



Australian Government

Department of Education, Employment and Workplace Relations

LMTTD5007A Develop textile designs using computer based design programs

Revision Number: 1

LMTTD5007A Develop textile designs using computer based design programs

Modification History

Not applicable.

Unit Descriptor

Unit descriptor This unit covers the skills and knowledge required to use a range of computer based design programs, equipment and computing technology to generate, produce and manufacture computer aided designs for textile products.

Application of the Unit

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The unit applies to the creation of designs and production specifications for woven, knitted or printed textiles, tapestries, and experimental textile products using computer based programs and equipment.

This unit requires the use of computers. If training in the use of computers is required then the unit LMTGN2009A Operate computing technology in a textiles, clothing and footwear workplace should also be selected.

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

The application of this unit is according to OHS practices of the enterprise and workplace practices which may include:

- requirements prescribed by legislation, awards agreements and conditions of employment
- standard operating procedures
- 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

This unit requires the application of skills associated with communication to interpret and apply technical information and develop documented design specifications. The use of computing technology and programs is central to this unit. Initiative and enterprise, planning and organising and problem solving will be used to create design concepts, patterns and specifications.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisites

Employability Skills Information

Employability Skills This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Not applicable.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1 Analyse brief for textile product	1.1 Textile <i>design specifications</i> are identified and interpreted 1.2 <i>Product considerations</i> and <i>production requirements</i> are identified
2 Select and use design tools	2.1 Suitable <i>programs and equipment</i> are identified 2.2 Design programs and equipment are used to create required designs, and production specifications 2.3 Design programs and equipment are used to modify and edit designs, or production specifications 2.4 Design programs and equipment are used to test designs, patterns and production specifications 2.5 Design programs and equipment are used in accordance with <i>OHS practices</i>
3 Examine design results	3.1 Outputs generated using electronic design programs are assessed against design specifications and production requirements 3.2 Outputs are presented to appropriate personnel to assess accuracy and completeness 3.3 Improvements are made as required
4 Maintain electronic design systems	4.1 Designs, patterns or production specifications are created, stored, organized and protected according to workplace practices 4.2 Design programs and equipment are used, maintained and stored according to workplace practices

Required Skills and Knowledge

This describes the essential skills and knowledge and their level, required for this unit.

Demonstrates knowledge of:

- relevant OHS legislation, codes of practice, policies and procedures
- principles of design
- electronic equipment and program features
- editing tools and procedures
- operating procedures
- product production requirements
- quality standards
- workplace practices
- reporting procedure
- OHS practices including hazard identification and control measures associated with computing use
- quality practices
- workplace practices
- recording and reporting practices

Demonstrates skill to:

- receive and interpret design brief
- maintain accurate work records in accordance with workplace practices
- use required electronic and program functions
- carry out work in accordance with OHS policies and procedures
- meet work specifications
- communicate effectively within the workplace
- interpret and apply defined procedures
- read, interpret and follow information on job instructions, specifications, standard operating procedures, patterns, charts, tickets, order forms and other applicable reference material
- sequence operations
- clarify and check task related information
- maintain accurate records
- communicate within the workplace
- sequence operations
- meet specifications
- clarify and check task-related information
- carry out work according to OHS practices

Evidence Guide

The Evidence Guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for the Training Package.

Critical aspects of evidence to be considered	Demonstrates skills and knowledge to: • plan work tasks to achieve specifications • prepare workstation and work prior to commencing operations • use electronic tools and equipment • use software programs • apply workplace OHS practices in work operations • maintain accurate records
Consistency in performance	Consistently applies skills and knowledge when: • organising work • completing tasks • identifying improvements • using workplace practices • using OHS practices • recording and reporting accidents and incidents • assessing operational readiness of equipment used and work processes • recognising and adapting to cultural differences in the workplace, including modes of behaviour and interactions • completing work systematically with attention to detail without damage to goods and equipment
Resource implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Context for assessment	Assessment may occur on the job or in an appropriately simulated environment.
Interdependent assessment	This unit may be assessed independently or in combination with other relevant units.

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the Performance Criteria, is detailed below. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts.

Legislative/regulatory requirements	All work must comply with relevant Federal and State or Territory legislative or regulatory requirements.
Design specifications may include	• colour • style details • fabric, fibre and quantity • production requirements • special effects or features • quality criteria • sizing • finishing details • presentation
Product considerations may include	• product outcome or end-use woven fabrics, tapestry works, knitted fabrics, digitally printed fabrics • quality standards • colours and trends • environmental factors
Programs and equipment may include	• computer • software programs, eg Illustrator, Photoshop, Scotweave, Lectra, WeaveMaker, DesignerKnit, Internet • hardware peripherals such as: • colour scanners • laser or inkjet printers (film output, film separations) • drawing tablets • drawing tablet • data projector • specialised equipment: • direct digital textile printer • industrial knitting machine • electronic jacquard loom • networked file storage and back-up devices • trade journals and trend information
OHS practices	OHS practices must include hazard identification and control, risk assessment and implementation of risk reduction measures specific to the tasks described by this unit and may include:

- manual handling techniques
- standard operating procedures
- personal protective equipment
- safe materials handling
- taking of rest breaks
- ergonomic arrangement of workplaces
- following marked walkways
- safe storage of equipment
- housekeeping
- reporting accidents and incidents
- other OHS practices relevant to the job and enterprise

Unit Sector(s)

Sector Textile Design and Development