

## Input garment patterns into a clothing CAD/CAM system and plot patterns

**Level** 3

**Credits** 3

**Purpose** People credited with this unit standard are able to: demonstrate knowledge of a clothing CAD/CAM system and prepare for pattern input; obtain and check patterns to be input; input patterns into a clothing CAD/CAM system; set up plotter; and plot patterns.

**Subfield** Clothing Manufacture

**Domain** Apparel Design and Patternmaking

**Status** Registered

**Status date** 19 June 2009

**Date version published** 19 June 2009

**Planned review date** 31 December 2015

**Entry information** Open.

**Accreditation** Evaluation of documentation and visit by NZQA and industry.

**Standard setting body (SSB)** Competenz

**Accreditation and Moderation Action Plan (AMAP) reference** 0030

This AMAP can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

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### Special notes

- 1 Any clothing CAD/CAM (Computer Aided Design, Computer Aided Manufacturing) system is acceptable for this unit standard, but candidates being assessed against this unit standard need to be aware that being able to input patterns to any one system may or may not give them the knowledge to input to a different type of system.
- 2 **Definitions**  
*Digitising patterns* into the system refers to using a mouse and/or digitiser. On systems where the pattern is scanned in, notches and high points will be input automatically.

*Workplace procedures* refer to the verbal or documented procedures for performing work activities and include health and safety, operational, environmental, and quality management requirements. They may refer to manuals, manufacturer's specifications, codes of practice, or policy statements.

*Product, style or garment specifications* are all terms for the same document. The terminology varies between workplaces but they all refer to the documentation that accompanies each manufacturing order. This documentation sets out the material to be used for the garment, the size range for manufacturing, the product assembly sequence, product finishing procedures and the component specifications.

- 3 Performance of the elements must comply with the Health and Safety in Employment Act 1992.

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## Elements and performance criteria

### Element 1

Demonstrate knowledge of a clothing CAD/CAM system and prepare for pattern input.

#### Performance criteria

- 1.1 Component parts of the system are described in terms of their functions.  
  
Range central processing unit (CPU), digitising board or scanner, digitiser, keyboard, display unit, plotter, printer.
- 1.2 Files are created and existing files are opened according to system requirements.
- 1.3 Pattern numbering and piece identification are described according to workplace procedures.

### Element 2

Obtain and check patterns to be input.

#### Performance criteria

- 2.1 Pattern comments are determined from the style specifications.
- 2.2 Grain lines and/or directional marking restrictions are confirmed from the style specifications.
- 2.3 Patterns needing to be duplicated for a garment are identified from the style specifications.
- 2.4 Total number of pattern pieces for garment meet the style specifications.
- 2.5 Sizes of patterns supplied are established before input according to job instructions.

### **Element 3**

Input patterns into a clothing CAD/CAM system.

#### **Performance criteria**

- 3.1 Patterns are securely attached to board or scanner in accordance with workplace procedures.
- 3.2 Notches and/or high points are digitised or scanned according to pattern pieces.
- 3.3 Pattern pieces are identified according to system procedures.
- 3.4 Pattern pieces are marked for size and style according to system procedures.
- 3.5 Number of pieces input meets style specifications.
- 3.6 File is named and saved according to system and in accordance with workplace procedures.
- 3.7 Documentation is completed in accordance with workplace procedures.

### **Element 4**

Set up plotter.

#### **Performance criteria**

- 4.1 Paper is loaded to plotter according to manufacturer's specifications.
- 4.2 Pens are checked for sufficient ink before plotting and replaced, if required, in accordance with manufacturer's specifications.

### **Element 5**

Plot patterns.

#### **Performance criteria**

- 5.1 Each pattern piece is plotted in accordance with workplace procedures.  
Range full size, miniature.
- 5.2 Plotted patterns match the master.  
Range size, grain direction, notches, drill holes, annotation, shape, number.

### **Please note**

Providers must be accredited by NZQA, or an inter-institutional body with delegated authority for quality assurance, before they can report credits from assessment against unit standards or deliver courses of study leading to that assessment.

Industry Training Organisations must be accredited by NZQA before they can register credits from assessment against unit standards.

Accredited providers and Industry Training Organisations assessing against unit standards must engage with the moderation system that applies to those standards.

Accreditation requirements and an outline of the moderation system that applies to this standard are outlined in the Accreditation and Moderation Action Plan (AMAP). The AMAP also includes useful information about special requirements for organisations wishing to develop education and training programmes, such as minimum qualifications for tutors and assessors, and special resource requirements.

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### **Comments on this unit standard**

Please contact Competenz info@competenz.org.nz if you wish to suggest changes to the content of this unit standard.