

# Unit 128: Garment Production

<b>Unit code:</b>	<b>J/542/5422</b>
<b>QCF Level 3:</b>	<b>BTEC National</b>
<b>Credit value:</b>	<b>10</b>
<b>Guided learning hours:</b>	<b>60</b>

## ● Aim and purpose

The aim of this unit is to give learners the opportunity to develop their skills in the manufacturing processes and gain experience in the use of industrial equipment and techniques to produce sample quality garments.

## ● Unit introduction

Learners will develop and extend their skills in garment production techniques. They will select and use appropriate machinery and hand tools to achieve quality production standards.

Learners will be expected to plan and extend their skills in the planning of the production process. They will develop a clear understanding of the planning and sequence of operation used during the production process paying particular attention to effectiveness in terms of time management.

Learners will be encouraged to look at a variety of garments to develop their skills and understanding of the production process. Assignment briefs should be designed to be stimulating and motivating to encourage learners to develop and acquire new skills.

Learners will need to be aware of health and safety issues associated with the equipment and materials that they use. Learners should follow and understand appropriate risk assessments and follow relevant COSHH guidance at all times.

## ● Learning outcomes

**On completion of this unit a learner should:**

- 1 Be able to operate equipment and machinery safely for the development of garment production
- 2 Be able to evaluate work during the production process
- 3 Be able to produce and assemble garments.

# Unit content

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## 1 Be able to operate equipment and machinery safely for the development of garment production

*Equipment:* eg steam iron, dress stand; hand tools eg scissors, cutting wheels, pins, needles

*Machinery:* sewing machines eg lock stitch, over lockers, heavy duty machines for stitching leather, domestic, embroidery machines, pressing and steaming equipment eg industrial steam irons

*Health and safety:* correct use according to manufacturers' guidelines; relevant legislation; risk assessments (write, understand); Health and Safety Act 1974

## 2 Be able to evaluate work during the production process

*Planning:* production process (sequence of operation); production techniques; fabrics; threads; fasteners; trims

*Evaluation:* quality checks

## 3 Be able to produce and assemble garments

*Production process:* cutting out a pattern; preparing and cutting out fabric; construction techniques; fasteners; decorative details; pressing and finishing techniques; final presentation

## Assessment and grading criteria

In order to pass this unit, the evidence that the learner presents for assessment needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria for a pass grade describe the level of achievement required to pass this unit.

Assessment and grading criteria		
To achieve a pass grade the evidence must show that the learner is able to:	To achieve a merit grade the evidence must show that, in addition to the pass criteria, the learner is able to:	To achieve a distinction grade the evidence must show that, in addition to the pass and merit criteria, the learner is able to:
<b>P1</b> select, use and safely operate appropriate equipment and machinery for the development of garment production [IE]	<b>M1</b> produce and evaluate individually, well-finished garments which demonstrate high standards of practical skill and understanding.	<b>D1</b> create quality garments that demonstrate a high standard of practical competence, analysis, independent working and sophistication.
<b>P2</b> plan and complete an ongoing evaluation at appropriate stages of the production process [SM, RL]		
<b>P3</b> select and use appropriate production processes to assemble and present well-finished garments. [CT, SM]		

**PLTS:** This summary references where applicable, in the square brackets, the elements of the personal, learning and thinking skills applicable in the pass criteria. It identifies opportunities for learners to demonstrate effective application of the referenced elements of the skills.

<b>Key</b>	IE – independent enquirers CT – creative thinkers	RL – reflective learners TW – team workers	SM – self-managers EP – effective participators
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# Essential guidance for tutors

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## Delivery

Learners should have access to the appropriate production equipment used within the fashion and clothing industry. As the production process varies according to the garment or accessory to be produced, it is anticipated that the learners will need guidance at the start of the unit, acquiring understanding and skills as the unit develops, and working independently and demonstrating safe practice once the skills have been acquired.

This unit builds on the production skills gained in *Production Techniques for Fashion and Clothing*. Since the production process varies according to the garment or accessory to be produced, it is anticipated that learner will be given guidance at the start of the unit, acquiring understanding and skills as the unit develops, and working independently and demonstrating safe practice once the skills have been acquired.

Tutors delivering this unit must ensure that learners have received an induction to the workshop and the appropriate health and safety procedures and then demonstrate safe working practices at all times. Learners should understand the process of risk assessment and be able to apply this to their own working practice.

Learning outcome 1 can be evidenced by the production of a portfolio that includes stitched samples, annotated notes, health and safety documentation, lay plan, costing, sequence of operation, technical specification sheet, working sketch and sequence of operation. The portfolio should relate to a variety of garments including the assessed garment(s). The portfolio may also include copies of observations completed by the tutor and records of any tutorials. In addition, learners are required to write a report on quality improvement used within the fashion and clothing industry supported by samples and test pieces.

Learners should be encouraged to be experimental in their use of a range of fabrics and be able to identify their properties and characteristics. It is, therefore, essential that learners have access to a wide range of fabrics and fibres used in the fashion industry.

Learners should explore a variety of garments to broaden their skills, knowledge and understanding of the production techniques and processes. Learners should also look at new technologies available within the textiles and fashion production and manufacturing processes and be experimental in their choice of sample garments.

Learners may produce toiles as well as completed garments, although a toile need not necessarily always be followed through to a completed item. Learners should be encouraged to make up samples of substantial parts of garments where skill can be demonstrated in using, for example, difficult fabrics and/or techniques, and expensive fabrics.

Learners should be given guidance on minimal waste of fabric, the production of lay plans, materials used in production processes and the overall cost effectiveness of the process before putting these skills into practice themselves. They should also be required to complete quality checks throughout the production process in order to develop their skills and understanding of the planning and evaluation of finished sample garments.

Evidence for learning outcome 2 can take the form of an ongoing evaluation which may also include tutor observations made during the construction process. It should also include the sequence of operation used for the construction of the garment and any alterations provide details of any samples or toiles completed. Additional evidence may be in the form of tutor observation and question and answer records.

Learning outcome 3 can be evidenced by the observation of individual learners during the production process. Learners should select and use the appropriate techniques and processes which should be documented in the ongoing record of work undertaken and evaluation. Learners should be observed whilst cutting out the garment, transferring pattern markings, using appropriate tools and machinery, identifying of machine faults and remedies, adding any decorative detail and pressing and finishing. The finished garment should be appropriately assembled, well finished and presented.

Regular feedback should be given to learners through day to day discussion and formal and informal assessment. Learners should participate in a group critique on completion of the final garment.

## Outline learning plan

The outline learning plan has been included in this unit as guidance and can be used in conjunction with the programme of suggested assignments.

The outline learning plan demonstrates one way in planning the delivery and assessment of this unit.

Topic and suggested assignments/activities and/assessment
Introduction to unit and assignment – whole class.
<b>Assignment 1:</b> Preparation for Garment Production
Identify appropriate fabrics and haberdashery for garment production. This will include a detailed costing and yardage. Discussion, demonstration, group and individual activities.
Garment demonstration, group production of a lay plan, followed by individual work.
Guidance on pattern laying and cutting out. Individual practise.
Learners place pattern onto fabric and cut out using a cost effective lay, transferring appropriate pattern markings for production.
<b>Assignment 2:</b> Quality Improvement Report
Discussion on quality checks – whole class.
Learners research and report on quality inspection within the fashion industry in pairs.
In pairs learners, carry out quality checks, producing evidence of the identification of quality faults, eg incorrect stitch size, tension.
<b>Assignment 3:</b> Garment Production
Learners individually plan the production process through a cost effective sequence of operation individuals. This should be accompanied by a technical specification and working sketch.
Learner initiated study: Safely use and select appropriate tools and machinery to carry out the production process.
Learners add decorative details and trims if applicable.
Learners press and, present finished garment.
Learners evaluate the production process.
Group critique.
Review of unit and assessment.

## Assessment

To achieve P1, learners must select the appropriate tools, equipment and production process for sample garment production. Evidence should include practical testing and the production of substantial samples and toiles. Learners should produce a portfolio which includes stitched samples, annotated notes, health and safety documentation, lay plan, costing, sequence of operation, technical specification sheet, working sketch and a sequence of operation. The portfolio should relate to a variety of garments including the assessed garment(s).

For P2, learners must record the planning of garment production and an ongoing evaluation of the production process to demonstrate their understanding of how they can improve their work.

For P3, learners need produce well finished garments which demonstrate a variety of production processes and include the cutting out of a pattern, seaming, seam finishes, fashion details and pressing and finishing techniques. The garment must be accompanied by a record of evidence of the planning process, which should include the sequence of operation of the production process, identifying production techniques, different types of threads, trims, and carrying out quality checks.

To achieve M1, learners must effectively plan and evaluate a variety of garments at the various production stages, and provide visual and/or written evidence of the process in addition to observation. Learners must demonstrate effective planning in terms of action planning, and identification and selection of individual production techniques and processes. Learners should, with a degree of independence, produce well finished garments which demonstrate good practical skills and understanding of the production process. They must operate all equipment and hand tools independently, demonstrating good practice with consideration to both self and peers within a workshop environment.

To achieve D1, learners must demonstrate that they have continuously reflected and evaluated throughout the production process and that this has informed a high degree of practical application in the creation of quality garments. The work must have been completed independently and demonstrate a degree of sophistication.

## Programme of suggested assignments

The table below shows a programme of suggested assignments that cover the pass, merit and distinction criteria in the assessment and grading grid. This is for guidance and it is recommended that centres either write their own assignments or adapt any Edexcel assignments to meet local needs and resources.

Criteria covered	Assignment title	Scenario	Assessment method
PI, P2	<b>Assignment 1:</b> Preparation for Garment Production (Individually produced documentation)	A brief from a manufacturing company to produce a sample garment to a specified target market to a given budget and deadline which is accompanied by detailed production process requirements.	<ul style="list-style-type: none"> <li>• Stitched samples.</li> <li>• Annotated notes.</li> <li>• Health and safety documentation.</li> <li>• Lay plan.</li> <li>• Costing.</li> <li>• Technical specification sheet.</li> <li>• Working sketch.</li> <li>• Sequence of operation.</li> <li>• (Toile if appropriate.)</li> <li>• Record of tutor observations.</li> </ul>
PI, P2	<b>Assignment 2:</b> Quality Improvement Report (Research undertaken in pairs but report written individually by learners)	Brief for manufacturing company working to tight deadlines and budget constraints.	<p>Written report to include:</p> <ul style="list-style-type: none"> <li>• research on quality inspection within the fashion industry</li> <li>• details of quality checks carried out during the production process</li> <li>• samples of checks completed and solutions to faults.</li> </ul>
P3, M1, DI	<b>Assignment 3:</b> Garment Production (Individually produced well finished garment)	Designer following a brief from a manufacturing company to produce a well finished sample garment to a specified target market to a given budget and deadline.	<p>Finished garment:</p> <ul style="list-style-type: none"> <li>• sequence of operation</li> <li>• record of the production process</li> <li>• fabric and haberdashery requirements listing</li> <li>• evaluation</li> <li>• record of tutor observations.</li> </ul>

## Links to National Occupational Standards, other BTEC units, other BTEC qualifications and other relevant units and qualifications

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

Level 1	Level 2	Level 3
Introduction to Garment Making	Working with Fashion Briefs	Production Techniques for Fashion and Clothing
Introduction to Hand and Machine Sewing Techniques	Working with Accessory Briefs	Pattern Construction
		Pattern Development

### National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

#### Skillfast-UK Sector Skills Council

- TP 18 Drafting pattern for costumes
- O46NAMTech 13 Construct and adapt patterns to customer requirements
- 046AMTech 9 Make up Apparel Products from Patterns
- AMTech 19 Investigate markets, materials and styles
- AMT7 Produce Prototype/Sample Patterns and Assess for Fit
- 046NAMTech 15 Solve quality issues for apparel production
- 046NAMTech 16 Produce sample garments for manufacture
- 046NAMTech 17 Provide technical feedback on sample garments.

### Essential resources

Learners need access to the appropriate production equipment used within the fashion and clothing industry, such as industrial sewing equipment, including flat bed sewing machines, overlocking machines and industrial pressing equipment. Domestic machines can be used.



## Employer engagement and vocational contexts

Centres should develop links with practising fashion and tailors, to deliver assignments to learners or to provide work experience.

Links with employers are essential to the delivery of the programme for work experience and future employment.

Vocational learning support resources:

- Learning and Skills Network – [www.vocationallearning.org.uk](http://www.vocationallearning.org.uk)

Business and finance advice:

- local and regional Business Link – [www.businesslink.gov.uk](http://www.businesslink.gov.uk)

Assignments should be vocationally relevant; centres should consider the delivery of 'live projects', for example, to support the vocational content of the unit and programme.

Creative and Cultural Skills ([www.ccskills.org.uk](http://www.ccskills.org.uk)), the Sector Skills Council for Arts, Crafts and Design, has launched the web portal Creative Choices ([www.creative-choices.co.uk](http://www.creative-choices.co.uk)). This portal has a range of information about careers in the arts, crafts and design sector, including job descriptions.

Skillfast-UK, the Sector Skills Council for Fashion and Textiles ([www.skillfast-uk.org](http://www.skillfast-uk.org)), provides details on careers ([www.skillfast-uk.org/justthejob](http://www.skillfast-uk.org/justthejob)) and the industry and has regularly updated news and events pages.

## Indicative reading for learners

### Textbooks

Amaden-Crawford C – *Guide to Fashion Sewing* (Fairchild Books, 2006) ISBN 978-1563674501

Carr R – *Couture: The Art of Fine Sewing* (Batsford, 1993) ISBN 978-0935278286

Cole C and Czachor S – *Professional Sewing Techniques for Designers* (Fairchild, 2009) ISBN 978-1563676147

Holman G – *Bias Cut Dressmaking* (Batsford, 2001) ISBN 978-0713486244

McDonald C – *Vogue Sewing* (Sixth and Spring Books, 2006) ISBN 978-1933027005

Mooney S – *Making Latex Clothes* (Batsford, 2004) ISBN 978-0713488654

Moss S – *Costumes and Chemistry: A Comprehensive Guide to Materials and Applications* (Batsford, 2001) ISBN 978-0896762145

Shaeffer C – *Couture Sewing Techniques* (Taunton Press, 2001) ISBN 978-1561584970

Shaeffer C – *Fabric Sewing Guide* (Krause Publications, 2008) ISBN 978-0896895362

Shaeffer C – *High Fashion Sewing Secrets from the World's Best Designers: (Rodale Press, 2001)* ISBN 978-1579544157

Shaeffer C – *Sewing for the Apparel Industry* (Prentice Hall, 2001) ISBN 978-0321062840

### Website

[www.drapersonline.com](http://www.drapersonline.com)

Drapers magazine online

## Delivery of personal, learning and thinking skills

The table below identifies the opportunities for personal, learning and thinking skills (PLTS) that have been included within the pass assessment criteria of this unit.

Skill	When learners are ...
<b>Independent enquirers</b>	selecting, using and safely operating appropriate equipment and machinery for the development of garment production
<b>Creative thinkers</b>	selecting and using appropriate production processes to assemble a well finished garment
<b>Reflective learners</b>	evaluating their work at appropriate stages of the production process
<b>Self-managers</b>	planning the production process and use appropriate techniques to present well finished garments and accompanying documentation.

Although PLTS are identified within this unit as an inherent part of the assessment criteria, there are further opportunities to develop a range of PLTS through various approaches to teaching and learning.

Skill	When learners are ...
<b>Independent enquirers</b>	selecting and operating appropriate equipment and materials
<b>Creative thinkers</b>	using an innovative and creative approach to the production process when completing finished garments
<b>Reflective learners</b>	adapting and refining garment production processes to meet a sophisticated level of competence
<b>Team workers</b>	working as a team to produce a collection of garments
<b>Self-managers</b>	producing garments which demonstrate a high standard of competence and meeting the requirements of the brief and meeting the deadline
<b>Effective participators</b>	effectively participating in group critique and presentations.

## ● Functional Skills – Level 2

Skill	When learners are ...
<b>ICT – Develop, present and communicate information</b>	
Enter, develop and format information independently to suit its meaning and purpose including: <ul style="list-style-type: none"> <li>• text and tables</li> <li>• images</li> <li>• numbers</li> <li>• records</li> </ul>	producing and presenting the following using IT: <ul style="list-style-type: none"> <li>• lay plan</li> <li>• sequence of operation</li> <li>• working sketch</li> <li>• costing</li> <li>• technical specification</li> <li>• evaluation</li> </ul>
Bring together information to suit content and purpose	
Present information in ways that are fit for purpose and audience	
<b>Mathematics</b>	
Interpret and communicate solutions to practical problems in familiar and unfamiliar routine contexts and situations	producing a cost effective lay plan for the selected garment to include fabric requirements for a minimum number of two fabric widths
Draw conclusions and provide mathematical justifications	
<b>English</b>	
Speaking and listening – make a range of contributions to discussions and make effective presentations in a wide range of contexts	participating in one to one tutorials and group critique throughout the production process
Reading – compare, select, read and understand texts and use them to gather information, ideas, arguments and opinions	gathering research on quality inspection processes used within the fashion and clothing industry
Writing – write documents, including extended writing pieces, communicating information, ideas and opinions, effectively and persuasively	producing an ongoing evaluation of the production process, sequence of operation and report of quality inspection within the fashion and clothing industry.