



Australian Government

MSTFD5016 Grade complex patterns

Release: 1

MSTFD5016 Grade complex patterns

Modification History

Release 1. Supersedes and is equivalent to LMTFD5016B Grade shaped patterns

Application

This unit of competency covers the skills and knowledge required to conduct allometric grading of shaped or 3-D patterns for fashion garments.

The unit of competency applies to grading patterns where the focus is on taking into account differences in body growth for a specialised fit. Allometric grading must consider the relative growth rate of different parts of the body. Discretion and judgement may be required in planning and selecting processes.

Work may be conducted in small to large scale enterprises and may involve individual and team activities.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

MSTFD4013 Grade 2-D patterns

Competency Field

Fashion design and technology

Unit Sector

Not applicable

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1 Determine job requirements

- 1.1 Follow standard operating procedures (SOPs)
- 1.2 Comply with work health and safety (WHS) requirements at all times
- 1.3 Use appropriate personal protective equipment (PPE) in

			accordance with SOPs
		1.4	Identify job requirements from specifications, drawings, job sheets or work instructions
2	Prepare to grade complex patterns	2.1	Research target market and collect data of target market for measurement table
		2.2	Clarify design brief and confirm target market and intended purpose of design with designer
		2.3	Analyse measurement table
		2.4	Identify growth of circumference and length increments and construct size table
		2.5	Identify base pattern pieces, allocate grade points and construct grade rule table
3	Grade complex patterns	3.1	Determine stacking or outlay requirements, including direction
		3.2	Grade pattern manually using patternmaking technical skills or by computer
		3.3	Identify stack points or lines if stacking is used
		3.4	Preserve integrity of pattern attributes during grading
		3.5	Accurately label all pattern pieces with pattern marking symbols
		3.6	Check pattern for accuracy and rectify or address faults as required
4	Finalise and store complex patterns	4.1	Prepare shaped patterns and markers and present in preparation for production
		4.2	Prepare specification documents required
		4.3	Maintain records and complete documentation as required
		4.4	File patterns according to workplace procedures

Foundation Skills

This section describes those required skills (language, literacy and numeracy) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Workplace procedures include one or more of the following:

- requirements prescribed by legislation, awards, agreements and conditions of employment
- SOPs
- work instructions
- oral, written and visual communication
- quality practices, including responsibility for maintenance of own work quality and contribution to quality improvement of team or section output
- housekeeping
- tasks related to environmental protection, waste disposal, pollution control and recycling
- WHS practices

Australian Standards include:

- the relevant industry or Australian Standards that are current at the time this unit is being undertaken

Research target market includes the following:

- analyse target market
- identify averages and differences
- analyse body growth
- record relevant data

Body growth includes the following:

- change in shape
- increase in dimension of the neck, torso and limbs which is independent of growth in stature

Grading methodology includes the following:

- allometric or 3-D apportion of grade increments
- positioning of constant or stack point through growth areas of body

Shaped grading includes the following:

- a construction-based method of grading
- reduces or grows a base pattern in height, girth and shape
- distributes grade increments at points and in values that reflect a third dimension to a flat 2-D pattern
- must consider the relative growth rate of different parts of the body

Unit Mapping Information

Release 1. Supersedes and is equivalent to LMTFD5016B Grade shaped patterns

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 MSTFD5016 Grade complex patterns

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Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria, and include:

- reading and following work instructions, standard operating procedures (SOPs) and safe work practices
- applying relevant standards
- researching target market, clarifying design brief and confirming target market and intended purpose of design with designer
- analysing measurement table, identifying growth of circumference and length increments and constructing size table
- identifying base pattern pieces, allocating grade points and constructing grade rule table
- determining stacking or outlay requirements, including direction
- using computer-aided design (CAD) or manual grading system to grade at least two (2) shaped or 3-D patterns
- preserving integrity of pattern attributes during grading and correctly marking and labelling pattern pieces
- checking pattern for accuracy, rectifying faults as required, finalising pattern for production and preparing specification documents
- completing documentation, maintaining records and filing patterns according to workplace procedures.

Knowledge Evidence

Evidence must be provided that demonstrates knowledge of:

- safe work practices and procedures and use of personal protective equipment (PPE)
- Australian size Standards
- workplace and customer size charts
- allometric grading processes
- pattern attributes:
 - darts
 - notches
 - shape
 - design proportion
- marker making
- pattern marking symbols and labelling:

- grain lines
- darts
- notching
- all necessary slits
- job seams
- seam allowance
- cutting line
- stitching line
- correct written information and instructions
- cost efficiency in patternmaking
- documentation, specifications and recording practices.

Assessment Conditions

- Assessors must:
 - satisfy the assessor competency requirements that are in place at the time of the assessment, as set by the VET regulator
 - have vocational competency in grading complex patterns, at least to the level being assessed, with relevant industry knowledge and experience.
- Assessment should occur in operational workplace situations. Where this is not possible, or where personal safety or environmental damage are limiting factors, assessment must occur in a sufficiently rigorous simulated environment reflecting realistic operational workplace conditions. This must cover all aspects of workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.

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