



Australian Government

MSTAT4022 Produce screen-printed textiles

Release: 1

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Modification History

Release 1. Unit Code and Application changed. Element 1 removed. Foundation Skills field populated. Range of Conditions removed with relevant information moved to Performance or 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 MSTTD4005 Produce screen printed textiles.

Application

This unit describes the skills and knowledge required to interpret design specifications and use stencil or silk-screen printing techniques to produce designs and artworks for textiles to be used for garments, textile products, furnishing fabrics, accessories or public art commissions. Screen printing involves the use of manual techniques, tools and equipment.

This unit applies to individuals producing work based on a pre-determined design. They use judgement and problem-solving to select and troubleshoot processes to achieve quality 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.

Pre-requisite Unit

Nil

Competency Field

Apparel and Textile Production

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. Establish requirements for screen-printed textiles	1.1 Analyse design specifications and discuss with appropriate personnel to confirm production requirements 1.2 Identify desired effects of screen printing and select appropriate printing technique to achieve required design outcome 1.3 Select textile substrates and quantities according to design requirements 1.4 Select stencil techniques, stencil types, masters, screen types, meshes

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
	and medium according to requirements of printing technique, substrate and design
2. Apply screen-printing procedure	2.1 Set up workstation, tools and equipment according to specifications for work 2.2 Prepare substrates and check against quality standards 2.3 Prepare stencil masters, meshes and screens for printing according to requirements for selected printing technique 2.4 Prepare printing set up 2.5 Apply screen printing techniques to meet design specifications for sample and in accordance with workplace procedures
3. Produce textile printed sample	3.1 Check strike off against design specifications to ensure quality standards are met 3.2 Identify printing faults and production problems and determine causes 3.3 Analyse printing process, technique and medium used to determine necessary modifications to printing techniques, processes or materials 3.4 Print and finish screen print and complete housekeeping in accordance with workplace procedures 3.5 Examine outcomes with appropriate personnel and discuss and document possible modifications to design 3.6 Complete required documentation

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 design specifications
- Oral communication skills to discussion requirements and production issues with others
- Numeracy skills to work with basic mathematical operations and measurement concepts

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

Unit Mapping Information

Supersedes and is equivalent to MSTTD4005 Produce screen printed textiles.

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 MSTAT4022 Produce screen-printed textiles

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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:

- produce screen-printed designs on at least three different textiles, with work to include:
 - use of at least three types of equipment
 - at least one of the following stencil techniques:
 - hand cut or hand drawn stencils
 - photographic stencils
 - digitally generated stencils.

Knowledge Evidence

There must be evidence the candidate has knowledge of:

- safe work practices and procedures and use of personal protective equipment
- characteristics of fabrics
- information resources on fibres and fabrics
- printing techniques:
 - registered techniques, including:
 - multi-coloured
 - print rail
 - registration lays
 - placement printing
 - flatbed repeat printing
 - wet-on-wet
 - flood coat
 - dry pull
- screen preparation, including:
 - reclaim
 - de-grease

- wash and dry
- apply emulsion
- registration
- attach master and expose to light source
- printing processes and practices
- different types of screens and meshes
- different types of medium and how they are used, including:
 - inks
 - dyes
 - specialist inks
 - binders
 - extenders
 - reducers
 - additives
 - thermoset
 - sublimation
- stencil and printing techniques and equipment
- textile substrates, how they are prepared and their suitability for different applications based on their characteristics, including:
 - knitted fabric
 - felt
 - woven fabrics
- types of design outcomes for screen-printed textiles, including:
 - repeat patterns
 - border designs
 - placement prints
 - engineered designs
- finishing techniques, including:
 - touch up and tape
 - wash image clean and dry
 - curing and heat setting
 - labelling
- fault-finding procedures, typical fault conditions and how to rectify, including:
 - inaccurate repeat measurements
 - inappropriate fixing of dyes and pigments
 - incorrectly stretched screen mesh
 - insufficient print paste used
 - off printing
 - poor preparation of substrates
 - poor squeegee action

- poorly exposed screen
- poorly registered print
- uneven screen coating
- poor quality colour separations
- recording and reporting practices for screen printing operations.
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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:
 - design specifications
 - screen printing materials, tools and equipment
 - workplace procedures.

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

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