value 1.2 Determine, with input from key stakeholders, supply chain and production choices with potential benefits for sustainability and/or

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Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
	customer perceived value and implications for design brief 1.3 Determine any regulatory, industry code or intellectual property (IP) requirements for product 1.4 Identify any required tooling, process or equipment needs 1.5 Confirm design brief, including relevant drawings 1.6 Determine design brief conforms to organisation objectives and capability 1.7 Obtain approval on total design brief from all relevant personnel
2. Determine material requirements for product	2.1 Select appropriate materials and components in liaison with key stakeholders 2.2 Determine material and component testing and evaluation regime required to meet product end use requirements and regulatory and/or industry code requirements 2.3 Arrange for testing and evaluation of trial materials and components 2.4 Guide material trial process and interpret material trial results 2.5 Determine final materials and components specifications and details of value chain
3. Determine process requirements for product	3.1 Select process to make product in liaison with key stakeholders and based on relevant factors 3.2 Determine any special process and/or equipment requirements for this product 3.3 Communicate with production personnel to determine any concerns and/or training or other needs 3.4 Adjust design, as required, to satisfy customer and production needs
4. Ensure process needs for new product have been met	4.1 Liaise with equipment design and procurement personnel to ensure they align with requirements 4.2 Interpret hardware specifications and ensure they are appropriate for job 4.3 Liaise with process personnel to ensure draft procedures for new product have been developed 4.4 Validate product cost and design meets organisation requirements and capability
5. Trial new product	5.1 Design trialling procedures to evaluate key aspects of product and

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through the process	process 5.2 Liaise with relevant stakeholders to facilitate engagement with trials 5.3 Ensure trialling procedures incorporate health, safety and environment (HSE) requirements 5.4 Coordinate trialling of new product 5.5 Interpret product trial results and guide product trial process 5.6 Tune process to optimise production of new product
6. Determine process capability	6.1 Plot appropriate statistical process control charts 6.2 Determine confidence limits 6.3 Compare confidence limits with product specification
7. Coordinate product trials	7.1 Determine product testing and evaluation regime required to meet end use requirements and regulatory and/or industry code requirements 7.2 Arrange for testing and evaluation of trial product or prototype 7.3 Interpret product trial results and guide product trial process 7.4 Determine final product specification in liaison with key stakeholders 7.5 Make changes to materials, process and equipment as needed to meet final product specifications
8. Implement standard procedures for new product	8.1 Monitor initial production and, in liaison with relevant team members, adjust process, conditions and materials to ensure product and process outcomes conform to customer, regulatory and organisation requirements 8.2 Update process specifications to reflect optimised operations 8.3 Make, or initiate action for, updates to standard operating procedures (SOPs) to reflect new product 8.4 Make, or initiate action for, updates to update equipment and other hardware records to reflect additions/changes 8.5 Oversee completion and submission of project records and reports 8.6 Archive records according to company procedure

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 interpret product designs, technical specifications and organisation objectives
- Writing skills to ensure procedures are correct, ensure records and reports are completed
- Oral communication skills to liaise with stakeholders across a range technical and operational areas
- Numeracy skills to determine metrics for trials, apply statistical concepts and plot control charts.

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

Unit Mapping Information

Release 1. Supersedes and is not equivalent to MSS405075 Facilitate the development of a new product.

Links

Companion Volume Implementation Guides are found in VETNet – -

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

Assessment Requirements for MSS405076 Facilitate the development of a new product

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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:

- interpret at least one new product design and facilitate the development, trialling and standardisation of its production

Knowledge Evidence

There must be evidence the candidate has knowledge of:

- organisation's strategic goals and objectives relevant to new product
- new product/application requirements, expected performance outcomes and key indicators
- current and emerging approaches to sustainable product design and production
- types of materials and components suitable for the new product design and their impact on sustainability, customer perceived value and organisation objectives
- alternative processes, plant and/or equipment for making the new product and their impact on sustainability, customer perceived value and organisation objectives
- methods and criteria for decision making
- determination of process capability
- appropriate sampling and testing for materials, components and products
- determination of processing time, product cost, benefit cost of the new product
- interpretation of trial and/or field test results
- underpinning values relevant to competitive systems and practices and application to production design including at least 5 of the following:
 - respect for people
 - respect for process
 - transparency and culture of learning
 - creation of value and customer perceived value
 - empowered teams and devolved decision making and/or strategy deployment
 - go and see and/or go to the source decision making
 - rapid cycle or iterative development
 - empirical development.

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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, including:
 - product design
- modelling of industry operating conditions, including:
 - functioning competitive systems and practices environment.

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

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