



National Unit specification: general information

Unit title: Develop and Manufacture: Trousers (SCQF level 6)

Unit code: FP5M 12

Superclass: WH

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Version: 02

Summary

This Unit is designed to use pattern construction and sewing skills to create trousers. Candidates will manipulate a basic trouser block to make relevant style changes, create and cut out a production pattern and then sew the trousers. Candidates will use industrial equipment and methods and will work in accordance with working drawings.

This Unit forms part of the National Certificate in Fashion Design and Manufacture but can also be delivered as a freestanding Unit.

Outcomes

- 1 Manipulate a block to produce garment pattern pieces for trousers.
- 2 Prepare to manufacture trousers.
- 3 Manufacture trousers.

Recommended entry

While entry is at the discretion of the centre, candidates would normally be expected to have attained a Course or its component Units at SCQF level 5. It would be beneficial if candidates had some basic understanding of pattern construction and experience of using industrial machine sewing skills.

Credit points and level

1 National Unit credit at SCQF level 6: (6 SCQF credit points at SCQF level 6*)

**SCQF credit points are used to allocate credit to qualifications in the Scottish Credit and Qualifications Framework (SCQF). Each qualification in the Framework is allocated a number of SCQF credit points at an SCQF level. There are 12 SCQF levels, ranging from Access 1 to Doctorates.*

National Unit specification: general information (cont)

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Core Skills

Achievement of this Unit gives automatic certification of the following Core Skills component:

- ◆ Critical Thinking at SCQF level 5
- ◆ Planning and Organising at SCQF level 5
- ◆ Using Graphical Information at SCQF level 5

There are also opportunities to develop aspects of Core Skills which are highlighted in the Support Notes of this Unit specification.

National Unit specification: statement of standards

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Acceptable performance in this Unit will be the satisfactory achievement of the standards set out in this part of the Unit specification. All sections of the statement of standards are mandatory and cannot be altered without reference to SQA.

Outcome 1

Manipulate a block to produce garment pattern pieces for trousers.

Performance Criteria

- (a) Create a manipulation sheet for trousers using a full scale block in accordance with working drawings for an agreed design.
- (b) Produce a full scale production pattern for trousers in accordance with the working drawings.
- (c) Annotate the production pattern with relevant information.
- (d) Evaluate the production pattern in accordance with given working drawings.

Outcome 2

Prepare to manufacture trousers.

Performance Criteria

- (a) Produce a mock up of the trousers for an agreed design to assess design, fit and pattern.
- (b) Evaluate the production pattern and adjust as required.
- (c) Cut out the trousers accurately using the production pattern in an agreed final fabric.
- (d) Comply with appropriate Health and Safety requirements.

Outcome 3

Manufacture trousers.

Performance Criteria

- (a) Produce trousers using industrial equipment and methods for an agreed design.
- (b) Finish the trousers to a saleable standard.
- (c) Create a specification sheet with relevant manufacturing information.
- (d) Evaluate the trousers against the design.
- (e) Comply with appropriate Health and Safety requirements.

National Unit specification: statement of standards (cont)

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Evidence Requirements for this Unit

Evidence is required to demonstrate that candidates have achieved all Outcomes and Performance Criteria.

Outcomes 1 and 2 — Practical exercises

For **Outcome 1** candidates will be required to:

- ◆ use given working drawings for a design to produce a manipulation sheet incorporating a minimum of 3 manipulations
- ◆ create a full scale production pattern for the design
- ◆ annotate the production pattern with the following information — seam allowances, grain lines, notches, drill holes, balance marks, size; style, cutting instructions and pattern piece identification
- ◆ evaluate the quality of the production pattern against the working drawings using a given evaluation checklist

For **Outcome 2** candidates will be required to:

- ◆ create a mock up with toile fabric to test design, fit and pattern
- ◆ evaluate and adjust the product pattern as required
- ◆ cut out the trousers accurately using the production pattern in an agreed final fabric, showing understanding of fabric type and efficient lay planning

For **Outcome 3** candidates will be required to:

- ◆ demonstrate industrial sewing methods for relevant trousers manufacturing techniques — this should be assessed using an observation checklist which should ensure compliance with H&S requirements, including maintaining the work area
- ◆ produce trousers which complies with the working drawing for the agreed design and is within an overall girth and length tolerance of ± 1 cm
- ◆ finish the trousers to a saleable standard
- ◆ create a specification sheet which includes a working drawing, style features, pattern cutting stages, pattern components, operational breakdown
- ◆ evaluate the quality of the finished trousers against the working drawings using a given evaluation checklist

National Unit specification: support notes

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This part of the Unit specification is offered as guidance. The support notes are not mandatory.

While the exact time allocated to this Unit is at the discretion of the centre, the notional design length is 40 hours.

Guidance on the content and context for this Unit

This Unit could be studied on its own as a freestanding Unit or it could be studied in conjunction with other Units as part of the National Certificate for Fashion Design and Manufacture.

This Unit will be a continuation of the skills developed in the Sewing Skills and Pattern Construction Units. The Unit could be delivered in an integrated way with other Units, eg using basic blocks created in Pattern Construction Units and designs created in Fashion Design Units.

The Unit will focus on industrial methods and techniques using industrial equipment.

Key skills to be developed and consolidated in the Unit will include:

- ◆ drafting block patterns
- ◆ using annotated working drawings (flats/technical drawings)
- ◆ using manipulation techniques and creating a manipulation sheet (sometimes referred to as a manipulation draft)
- ◆ producing production patterns (including pattern balance lines/marks, drill holes, notches)
- ◆ lay planning and fabric cutting
- ◆ industrial sewing and garment construction techniques
- ◆ fabric handling techniques
- ◆ finishing techniques

Guidance on learning and teaching approaches for this Unit

A candidate centred, resource based learning approach is recommended. The Outcomes in this Unit need not be taught separately and it is likely that an integrated approach could be used. The Outcomes are likely to be taught in the order shown.

Candidates must use industrial equipment and methods. Industrial equipment should include: three thread overlocker, single needle lockstitch machine, blind hemmer, button hole machine functions, pressing equipment, iron and vacuum table, various sewing attachments.

The requirements to meet tolerance and comply with specifications must be stressed and candidates must evaluate their own work on an on-going basis. Candidate should also test and adjust production patterns before cutting out fabric.

National Unit specification: support notes (cont)

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Candidates need to be aware of the requirements for finishing their garment to a saleable quality. Candidates should discuss the differences in quality and price of garments, for example by comparing and contrasting quality and prices of budget stores and more expensive stores.

Efficient lay planning should be demonstrated and implications for fabric and costs discussed. Implications of notations on pattern pieces, grain lines and cutting instructions could also be discussed.

Candidates could be encouraged to create a portfolio which includes photographs recording the development and manufacturing process, eg fashion sketch/working drawing, manipulation sheet, production pattern, mock up, layout, final garment.

Definition of acceptable 'saleable' standard

The definition of a 'saleable' standard will differ according to the SCQF level of the Unit. Each qualification level should be a skills progression from the previous level.

Within high street stores there is often a basic range and a higher quality range. NQ Units at SCQF levels 5 and 6 would be comparable to the saleable standard expected in the lower range high street store's basic range. Level 5 would have more 'allowable' faults than level 6. HN Units at levels 7 and 8 would be comparable to the saleable standard expected in the mid range high street store's basic range. Level 7 would have more 'allowable' faults than level 8.

Centres could produce samples of work at the minimum acceptable level and also at a high level of finish. Samples of what is not acceptable would also be useful — such as poor stitch tension in a garment seam. The following areas should be considered when assessing an acceptable 'saleable' standard:

- ◆ raw material faults, eg holes, tears, marks on fabric
- ◆ machining faults, eg unbalanced stitch tension, skipped stitches, puckered stitches
- ◆ appearance defects, eg notches too deep and visible in seam, twisted hem, zip slide unable to open or close, sleeve not draping correctly
- ◆ finish, eg trimming of threads and final pressing

Candidates should be encouraged to inspect the inside as well as the outside of a garment. They should look at the stitching, seams and seam finishes and the drape of the garment. Candidates could benchmark their work against samples to assess if it is of an acceptable standard.

Guidance on approaches to assessment for this Unit

Each candidate should have several opportunities to develop practical skills required in this Unit and should be assessed at appropriate points throughout the Unit. The Outcomes are likely to be assessed in the order shown. Where a candidate is unsuccessful in achieving an Outcome, provision should be made for remediation and re-assessment.

National Unit specification: support notes (cont)

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Instruments of Assessment

Centres may use Instruments of Assessment which are considered by assessors/tutors to be the most appropriate.

It is recommended that practical exercises are used to assess Outcomes 1, 2 and 3. As well as producing the requirements of the Outcomes, practical observation checklists should be used to evidence the candidates' completion of the Outcomes and Performance Criteria, in particular in relation to the sewing techniques, cutting techniques and compliance with Health and Safety requirements.

Assessment Guidance

Outcome 1

The design for the trousers could be candidate's own design that they created or it could be a given design. In either case candidates need to have working drawings for a design to create their garment. Candidates must create a manipulation sheet which includes a minimum of three manipulations selected from the following: dart manipulation, shorten/lengthen, flare, taper, pockets related to sewing, panels, yokes, pleats, hem finishes, fastenings, varied seam allowances, different waistlines — high, hipster, elastic. Candidates should be provided with an evaluation checklist to allow them to evaluate the quality of the production pattern against the working drawings

Outcome 2

Candidates must create a mock up to test design, fit and pattern and then adjust the pattern as required. The fabric used for the skirt could be candidate's own selection or it could be a given fabric. Candidates must take account of fabric type and efficient lay planning when cutting out the production pattern.

Outcome 3

The candidate must manufacture the trousers using relevant sewing techniques which may include darts, zips (concealed, fly, fashion), facings and waistbands, pockets (slanted, patch, ticket), panels yokes, belt carriers, hem finishes (slit, circular edge hem, turn ups), elastication, pleats and gathers, fastenings. The trousers must comply with the agreed design, be within an overall girth and length tolerance of ± 1 cm and be finished to a saleable standard (as a point of reference the basic range of a lower range high street store would be an acceptable saleable standard). Candidates should be provided with an evaluation checklist to allow them to evaluate the quality of the finished trousers against the working drawings.

National Unit specification: support notes (cont)

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Opportunities for the use of e-assessment

E-assessment may be appropriate for some assessments in this Unit. By e-assessment we mean assessment which is supported by Information and Communication Technology (ICT), such as e-testing or the use of e-portfolios or e-checklists. Centres which wish to use e-assessment must ensure that the national standard is applied to all candidate evidence and that conditions of assessment as specified in the Evidence Requirements are met, regardless of the mode of gathering evidence. Further advice is available in *SQA Guidelines on Online Assessment for Further Education (AA1641, March 2003)*, *SQA Guidelines on e-assessment for Schools (BD2625, June 2005)*.

Opportunities for developing Core Skills

During the delivery of this Unit candidates will be involved a range of practical activities which could offer good opportunities for developing aspects of:

- *Communication*
- *Problem Solving*
- *Numeracy*

The following gives some examples of some of the opportunities for developing these Core Skills which the Unit makes available to candidates.

Communication (Practical exercises) — Providing accurate annotations on production pattern; creating a specification sheet which demonstrates the different manufacturing processes.

Problem Solving (Practical exercises) — Interpretation of working drawings and design; use of manipulation techniques; evaluation of production pattern and sewn garment.

Numeracy (Practical exercises) — Ensuring measurements are accurate; working within tolerances.

Disabled candidates and/or those with additional support needs

The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments, or considering whether any reasonable adjustments may be required. Further advice can be found on our website www.sqa.org.uk/assessmentarrangements

History of changes to Unit

Version	Description of change	Date
02	Core Skills Components Critical Thinking, Planning and Organising and Using Graphical Information at SCQF level 5 embedded.	29/09/2011

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