



Australian Government

Assessment Requirements for MSTGN4028 Research and use information about textiles

Release: 1

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Modification History

Release 1. Unit Code, Title and Application changed. Prerequisite units removed. Elements and Performance Criteria restructured. Foundation Skills field populated. Range of Conditions removed. Assessment Requirements clarified with generic foundation skills statements moved to appropriate section and duplication with Performance Criteria removed. Supersedes and is not equivalent to MSTTX4002 Understand and apply textile science.

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 technical information about 10 different textile materials, and for each material:
 - interpret information from at least two different sources
 - establish physical and chemical properties
 - establish the safety and sustainability issues for use
 - determine the potential impacts of at least three different production processes on the material.

Knowledge Evidence

There must be evidence the candidate has knowledge of:

- current and emerging safety and sustainability issues for textile materials
- local and global frameworks and initiatives that support safe and sustainable supply and use
- the link between effective use of textile knowledge and profitable and sustainable business operations
- textile industry terminology, including categories of different textile materials
- generic and trade names for common fabrics and textile materials
- techniques for identifying fibre, yarn, fabric and textiles, including:
 - natural fibres: cotton, wool, silk and linen
 - synthetic fibres: polyamide, polyester, acrylic, lycra, rayon and acetate
- types of fabrics and textiles and their construction methods, including:
 - natural and synthetic single yarn fabrics and blends
 - knitted fabrics: weft knits and warp knits
 - woven fabrics: plain, twill, satin, dobby, jacquard and pile
 - non-woven fabrics: felts, nets, braids, bonded and composite
 - emerging smart fabrics
- physical properties of textiles and other materials, including:

- density
- length
- moisture content
- shape and contour
- strength
- weight or mass
- chemical properties of textiles and associated materials, including:
 - fat content
 - chemical concentrations
- construction processes for the following fibres, yarns and textiles:
 - spun
 - ply
 - combo
 - blended
 - crimped
 - monofilament
 - multifilament
 - staple spun
 - technical textiles
- textile treatments and processing techniques and the implications for their use on textiles with different physical and chemical properties, including:
 - cutting
 - drying and curing
 - dyeing and colouration
 - dying
 - finishing using chemical and mechanical means
 - heating
 - printing
 - proofing (water and fire)
 - spinning
 - stitching
 - stretching
 - washing
 - weaving
- standard textile test procedures and the role of testing in textile product development
- ways of ensuring currency of textile knowledge.

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:
 - technical information about textile materials, including product specifications
 - information technology for research.

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>