





SEG Awards Level 4 Diploma in Technical Textiles and Apparel

Wales - C00/0615/6

### **About Us**

At the Skills and Education Group Awards we continually invest in high quality qualifications, assessments and services for our chosen sectors. As a UK leading sector specialist we continue to support employers and skills providers to enable individuals to achieve the skills and knowledge needed to raise professional standards across our sectors.

Skills and Education Group Awards has an on-line registration system to help customers register learners on its qualifications, units and exams. In addition it provides features to view exam results, invoices, mark sheets and other information about learners already registered.

The system is accessed via a web browser by connecting to our secure website using a username and password: Skills and Education Group Awards Secure Login

### **Sources of Additional Information**

The Skills and Education Group Awards website <a href="https://www.skillsandeducationgroupawards.co.uk">www.skillsandeducationgroupawards.co.uk</a> provides access to a wide variety of information.

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### **Specification Code, Date and Issue Number**

The specification code is D2157-C4 and D2158-C4

Version	Date	Details of change
6.3	June 2022	Update of qualification review date
6.4	July 2022	Addition of Welsh regulation
6.5 October 2022		New front page
6.6	July 2023	Removal of Ofqual and CCEA regulation
6.7	December 2024	Updated UKFT Logo

This guide should be read in conjunction with the Indicative Content document **version 1.1** which is available on our secure website using the link above.

Version 6.7 Page **2** of **88** 

## **Contents**

Abo	out Us	. 2
Cor	ntents	. 3
Inti	roduction	. 5
Pre	-requisites	. 5
Aim	าร	. 5
Tar	get Group	. 5
Qua	alification Structure and Rules of Combination	. 5
Pra	ctice Assessment Material	. 8
Tea	aching Strategies and Learning Activities	. 8
Pro	gression Opportunities	. 8
Tut	or/Assessor Requirements	. 9
Lan	nguage	. 9
Qua	alification Summary	10
Uni	t Details	11
	Managing Health and Safety and Employment Rights and Responsibilities within the Textile Industry	. 12
	Fibres and Technical Textiles	. 14
	General Textile Technology	. 17
	Fire and Heat Resistance in Textile Applications	. 20
	Stain Resistance in Textile Applications	. 22
	Ultra-Violet Resistance in Textile Applications	. 24
	Fabric Wear and Durability of Textile Products	. 27
	Anti-Microbial Applications for Textile Products	. 29
	Breathability in Textile Products	. 31
	Anti-Static and Conductive Textiles	. 33
	Biodegradable Textiles	. 35
	Managing Quality Standards: Textile Production	. 37
	Managing Own Relationships within Textile Production	. 39
	Aspects of Design within the Textile Industry	. 41
	Professional Practice / Preparation for Employment within the Textile Industry	. 42
	Manage Information for Action within the Textile Industry	. 43
	Planning for Textile Production	
	Managing Customer Relations within the Apparel, Footwear or Leather Industry	. 47
	Portfolio Management of New Products	. 49
	Planning and Managing the Outsourcing Process in Manufacturing	. 52

Version 6.7

Page **3** of **88** 

	Outsourcing Costs in Manufacturing	55
	Strategic Marketing Planning Skills within the Design and Creative Industries	56
	Business Planning and Financial Projections in the Design and Creative Industries	58
	Design Development, Creativity and Business Development	60
	Leadership and People Management in the Design and Creative Industries	62
	Intellectual Property Management in the Design and Creative Industries	64
	Design Project Management for Creative Practitioners	66
	Doing Business Globally	68
	Finance for Designers and Creatives	70
	Managing Quality Standards within Apparel, Footwear or Leather Production	72
	Managing Own Working Relationships within Apparel, Footwear or Leather Production	74
	Professional Practice / Preparation for Employment within the Apparel, Footwear or Leather Industry	7 <i>6</i>
	Managing Information for Action within the Apparel, Footwear or Leather Industry	77
	Aspects of Design within the Apparel, Footwear or Leather Industry	79
	Manufacturing Techniques within Apparel Production	80
	Materials used in the Manufacture of Apparel	82
	Investigate Markets, Materials and Styles	84
Red	cognition of Prior Learning (RPL), Exemptions, Credit Transfers and Equivalencies	.86
Exe	emptions	.87
Εqι	uivalencies	.87
Cer	rtification	.87
Glo	ossary of Terms	.88

This is a live document and as such will be updated when required. It is the responsibility of the approved centre to ensure the most up-to-date version of the Qualification Guide is in use. Any amendments will be published on our website and centres are encouraged to check this site regularly.

Version 6.7 Page **4** of **88** 

### **Introduction**

The SEG Awards Level 4 Diploma in Technical Textiles and Apparel has been developed in response to developments in terms of new technologies e.g., stain resistant and fire-resistant treatments. Industry and HE have worked closely with Skills and Education Group Awards on this development.

### **Pre-requisites**

There are no formal entry requirements, but learners may be able to demonstrate the prior skills and knowledge developed in relevant employment or voluntary activities. New learners in the fashion and textiles sector must have an understanding of different technologies, alongside general knowledge and 'soft' skills.

Skills and Education Group Awards expects approved centres to recruit with integrity on the basis of a trainee's ability to contribute to and successfully complete all the requirements of a unit(s) or the full qualification.

### **Aims**

The SEG Awards Level 4 Diploma in Technical Textiles and Apparel aims to develop learners' understanding and skills in new technologies such as stain resistant and fire-resistant treatments in the textiles sector.

### **Target Group**

This qualification is designed for those learners who are working in the sector who need to upskill or those who are new to the sector at 18/19+.

### **Qualification Structure and Rules of Combination**

Rules of Combination: Level 4 Diploma in Technical Textiles and Apparel Learners must achieve a minimum of 90 credits from one pathway.

**Technical Textiles Pathway:** Learners must achieve 25 credits from Group A Mandatory units and a minimum of 65 credits from the Optional units in Groups B and C. 48 credits must come from Group B. The remaining 17 credits can come from units in either Group B or C.

**Product Development and Sourcing Pathway:** Learners must achieve 7 credits from Group D Mandatory Units and a minimum of 83 credits from the Optional Units in Groups E and F. 52 credits must come from Group E. The remaining 31 credits can come from units in either Groups E or F.

Version 6.7 Page **5** of **88** 

Unit	Unit Number	Level	Credit Value	GL
Technical Textiles Pathway				
Group A Mandatory Units  Managing health and safety and				
employment rights and responsibilities within the textile industry	H/502/6299	3	7	40
Fibres and technical textiles	T/505/6892	4	9	40
General textile technology	R/502/2264	3	9	80
Group B Optional Units				
Fire and heat resistance in textile applications	A/504/2668	4	8	40
Stain resistance in textile applications	F/504/2669	4	8	40
Ultra violet resistance in textile applications	T/504/2670	4	8	40
Fabric wear and durability of textile products	A/504/2671	4	8	40
Anti-microbial applications for textile products	F/504/2672	4	8	40
Breathability in textile products	J/504/2673	4	8	40
Anti-static and conductive textiles	L/504/2674	4	8	40
Biodegradable textiles	R/504/2675	4	8	40
Group C Optional Units				
Managing quality standards: textile production	D/502/2266	3	7	60
Managing own relationships within textile production	M/502/6399	3	9	60
Aspects of design within the textile industry	Y/502/6400	3	7	40
Professional practice/preparation for employment within the textile industry	D/502/6401	3	7	40
Manage information for action within the textile industry	K/502/6403	3	8	50
Planning for textile production	F/502/2292	3	7	60

Version 6.7 Page **6** of **88** 

Managing customer relations within the apparel, footwear or leather industry	T/601/7858	3	8	50
Product Development and Sourcing P	athway			
Group D Mandatory Units				
Managing health and safety and employment rights and responsibilities within the textile industry	H/502/6299	3	7	40
Group E Optional Units				
Portfolio management of new products	Y/504/2676	4	8	40
Planning and managing the outsourcing process in manufacturing	D/504/2677	4	8	40
Outsourcing costs in manufacturing	H/504/2678	4	4	10
Strategic marketing planning skills within the design and creative industries	J/501/8387	4	6	40
Business planning and financial projections in the design and creative industries	L/501/8388	4	8	60
Design development, creativity and business development	R/501/8389	4	6	40
Leadership and people management in the design and creative industries	J/501/8390	4	6	40
Intellectual property management in the design and creative industries	L/501/8391	4	7	50
Design project management for creative practitioners	R/501/8392	4	6	40
Doing business globally	Y/501/8393	4	7	50
Finance for designers and creatives	D/501/8394	4	12	90
Group F Optional Units				
Planning for textile production	F/502/2292	3	7	60
Managing customer relations within the apparel, footwear or leather industry	T/601/7858	3	8	50
Managing quality standards within apparel, footwear or leather production	Y/601/7836	3	7	40

Version 6.7 Page **7** of **88** 

Managing own working relationships within the apparel, footwear or leather production	H/601/7838	3	9	60
Professional practice/preparation for employment within the apparel, footwear or leather industry	M/601/7857	3	7	40
Manage information for action within the apparel, footwear or leather industry	T/601/7861	3	8	50
Aspects of design within the apparel, footwear or leather industry	K/601/7856	3	7	40
Manufacturing techniques within apparel production	M/601/7843	3	8	50
Materials used in the manufacture of apparel	D/601/7854	3	8	50
Investigate markets, materials and styles	R/502/0899	3	5	30

### **Practice Assessment Material**

Skills and Education Group Awards confirm that there is no practice assessment material for this qualification.

### **Teaching Strategies and Learning Activities**

Centres should adopt a delivery approach which supports the development of all individuals. The aims and aspirations of all the learners, including those with identified special needs or learning difficulties/disabilities, should be considered and appropriate support mechanisms put in place.

### **Progression Opportunities**

Continued employment with possible opportunities for promotion or progression onto further study/training.

Centres should be aware that Reasonable Adjustments which may be permitted for assessment may in some instances limit a trainee's progression into the sector. Centres must, therefore, inform trainees of any limits their learning difficulty may impose on future progression

Version 6.7 Page **8** of **88** 

### **Tutor/Assessor Requirements**

We require those involved in the assessment process to be suitably experienced and / or qualified. In general terms, this usually means that the assessor is knowledgeable of the subject / occupational area to a level above that which they are assessing.

Assessors should also be trained and qualified to assess or be working towards appropriate qualifications.

Centres must take all reasonable steps to avoid any part of the assessment of a learner (including any internal quality assurance and invigilation) being undertaken by any person who has a personal interest in the result of the assessment.

### Language

These specifications and associated assessment materials are in English only.

Version 6.7 Page **9** of **88** 

## **Qualification Summary**

### Qualification

SEG Awards Level 4 Diploma in Technical Textiles and Apparel (Technical Textiles Pathway) SEG Awards Level 4 Diploma in Technical Textiles and Apparel (Product Development and Sourcing Pathway)

Qualification Purpose	D1. Confirm competence in an occupational role to the standards required							
Age Range	Pre 16	1	.6-18		18+	✓	19+	✓
Regulation	The above qualification is regulated by:  • Qualification Wales							
Assessment	<ul><li>Internal assessment</li><li>Internal and external moderation</li></ul>							
Type of Funding Available	See LARS (L	earnin	g Aims l	Refe	rence Sei	vice)		
Qualification/Unit Fee	See Skills ar current fees			iroup	Awards	web :	site for	
Grading	Pass To achieve a Pass, learners must complete all units as stated in the rule of combination (RoC)							
<b>Operational Start Date</b>	01/12/2013							
Review Date	31/12/2025							
Operational End Date								
<b>Certification End Date</b>								
Guided Learning (GL)	500 – 540 hours							
Total Qualification Time TQT)	<b>900</b> hours							
Credit Value	90							
Skills and Education Group Awards Sector	Sewing and Textiles							
Qualification Wales SSA Sector	4.2 Manufacturing Technologies							
Support from Trade Associations/Stakeholder Support	UKFT							
Administering Office	See Skills and Education Group Awards website							

Version 6.7 Page **10** of **88** 

## **Unit Details**

Version 6.7 Page **11** of **88** 

## Managing Health and Safety and Employment Rights and Responsibilities within the Textile Industry

Unit Reference	H/502/6299		
Level	3		
Credit Value	7		
Guided Learning (GL)	40 hours		
Unit Summary	This unit will enable the learner to understand the legal requirements of employers and employees with regard to health and safety and employment law in the textile sector.  The work will cover the implications of current legislation. This unit will also cover the legal aspects of employment in respect of the individual employee and form part of the induction process to the world of work. Assessment must be linked to the real work environment.		
Learning Outcomes (1 to 6)	Assessment Criteria		
The learner will:	(1.1 to 6.2) The learner can:		
Understand the health and safety requirements for the textile sector	<ol> <li>1.1. For a business in their chosen sector, state the health and safety requirements of employers, as required by current law</li> <li>1.2. State the health and safety responsibilities of employees at each level within the business as required by law</li> <li>1.3. Report how the business manages its obligations to meet current health and safety legislation</li> </ol>		
2. Be able to carry out a risk assessment within the textile sector	<ul> <li>2.1. Carry out a risk assessment <ul> <li>using appropriate documentation</li> <li>identifying and recording hazards</li> <li>ranking hazards identified</li> <li>making recommendations to remove or minimize risk</li> </ul> </li> <li>2.2. Carry out an assessment for COSHH purposes <ul> <li>using appropriate documentation</li> <li>making recommendations to remove or minimize risk</li> </ul> </li> </ul>		

Version 6.7 Page **12** of **88** 

3. Understand the career progression routes available within the textile sector	<ul> <li>3.1. Describe</li> <li>the structure and organisation of the business</li> <li>the main job roles in the business</li> <li>careers paths available</li> </ul>
4. Know about their statutory rights in employment	<ul> <li>4.1. Describe their current statutory rights in relation to</li> <li>Employment Law</li> <li>Contracts of employment</li> <li>Sick pay</li> <li>Work time regulations</li> <li>Holiday entitlement</li> <li>Maternal and paternal leave</li> <li>Data protection</li> </ul>
5. Know about the expectations and relevant procedures in the textile sector	<ul> <li>5.1. Describe the standards of acceptable behaviour in the business</li> <li>5.2. Explain the consequences of not meeting that standard</li> <li>5.3. Describe relevant procedures within the business to include <ul> <li>Performance management</li> <li>Disciplinary procedures</li> <li>Grievance procedures</li> </ul> </li> </ul>
6. Know how to obtain further information about employment issues	<ul><li>6.1. Know where to access information and advice concerning employment</li><li>6.2. Describe the role of Trade Unions in the work place, supporting and advising employees</li></ul>

This unit has been mapped to Manufacturing Textile Products NOS (2010) HS1 Health, safety and security at work

Version 6.7 Page **13** of **88** 

### **Fibres and Technical Textiles**

Unit Reference	T/505/6892
Level	4
Credit Value	9
Guided Learning (GL)	40 hours
Unit Summary	In this unit learners are developing and applying their knowledge of the fibres, yarns and materials that are used in technical textile materials or products. It is relevant across all of the technical textile sectors including, but not limited to: Agrotex (Agricultural Textiles), Mobiltex (Automotive and Aerospace Textiles), Buildtex (Construction Textiles), Clothtex (Clothing Textiles), Geotex (Geo-Textiles), Hometex (Domestic Textiles), Indutex (Industrial Textiles), Oekotex/Ecotex (Environmentally Friendly Textiles), Packtex (Packaging Textiles), Protex (Protective Textiles), Sporttex (Sports Textiles) and Medtex (Medical Textiles).  The unit may be relevant to learners whose job role may involve the following  • researching test methods  • preparing for textile material/product testing  • using standard and non-standard test methods to determine the physical and mechanical properties of textile materials and products  • recording and analysis of test results  • validation and presentation of data  • analysis of material properties and performance for application in new product development  • manufacturing yarns, fibres, fabrics and garments for technical textile applications  Assessment Criteria
Learning Outcomes (1 to 6) The learner will:	(1.1 to 6.2) The learner can:
Understand the technical textiles sector	<ol> <li>1.1. Explain the fibres used and products produced for each technical textile sector</li> <li>1.2. Analyse the present relative volume and value of each of these sectors within the textile industry and the UK economy as a whole, identifying current trends</li> <li>1.3. Explain the impact of current legislation, EU</li> </ol>

Version 6.7 Page **14** of **88** 

	directives and CE marking on the technical textile industry
	1.4. Assess future trends in the technical textile industry
	<ul> <li>2.1. Classify natural and manufactured fibres according to the following</li> <li>organic and inorganic materials</li> <li>natural and synthetic polymers</li> <li>bioabsorbable and biodegradable</li> </ul>
	2.2. Describe the synthesis and molecular structures of polymers used for fibre production
Understand the structure and properties of natural and synthetic fibres	2.3. Explain the difference between the thermoset, elastomer and thermoplastic materials in relation to branched, cross-linked and linear polymer structures
	2.4. Explain the principles of man-made fibre production
	2.5. Explain the importance of amorphous and crystalline regions of fibres to their mechanical, thermal and functional properties
	2.6. Describe the morphologies of bi-component fibres
Understand the importance of the properties of fibre and	<ul> <li>3.1. Explain the qualities of</li> <li>staple fibres and spun yarns</li> <li>filaments and filament yarns</li> </ul>
yarn in relation to their use	3.2. Analyse the appropriateness of fibres for applications relevant to specific business need
	4.1. Describe the methods used for thermal characterisation of fibres, to include DSC, TGA
Understand the range of analytical methods used for	4.2. Describe the optical techniques for studying the morphology and structural features of fibres, yarns and fabrics
fibre identification and assessment for particular applications	4.3. Explain principles of techniques used for identifying fibre molecular structures
	4.4. Describe the spectroscopic techniques used to determine functional chemical groups within the bulk and on the surface of fibres

Version 6.7 Page **15** of **88** 

5. Understand the combined roles of fibre, yarns and fabric structure and properties in relation to the technical textile applications	<ul> <li>5.1. Explain the relation between fabric structural parameters and resulting properties</li> <li>5.2. Evaluate the use of the following structures for specific applications <ul> <li>woven structures</li> <li>knitted structures</li> <li>non-woven structure</li> </ul> </li> </ul>
	6.1. Explain the fundamental principles of unconventional textile finishing methods
6. Understand the finishing techniques and their	6.2. Analyse a chemical finishing technique in terms of

# • cost effectiveness Mapping to National Occupational Standards

applications

Creative National Occupational Standards July 2012:

SKS TTX 1 – Analyse and assess fibres and fabric structures used in technical textiles

• specific end-use requirements

process parameters environmental issues

Version 6.7 Page **16** of **88** 

## **General Textile Technology**

Unit Reference	R/502/2264
Level	3
Credit Value	9
Guided Learning (GL)	80 hours
Unit Summary	The aim of this unit is to introduce learners to the Textile Industry and develop a broad based knowledge of the technical aspects of the major textile manufacturing processes.
Learning Outcomes (1 to 9) The learner will:	Assessment Criteria (1.1 to 9.1) The learner can:
Know about global textile production and trends	<ul> <li>1.1. Identify the yarns and fabrics produced in the following areas <ul> <li>North America</li> <li>South America</li> <li>Europe</li> <li>Asia</li> <li>Africa</li> <li>Pacific rim</li> </ul> </li> <li>1.2. Identify the main types of traditional textile production in the UK and the main regional centres for each type of production</li> </ul>
2. Know about fibre types and their properties	<ul> <li>2.1. Identify the major types of natural and manufactured fibres</li> <li>2.2. Identify the major fibre properties</li> <li>2.3. For each fibre type identified in 2.1, analyse its physical and chemical properties and the factors affecting these</li> </ul>
3. Know about the general principles and production processes of fibre and yarn manufacture	<ul> <li>3.1. Identify the production methods used to produce natural and manufactured fibres</li> <li>3.2. Explain the general principles of staple fibre yarn manufacture</li> <li>3.3. Describe the manufacture of manufactured fibre yarns</li> </ul>

Version 6.7 Page **17** of **88** 

	3.4. Explain yarn count numbering
	3.4. Explain yarn count numbering
	3.5. Explain yarn twist
4. Know about the post-yarn spinning process	<ul> <li>4.1. Describe the following post-yarn spinning processes <ul> <li>yarn winding</li> <li>yarn twisting (doubling or plying)</li> <li>fancy yarn manufacture</li> </ul> </li> <li>4.2. Explain how yarns are prepared for fabric production</li> </ul>
5. Know about the different processes of fabric production used in the textile industry	<ul> <li>5.1. Define and explain <ul> <li>woven fabric structures</li> <li>weaving loom motions</li> </ul> </li> <li>5.2. Define and explain weft knitting</li> <li>5.3. Define and explain warp knitting</li> <li>5.4. Define and explain the principles of lace manufacture</li> <li>5.5. Define and explain narrow fabrics <ul> <li>raschel-crochet</li> <li>weaving</li> <li>braided</li> </ul> </li> <li>5.6. Identify the manufacturing systems used to produce non-woven structures and explain their end uses</li> <li>5.7. Define and explain carpet production <ul> <li>woven - Wilton and Axminster</li> <li>tufted</li> <li>bonded</li> <li>knitted</li> </ul> </li> </ul>
6. Know about finishing and dyeing processes	<ul> <li>6.1. Define and explain the following finishing processes for textiles <ul> <li>wet finishing</li> <li>dry finishing</li> <li>chemical / functional finishes</li> </ul> </li> <li>6.2. Define and explain the following areas of dimensional stability <ul> <li>methods used for setting fabrics</li> <li>dimensional stability</li> </ul> </li> <li>6.3. Define and explain the following areas of textile colouration</li> </ul>

Version 6.7 Page **18** of **88** 

	<ul><li>dyehouse services</li><li>dyeing techniques</li><li>dyeing machinery</li><li>printing</li></ul>
7. Know about garment production	7.1. Classify garment production  • production sequencing and make-up
8. Know about technical textiles	8.1. Identify the major technical textiles and explain their uses
9. Know about basic production planning methods	<ul> <li>9.1. Identify the areas where to ensure effective production planning</li> <li>customer liaison</li> <li>planning systems</li> </ul>

This unit has been mapped to Manufacturing Textile Products NOS MTP8, MTP11, MTP27

Version 6.7 Page **19** of **88** 

## **Fire and Heat Resistance in Textile Applications**

Unit Reference	A/504/2668
Level	4
Credit Value	8
Guided Learning (GL)	40 hours
Unit Summary	In this unit, learners will develop and apply knowledge of the fibres, yarns and materials that are used in technical textile materials or products in relation to fire and heat resistance.  The unit links to job roles which may involve  • researching test methods  • preparing for textile material/product testing  • using standard and non-standard test methods to determine the physical and mechanical properties of textile materials and products  • recording and analysis of test results  • validation and presentation of data  • analysis of material properties and performance for application in new product development  • manufacturing yarns, fibres, fabrics and garments for technical textile applications
Learning Outcomes	Assessment Criteria
(1 to 4)	(1.1 to 4.2)
The learner will:	The learner can:
Understand ignition and combustion processes in relation to textile materials	<ul> <li>1.1. Explain the combustion cycle and how it can be inhibited</li> <li>1.2. Explain how the following stages relate to the combustion process <ul> <li>ignition temperature</li> <li>melt temperature/melting point</li> <li>heat release/heat of combustion</li> <li>limiting oxygen index</li> <li>smoke emission</li> <li>toxicity of combustion gases</li> <li>flame spread</li> </ul> </li> <li>1.3. Explain the characteristics of polymers and fibres in relation to combustion and heat resistance performance</li> </ul>

Version 6.7 Page **20** of **88** 

	<ul><li>1.4. Explain the standard analytical techniques which could be used to evaluate polymer and fibre thermal characteristics</li><li>1.5. Explain techniques used to inhibit combustion of textile material</li></ul>
Understand the materials processing technologies for producing fire and heat resistant textile products	<ul> <li>2.1. Explain the uses of fire and heat resistant textile products</li> <li>2.2. Explain the methods of production of fire and heat resistant textile products</li> <li>2.3. Explain the current product and manufacturing legislation and industry best practice which impacts on processes to inhibit combustion of textile material</li> </ul>
3. Be able to carry out standard material combustion testing to meet a given brief relating to the use of combustion/heat resistant treatments of textile products	<ul> <li>3.1. Prepare textile materials for combustion/heat resistance testing to meet the brief</li> <li>3.2. Carry out standard material combustion tests in accordance with recognised standard procedures</li> <li>3.3. Justify choice of test method/s used</li> <li>3.4. Record findings in accordance with organisational policies and procedures in line with appropriate quality standards</li> <li>3.5. Comply with health and safety requirements and procedures</li> </ul>
4. Be able to report findings to meet a given brief relating to the use of combustion/heat resistant treatments of textile products	<ul> <li>4.1. Analyse findings from testing to evaluate polymer and fibre thermal characteristics in relation to combustion/heat resistance</li> <li>4.2. Present recommendations in accordance with organisational policies and procedures in line with appropriate quality standards to meet the brief</li> </ul>

Creative National Occupational Standards July 2012:

SKS TTX 2 – Analyse and assess the fire and heat resistance of materials for technical textile applications

Version 6.7 Page **21** of **88** 

## **Stain Resistance in Textile Applications**

Unit Reference	F/504/2669
Level	4
Credit Value	8
Guided Learning (GL)	40 hours
Unit Summary	In this unit, learners will develop and apply knowledge of preventing textile materials and products from becoming stained during manufacture or use. They will explore the interaction of liquid and solid materials with a textile in the function of stain resistance.  The unit links to job roles which may involve  • researching fabric production methods that affect stain resistance  • researching surface or intrinsic finishes used to impart stain resistance  • preparing textile materials for stain resistance testing  • applying knowledge in using standard and non-standard test methods to determine the stain resistance properties of a material or product  • recording and analysis of test results  • validation and presentation of data  • analysis of material stain resistance properties and performance for application in new product development
Learning Outcomes (1 to 5)	Assessment Criteria (1.1 to 5.2)
The learner will:	The learner can:
Understand how solid and liquid staining occurs in textile materials and products	<ol> <li>1.1. Explain how fibre, yarn, fabric, finish and structural parameters influence the stainability of a textile material</li> <li>1.2. Identify the properties of the most common textile staining materials</li> <li>1.3. Explain the process by which a liquid can interact with a textile product to result in staining</li> </ol>
	1.4. Explain the process by which a solid can interact with a textile product resulting in staining

Version 6.7 Page **22** of **88** 

2. Understand the finishes used to provide stain resistant textile materials and products	<ul> <li>2.1. Analyse the advantages and disadvantages of a range of stain resistant finishes</li> <li>2.2. Explain the standard testing techniques which could be used to evaluate stain resistance performance</li> <li>2.3. Explain the current product and manufacturing legislation and industry best practice which impacts on processes relating to stain resistance of textile material and products</li> </ul>
3. Understand the materials processing technologies for producing stain resistant textile products	<ul> <li>3.1. Explain the methods of production of stain resistant textiles to include</li> <li>finishing processes</li> <li>fibre production</li> <li>3.2. Explain what are the uses of stain resistant textiles</li> </ul>
4. Be able to carry out standard stain resistance testing to meet a given brief relating to the use of stain resistant treatments of textile products	<ul> <li>4.1. Prepare textile materials for stain resistance testing to meet the brief</li> <li>4.2. Carry out standard stain resistance tests in accordance with recognised standard procedures</li> <li>4.3. Justify choice of test method/s used</li> <li>4.4. Record findings in accordance with organisational policies and procedures in line with appropriate quality standards</li> <li>4.5. Comply with health and safety requirements and procedures</li> </ul>
5. Be able to report findings to meet a given brief relating to the use of stain resistant treatments of textile products	<ul><li>5.1. Analyse findings from testing to evaluate stain resistance</li><li>5.2. Present recommendations in accordance with organisational policies and procedures in line with appropriate quality standards to meet the brief</li></ul>

Creative National Occupational Standards July 2012:

SKS TTX 3 – Analyse and assess stain resistant textiles to meet performance requirements

Version 6.7 Page **23** of **88** 

## **Ultra-Violet Resistance in Textile Applications**

Unit Reference	T/504/2670
Level	4
Credit Value	8
Guided Learning (GL)	40 hours
Unit Summary	In this unit, learners will develop and apply their knowledge of UV wave resistance and how it relates to textile materials/products.  The unit links to job roles which may involve  understanding the properties of UV radiation preparing textile materials for UV resistance testing applying knowledge in using standard and nonstandard test methods to determine the UV resistance properties of a material or product recording and analysis of test results validation and presentation of data analysis of material UV resistance properties and performance for application in new product development
Learning Outcomes (1 to 6) The learner will:	Assessment Criteria (1.1 to 6.2) The learner can:
Understand the sources and behaviour of UV radiation	<ul> <li>1.1. Identify sources of UV radiation</li> <li>1.2. Define <ul> <li>UPF rating</li> <li>SPF rating</li> </ul> </li> <li>1.3. Explain factors affecting potency of UV radiation</li> <li>1.4. Explain the interaction of UV rays in the following terms <ul> <li>reflection</li> <li>refraction</li> <li>diffraction</li> <li>scatter</li> <li>absorption</li> </ul> </li> </ul>

Version 6.7 Page **24** of **88** 

2. Understand the requirements of UV resistance in textile products	<ul> <li>2.1. Give examples of textile products where UV resistance is of importance</li> <li>2.2. Explain how UV rays interact with <ul> <li>polymer</li> <li>fibre</li> <li>fabric</li> </ul> </li> <li>2.3. Explain factors which may positively and negatively affect UV protection of a garment</li> <li>2.4. Explain how to increase UV protection</li> <li>2.5. Analyse how UV resistance in textiles varies under different conditions</li> <li>2.6. Explain the standard testing techniques which could be used to evaluate UV resistance</li> </ul>
3. Understand the materials processing technologies for producing UV resistant textile products	<ul> <li>3.1. Explain the uses of UV resistant textiles</li> <li>3.2. Explain the methods of production of UV resistant textiles to include <ul> <li>finishing processes</li> <li>fibre production</li> </ul> </li> <li>3.3. Explain the current product and manufacturing legislation and industry best practice which impact on processes relating to UV resistance of textile products</li> </ul>
4. Be able to measure SPF value of a textile product to meet a given brief	<ul> <li>4.1. Prepare textile materials for SPF testing to meet the brief</li> <li>4.2. Carry out standard SPF tests in accordance with recognised standard procedures</li> <li>4.3. Record findings in accordance with organisational policies and procedures in line with appropriate quality standards</li> <li>4.4. Comply with health and safety requirements and procedure</li> </ul>
5. Be able to measure UPF value of a textile product to meet a given brief	<ul><li>5.1. Prepare textile materials for UPF testing to meet the brief</li><li>5.2. Carry out standard UPF tests in accordance with recognised standard procedures</li></ul>

Version 6.7 Page **25** of **88** 

	<ol> <li>Record findings in accordance with organisational policies and procedures in line with appropriate quality standards</li> </ol>
	5.4. Comply with health and safety requirements and procedure
6. Be able to report findings to meet a given brief relating to	6.1. Analyse findings from testing to evaluate UV resistance
UV resistance treatments of textile products	6.2. Present recommendations in accordance with organisational policies and procedures in line with appropriate quality standards to meet the brief

Creative National Occupational Standards July 2012: SKS TTX 4 – Analyse and assess the UV resistance of textile materials

Version 6.7 Page **26** of **88** 

## **Fabric Wear and Durability of Textile Products**

Unit Reference	A/504/2671
Level	4
Credit Value	8
Guided Learning (GL)	40 hours
Unit Summary	In this unit, learners will develop and apply their knowledge of the wear performance of textile materials that are used in technical textile materials or products and the developments to improve their durability.  The unit links to job roles which may involve  • researching existing and new test methods  • preparing for textile material/product testing  • using standard and non-standard test methods to determine the physical and mechanical properties of textile materials and products  • recording and analysis of test results  • validation and presentation of data  • analysis of material wear properties and performance for application in new product development
Learning Outcomes	Assessment Criteria (1.1 to 5.2)
(1 to 5) The learner will:	The learner can:
Understand factors and behaviours which lead to wear of textile products	<ol> <li>1.1. Explain the mechanics of fabric deformation</li> <li>1.2. Explain the importance of fibre morphology</li> <li>1.3. Explain the effect of visco-elastic properties of fibres and yarn</li> <li>1.4. Explain the basic theory of moisture sorption in fibres and how differential shrinkage can cause fabric wrinkle</li> </ol>
Understand how to increase durability of textile products	<ul><li>2.1. Explain the standard physical and mechanical testing methods which could be used to measure durability of textile products</li><li>2.2. Describe typical finishing treatments and chemicals used for improving fabric durability</li></ul>

Version 6.7 Page **27** of **88** 

	3. Understand the materials processing technologies for increasing durability of textile products	<ul> <li>3.1. Explain the methods of production used to increase durability of textile products to include</li> <li>finishing processes</li> <li>fibre production</li> <li>3.2. Explain the current industry best practice which impacts on processes relating to durability of textile products</li> </ul>
	4. Be able to carry out standard tests to measure durability of textile products to meet a given brief relating to the use of treatments to increase durability of textile products	<ul> <li>4.1. Prepare textile materials for durability testing to meet the brief</li> <li>4.2. Carry out standard durability tests in accordance with recognised standard procedures</li> <li>4.3. Justify choice of test method/s used</li> <li>4.4. Record findings in accordance with organisational policies and procedures in line with appropriate quality standards</li> <li>4.5. Comply with health and safety requirements and procedures</li> </ul>
	5. Be able to report findings to meet a given brief relating to the use of treatments to increase durability of textile products	<ul><li>5.1. Analyse findings from testing to evaluate durability of textile products</li><li>5.2. Present recommendations in accordance with organisational policies and procedures in line with appropriate quality standards to meet the brief</li></ul>

Creative National Occupational Standards July 2012: SKS TTX 5 – Analyse and assess the wear and durability of textile fabrics

Version 6.7 Page **28** of **88** 

## **Anti-Microbial Applications for Textile Products**

Unit Reference	F/504/2672
Level	4
Credit Value	8
Guided Learning (GL)	40 hours
Unit Summary	In this unit, learners will develop and apply their knowledge of anti-microbial fibres and chemical additives for textiles.  The unit links to job roles which may involve  understanding the behaviour of microorganisms  understanding the interaction between textile materials and anti-microbial agents  applying knowledge of anti-microbial treatments to different textile materials/products  applying anti-microbial treatments to textile materials or products  analysis of material anti-microbial properties and performance for application in new product development
Learning Outcomes (1 to 5) The learner will:	Assessment Criteria (1.1 to 5.2) The learner can:
Understand the ways in which micro-organisms interact with textile materials	<ul> <li>1.1. Describe the properties of groups of microorganisms</li> <li>1.2. Explain the mechanisms by which micro-organisms may be transferred to textile products</li> <li>1.3. Explain the impact that micro-organisms may have on textile products</li> <li>1.4. Explain how the following interactions impact on micro-organism presence in textile materials <ul> <li>wetting</li> <li>wicking</li> <li>water vapour transfer</li> </ul> </li> </ul>
Understand the application of anti-microbial agents for textile products	2.1. Identify a range of anti-microbial agents suitable for textile application

Version 6.7 Page **29** of **88** 

	2.2. Explain the test procedures for evaluating antimicrobial agents
	2.3. Explain the testing of the durability of anti- microbial agents in a textile product
	2.4. Explain the uses of textile products treated with anti-microbial agents
	<ul> <li>2.5. Analyse the implications of anti-microbial treatments for the following at the present and in the future <ul> <li>the environment</li> <li>health care</li> <li>technology</li> </ul> </li> </ul>
3. Understand the materials processing technologies used to apply anti-microbial agents to textile products	<ul> <li>3.1. Explain the production methods used in applying anti-microbial agents to textiles to include <ul> <li>finishing processes</li> <li>fibre production</li> </ul> </li> <li>3.2. Explain the current product and manufacturing legislation and industry best practice which impacts on processes relating to the application of anti-microbial agents to textile products</li> </ul>
4. Be able to carry out standard tests to assess the antimicrobial properties to meet a given brief relating to the use of anti-microbial treatment of textile products	<ul> <li>4.1. Prepare textile materials for anti-microbial testing to meet the brief</li> <li>4.2. Carry out standard anti-microbial tests in accordance with recognised standard procedures</li> <li>4.3. Justify choice of test method/s used</li> <li>4.4. Record findings in accordance with organisational policies and procedures in line with appropriate quality standards</li> <li>4.5. Comply with health and safety requirements and procedures</li> </ul>
5. Be able to report findings to meet a given brief relating to anti-microbial treatment of textile products	<ul><li>5.1. Analyse findings from testing to evaluate antimicrobial properties</li><li>5.2. Present recommendations in accordance with organisational policies and procedures in line with appropriate quality standards to meet the brief</li></ul>
Mapping to National Occupation	nal Standards

Creative National Occupational Standards July 2012:

SKS TTX 6 – Analyse and assess anti-microbial materials for textile applications

Version 6.7 Page **30** of **88** 

## **Breathability in Textile Products**

Unit Reference	J/504/2673
Level	4
Credit Value	8
Guided Learning (GL)	40 hours
Unit Summary	In this unit, learners will develop and apply their knowledge of breathable textiles.  The unit links to job roles which may involve  understanding the principles of breathability in relation to textile products  applying knowledge of textile characteristics related to breathability  carrying out tests to determine the breathability performance of textile materials  analysis of material breathability for application in new product development
Learning Outcomes	Assessment Criteria
(1 to 5) The learner will:	(1.1 to 5.2) The learner can:
Understand the function of breathability in textile products	<ol> <li>1.1. Define breathability in textiles</li> <li>1.2. Explain why breathability is important in apparel/skin contact applications</li> <li>1.3. Analyse the effects of breathability on human performance</li> <li>1.4. Explain the standard tests for analysing breathability of textile products</li> <li>1.5. Analyse the advantages and disadvantages of micro-porous/hydrophilic coatings and laminations in relation to functionality and durability</li> <li>1.6. Analyse how to maximise and minimise air permeability in textile structures</li> </ol>
Understand the thermoregulation process and water vapour transfer	<ul><li>2.1. Explain the reasons for and occurrence of water vapour production by the human body</li><li>2.2. Explain the mechanism of water vapour transfer</li></ul>

Version 6.7 Page **31** of **88** 

	<ul><li>2.3. Explain the pressure temperature relationship of water vapour</li><li>2.4. Explain the saturation vapour pressure</li></ul>
3. Understand the materials processing technologies to produce breathable textile products	<ul> <li>3.1. Explain the methods used in the production of breathable textile products to include</li> <li>finishing processes</li> <li>fibre production</li> <li>3.2. Explain the current product and manufacturing legislation and industry best practice which impact on processes relating to the application of breathability to textile products</li> </ul>
4. Be able to carry out standard tests to meet a given brief relating to breathability performance of textile products	<ul> <li>4.1. Prepare textile materials for breathability performance testing to meet brief</li> <li>4.2. Carry out standard breathability performance tests in accordance with recognised standard procedures</li> <li>4.3. Justify choice of test method/s used</li> <li>4.4. Record findings in accordance with organisational policies and procedures in line with appropriate quality standards</li> <li>4.5. Comply with health and safety requirements and procedures</li> </ul>
5. Be able to report findings to meet a given brief relating to treatment of textile products to enhance breathability	<ul><li>5.1. Analyse findings from testing to evaluate breathability performance</li><li>5.2. Present recommendations in accordance with organisational policies and procedures in line with appropriate quality standards to meet the brief</li></ul>

Creative National Occupational Standards July 2012: SKS TTX 7 – Analyse and develop the breathability of textile materials

Version 6.7 Page **32** of **88** 

## **Anti-Static and Conductive Textiles**

Unit Reference	L/504/2674
Level	4
Credit Value	8
Guided Learning (GL)	40 hours
Unit Summary	In this unit, learners will develop and apply knowledge of anti-static and conductive textiles.  The unit links to job roles which may involve  • researching and applying anti-static finishes to textile materials  • understanding the classification of textile materials in terms of their dielectric properties, electrical conductivity, electrical resistance and electrostatic propensity  • utilising standard test methods to determine the conductivity of textile materials  • applying knowledge of electrical characteristics to develop new products
Learning Outcomes (1 to 5)	Assessment Criteria (1.1 to 5.2)
The learner will:	The learner can:
Understand static in textile materials and products	<ul> <li>1.1. Explain the meaning of dielectric constant</li> <li>1.2. Explain the dielectric characteristics of polymers, fibres and fabrics to include <ul> <li>the relationship between the dielectric effect and polarisation of electric charges at the molecular scale</li> <li>the effect of fibre type on the dielectric constant</li> <li>the effect of yarn and fabric structure</li> <li>the effect of moisture and temperature</li> </ul> </li> <li>1.3. Explain the importance of the chemical structure of natural and synthetic materials in generation of electrostatic charges on textile substrates</li> </ul>
2. Understand the conductivity of textile materials	<ul> <li>2.1. Explain how the following affect conductivity of fibres</li> <li>chemical structure</li> <li>moisture</li> <li>temperature</li> </ul>

Version 6.7 Page **33** of **88** 

	Explain surface resistance classification
	2.2. Explain the ISO and AATCC test procedures for evaluating the electrical characteristics of textile materials
3. Understand the materials processing technologies for producing conductive and anti-static textile products	<ul><li>3.1. Explain the methods of production of conductive and anti-static textiles</li><li>3.2. Explain the uses of conductive and anti-static textiles</li></ul>
4. Be able to carry out standard tests to determine the electrical characteristics of textile products to meet a given brief relating to treatment of textile products to alter electrical characteristics	<ul> <li>4.1. Prepare textile materials for testing to determine the electrical characteristics to meet brief</li> <li>4.2. Carry out standard tests to determine the electrical characteristics in accordance with recognised standard procedures</li> <li>4.3. Justify choice of test method/s used</li> <li>4.4. Record findings in accordance with organisational policies and procedures in line with appropriate quality standards</li> <li>4.5. Comply with health and safety requirements and procedures</li> </ul>
5. Be able to report findings to meet a given brief relating to the treatment of textile products to alter electrical characteristics	<ul><li>5.1. Analyse findings from testing to determine the electrical characteristics</li><li>5.2. Present recommendations in accordance with organisational policies and procedures in line with appropriate quality standards to meet the brief</li></ul>

Creative National Occupational Standards July 2012:

SKS TTX 8 – Analyse and assess polymeric and inorganic materials for anti-static and conductive textiles

Version 6.7 Page **34** of **88** 

## **Biodegradable Textiles**

Unit Reference	R/504/2675
Level	4
Credit Value	8
Guided Learning (GL)	40 hours
Unit Summary	In this unit, learners will develop and apply knowledge of biodegradable textiles.  The unit links to job roles which may involve
Learning Outcomes (1 to 4)  The learner will:	Assessment Criteria (1.1 to 4.2) The learner can:
Understand the principles of natural biodegradability on polymers and fibres for textile applications	<ol> <li>Define biodegradability</li> <li>Explain the 3 main categories of biodegradable polymers</li> <li>Explain the properties of natural and synthetic biodegradable fibres</li> <li>Explain the impact of weathering and ageing on textile polymers and fibres in relation to biodegradability</li> <li>Explain the contribution the following may have on biodegradation of textile polymers and fibres         <ul> <li>action of enzymes</li> <li>chemical decomposition</li> <li>secretion products of living organisms</li> <li>hydrolytic degradation</li> <li>photo-degradability</li> </ul> </li> <li>Describe the technical issues which have to be considered in the processing of biodegradable materials during conversion to textiles</li> </ol>

Version 6.7 Page **35** of **88** 

	1.7. Explain the ISO, ASTM and AATCC test procedures for evaluating the biodegradability of materials
Understand the commercial availability of biodegradable textile products	<ul><li>2.1. Analyse the availability and use of biodegradable textile products</li><li>2.2. Explain the issues involved in life-cycle analysis in relation to biodegradable textile products</li></ul>
3. Be able to carry out standard degradation tests to meet a given brief relating to the use of biodegradable materials to produce textile products	<ul> <li>3.1. Prepare textile materials for testing biodegradability of materials exposed to solid waste controlled composting conditions</li> <li>3.2. Carry out standard testing biodegradability of materials in accordance with recognised standard procedures</li> <li>3.3. Justify choice of test method/s used</li> <li>3.4. Record findings in accordance with organisational policies and procedures in line with appropriate quality standards</li> <li>3.5. Comply with health and safety requirements and procedures</li> </ul>
4. Be able to report findings to meet a given brief relating to the use of biodegradable materials to produce textile products	<ul> <li>4.1. Analyse findings from testing biodegradability of materials</li> <li>4.2. Present recommendations in accordance with organisational policies and procedures in line with appropriate quality standards to meet the brief</li> </ul>

Creative National Occupational Standards July 2012:

SKS TTX 9 – Analyse and assess the biodegradability of textile polymers and fibres for textile applications

Version 6.7 Page **36** of **88** 

## **Managing Quality Standards: Textile Production**

Unit Reference	D/502/2266
Level	3
Credit Value	7
Guided Learning (GL)	60 hours
Unit Summary	This unit will enable the learner to understand the functions that go into the quality control process. The work will cover the expected quality requirements, common causes of non-standard or reject work and appropriate remedial action that may be taken.  Company procedures for quality monitoring and recording information and dealing with rejects. Also covered will be the importance of suitable ways of communicating with other employees over issues of quality
Learning Outcomes (1 to 3) The learner will:	Assessment Criteria (1.1 to 3.4) The learner can:
Understand the requirements of quality control systems	<ol> <li>1.1. Explain quality management systems and relevant procedures</li> <li>1.2. Interpret and apply relevant quality standards</li> <li>1.3. Explain a company's methods of monitoring product or process quality and taking corrective action</li> </ol>
2. Know about quality testing	<ul><li>2.1. Explain the reasons for performing quality tests</li><li>2.2. Identify standard test methods</li></ul>
3. Know how to perform quality tests	<ul> <li>3.1. Calibrate equipment for testing</li> <li>3.2. Select appropriate textile products, prepare samples and perform the following tests safely <ul> <li>fibre I.D and regain tests</li> <li>fibre diameter and fibre length tests</li> <li>yarn tests – count, twist and strength</li> <li>fabric tests – fabric analysis</li> <li>tensile, pilling, abrasion, crease resistance and colour fastness tests</li> </ul> </li> </ul>

Version 6.7 Page **37** of **88** 

3.3. Identify test methods for flammability
3.4. Record and analyse test results

This unit has been mapped to Manufacturing Textile Products NOS MTP3, MTP6 MTP15, MTP16, MTP24, MTP27, MTP40

Version 6.7 Page **38** of **88** 

## **Managing Own Relationships within Textile Production**

Unit Reference	M/502/6399
Level	3
Credit Value	9
Guided Learning (GL)	60 hours
Unit Summary	This unit will enable the learner to develop skills in managing their own time in the workplace. It will assist the learner to understand and deal with their peer group and managers above their own level of responsibility. They will explore the positive aspects of the role an individual and manager can play within a team. Assessment must be linked to the real work environment.
Learning Outcomes (1 to 6)	Assessment Criteria (1.1 to 6.1)
The learner will:	The learner can:
Understand how to communicate with their colleagues within the workplace	<ul> <li>1.1. Demonstrate the benefits of effective communication in the workplace, which may include <ul> <li>verbal</li> <li>non-verbal</li> <li>internal media</li> <li>external media</li> </ul> </li> </ul>
Be able to minimise     disruption in the workplace     and deal with any problems	2.1. Discuss and deal with problems as they arise to minimise disruption in the workplace
3. Understand the role of an individual in fulfilling the aims of an organisation	3.1. Provide evidence of workplace organisation that demonstrates their own responsibility for maintaining health, safe and productive work conditions that comply with company procedures
4. Be able to undertake professional self-development	<ul><li>4.1. Provide examples of own CPD and action plan to achieve objectives</li><li>4.2. Discuss and verify action plan with a senior manager</li></ul>
5. Be able to make decisions, manage their objectives and activities efficiently	5.1. Produce a document detailing a typical working week, to show evidence of effective time management. This may include reference to

Version 6.7 Page **39** of **88** 

	<ul> <li>agreeing and prioritising own objectives</li> <li>planning own time</li> <li>decision making</li> <li>rescheduling own activities as appropriate</li> </ul>
6. Be able to manage their resources in the workplace	6.1. Manage and maintain their resources in the workplace

- B6 Provide leadership in your area of responsibility
- D2 Develop productive working relationships with colleagues and stakeholders
- A2 (SK1) Manage your own resources and professional development

Version 6.7 Page **40** of **88** 

### **Aspects of Design within the Textile Industry**

Unit Reference	Y/502/6400
Level	3
Credit Value	7
Guided Learning (GL)	40 hours
Unit Summary	This unit covers the various stages in the design process. Learners will learn how mood boards, market research and customer profiling can be used to help develop designs. They will also learn how to communicate their ideas through a variety of drawing and other techniques, and will have the opportunity to develop a number of designs based on the analysis of their own research.  Assessment must be linked to the real work environment.
Learning Outcomes	Assessment Criteria
(1 to 3) The learner will:	(1.1 to 3.1) The learner can:
Understand the sector market and how trends are predicted	1.1. Demonstrate how to predict trends of the sector's market, including  • seasonal trends  • design functions
2. Be able to communicate ideas and technical information through different media	<ul> <li>2.1. Use different media to communicate ideas and technical information, including</li> <li>a research sketch book</li> <li>mood/story boards</li> <li>design development sheets</li> <li>information technology</li> </ul>
3. Be able to select and use a wide range of media to produce a range of fashion illustrations  Mapping to National Occupation	<ul><li>3.1. Present final designs, including</li><li>presentation drawings</li><li>working drawings</li></ul>

#### **Mapping to National Occupational Standards**

Manufacturing Textile Products NOS (2010):

Text 30

Version 6.7 Page **41** of **88** 

# **Professional Practice / Preparation for Employment within the Textile Industry**

Unit Reference	D/502/6401
Level	3
Credit Value	7
Guided Learning (GL)	40 hours
Unit Summary	This unit is designed to help prepare learners for a role within the textile industry. The work will cover current professional practices and the uses of computer-based technology to produce high quality paper based personal presentations.  The work will cover the production of detailed reports and the methods used to present oneself in a business situation.  Assessment must be linked to the real work environment.
Learning Outcomes (1 to 3) The learner will:	Assessment Criteria (1.1 to 3.1) The learner can:
Understand the workings of a company specific to the sector the learner is working/intends to work in	1.1. Produce a report giving an overview of their chosen company
Be able to produce a report to meet a specific task	<ul> <li>2.1. Produce a report which</li> <li>details an item of professional practice in the specific area of expertise investigated by the learner</li> <li>includes any suggested opportunities for improvement which could be made</li> </ul>
3. Be able to produce business contextualised paperwork, giving information about oneself	<ul> <li>3.1. Produce a range of paper based items to be used in a business context, including</li> <li>computer generated CV</li> <li>business card</li> <li>letter of application for a real of fictional position</li> </ul>
Mapping to National Occupation	nal Standards

#### **Mapping to National Occupational Standards**

Manufacturing Textile Products NOS (2010): MSC B1

Version 6.7 Page **42** of **88** 

## **Manage Information for Action within the Textile Industry**

Unit Reference	K/502/6403
Level	3
Credit Value	8
Guided Learning (GL)	50 hours
Unit Summary	This unit will enable the learner to understand the efficient management of information within a given area of responsibility. It covers the gathering of information needed, providing information needed by a team leader, advice to others and the holding of meetings.  Assessment must be linked to the real work environment.
Learning Outcomes (1 to 3) The learner will:	Assessment Criteria (1.1 to 3.3) The learner can:
Understand the importance     to a team leader of gathering     all types of valid information	<ul> <li>1.1. For a given situation, detail the information that would need to be gathered before any action is taken. This should include <ul> <li>the location</li> <li>type</li> <li>validity</li> <li>any problems envisaged in obtaining the documentation</li> </ul> </li> </ul>
2. Understand the importance of effectively communicating the types of information and advice which other people may require	2.1. Demonstrate to employees the principles involved in effective communication to be used in a workplace (shop-floor or office)
3. Understand the factors to be considered when organising, leading and recording the outcomes of meetings	<ul> <li>3.1. Set up, organise and chair a meeting</li> <li>3.2. Produce details of the meeting, including <ul> <li>notice of meeting</li> <li>agenda</li> <li>minutes</li> <li>actions</li> </ul> </li> <li>3.3. Produce a critical self-appraisal as to the choice of the leadership style used and the effectiveness of the meeting</li> </ul>

Version 6.7 Page **43** of **88** 

 $\label{eq:manufacturing} \textit{Manufacturing Textile Production NOS (2010):}$ 

MSC B5 , D2

Version 6.7 Page **44** of **88** 

## **Planning for Textile Production**

Unit Reference	F/502/2292
Level	3
Credit Value	7
Guided Learning (GL)	60 hours
Unit Summary	The aim of this unit is to expand the learner's knowledge and understanding of the production planning process.
Learning Outcomes (1 to 3) The learner will:	Assessment Criteria (1.1 to 3.4) The learner can:
Understand the principles and functions of production planning	<ol> <li>1.1. Explain the importance of specifications and scheduling</li> <li>1.2. Describe the principles of production planning</li> <li>1.3. Explain the processes involved in production planning</li> <li>1.4. Develop a specification to cover customer and production requirements</li> </ol>
2. Understand the resource requirements of production planning	<ul> <li>2.1. Describe the process of carrying out production planning calculations</li> <li>2.2. Calculate the machine capacity for a given textile machine</li> <li>2.3. Evaluate the advantages and disadvantages of JIT, KANBAN and OPT</li> <li>2.4. Produce a production plan for a given textile product / order</li> </ul>
3. Understand the management systems required for production planning	<ul> <li>3.1. Identify the production planning systems used in textile companies</li> <li>3.2. Assess the advantages and disadvantages of the various production systems</li> <li>3.3. Identify any potential problems that can occur in planning and the possible solutions</li> </ul>

Version 6.7 Page **45** of **88** 

3.4. Identify the financial implications involved in production planning and the control systems needed

#### **Mapping to National Occupational Standards**

This unit has been mapped to Manufacturing Textile Products NOS MTP11, MTP18, MTP27, MTP33, MTP40, MTP41, MTP44, MTP45, MTP46

Version 6.7 Page **46** of **88** 

# **Managing Customer Relations within the Apparel, Footwear or Leather Industry**

Unit Reference	T/601/7858
Level	3
Credit Value	8
Guided Learning (GL)	50 hours
Unit Summary	This unit will enable the learner to understand the different ways in which customers need to be handled within the working environment. The unit will cover all types of customer from trade to retail and in face-to-face situations as well as remotely.
Learning Outcomes (1 to 7) The learner will:	Assessment Criteria (1.1 to 7.1) The learner can:
Know the legal requirements and related Acts in respect of sales	1.1. Describe the legal requirements and related Acts in respect of sales
Be able to respond to customer enquiries by telephone and in person	2.1. Respond to customer enquiries by telephone and in person
3. Be able to deal with customers face-to-face	3.1. Demonstrate how to communicate with customers face-to-face
4. Know the products and services that are on offer across the business	4.1. Identify the products and services that their company offers
5. Be able to conduct presentations of products to clients	<ul><li>5.1. Plan and carry out a presentation of products to a peer group</li><li>5.2. Respond to customer questions concerning products</li></ul>
6. Know how to deal with customer/client complaints	6.1. Identify strategies which may be used when dealing with difficult customers making complaints about the products and service the company offers
7. Be able to carry out a complete sale to a range of customers	7.1. Conduct a complete sale to a range of customers. For each sale

Version 6.7 Page **47** of **88** 

- prepare a breakdown of the selling techniques used
- explain how it was modified according to the type of customer

SKSF3v2 – Manage business processes

SKSFL25v2 - Organise the delivery of reliable customer service

SKSFL32v2 - Monitor and solve customer service problems

Version 6.7 Page **48** of **88** 

### **Portfolio Management of New Products**

Unit Reference	Y/504/2676
Level	4
Credit Value	8
Guided Learning (GL)	40 hours
Unit Summary	This unit will enable learners to use a variety of techniques to evaluate new product development proposals and make decisions on which projects to undertake. The decisions made, based on critical success factors, will determine the potential success of proposed projects. Learners will use the agreed weightings to evaluate the project scoring and follow the execution of a project from start to finish.  The unit links to job roles which may involve  • co-ordinating and managing teams involved in proposing new product development projects  • determining which projects should be undertaken and which should not be progressed  • developing assessment categories  • developing weightings to score past and future projects  • calibrating past product successes and failures to check the weightings  • working closely with the marketing team to develop marketing plans  • organising meetings with project managers to discuss scoring  • overseeing teams involved in scoring standardisation  • organising meetings and the relevant paperwork as necessary  • setting targets to complete activities
Learning Outcomes (1 to 4)	Assessment Criteria (1.1 to 4.1)
The learner will:	The learner can:
Understand the processes involved in developing the product portfolio	<ul><li>1.1. Explain the strategic objectives of their business in the context of the global market place</li><li>1.2. Explain how the product life-cycle can impact on the decision making process</li></ul>

Version 6.7 Page **49** of **88** 

	1.3. Assess the advantages and contribution of new product development to a business in producing a balanced portfolio
	1.4. Analyse the risks involved in new product development
	1.5. Explain the advantages and disadvantages of using scoring models to evaluate and assess projects
	1.6. Explain the stages involved in the project execution process which ensure delivery of the project
	1.7. Explain the importance of on-going monitoring and evaluation in the execution of a project
	2.1. Carry out a strategic review of the Portfolio and ensure that spending reflects business strategy
	<ul> <li>2.2. Using a range of portfolio evaluation methods and scoring models determine which projects should be undertaken to include <ul> <li>the creation of evaluation criteria and weightings</li> <li>use of product Critical Success Factors (CSFs)</li> <li>evaluation of past product performance as success or failure in the market place to check the weightings</li> <li>evaluation of costs against available budget</li> </ul> </li> </ul>
Be able to evaluate project ideas to determine which should be progressed	2.3. Work with business management teams to rank and compare projects in the context of the business and the market place
	2.4. Carry out a strategic assessment of the proposed portfolio and make recommendations in line with limits of authority and responsibility
	2.5. Create accurate records in line with their organisation's policies and procedures to ensure that quantitative and qualitative data can be used in the future to improve the quality of the decision making process
	2.6. Communicate with key business functions to ensure that the process is reflected in the delivery of the business plan
3. Be able to execute the project	3.1. Demonstrate that the project execution process has been adopted in a way that ensures quality products are produced on time and in line within budget

Version 6.7 Page **50** of **88** 

	3.2. Communicate with key business functions to ensure that the project execution process is understood and reflected in the delivery of the business plan
	3.3. Identify the job role or department accountable for monitoring and controlling the execution of the process
	3.4. Ensure that each process stage is a discrete identifiable action that allows the management team to make stop / go decisions to build quality into the end product
4. Be able to evaluate the project process	4.1. Conduct post launch evaluation with relevant members of the business management team to measure performance against the original targets

National Occupational Standards for Balanced Sourcing and New Product Development (March 2010)

Version 6.7 Page **51** of **88** 

## Planning and Managing the Outsourcing Process in Manufacturing

Unit Reference	D/504/2677
Level	4
Credit Value	8
Guided Learning (GL)	40 hours
Unit Summary	This unit will enable learners to understand and analyse the business case for outsourcing. It covers the fundamental issues to be considered when deciding to outsource and tendering manufacturing proposals to a number of vendors. It will deal with the complexities of determining and analysing the costs involved in outsourcing and managing the outsourcing process.  The unit links to job roles which may involve  • assessing the need for outsourcing production from overseas  • assessing the need to maintain a degree of manufacturing within the UK  • determining reasons for outsourcing  • assessing vendor capabilities  • evaluating the vendor proposals  • determining which costs may be incurred  • creating cost matrices  • negotiating with vendors over costings  • communicating with people in both companies in a variety of departments (technical, finance, sales, marketing, production)  • facilitating meetings and working relationships  • ensuring that documentation is correct and distributed accordingly  • building relationships between locations  • understanding when to outsource and when to produce textile or apparel products using UK manufacturers  • understanding the relationship between poor forecasting and quick response  • communicating with designers
Learning Outcomes (1 to 3) The learner will:	Assessment Criteria (1.1 to 3.7) The learner can:
Understand the business case for outsourcing	1.1. Define the following terms  • balanced sourcing

Version 6.7 Page **52** of **88** 

	<ul><li>outsourcing</li><li>offshoring</li><li>rapid response</li></ul>
	1.2. Explain the differences between sourcing raw materials, goods and services
	1.3. Analyse the main drivers and trends which influence outsourcing in a global market place
	1.4. Analyse the benefits and risks of outsourcing at strategic and operational level
	1.5. Assess the advantages and disadvantages of outsourcing in order to facilitate the decision on whether to manufacture overseas or in the UK
	1.6. Explain the relationship between poor forecasting and quick response
Be able to assess proposals for outsourcing	2.1. Identify products within their organisation's portfolio that will benefit from outsourcing
	2.2. Create cost matrices, determining which costs may be incurred
	2.3. Assess vendor capabilities for a product or product group
	2.4. Formulate contingency plans in the light of unsuitable vendors
	2.5. Evaluate the vendor proposals for a product or product group
	2.6. Conduct negotiations in relation to costs
	2.7. Complete risk analysis, making recommendations to satisfy the business case
3. Be able to manage the outsourcing process	3.1. Establish the steps required in the outsourcing process
	3.2. Communicate appropriately with the design team and all relevant business functions at senior level
	3.3. Use the stages and key performance measures to monitor and control the outsourcing process
	3.4. Liaise with vendors to ensure required quality, value and delivery plans are met in the right timeframe

Version 6.7 Page **53** of **88** 

- 3.5. Ensure that documentation is completed in line with current legislation and their organisation's policies and procedures
- 3.6. Integrate with the manufacturing plan and business management process
- 3.7. Work with overseas partners as appropriate to comply with relevant legislation and the maintenance of a skilled workforce

National Occupational Standards for Balanced Sourcing and New Product Development (March 2010)

Version 6.7 Page **54** of **88** 

### **Outsourcing Costs in Manufacturing**

Unit Reference	H/504/2678
Level	4
Credit Value	4
Guided Learning (GL)	10 hours
Unit Summary	This unit will enable learners to deal with the complexities of determining and analysing the costs involved in outsourcing and to understand links with other business functions.  The unit links to job roles which may involve  • determining which costs may be incurred  • creating cost matrices  • negotiating with vendors over costings
Learning Outcomes	Assessment Criteria
(1 to 2)	(1.1 to 2.3)
The learner will:	The learner can:
Understand the costs involved in outsourcing	<ul> <li>1.1. Explain why the following are important when considering cost implications <ul> <li>product lifecycle</li> <li>lead times</li> <li>forecasting</li> <li>SKU proliferation</li> <li>letters of credit</li> <li>currency and fluctuations in exchange rate</li> </ul> </li> <li>1.2. Analyse the direct and indirect costs of outsourcing in order to build a cost matrix</li> <li>1.3. Identify assumptions that apply when producing a cost matrix</li> </ul>
Understand links with other business functions	<ul> <li>2.1. Identify which functions need to be consulted when producing costings for outsourcing</li> <li>2.2. Explain why this consultation is important</li> <li>2.3. Explain the importance of integrating with their business management processes</li> </ul>
Manning to National Occupation	and Characteristic

#### **Mapping to National Occupational Standards**

National Occupational Standards for Balanced Sourcing and New Product Development (March 2010)

Version 6.7 Page **55** of **88** 

# **Strategic Marketing Planning Skills within the Design and Creative Industries**

Unit Reference	J/501/8387
Level	4
Credit Value	6
Guided Learning (GL)	40 hours
Unit Summary	This unit aims to provide learners with an understanding of the markets in which they operate and enables learners to gain a clear understanding of the marketing strategies required to implement a successful marketing plan.
Learning Outcomes (1 to 3) The learner will:	Assessment Criteria (1.1 to 3.1) The learner can:
Understand the market in which their business operates	<ul><li>1.1. Analyse the market in which a chosen business operates, benchmarking the competition</li><li>1.2. Assess the suitability of known generic strategic and tactical marketing techniques</li></ul>
2. Be able to construct a strategic marketing plan relevant to their business	<ul> <li>2.1. Analyse client needs, perspectives and patterns of buying behaviour</li> <li>2.2. Determine the strengths and weaknesses of the business relevant to its target market</li> <li>2.3. Construct an effective marketing strategy for a chosen business which will include analysis of <ul> <li>positioning</li> <li>sales</li> <li>strategic pricing options</li> <li>tactical marketing activities (pricing, products, selling)</li> <li>routes to market</li> <li>promotions/delivery of marketing plan</li> <li>client view and needs</li> <li>competition</li> </ul> </li> <li>2.4. Allocate resources (including financial) to indicate how marketing relates to other functions within the company including sales and business development</li> </ul>

Version 6.7 Page **56** of **88** 

- 3. Understand how to explore potential growth in business through the implementation of effective marketing strategies
- 3.1. Construct a practical plan of action specific to a chosen sector. Assess how your plan will contribute to
  - potential growth of business from existing clients
  - generating new business opportunities from previously unexploited markets
  - developing new products and services

This unit is mapped to Marketing and Sales Standards Setting Body (MSSSB) Suite: Marketing (February 2006)

Version 6.7 Page **57** of **88** 

# **Business Planning and Financial Projections in the Design and Creative Industries**

Unit Reference	L/501/8388
Level	4
Credit Value	8
Guided Learning (GL)	60 hours
Unit Summary	This unit aims to provide learners with an understanding of the importance of effective business planning and financial forecasting. Learners will analyse the current position of a business, prepare a strategic business plan and determine how to allocate resources effectively.
Learning Outcomes (1 to 4) The learner will:	Assessment Criteria (1.1 to 4.1) The learner can:
Understand the role of effective business planning in guiding the future of the business	<ol> <li>Identify strengths and weakness in business planning models in order to look for and identify poor business planning</li> <li>Demonstrate the need for business planning which adapts to market change</li> <li>Compare and contrast market and customer led models</li> <li>Determine financial projections which reflect company strategy</li> </ol>
2. Understand the current situation of a business to include the financial position	<ul> <li>2.1. Establish the current situation of their chosen business through analysis of <ul> <li>sales</li> <li>analysis of market segmentation</li> <li>PESTLE analysis</li> <li>competitive analysis</li> <li>strategy review</li> <li>profit and loss and cash flow analysis</li> <li>segmental analysis</li> <li>organisation analysis</li> </ul> </li> </ul>
3. Be able to prepare a strategic business plan	3.1. Produce an effective business plan which is realistic and flexible for their chosen organisation which will include

Version 6.7 Page **58** of **88** 

•	prioritised strategic, creative and flexible
	objectives that are consistent with the vision
	of the organisation

- a plan which is adaptable to market changes
- analysis of potential risks in relation to the achievement of objectives
- identification of responsibility for achieving goals and allocation of resources effectively
- setting goals and objectives for the business
- measures and methods for monitoring and evaluating the plan

- 4. Be able to determine how to allocate resources in order to meet the company's strategic plan and financial forecasting
- 4.1. Construct realistic financial plans to present to departmental or operational heads to incorporate
  - financial projections, budgeting and sources of funding
  - tracking of financial documentation to drive medium term internal decision making processes of the business
  - identification of responsibility for achieving goals and allocation of resources effectively

This unit is mapped to Management Standards Centre (MSC)

Suite: Management and Leadership

Version 6.7 Page **59** of **88** 

## **Design Development, Creativity and Business Development**

Unit Reference	R/501/8389
Level	4
Credit Value	6
Guided Learning (GL)	40 hours
Unit Summary	This unit provides learners with the understanding of the importance of design in business and how design and branding impacts on business performance. The learner will consider the concept of how creative thought leads to innovation within the business. Learners will analyse how to understand customer needs through establishing and writing a brief. Business development, selling skills and presenting a pitch will be covered.
Learning Outcomes (1 to 5) The learner will:	Assessment Criteria (1.1 to 5.2) The learner can:
Define techniques used in creating a brand and the importance of branding to business development	<ul> <li>1.1. Define and evaluate the tools needed to create a brand to include</li> <li>analysing competitor brands</li> <li>development of own business brand personality</li> <li>investigating business USP</li> </ul>
Be able to develop thought processes to generate creative ideas	<ul> <li>2.1. Develop techniques for creative thought through applying <ul> <li>brainstorming</li> <li>use of empathic tools</li> <li>learning from others</li> </ul> </li> </ul>
3. Be able to transfer creative thought to initial design idea	<ul> <li>3.1. For a specific brief define and implement the processes involved when transferring creative thought to initial design idea to include <ul> <li>identification of the market through the understanding of customer needs in order to clarify brief</li> <li>researching sales and market information</li> <li>analysis of gathered data about customer behaviour and competitor activity</li> </ul> </li> <li>3.2. Communicate research findings with client to agree best approach to project and produce a proposal</li> </ul>

Version 6.7 Page **60** of **88** 

4. Define techniques used in the presentation of developed design concepts to the end user (considering and understanding client needs)

- 4.1. Present a pitch of developed design concepts, (considering and understanding client needs) to an appropriate audience taking into consideration
  - how the concept meets client need
  - roles and format of the presentation
  - appropriate presentation techniques to communicate design options visually and orally
- 4.2. Produce a written specification for the client
- 5. Understand selling and promotional techniques to increase customer/client base
- 5.1. Apply the following concepts to their own area of expertise
  - sales negotiation
  - preparing and presenting proposals and quotations - to include terms, specification, quality, price
  - analysing market opportunities
  - communicate and record agreements
- 5.2. Review the impact of the concepts in 5.1 in their own area of expertise

#### **Mapping to National Occupational Standards**

This unit is mapped to Creative and Cultural Skills (CCSkills)

Suite: Design

Marketing and Sales Standards Setting Body (MSSSB) Suite: Marketing and Sales Standards for non-specialists

Version 6.7 Page **61** of **88** 

## **Leadership and People Management in the Design and Creative Industries**

Unit Reference	J/501/8390
Level	4
Credit Value	6
Guided Learning (GL)	40 hours
Unit Summary	This unit provides learners with an understanding of effective management and leadership skills and how to implement these within a Design business. Learners will examine how to select, manage and motivate their teams and build their own leadership skills.
Learning Outcomes (1 to 3) The learner will:	Assessment Criteria (1.1 to 3.1) The learner can:
Understand what it is that makes an effective team leader and/or manager	<ul><li>1.1. Analyse skills and attributes that make an effective team leader</li><li>1.2. Evaluate their own leadership skills and attributes, identifying areas for personal development if they want to be a good team leader</li></ul>
2. Understand how to select a team for a specific purpose	<ul> <li>2.1. Analyse methods which can be implemented in order to <ul> <li>identify the mix of expertise, knowledge, skills and attitudes required to achieve the team purpose</li> <li>identify team members' expertise, knowledge, skills and attitudes and agree their particular roles within the team</li> <li>use team selection and development processes to develop any expertise, knowledge, skills and attitudes lacking in the team</li> </ul> </li> </ul>
3. Understand how to manage and motivate a team	<ul> <li>3.1. Analyse methods which can be implemented in order to <ul> <li>enable team building and how to build mutual trust and respect</li> <li>encourage open communication between team members to share problems with each other to produce creative solutions</li> </ul> </li> </ul>

Version 6.7 Page **62** of **88** 

- review the performance of the team at appropriate points and evaluate how well its purpose is being achieved
- celebrate the team and individual successes together and the methods for empowerment of individuals to develop their own ways of working and take their own decisions within agreed boundaries
- steer your team successfully through difficulties and challenges

This unit is mapped to Management Standards Centre

Suite: Management and Leadership

Version 6.7 Page **63** of **88** 

## **Intellectual Property Management in the Design and Creative Industries**

Unit Reference	L/501/8391
Level	4
Credit Value	7
Guided Learning (GL)	50 hours
Unit Summary	This unit provides learners with an understanding of effective management and leadership skills and how to implement these within a Design business. Learners will examine how to select, manage and motivate their teams and build their own leadership skills.
Learning Outcomes (1 to 3) The learner will:	Assessment Criteria (1.1 to 3.1) The learner can:
Understand the legal issues in relation to intellectual property rights and their business	<ol> <li>Analyse the key aspects of UK and international intellectual property law</li> <li>Determine where to go for information about protecting intellectual property rights in specific jurisdictions inside and outside the UK</li> </ol>
2. Know how to manage the intellectual property rights in their designs	<ul> <li>2.1. Identify the different types of intellectual property rights and how they can be protected <ul> <li>copyright</li> <li>design right</li> <li>registered designs</li> </ul> </li> <li>2.2. Determine when and how to assert or enforce their (or their organisation's) intellectual property rights</li> <li>2.3. Draw up contract(s) concerning Intellectual Property Rights with their clients</li> <li>2.4. Determine what can be protected and how it is protected <ul> <li>web sites</li> <li>images</li> <li>text</li> <li>designs</li> </ul> </li> </ul>
Understand the revenue opportunities and risks	3.1. Explain the revenue opportunities and risks associated with Intellectual Property Rights

Version 6.7 Page **64** of **88** 

associated with intellectual property rights

#### **Mapping to National Occupational Standards**

This unit is mapped o

Suite: Interactive Media and Computer Games (May 2005)

Unit IM11 Manage Intellectual Property Rights

Version 6.7 Page **65** of **88** 

## **Design Project Management for Creative Practitioners**

Unit Reference	R/501/8392
Level	4
Credit Value	6
Guided Learning (GL)	40 hours
Unit Summary	This unit aims to provide learners with the skills to enable them to manage a Design project. Learners will explore the importance of timelines, allocation of resources, managing staff and project objectives.
Learning Outcomes (1 to 4)	Assessment Criteria (1.1 to 4.1)
The learner will:	The learner can:
Understand the importance of managing a project to timelines	<ul><li>1.1. Produce a schedule with clear and realistic timescales to meet project objectives to enable the project to be delivered on time</li><li>1.2. Explore potential risks to the project and analyse methods of overcoming unforeseen difficulties</li></ul>
2. Know how to allocate internal resources correctly to achieve project goals	<ul> <li>2.1. Analyse the importance of meeting the following <ul> <li>the full cost of the project</li> <li>time scales required</li> <li>resources required</li> <li>individual tasks within the project</li> <li>milestones and deliverables to be met</li> <li>agreed quality standards</li> <li>project keeping within budget</li> </ul> </li> <li>2.2. Evaluate the importance of effective negotiating and liaison with clients</li> <li>2.3. Determine and agree the individual roles of team members to set realistic goals for individuals and the team as a whole</li> </ul>
3. Understand the importance of managing internal and external project objectives	<ul><li>3.1. Explore the risks to project objectives through poor communication between project team, managers and customers</li><li>3.2. Analyse monitoring processes which need to be implemented in order to meet design objectives</li></ul>

Version 6.7 Page **66** of **88** 

- 4. Explore the use of computer software programmes and other support mechanisms as a tool for successful project management
- 4.1. Determine which software programmes are available for project management and evaluate the strengths and weaknesses of these

This unit is mapped to

SEMTA

Suite: Business Improvement (March 2007)

Unit 35 Carrying out project management activities

CCSKILLS
Suite: Design

Unit 3M Plan and manage Design Work

Version 6.7 Page **67** of **88** 

### **Doing Business Globally**

This unit is mapped to MSSSB

Unit Reference	Y/501/8393
Level	4
Credit Value	7
Guided Learning (GL)	50 hours
Unit Summary	This unit aims to provide learners with the understanding of the implications of entering a global market. Learners will explore branding, product development for specific markets.
Learning Outcomes (1 to 4) The learner will:	Assessment Criteria (1.1 to 4.1) The learner can:
Understand factors within a company which affect the building of overseas markets	<ul> <li>1.1. Analyse the impact of the following on entering a Global market</li> <li>company branding</li> <li>web site design and functionality in a new market</li> <li>product design for a specific market</li> </ul>
Understand logistics for taking designs, brands and products to global markets	<ul> <li>2.1. Evaluate methods of breaking into global markets through <ul> <li>consultation with relevant trade, and government support agencies</li> <li>the understanding of import/export procedures/ law/ financial costs</li> <li>the use of agents</li> </ul> </li> </ul>
3. Understand how cultural differences can influence design ideas for different countries	3.1. Analyse the cultural differences in potential markets and consider how this could affect product development
4. Recognise techniques for communication in different cultures and develop cultural awareness	<ul> <li>4.1. Evaluate the important differences in communicating with a range of cultures including</li> <li>language – non-verbal and verbal</li> <li>translation</li> <li>dress</li> <li>social etiquette</li> <li>managing time</li> </ul>

Version 6.7 Page **68** of **88** 

Suite: Marketing and Sales Standards for non-specialists. Unit 11 Determine opportunities for International Sales

Suite: Marketing

Unit 6.2.1 Assess marketing opportunities within international and/or diverse markets

Unit 6.2.2. Establish the business case and marketing plan for distributing

products/services to international and /or diverse markets

Suite: Sales

Unit 7.4 Sell products or services in International markets

Version 6.7 Page **69** of **88** 

## **Finance for Designers and Creatives**

Unit Reference	D/501/8394
Level	4
Credit Value	12
Guided Learning (GL)	90 hours
Unit Summary	This unit aims to provide learners with an understanding of the basics of management accounting within a design business. Learners will understand the importance of analysing financial data in order to improve the management of their business.
Learning Outcomes (1 to 5) The learner will:	Assessment Criteria (1.1 to 5.1) The learner can:
Understand financial statements	<ul> <li>1.1. Analyse and interpret prepared financial statements which include</li> <li>profit and loss statements</li> <li>balance sheet</li> <li>cash flow spreadsheets</li> </ul>
2. Understand the profitability of products and services within the business	<ul> <li>2.1. Assess which business elements are profitable and worthy of development by considering the following <ul> <li>allocation of budgets</li> <li>establishing pricing</li> <li>segmental analysis</li> <li>break even analysis</li> <li>return on investment (ROI)</li> <li>risk analysis</li> </ul> </li> </ul>
3. Understand how to improve management systems through implementation of financial data	<ul> <li>3.1. Identify, evaluate and construct systems to implement the following</li> <li>setting price</li> <li>ensure profitability</li> <li>track cash flow</li> <li>allocate budgets</li> </ul>
4. Understand the techniques for managing financial systems effectively	<ul> <li>4.1. Determine and identify techniques in order to</li> <li>calculate pricing</li> <li>allocate time</li> <li>collect debt</li> <li>negotiate discounts</li> </ul>

Version 6.7 Page **70** of **88** 

- 5. Review the effectiveness of financial management systems in order to make successful business decisions
- 5.1. Integrate techniques into overall business to
  - assess financial risks
  - increase profitability
  - apply theories and implement within your business

This unit is mapped to

FSSC

Suite: Leadership and Management

Unit PSA43 Manage finance in your area of responsibility

Suite: Lending and Credit

Unit LC10 Investigate arrears and recover debt

CCSkills

Suite: Community Arts

Unit CCS2 Assist with daily financial issues within your organisation

Version 6.7 Page **71** of **88** 

# Managing Quality Standards within Apparel, Footwear or Leather Production

Unit Reference	Y/601/7836
Level	3
Credit Value	7
Guided Learning (GL)	40 hours
Unit Summary	This unit will enable the learner to understand the functions that go into the quality control process. The work will cover the expected quality requirements, common causes of non-standard or reject work and appropriate remedial action that may be taken.  Company procedures for quality monitoring and recording information and dealing with rejects. Also covered will be the importance of suitable ways of communicating with other employees over issues of quality.
Learning Outcomes (1 to 3)	Assessment Criteria (1.1 to 3.1)
The learner will:	The learner can:
Know the quality     requirements and     specifications laid down by a     company for its product	<ul><li>1.1. State the quality requirements laid down by a company for the product it sells</li><li>1.2. Produce a quality specification for a product within the learner's chosen sector</li></ul>
2. Know how to ensure any required changes to the product are actioned	<ul> <li>2.1. For the chosen product (1.2, above), identify <ul> <li>any defects which may occur at different stages of production</li> <li>how they may be caused</li> <li>possible actions to rectify the fault or will it have to be rejected</li> </ul> </li> <li>2.2. Explain how that information would be passed on to the appropriate person</li> </ul>
3. Understand product quality control systems	<ul> <li>3.1. Describe a company's methods of implementing quality control, to include</li> <li>areas of responsibility</li> <li>examples of documentation</li> <li>recording and analysing information as a way of identifying problem areas</li> </ul>

Version 6.7 Page **72** of **88** 

SKSMSP2 - Maintain the quality of production working with textiles, leather and materials SKSMSP7B - Support the quality of production– Maintain

Version 6.7 Page **73** of **88** 

# Managing Own Working Relationships within Apparel, Footwear or Leather Production

Unit Reference	H/601/7838
Level	3
Credit Value	9
Guided Learning (GL)	60 hours
Unit Summary	This unit will enable the learner to develop skills in managing their own time in the workplace. It will assist the learner to understand and deal with their peer group and managers above their own level of responsibility. They will explore the positive aspects of the role an individual and manager can play within a team.
Learning Outcomes (1 to 6) The learner will:	Assessment Criteria (1.1 to 6.1) The learner can:
Understand how to communicate with their colleagues within the workplace	<ul> <li>1.1. Demonstrate the benefits of effective communication in the workplace, which may include <ul> <li>verbal</li> <li>non-verbal</li> <li>internal media</li> <li>external media</li> </ul> </li> </ul>
Be able to minimise disruption in the workplace and deal with any problems	2.1. Discuss and deal with problems as they arise to minimise disruption in the workplace
3. Understand the role of an individual in fulfilling the aims of an organisation	3.1. Provide evidence of workplace organisation that demonstrates their own responsibility for maintaining health, safe and productive work conditions that comply with company procedures
4. Be able to undertake professional self-development	<ul><li>4.1. Provide examples of own CPD and action plan to achieve objectives</li><li>4.2. Discuss and verify action plan with a senior manager</li></ul>
5. Be able to make decisions, manage their objectives and activities efficiently	5.1. Produce a document detailing a typical working week, to show evidence of effective time management. This may include reference to  • agreeing and prioritising own objectives

Version 6.7 Page **74** of **88** 

	<ul><li>planning own time</li><li>decision making</li><li>rescheduling own activities as appropriate</li></ul>
6. Be able to manage their resources in the workplace	6.1. Manage and maintain their resources in the workplace

SKSAMTB6 – Provide leadership in your area of responsibility SKSD2v3 – Develop productive working relationships with colleagues and stakeholders SKSA2SK1v2 – Manage your own resources and professional development

Version 6.7 Page **75** of **88** 

## **Professional Practice / Preparation for Employment within the Apparel, Footwear or Leather Industry**

Unit Reference	M/601/7857
Level	3
Credit Value	7
Guided Learning (GL)	40 hours
Unit Summary	This unit is designed to help prepare learners for a role within apparel/footwear/leather or other related business. The work will cover current professional practices and the uses of computer-based technology to produce high quality paper based personal presentations.  The work will cover the production of detailed reports and the methods used to present oneself in a business situation.
Learning Outcomes (1 to 3) The learner will:	Assessment Criteria (1.1 to 3.1) The learner can:
Understand the workings of a company specific to the sector the learner is working/intends to work in	1.1. Produce a report giving an overview of their chosen company
Be able to produce a report to meet a specific task	<ul> <li>2.1. Produce a report which</li> <li>details an item of professional practice in the specific area of expertise investigated by the learner</li> <li>includes any suggested opportunities for improvement which could be made</li> </ul>
3. Be able to produce business contextualised paperwork, giving information about oneself	<ul> <li>3.1. Produce a range of paper based items to be used in a business context, including</li> <li>computer generated CV</li> <li>business card</li> <li>letter of application for a real or fictional position</li> </ul>

#### **Mapping to National Occupational Standards**

 ${\sf SKSA2SK1v2-Manage\ your\ own\ resources\ and\ professional\ development} \\ {\sf SKSB1v2-Develop\ and\ implement\ operational\ plans\ for\ your\ area\ of\ responsibility} \\$ 

Version 6.7 Page **76** of **88** 

# Managing Information for Action within the Apparel, Footwear or Leather Industry

Unit Reference	T/601/7861
Level	3
Credit Value	8
Guided Learning (GL)	50 hours
Unit Summary	This unit will enable the learner to understand the efficient management of information within a given area of responsibility. It covers the gathering of information needed, providing information needed by a team leader, advice to others and the holding of meetings.
Learning Outcomes (1 to 3) The learner will:	Assessment Criteria (1.1 to 3.3) The learner can:
Understand the importance     to a team leader of gathering     all types of valid information	<ul> <li>1.1. For a given situation, detail the information that would need to be gathered before any action is taken. This should include <ul> <li>the location</li> <li>type</li> <li>validity</li> <li>any problems envisaged in obtaining the documentation</li> </ul> </li> </ul>
2. Understand the importance of effectively communicating the types of information and advice which other people may require	2.1. Demonstrate to employees the principles involved in effective communication to be used in a workplace (shop-floor or office)
3. Understand the factors to be considered when organising, leading and recording the outcomes of meetings	<ul> <li>3.1. Set up, organise and chair a meeting</li> <li>3.2. Produce details of the meeting, including <ul> <li>notice of meeting</li> <li>agenda</li> <li>minutes</li> <li>actions</li> </ul> </li> <li>3.3. Produce a critical self-appraisal as to the choice of the leadership style used and the effectiveness of the meeting</li> </ul>

### **Mapping to National Occupational Standards**

SKSAMTB6 – Provide leadership in your area of responsibility

Version 6.7 Page **77** of **88** 

SKSD2v3 – Develop productive working relationships with colleagues and stakeholders

SKSF3v2 – Manage business processes

SKSAMTF12 – Improve organisational performance

Version 6.7 Page **78** of **88** 

## Aspects of Design within the Apparel, Footwear or Leather Industry

Unit Reference	K/601/7856
Level	3
Credit Value	7
Guided Learning (GL)	40 hours
Unit Summary	This unit covers the various stages in the design process. Learners will learn how mood boards, market research and customer profiling can be used to help develop designs. They will also learn how to communicate their ideas through a variety of drawing and other techniques, and will have the opportunity to develop a number of designs based on the analysis of their own research.
Learning Outcomes (1 to 3) The learner will:	Assessment Criteria (1.1 to 3.1) The learner can:
Understand the sector     market and how trends are     predicted	<ul> <li>1.1. Demonstrate how to predict trends of the sector's market, including</li> <li>seasonal trends</li> <li>design functions</li> </ul>
2. Be able to communicate ideas and technical information through different media	<ul> <li>2.1. Use different media to communicate ideas and technical information, including</li> <li>a research sketch book</li> <li>mood/story boards</li> <li>design development sheets</li> <li>information technology</li> </ul>
3. Be able to select and use a wide range of media to produce a range of fashion illustrations	<ul><li>3.1. Present final designs, including</li><li>presentation drawings</li><li>working drawings</li></ul>

#### **Mapping to National Occupational Standards**

SKSFL4v2 - Design products using CAD systems

SKSFL5v2 - Create digitised patterns using CAM systems

SKSFL6v1 - Create basic patterns for footwear / leathergoods / saddlery products

SKSAMT5 – Assess and develop given apparel designs

SKSAMT19 - Investigate markets, materials and styles

Version 6.7 Page **79** of **88** 

## **Manufacturing Techniques within Apparel Production**

Unit Reference	M/601/7843
Level	3
Credit Value	8
Guided Learning (GL)	50 hours
Unit Summary	This unit will enable the learner to understand the functions that go into the manufacturing process. The work will cover the stages of manufacture as well as the relationship between machines, stitches, threads and seams.
Learning Outcomes (1 to 3) The learner will:	Assessment Criteria (1.1 to 3.4) The learner can:
Know the different processes and functions involved in product construction	1.1. Identify two products and produce a process chart of functions that go into the manufacturing process of each product
Know the different machine types and materials used in product assembly	<ul> <li>2.1. Report on the <ul> <li>machines</li> <li>needle types</li> <li>seam types</li> <li>stitch types</li> <li>thread types</li> </ul> </li> <li>used in the production of three products that are made at their own place of work</li> </ul>
3. Understand the relationship between all the components used in product assembly and the effect they have on quality	3.1. Explain the relationship between machines, threads, stitches and needles in the production process and the effect on quality
	3.2. Produce a portfolio of samples of quality defects across a range of articles, identifying the cause of the defects
	3.3. Give examples of how quality defects have affected products at work
	3.4. Produce a report on products that have been returned due to manufacturing issues

#### **Mapping to National Occupational Standards**

SKSAMT4 – Contribute to the production of outsourced apparel products SKSAMT15 - Solve quality issues for sample apparel production

Version 6.7 Page **80** of **88** 

SKSAMT26 - Make up and assemble apparel samples

SKSMSP2 - Maintain the quality of production working with textiles, leather and materials

Version 6.7 Page **81** of **88** 

## **Materials used in the Manufacture of Apparel**

Unit Reference	D/601/7854
Level	3
Credit Value	8
Guided Learning (GL)	50 hours
Unit Summary	This unit will ensure that the learner has an understanding of the fibres, yarns and fabrics that they will encounter during their working experience.  They will acquire the skills to recognise materials, their performance characteristics and to evaluate their suitability for end use.  This unit will also cover aspects of fabric faults and the relationship of materials, cost and end use.
Learning Outcomes (1 to 5) The learner will:	Assessment Criteria (1.1 to 5.1) The learner can:
Know the origin of natural and man-made fibres	<ul><li>1.1. Identify the origin of</li><li>natural</li><li>man-made fibres</li></ul>
2. Understand the processes involved in fabric production	<ul> <li>2.1. Identify the fabrics, by name, that are primarily used in the sector that the learner is working in</li> <li>2.2. Recognise and describe fabric construction for these fabrics (in 2.1)</li> <li>2.3. Identify all the stages, from fibre through to finished fabric, for a range of fabrics from their place of work</li> </ul>
3. Understand the suitability of fabrics for specific uses	<ul> <li>3.1. Select a number of products from work and explain the fabric choice made for each including considerations of <ul> <li>characteristics</li> <li>cost</li> <li>performance</li> </ul> </li> </ul>
4. Understand fabric faults	4.1. Identify a range of fabric faults and evaluate how they should be dealt with during product manufacture

Version 6.7 Page **82** of **88** 

- 5. Know about use of care labels and their suitability to end-use
- 5.1. Select a number of products from their place of work and for each describe how the product will have to be labelled to meet current legislation

- SKSAMT2 Monitor compliance with requirements in garment construction
- SKSAMT4 Contribute to the production of outsourced apparel products
- SKSAMT5 Assess and develop given apparel designs
- SKSAMT15 Solve quality issues for sample apparel production

Version 6.7 Page 83 of 88

## **Investigate Markets, Materials and Styles**

Unit Reference	R/502/0899
Level	3
Credit Value	5
Guided Learning (GL)	30 hours
Unit Summary	This unit is for those who identify and review existing and new markets, materials and styles relating to garments that vary in style, fabric and make up.  The job role will involve  Identifying and reviewing markets, materials and styles  Evaluating and feeding back information on markets, materials and styles  This unit must be assessed in the workplace where learners will demonstrate occupational competence.
Learning Outcomes	Assessment Criteria
(1 to 3)	(1.1 to 3.3)
The learner will:	The learner can:
Be able to research     current markets, materials     and styles	<ol> <li>Review up-to-date documents relating to current markets, materials and styles</li> <li>Visit appropriate outlets to examine and evaluate features of current and emerging materials and styles</li> <li>Continually observe the public to identify emerging markets, styles and materials appropriate to your organisation's products and services, including the potential for new markets</li> </ol>
Be able to evaluate the markets and identify competitors	<ul><li>2.1. Examine and assess the styles being presented by designers for current and future seasons</li><li>2.2. Identify national and international competitors that are likely to impact on your organisation's markets</li><li>2.3. Evaluate the markets for your apparel products</li></ul>
3. Be able to identify new markets that might enhance your organisation's product base and communicate any recommendations	3.1. Identify new markets that might enhance your organisation's product base

Version 6.7 Page **84** of **88** 

- 3.2. Develop and document ideas for new, and appropriate adaptations to your organisation's own styles, materials and markets
- 3.3. Communicate your ideas and make recommendations about changes and expansions to the appropriate personnel

This unit maps to Apparel Manufacturing Technology NOS 2008

Version 6.7 Page **85** of **88** 

## Recognition of Prior Learning (RPL), Exemptions, Credit Transfers and Equivalencies

Skills and Education Group Awards policy enables learners to avoid duplication of learning and assessment in a number of ways:

- Recognition of Prior Learning (RPL) a method of assessment that considers whether a learner can demonstrate that they can meet the assessment requirements for a unit through knowledge, understanding or skills they already possess and do not need to develop through a course of learning.
- Exemption Exemption applies to any certificated achievement which is deemed to be
  of equivalent value to a unit within a Skills and Education Group Awards qualification
  but which does not necessarily share the exact learning outcomes and assessment
  criteria. It is the assessor's responsibility, in conjunction with the Internal Moderator,
  to map this previous achievement against the assessment requirements of the Skills
  and Education Group Awards qualification to be achieved in order to determine its
  equivalence.

Any queries about the relevance of any certificated evidence, should be referred in the first instance to your centre's internal moderator and then to Skills and Education Group Awards.

It is important to note that there may be restrictions upon a learner's ability to claim exemption or credit transfer which will be dependent upon the currency of the unit/qualification and a learner's existing levels of skill or knowledge. Where past certification only provides evidence that could be considered for exemption of part of a unit, learners must be able to offer additional evidence of previous or recent learning to supplement their evidence of achievement.

- Credit Transfer Skills and Education Group Awards may attach credit to a
  qualification, a unit or a component. Credit transfer is the process of using certificated
  credits achieved in one qualification and transferring that achievement as a valid
  contribution to the award of another qualification. Units/Components transferred must
  share the same learning outcomes and assessment criteria along with the same unit
  number. Assessors must ensure that they review and verify the evidence through sight
  of:
  - o original certificates OR
  - copies of certificates that have been signed and dated by the internal moderator confirming the photocopy is a real copy and make these available for scrutiny by the External Moderator
- Equivalencies opportunities to count credits from the unit(s) from other qualifications or from unit(s) submitted by other recognised organisations towards the place of mandatory or optional unit(s) specified in the rule of combination. The unit must have the same credit value or greater than the unit(s) in question and be at the same level or higher.

Skills and Education Group Awards encourages its centres to recognise the previous achievements of learners through Recognition of Prior Learning (RPL), Exemption, Credit Transfer and Equivalencies. Prior achievements may have resulted from past or present employment, previous study or voluntary activities. Centres should provide advice and

Version 6.7 Page **86** of **88** 

guidance to the learner on what is appropriate evidence and present that evidence to the external moderator in the usual way.

Further guidance can be found in 'Delivering and Assessing Qualifications' which can be downloaded from the website.

### **Exemptions**

There are no identified exemptions for these qualifications.

### **Equivalencies**

There are no identified equivalencies for these qualifications.

#### Certification

Learners will be certificated for all units and qualifications that are achieved and claimed.

Skills and Education Group Awards policies and procedures are available on the website.

Version 6.7 Page **87** of **88** 

### **Glossary of Terms**

#### **GL** (Guided Learning)

GLH is where the learner participates in education or training under the immediate guidance or supervision of a tutor (or other appropriate provider of education or training). It may be helpful to think – 'Would I need to plan for a member of staff to be present to give guidance or supervision?'

GLH is calculated at qualification level and not unit/component level.

Examples of Guided Learning include:

- Face-to-face meeting with a tutor
- Telephone conversation with a tutor
- Instant messaging with a tutor
- Taking part in a live webinar
- Classroom-based instruction
- Supervised work
- Taking part in a supervised or invigilated assessment
- The learner is being observed.

#### **TQT (Total Qualification Time)**

'The number of notional hours which represents an estimate of the total amount of time that could reasonably be expected to be required, in order for a learner to achieve and demonstrate the achievement of the level of attainment necessary for the award of a qualification.' The size of a qualification is determined by the TQT.

TQT is made up of the Guided Learning Hours (GLH) plus all other time taken in preparation, study or any other form of participation in education or training but not under the direct supervision of a lecturer, supervisor or tutor.

TQT is calculated at qualification level and not unit/component level.

Examples of unsupervised activities that could contribute to TQT include:

- Researching a topic and writing a report
- Watching an instructional online video at home/e-learning
- Watching a recorded webinar
- Compiling a portfolio in preparation for assessment
- Completing an unsupervised practical activity or work
- Rehearsing a presentation away from the classroom
- Practising skills unsupervised
- Requesting guidance via email will not guarantee an immediate response.

Version 6.7 Page **88** of **88**