

Higher National Unit Specification

General information for centres

Unit title: Printing Industry Estimating: An Introduction

Unit code: F0PH 34

Unit purpose: This Unit is designed to introduce candidates to estimating techniques used within the printing industry. It enables candidates to prepare estimates of cost and of production within a printing environment, using British Printing Industry Federation (BPIF) methods. It is primarily intended for candidates who expect to take up a career within an administration function in the printing industry.

On completion of the Unit candidates should be able to:

- 1 Describe the role of the print estimator and the relationship with internal and external functions.
- 2 Prepare an estimate of cost using the British Printing Industry Federation system and prepare a customer quotation.

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: Access to this Unit is at the discretion of the centre. However, candidates would normally be expected to have competence in communication and numeracy skills. Candidates should have knowledge of commercial Print Production Processes and have basic IT skills.

Core Skills: There are opportunities to develop the Core Skills of Information Technology 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: This Unit will be assessed by two open-book assessments. For Outcome 1 the candidate will require to respond to short answer questions on the role of the estimator. Outcome 2 will be a practical task which will require the candidate to generate the paperwork to respond to a customer enquiry with a quotation, production plan and detailed costing for a particular print job.

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

Describe the role of the print estimator and the relationship with internal and external functions

Knowledge and/or skills

- ◆ The duties of a print estimator
- ◆ The responsibilities of a print estimator
- ◆ The print estimators links with internal stakeholders
- ◆ The print estimators links with external stakeholders

Evidence Requirements

Candidates will need to provide evidence to demonstrate their knowledge and skills by showing that they can correctly identify the role of the estimator and the relationship with key stakeholders internal and external to the organisation.

For internal stakeholders, these will include: sales department, costing department, production departments, sales order processing, purchasing department.

For external stakeholders, these will include: customers and suppliers of raw materials and outwork.

Correct responses should be generated for all questions. All elements of the knowledge and skills will be covered within the assessment. This should be undertaken in open-book supervised conditions.

Assessment guidelines

Evidence may be presented in the form of short answer responses to a set of standard questions posed in the context of the role of the print estimator and the relationship of the estimator with internal and external functions. One question could be used to cover the relationships for each of the internal and external stakeholders. These questions could be drawn from a bank which could incorporate all of the Evidence Requirements.

Alternatively this may take the form of a case study provided by the subject Tutor, which could incorporate all of the Evidence Requirements.

Higher National Unit specification: statement of standards (cont)

Unit title: Printing Industry Estimating: An Introduction

Outcome 2

Prepare an estimate of cost using the British Printing Industry Federation system and prepare a customer quotation

Knowledge and/or skills

- ◆ Procedures for customer enquiries
- ◆ Constituent parts of an estimate of cost
- ◆ BPIF formulae
- ◆ Quotation content and presentation
- ◆ Standard conditions of sale
- ◆ Customer specification
- ◆ Production plan
- ◆ Costing techniques
- ◆ Working instructions

Evidence Requirements

Candidates will need to provide evidence to demonstrate their knowledge and skills by showing that they can:

- ◆ correctly follow procedures to meet customer requirements
- ◆ produce correctly detailed customer specifications
- ◆ generate precise working instructions which cover pre-press, printing and print finishing and should cover all elements included in the brief
- ◆ accurately calculate materials quantities and cost
- ◆ efficiently plan production processes
- ◆ accurately cost production processes

Candidates should prepare this assessment both manually and using a recognised print estimating software package. The evidence should include all BPIF formulae used, showing workings, and computer print outs.

Satisfactory performance will consist of an quotation to +/- 5% accuracy overall which correctly addresses all issues required within the given brief which includes quantity, number of colours, finished size, number of pages, substrate, artwork delivery, proof requirements, packing and delivery and which complies with the requirements of the BPIF Conditions.

The assessment should be carried out under open-book controlled conditions. The candidate will have access to estimating aids.

Higher National Unit specification: statement of standards (cont)

Unit title: Printing Industry Estimating: An Introduction

Assessment guidelines

The assessment submission of the manual estimate of cost may be presented using any method agreed by prior arrangement with the Tutor.

It is anticipated that candidates would be given one task which would require them to calculate a customer quotation and follow through the necessary paperwork to demonstrate that production planning and costing had been undertaken for a particular job.

Administrative Information

Unit code: F0PH 34

Unit title: Printing Industry Estimating: An Introduction

Superclass category: KH

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History of Changes:

Version	Description of change	Date

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Higher National Unit specification: support notes

Unit title: Printing Industry Estimating: An Introduction

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 was developed as part of the HNC/D Printing where it is an optional HNC Unit and a mandatory HND Unit. It is intended for those who are taking a qualification at Higher National level in the area of Printing or who have experience in this or related fields and wish to further their knowledge and experience.

It is intended that the assessments are completed by students working singly under controlled conditions.

Outcome 1

Topics to cover include:

- ◆ Role of the estimator (printing)
- ◆ Duties of the estimator (printing)
- ◆ Responsibilities of the print estimator
- ◆ The print estimator's links with other functional areas: sales department, costing department, production departments, sales order processing department, purchasing departments
- ◆ The print estimator's links with customers and suppliers

Outcome 2

Whilst it is recognised that industrial software packages are commonly used to generate estimates, it is essential that manual processes provide the underpinning knowledge for this area in order that accuracy/errors are easily detected and corrected and that the range of variable influencing the Outcome are understood.

Guidance on the delivery and assessment of this Unit

The following notes give some additional information on each Outcome. The delivery will be via lecture and demonstration.

Outcome 1

Comprehensive notes should be provided to candidates to permit them to complete an assessment consisting of a series of questions. It may be useful to provide a case study context as the basis for these questions.

Higher National Unit specification: support notes (cont)

Unit title: Printing Industry Estimating: An Introduction

Outcome 2

A manual estimate form should be completed by the candidates to show all workings. Correct terminology for use on print specifications should be used. A manual estimate of cost and a computerised estimate of cost should be accurately produced to include:

- ◆ Customer specification.
- ◆ Working instructions.
- ◆ Material requirements and cost.
- ◆ Production process requirements and cost.

Candidates will be provided with estimating aids such as supplier's price lists for raw materials and services provided, and company information such as equipment available, machine output speeds and hourly cost rates.

The estimate of cost will permit the candidate to prepare a customer quotation and send to a prospective customer. This should include:

- ◆ Correct presentation of quotation.
- ◆ Content of quotation.
- ◆ Standard conditions for sale of print as issued by BPIF.

Candidates will be provided with a printed sample for Outcome 2.

Opportunities for developing Core Skills

This Unit offers opportunities to further develop and extend the Core Skill, 'Numeracy' at SCQF level 5. The Unit does not seek to embed the skill as a development of all elements is seen as a likely pre-requirement of the Unit.

- ◆ Work confidently with a numerical concept.
- ◆ Carry out a range of straightforward calculations.
- ◆ Decide on the numerical operations to be carried out.
- ◆ Use a range of formulae.
- ◆ Carry out complex calculations or a number of sustained calculations.

The candidate will have opportunity to extend their skills in carrying out numerical calculations involving eg materials usage and cost, machine and labour hourly rates, production output times and cost.

This Unit offers opportunities to further develop and extend the Core Skill, 'Information Technology' at SCQF level 5. The Unit does not seek to embed the skill as a development of all elements is seen as a likely pre-requirement of the Unit. Core Skill elements may be further reinforced in the following areas.

Higher National Unit specification: support notes (cont)

Unit title: Printing Industry Estimating: An Introduction

- ◆ Use a networked system — to access and save files.
- ◆ Retrieving information from a range of sources — access and extract data from an MIS database designed for use in the printing industry.
- ◆ Using software in a context requiring some analysis — prepare estimates for printed work.

Open learning

This Unit could be delivered by distance learning. However, it would require planning by the centre to ensure the sufficiency and authenticity of candidate evidence. This could be done by individually questioning candidates. All assessments are supervised which means the centre would have to make arrangements for any open learning candidate to sit their assessments in an appropriately supervised environment.

Arrangements would have to be made to ensure that the evidence for all Outcomes was generated by assessment undertaken as detailed in the assessment guidelines for each Outcome.

Candidates would require access to a recognised print MIS system

For further information refer to the SQA guide, *Assessment and Quality Assurance of Open and Distance Learning* (www.sqa.org.uk).

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. For information on these, please refer to the SQA document *Guidance on Alternative Assessment Arrangements for Candidates with Disabilities and/or Additional Support Needs*, which is available on SQA's website: www.sqa.org.uk.

General information for candidates

Unit title: Printing Industry Estimating: An Introduction

The Unit is designed to enable you to describe the role of the print estimator within a printing organisation, and to describe the relationship with the other departments within the printing company and with customers and suppliers.

You will gain experience in the preparation of estimates of cost and estimates of production outputs within a printing environment.

In the practical elements you will use a recognised print estimating software package to produce an estimate of cost and quotation. You will be provided access to estimating aids such as supplier's price lists for raw materials and services provided, and company information such as equipment available, machine output speeds and hourly cost rates.

You will undertake some of the above work using manual techniques and computerised printing industry recognised Management Information Systems. The use of manual techniques will provide you with a clearer understanding of the functions of the Management Information Systems software.