



**Australian Government**

# **MSTFP3006 Apply foot anatomy principles to footwear production**

**Release: 1**

# MSTFP3006 Apply foot anatomy principles to footwear production

## Modification History

Release 1. Supersedes and is equivalent to LMTFP3006B Apply foot anatomy principles to footwear production

## Application

This unit of competency covers the skills and knowledge required to identify and describe the main structure and functions of the foot and to apply these principles to the design and production of footwear.

The unit of competency applies to identifying the structure and functions of the foot and how normal footwear design features meet these requirements. The unit of competency does not cover abnormal anatomy or medical conditions affecting feet. The retailing, alteration and manufacture of footwear for clients needing shoes or prostheses for surgical and medical conditions are covered by the Medical Grade Footwear units and qualifications.

The unit applies to small manufacturers making footwear by hand and dealing direct with the public.

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

## Pre-requisite Unit

Nil

## Competency Field

Footwear production

## 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 | <b>Identify the structure and functions of the foot</b> | 1.1 | Identify the main foot structures                   |
|   |                                                         | 1.2 | Describe functions of main foot muscles             |
|   |                                                         | 1.3 | Describe functions of main tendons and ligaments in |

|   |                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|---|-------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|   |                                                             | foot                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|   |                                                             | 1.4 Identify the main functions of the foot                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 2 | <b>Identify the main features and functions of footwear</b> | 2.1 Identify types of footwear and distinguish their different uses<br>2.2 Describe main features of footwear<br>2.3 Identify processes used to produce footwear features<br>2.4 Identify examples of flat, wide and different sized feet where specialised footwear may be required                                                                                                                                                                                                                                  |
| 3 | <b>Assess the impact of footwear features</b>               | 3.1 Identify the effect of poor-fitting or poorly made shoes<br>3.2 Relate features of footwear to foot function and structure<br>3.3 Assess features of footwear product and their capacity to support ideal performance of foot<br>3.4 Identify examples of possible surgical or medical conditions which would trigger referral to a medical practitioner, podiatrist or medical grade footwear practitioner<br>3.5 Identify quality processes used in workplace to ensure production of optimal footwear products |

## 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** • requirements prescribed by legislation, awards,

- one or more of the following:**
- agreements and conditions of employment
  - standard operating procedures (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
  - work health and safety (WHS) practices
- Australian Standards include:**
- the relevant industry or Australian Standards that are current at the time this unit is being undertaken
- Processes to produce footwear features include one or more of the following:**
- designing
  - developing patterns and lasts
  - stitching
  - selection of materials
  - manufacture of uppers, inner soles, linings and soles
  - quality checks

## Unit Mapping Information

Release 1. Supersedes and is equivalent to LMTFP3006B Apply foot anatomy principles to footwear production

## 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 MSTFP3006 Apply foot anatomy principles to footwear production

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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), safe work practices and other reference material
- applying relevant standards
- identifying foot structure and function
- identifying footwear features and function
- identifying at least five (5) different footwear products and relating their functions and features to the anatomy of the foot
- identifying the effect of poor-fitting or poorly made shoes
- assessing the impact of footwear features
- identifying medical or surgical conditions that may require referral to a specialist practitioner
- identifying quality processes used in workplace to ensure production of optimal footwear products.

## Knowledge Evidence

Evidence must be provided that demonstrates knowledge of:

- safe work practices and procedures and use of personal protective equipment (PPE)
- relevant Australian Standards
- structures and function of the foot:
  - muscles
  - bones
  - ligaments
  - joints
  - circulation systems
  - nervous system
- role and function of the foot:
  - balance
  - walking
  - standing

- running
- climbing
- specific sports
- kicking
- jumping
- features and function of footwear:
  - steel caps
  - moulded soles
  - heels
  - reinforcement
  - lining
  - laces and buckles
  - elastic sides
  - size
  - shape
- types of footwear and their relationship to anatomy of the foot:
  - safety boots
  - work boots and shoes
  - fashion shoes
  - everyday wear shoes
  - walking boots and shoes
  - sport shoes
- footwear production processes
- surgical and medical conditions:
  - injuries
  - health conditions, such as diabetes
  - amputations
  - diseases affecting the foot or ankle
  - sizing
  - foot muscle and structural features
  - deformities
- quality features of footwear production processes.

## 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 applying foot anatomy principles to footwear production, 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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