

Higher National Unit Specification

General information for centres

Unit title: Print Estimating: Manual & Computerised

Unit code: FOPD 35

Unit purpose: This Unit is designed to prepare candidates to undertake tasks involved in the estimating function within the printing industry. It prepares candidates for this role by covering both manual and computerised estimating for a range of work.

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

- 1 Calculate manual estimates of cost and produce customer quotations.
- 2 Prepare computerised estimates of cost for printed work using a recognised Print Management Information System (MIS) system, and prepare customer quotations.

Credit points and level: 1 HN 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; however candidates would normally be expected to have completed Printing Industry Estimating: An Introduction at SCQF level 7, an equivalent qualification or have relevant work experience. Candidates should have competence in communication and numeracy and have basic IT skills. They should also have adequate knowledge of printing materials, processes and terminology.

Core Skills: There are opportunities to develop Core Skills in Numeracy and Information Technology at level SCQF level 6 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.

General information for centres (cont)

Assessment: The Unit should be assessed using a range of printed work which the candidate will be required to estimate both on a manual basis and by use of an industry recognised Print MIS system. This Unit could be assessed holistically by a portfolio of evidence generated by the solving of estimating briefs, and by the production of high quality customer quotations calculated both manually and using a recognised print MIS software package. Outcome 1 and 2 should be assessed by production of estimates of costs calculated both manually and estimated on a recognised print MIS software package. There should be at least four printed samples of varying complexities. Each of the estimates of cost should be produced from a given brief and printed sample, and should show competence and technical ability.

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

Calculate manual estimates of cost and produce customer quotations

Knowledge and/or skills

- ◆ Customer specifications
- ◆ Working instructions
- ◆ Materials quantity and cost calculations using British Printing Industry Federation (BPIF) methods
- ◆ Planning of production process
- ◆ Costing of production process
- ◆ Preparation of final estimate of cost
- ◆ Preparation of customer quotation

Evidence Requirements

Candidates will need to provide evidence to demonstrate their knowledge and skills by showing that they can calculate manual estimates of cost and produce customer quotations. These estimates should demonstrate:

- ◆ correct interpretation of customer specification and working instructions
- ◆ accurate calculation of material quantities and costs
- ◆ estimates of costs of production
- ◆ preparation of customer quotations

Evidence must be generated for four printed samples and customer instructions covering each element of the knowledge and skill, in accordance with the brief supplied by the tutor.

The evidence should include all BPIF formulae used to arrive at quantities and prices and must show all workings. Correct technical terminology should be used for customer specifications, working instructions and quotations for each of the four printed samples.

These should be generated under open-book controlled conditions using estimating aids.

Higher National Unit specification: statement of standards (cont)

Unit title: Print Estimating: Manual & Computerised

Assessment guidelines

The evidence for this Outcome may consist of completed pro forma documentation for each printed sample and customer brief provided by the tutor. The assessment would require the candidates to produce a series of manually calculated estimates of cost to given briefs. The briefs should specify the quantity of prints to be quoted along with the type of paper, delivery details and how the customer is presenting the artwork. Candidates will be permitted use of estimating aids which will include production output data, material price lists, hourly rates, ink matching books, electronic calculators and pro forma documentation. Candidates will not have advance warning of the printed samples to be estimated.

Outcome 2

Prepare computerised estimates of cost for printed work using a recognised Print Management Information System (MIS) system, and prepare customer quotations

Knowledge and/or skills

- ◆ Use of print MIS system
- ◆ Customer specifications
- ◆ Working instructions
- ◆ Materials quantity and cost calculations
- ◆ Planning of production process
- ◆ Costing of production process
- ◆ Customer quotation

Evidence Requirements

Candidates will need to provide evidence to demonstrate their knowledge and skills by showing that they can prepare computerised estimates of cost for printed work using a recognised print MIS system, and prepare customer quotations. These estimates should demonstrate:

- ◆ correct interpretation of customer specifications and working instructions
- ◆ accurate calculation of material quantities and costs
- ◆ estimates of costs of production and customer quotations

The evidence should be in the form of computer print outs and be generated for four printed samples, in accordance with the briefs supplied by the tutor.

Candidates should produce computerised estimates and quotations ensuring that the correct technical terminology is used in customer specifications, working instructions and quotations.

The briefs should specify the quantity of prints to be quoted along with the type of paper, delivery details and how the customer is presenting the artwork. Candidates will be permitted use of estimating aids which will include production output data, material price lists, hourly rates, ink matching books, electronic calculators and use of a recognised print MIS software package.

Candidates will not have advance warning of printed samples to be estimated.

Higher National Unit specification: statement of standards (cont)

Unit title: Print Estimating: Manual & Computerised

These estimates and quotations should be generated under open-book controlled conditions using estimating aids.

Assessment guidelines

The evidence for this Outcome will be in the form of computer print outs. Any recognised Print MIS estimating package may be used.

Administrative Information

Unit code: F0PD 35

Unit title: Print Estimating: Manual & Computerised

Superclass category: KH

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History of Changes:

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Higher National Unit specification: support notes

Unit title: Print Estimating: Manual & Computerised

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 HND Printing where it is optional. It is intended for those who are taking a qualification in Printing at Higher National level or who have experience in this or related fields and wish to further their knowledge and experience. Candidates will be required to produce estimates of cost both on a manual basis and also on a recognised print MIS software package and will require guidance and preliminary tuition from tutors in using the software package.

It is essential that candidates have adequate knowledge of printing materials, printing processes and terminology prior to undertaking this Unit.

Guidance on the delivery and assessment of this Unit

It is intended that the completed assessments are completed by students working singly under controlled conditions. Candidates will be provided with briefs and printed samples for Outcomes 1 & 2.

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

Outcome 1

Manual estimating forms should be completed by candidates to show all workings. Correct terminology for use on print specifications should be used. Manual estimates of cost should be accurately produced to include:

- ◆ Customer specifications.
- ◆ Working instructions.
- ◆ Materials quantity and cost calculations.
- ◆ Planning of production process.
- ◆ Costing of production process.

Outcome 2

Computer print outs should be produced containing correct terminology for use on print specifications. MIS system estimates of cost should be accurately produced to include:

- ◆ Customer specifications.
- ◆ Working instructions.
- ◆ Materials quantity and cost calculations.
- ◆ Planning of production process.
- ◆ Costing of production process.

Higher National Unit specification: support notes (cont)

Unit title: Print Estimating: Manual & Computerised

It is recommended that tutors should discuss the quality of the candidate's work for both Outcomes and if required, additional work should be undertaken. Candidates should be given the opportunity to comment on the evaluation of their work, and will require guidance to ensure that they adopt a suitable approach to operating the software package.

Opportunities for developing Core Skills

This Unit offers opportunities to further develop and extend the Core Skill, 'Numeracy' at SCQF level 6. 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. There are areas where Core Skill elements may be further reinforced:

- ◆ Carry out a range of straightforward calculations.
- ◆ Use a range of formulae.

This Unit offers opportunities to further develop and extend the Core Skill, 'Information Technology' at SCQF level 6. 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. There are areas where Core Skill elements may be further reinforced:

- ◆ Use a networked system — to access and save files.
- ◆ Retrieving information from a range of sources — access and extract data from an MIS database.
- ◆ 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. Candidates would require access to a recognised print MIS system

Arrangements would have to be made to ensure that the evidence is generated by assessment detailed in the assessment guidelines for each Outcome. Authentication of candidate work could be through oral questioning by the assessor on completion of the submitted work. The assessment should be carried out under supervised conditions.

For further information and advice, please see 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: Print Estimating: Manual & Computerised

This Unit is designed to enable you to produce estimates of cost and quotations as sent to prospective customers, in the printing industry. On completion of this Unit, you should be competent in calculating estimates of cost for given printed samples from customer briefs. This will include calculating material requirements in terms of quantities and cost, production times required, and cost of production.

You will carry out the following work using manual and computerised printing industry recognised MIS systems. The use of manual techniques will provide you with a clearer understanding of the functions of the MIS systems software.

- ◆ Evaluating the most economical methods of production.
- ◆ Completing documentation, which would include customer enquiry forms, estimate forms and quotations.
- ◆ Completing estimates of cost on a recognised MIS print software package.
- ◆ Communicating customer requirements.
- ◆ Recognising the requirement for outwork.