

Higher National Unit specification

General information for centres

Unit title: Fashion: Technical Planning and Production Techniques

Unit code: F1PN 34

Unit purpose: This Unit is designed to enable the candidate to understand the planning and production process involved in preparing a garment for the manufacturing process. It is suitable for those studying fashion technology or working in a related area.

On completion of the Unit the candidate should be able to:

- 1 Produce calculations and data used in technical planning and production of a garment.
- 2 Apply technical planning and production techniques.

Credit points and level: 1 HN credit at SCQF level 7: (8 SCQF credit points at SCQF level 7*)

**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.*

Recommended prior knowledge and skills: Entry to this Unit is at the discretion of the centre, however it would be beneficial to the candidate if he/she possessed skills in any of the following areas; pattern development, sewing and production management to SCQF level 5/6. Industrial experience in the area of garment manufacture would be acceptable.

Core Skills: There are opportunities to develop the Core Skills of Problem Solving and Numeracy to SCQF level 5 in this Unit, although there is no automatic certification of Core Skills or Core Skills components.

Context for delivery: If this Unit is delivered as part of a Group Award, it is recommended that it should be taught and assessed within the subject area of the Group Award to which it contributes.

Assessment: Assessment for this Unit could take the form of the candidate completing five individual tasks which involve calculations and data used for technical planning and production of a garment. On completion of these tasks the candidate could work on a practical assignment to prepare the relevant paperwork and calculations to show that the correct application of technical planning and production techniques has been completed for the given assignment.

Higher National Unit specification: statement of standards

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The sections of the Unit stating the Outcomes, Knowledge and/or Skills, and Evidence Requirements are mandatory.

Where evidence for Outcomes is assessed on a sample basis, the whole of the content listed in the Knowledge and/or Skills section must be taught and available for assessment. Candidates should not know in advance the items on which they will be assessed and different items should be sampled on each assessment occasion.

Outcome 1

Produce calculations and data used in technical planning and production of a garment

Knowledge and/or Skills

- ◆ Specification sheets
- ◆ Garment Costing
- ◆ Production planning techniques
- ◆ Performance indices
- ◆ Garment breakdowns

Evidence Requirements

Candidates will need to provide evidence to demonstrate their Knowledge and Skills by showing that they can complete five individual tasks.

The content of these tasks will be as follows:

<i>Specification Sheets:</i>	Dimensions, tolerances, diagrams, equipment used
<i>Garment Costing:</i>	Labour cost, material cost, overhead cost, production cost and selling price
<i>Production Planning:</i>	Calculation of actual minutes worked and line balance
<i>Performance Indices:</i>	Calculation of performance, efficiency, utilisation and absenteeism
<i>Garment Breakdowns:</i>	Calculation of operation breakdowns and garment sequencing

Each task should be allocated 20 marks and a minimum of 70% of the marks should be achieved in each task.

The evidence should be produced under open-book controlled conditions where the candidate will have access to their subject pack, handouts and exercises used in class.

Assessment Guidelines

Candidates could complete a series of individual tasks contained in a workbook. Each individual task could be constructed to test all areas of skills and knowledge for each sub-heading given in the knowledge and skills above. Overall candidates should pass all five tasks to achieve the Outcome.

Higher National Unit specification: statement of standards (cont)

Unit title: Fashion: Technical Planning and Production Techniques

Outcome 2

Apply technical planning and production planning techniques

Knowledge and/or Skills

- ◆ Specification sheets
- ◆ Costing techniques
- ◆ Production planning techniques

Evidence Requirements

Candidates will need to provide evidence to demonstrate their Knowledge and Skills by showing that they can apply technical design and production planning techniques to a practical assignment for the production of an outerwear garment. The assignment will be fully detailed in terms of design, style details and materials to be used.

Completion of the assignment should include detailed specification sheets which correctly record style details, their position and dimensions, machinery and equipment used, trimmings used and all acceptable tolerance specifications, detailed costing information which shows the calculation of the production cost and selling price and accurate use of production planning techniques using correct performance and efficiency indices to provide detailed sequencing for the garment manufacture.

The brief should be completed under open-book controlled conditions in which the candidate has access to their subject pack including handouts and exercise materials.

Assessment Guidelines

The assessment for this Outcome could take the form of a practical assignment for a ladies outerwear garment such as a coat. The assignment could be given in written form with visuals or could be in the form of a finished garment. In this assignment the candidate could prepare the relevant paper work and calculations to show that the correct application of specification sheets, costing and planning techniques has been completed to meet the requirements of the assignment.

Administrative Information

Unit code: F1PN 34

Unit title: Fashion: Technical Planning and Production Techniques

Superclass category: WH

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Version	Description of change	Date

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Higher National Unit specification: support notes

Unit title: Fashion: Technical Planning and Production Techniques

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 is a mandatory Unit on the HNC/HND Fashion Technology and Manufacture with Design.

With the globalisation of the Fashion industry it has become increasingly important that the information moving between customers and suppliers is clear, precise and accurate. This has resulted in the growth in demand for staff with the required skills in Technical Design and Production planning. It is in these areas that all the relevant garment specification, construction and production planning is carried out to prepare the garments for manufacturing. This is usually carried out in a company's centrally located Technical Design facility and all information generated here is passed to all concerned throughout the world.

Methods of generating, collating and presenting this data in a standardised format has been perfected by many companies and it is these skills and techniques that are included within the Outcomes of this Unit. On completion of this Unit a candidate will have a firm foundation in Technical Design and Production Planning enhancing their employability skills or prepare them for university courses in Fashion Technology/Design.

The following techniques should be taught and should include calculations as indicated.

<i>Specification Sheets:</i>	Dimensions, tolerances, diagrams, equipment used
<i>Garment Costing:</i>	Labour cost, material cost, overhead cost, production cost and selling price
<i>Production Planning:</i>	Calculation of actual minutes worked and line balance
<i>Performance Indices:</i>	Calculation of performance, efficiency, utilisation and absenteeism
<i>Garment Breakdowns:</i>	Calculation of operation breakdowns and garment sequencing

Centres should consider developing standardised pro formas to deal with these commonly used documents. Pro formas should be based on those used in industry.

Guidance on the delivery and assessment of this Unit

To provide the candidate with the skills and knowledge to successfully complete this Unit the candidate must be shown how each individual technique is applied and used in isolation of the others. To complete this part the candidate will be given instruction and demonstrations by the lecturer enabling the candidate to complete a series of exercises from their workbook, which will prepare them for the completion of a summative assessment.

Higher National Unit specification: support notes (cont)

Unit title: Fashion: Technical Planning and Production Techniques

Once the candidate has shown that they have fully understood the application and use of the techniques they will then be shown how the techniques are used in an integrated way. This allows the candidate to fully understand the part played by each and how the accuracy of the information by each one has a bearing on the other and the process as a whole. These integrated assignments can take the form of an actual working situation where upon the candidate is given a specified garment style and is asked to compile the paperwork required to prepare the garment in readiness for manufacturing using the relevant technical planning and production techniques. The assessment for this part of the Unit will be carried out in the same manner. Each practical assignment used for practice and the final assessment will have clear and different specification for the candidate to work from.

Opportunities for developing Core Skills

Candidates will develop the Core Skills in Problem Solving and Numeracy by collating material and labour costs, they will also complete the calculation of performance indices which will be used in the area of production planning. Candidates will be working with different scenarios in the process of this Unit and they must be able to plan each stage to ensure that accuracy at each stage is completed to provide an accurate platform for the next stage to be carried forward.

Open learning

The work content of this Unit has been designed to ensure that they candidate receives a firm foundation in the techniques of Technical Design and Production Planning. To ensure that the candidate fully understands the techniques and their applications a series of practical assignments have been included. This will result in the candidate engaging in regular dialogue with the lecturer as they progress and complete each assignment. Due to this continual inclusion of lecturers time it is felt that this Unit is not suitable for open learning.

Candidates with disabilities and/or additional support needs

The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments, or considering alternative Outcomes for Units. Further advice can be found in the SQA document *Guidance on Assessment Arrangements for Candidates with Disabilities and/or Additional Support Needs* (www.sqa.org.uk).

General information for candidates

Unit title: Fashion: Technical Planning and Production Techniques

In this Unit you will learn the various skills and techniques used by companies in the Fashion Industry to complete the technical planning and production planning stages in the process of manufacturing a complete garment. You will be shown how to construct the various specification sheets containing such information as how the garment is put together, what machinery is required, the range of sizes to be made and the tolerances which are acceptable.

You will also be shown how to cost a garment and to identify the manufacturing cost which can be used as a basis for profit margins to be added before selling. The calculation of performance indices will be shown to you and how they are used in the pre-planning of production will be explained.

At all times throughout this Unit you will be using terminology and information layouts as used by the specialists within the industry. Your assessment for this Unit will consist of completing tasks involving make up and calculation of the techniques.

These tasks will be based on realistic industrial situations. To assess this part of the Unit a realistic industrial practical assignment will be set up for you in which you will work on carrying out the calculations involved and applying the appropriate techniques to produce a solution to match the specifications given.

In undertaking this Unit you will develop the Core Skills in Problem Solving and Numeracy.