



Higher National Unit specification

General information for centres

Unit title: Forestry Industries Market Evaluation

Unit code: F3YL 35

Unit purpose: This Unit is designed to give the candidate understanding and knowledge of the potential of home grown timber, conifer and broadleaf, in the context of UK wood based industries.

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

- 1 Evaluate the UK's timber inventory and projected raw material harvest against the wood using industry's current and future demands.
- 2 Evaluate home grown forest produce market potential.

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

**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: Access to this Unit is at the discretion of the centre.

Core Skills: There are opportunities to develop the Core Skills of *Communication* and *Numeracy* at 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: The assessment for this Unit takes the form of a holistic project on a given agreed subject area that will cover the requirements in Outcomes 1 and 2.

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

Evaluate the UK's timber inventory and projected raw material harvest against the wood using industry's current and future demands

Knowledge and/or Skills

- ◆ Timber supplies as projected by the Forestry Commission's and other relevant industry sources
- ◆ Wood using industry processes
- ◆ Wood industry demands
- ◆ UK timber inventory
- ◆ Raw material harvests
- ◆ Manufacturing processes
- ◆ British Standards
- ◆ International standards
- ◆ Species range available to processors

Evidence Requirements

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by showing that they can correctly:

- ◆ evaluate the timber supply for a given wood by using industry process. Candidates must include the level of present and future raw material timber stocks to include volume, quality aspects and species range, with indication of other wood industry demands and competition in the same round wood market. Candidates must provide details of where the information was sourced. The research material must include current and future timber supplies which are projected by the Forestry Commission's and other relevant industry sources. Candidates must use web searches from UK and international sources, images and information gathered on visits to a range of timber using industries large and small, traditional and innovative in their evaluation.
- ◆ establish raw material and finished product cost.
- ◆ evaluate the use of recycled material in the manufacturing of the product where used. This evaluation must include the use of recycling fibre and other timber residues. Candidates must evaluate whether recycling is added to the product or used as a fuel or incorporated into new products.

Higher National Unit specification: statement of standards (cont)

Unit title: Forestry Industries Market Evaluation

- ◆ explain and provide schematic drawings or flow chart of the manufacturing process of a wood based industry giving reasons for species choice specification. This must include species choice as preferred by the wood using industries and the specifications in timber size and quality as is necessary in their processes and product manufacture, to British and international standards.
- ◆ candidates must evaluate how it makes use of disposal of residues or the range of markets for its residues.

This Outcome will be integrated with Outcome 2, in that the knowledge and skills from this Outcome are needed for candidates to complete Outcome 2. The evidence of achievement for Outcomes 1 and 2 will be in the form of a single detailed project based on a given or agreed wood using industry.

Outcome 2

Evaluate home grown forest produce market potential

Knowledge and/or Skills

- ◆ Forest produce market
- ◆ Timber import market
- ◆ Retail market
- ◆ Industrial process
- ◆ Value adding processes
- ◆ Chain of custody

Evidence Requirements

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by showing that they can evaluate home grown forest produce market potential. Candidates must:

- ◆ evaluate the importance of wood and wood products in the UK, the import of timber and the contribution of home grown timber to the UK demand for wood
- ◆ describe the timber import and home grown timber market share in the UK and the influence these external markets have on home grown timber at forest roadside
- ◆ analyse diagrammatic and graphical evidence drawn from industry publications, evaluating the timber import and home grown timber market share in the UK and the influence these external markets have on home grown timber at forest roadside
- ◆ analyse schematic drawing or flow chart of the industrial process, quality standards and controls, value adding processes. State the key aspects of the chain of custody, from forest to retail market
- ◆ evaluate information gathered from visits, research and any photographic material that may help illustrate and explain aspects of the assessment
- ◆ evaluate the methods of marketing timber products, product innovations and value adding methods, to a sometimes low grade raw material, to stimulate timber use as a sustainable, durable and highly technically reliable product

This Outcome will be integrated with Outcome 1, in that the knowledge and skills from Outcome 1 are needed for candidates to complete this Outcome.

Higher National Unit specification: statement of standards (cont)

Unit title: Forestry Industries Market Evaluation

The evidence of achievement for Outcomes 1 and 2 will be in the form of a single detailed project based on a given or agreed wood using industry.

Assessment Guidelines for Unit

The evidence of achievement for Outcomes 1 and 2 will be in the form of a single detailed project based on a given or agreed wood using industry. The project should describe:

- ◆ the process used to achieve the product and the class of timber used
- ◆ timber specification for the process
- ◆ annual quota of raw material
- ◆ finished product output
- ◆ estimated costs (of both raw material and finished product)
- ◆ timber buying range from processing point
- ◆ species used
- ◆ volumes used

Candidates could analyse their interaction with the forests and woodlands of that area and evaluate the potential for changes to the land use of that area. The project (suggested word limit of 2,000 words or equivalent).

The report should include:

- ◆ the level of present and future raw material timber stocks
- ◆ selling home grown timber products, quality controls, value added, integration of technical information with the broader aspects of marketing, current trends
- ◆ understanding of interaction between home and international market
- ◆ national and local objectives of management
- ◆ implementation of policies within the forest — certification schemes, chain of custody
- ◆ present and future production and restock programmes
- ◆ expansion of growing stock
- ◆ future age class distribution
- ◆ present and future markets for the produce
- ◆ implementation of strategies to achieve the above
- ◆ production and down line markets

Administrative Information

Unit code: F3YL 35

Unit title: Forestry Industries Market Evaluation

Superclass category: SM

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History of changes:

Version	Description of change	Date

Source: SQA

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Higher National Unit specification: support notes

Unit title: Forestry Industries Market Evaluation

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

The content of this Unit should provide candidates with an understanding of the uses of harvested timber from UK forests in the context of a raw material product for a wide range of wood, using industries and their timber products. The Unit should also provide candidates with an understanding of the market share of home-grown timber products in the UK.

Guidance on the delivery and assessment of this Unit

The general approach with candidates will be to prepare for this assessment by way of site visits and lecture input supplemented by tutorials and suitable internet website use and research.

This is a learning exercise for the candidates, actual forest industry factory site visits with the opportunity to discuss the day-to-day workings of a wood processing plant with the plant managers and operators involved and see infrastructure in place with direct links back to the forest and the harvesting of the products. Information they glean from their research will put them in good stead when they develop their project and harvesting and machinery plans for decision making in the future.

The evidence for achievement for Outcomes 1 and 2 will take the form of a holistic project. It is suggested that this project is designed to give the candidate the opportunity to demonstrate an understanding of the wood using industries of the UK their scale and place within Europe and the world market of timber. Candidates should be able to place timber harvesting and its planning in context, drawing on their actual forest experience on industrial placement.

Opportunities for developing Core Skills

There may be opportunities to develop the following Core Skills in this Unit.

Written Communication may be developed to SCQF level 5 through reading and producing work for formative and summative assessment.

Candidates will be required to carry out calculation of raw material costs and data analysis. Presenting these calculations in graphical form will provide the opportunity to develop Numeracy to SCQF level 5.

Open learning

All Outcomes are appropriate for Open and Distance Learning approaches with candidate packs and Tutor input and support at all stages. Centre devised supervision agreements should detail controlled conditions to ensure authenticity of evidence.

Higher National Unit specification: support notes (cont)

Unit title: Forestry Industries Market Evaluation

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: Forestry Industries Market Evaluation

This Unit through active participation will provide you with the knowledge and understanding of the UK forest industry sector and how it relates to the markets. The Unit is designed to provide you with a knowledge and understanding of the underlying principles for the efficient working of a forest management Unit harvesting timber, under environmental constraints, to supply the wood using industries. It will also develop your evaluation skills in matching what you observe with the stated objectives and policies of the UK timber industry.

The Outcomes that you will acquire on completion of the Unit are as follows:

Outcome 1 will make you aware of the various information sources for research such as maps and images that will help you understand where the timber supply is and crop type and the volumes required now and in the future, for the range of wood using industries traditional and new, along side the operational requirements.

Outcome 2 will give you an understanding of the home timber market, its interaction with the international import market, specifications and output of the home wood using industries, how they compare and produce innovative products and their marketing systems.

This Unit is a mandatory component of the following SQA Group Awards:

- ◆ HND Forestry

Overall, the knowledge and skills acquired in this Unit will help you understand the factors that influence supply to and what part the UK wood using industry plays in the UK economy.

For candidates already in employment this Unit provides an opportunity to extend your existing knowledge and skills and lays a sound grounding for further study in forestry and the wider land based sectors.

This Unit will give you the opportunity to develop your *Communication* (Written) and *Numeracy* Core Skills at SCQF level 5, through the use material research and site visits.

The Unit will be assessed by an assignment submission, based on site visits.