

Higher National Unit Specification

General information for centres

Unit title: Financial Studies for the Construction Industry

Unit code: DW3J 35

Unit purpose: This Unit is designed to provide candidates with the ability to apply basic financial management and accounting skills required by the construction industry.

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

- 1 Produce an S-Curve of anticipated rate of spend from given data.
- 2 Produce an annual budget for a construction firm from given data.
- 3 Analyse cash flow requirements for a construction firm from given data.
- 4 Produce a report interpreting annual financial statements for two contracting firms.

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: It would be an advantage for candidates to have a basic knowledge and understanding of estimating and contract conditions. An appreciation of payment procedures for standard building contracts would be beneficial.

Possession of basic knowledge and understanding of estimating and contract conditions may be evidenced by possession of appropriate Units at Higher or HN level.

Core Skills: There are opportunities to develop the Core Skills of Communication, Numeracy, Information and Communication Technology (ICT) and Problem Solving 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: It is possible to assess candidates either on an individual Outcome basis, combinations of Outcomes or by a single holistic assessment combining all Outcomes. The assessment paper(s) should be composed of an appropriate balance of short answer, restricted response and structured questions. Assessment should be conducted under supervised, controlled conditions. A combined assessment covering Outcomes 1, 2 and 3 should not exceed two hours in duration. It should be noted that candidates must achieve all the minimum evidence specified for each Outcome in order to pass this Unit.

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.

An exemplar instrument of assessment and marking guidelines has been produced to provide examples of the type of evidence required to demonstrate achievement of the aims of this Unit and to indicate the national standard of achievement at SCQF level 8.

Higher National Unit specification: statement of standards

Unit title: Financial Studies for the Construction Industry

Unit code: DW3J 35

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 an S-Curve of anticipated rate of spend from given data.

Knowledge and/or skills

- ◆ Income/time relationship of the construction process
- ◆ Typical income anticipated in interim valuations
- ◆ Graphical representation of anticipated income to time in a construction contract

Evidence Requirements

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

- ◆ produce workings showing the time/payment relationship in the recognised $\frac{1}{4}$ - $\frac{1}{3}$ ratio from given information
- ◆ produce a neat well annotated S-curve in graphical format

In any assessment of this Outcome **all** Knowledge and/or Skills items should be included. Candidates must provide a satisfactory response to all items.

Evidence should be generated through assessment undertaken in closed book supervised conditions. Candidates are not allowed to bring textbooks, handouts or notes to the assessment.

Figures must be accurate within a tolerance of two arithmetic or computational errors, with a maximum of two errors of principle.

Assessment guidelines

The assessment of this Outcome may be combined with that for Outcomes 2 and 3.

Higher National Unit specification: statement of standards (cont)

Unit title: Financial Studies for the Construction Industry

Outcome 2

Produce an annual budget for a construction firm from given data.

Knowledge and/or skills

- ◆ Allocation of overheads
- ◆ Allocation of profit
- ◆ Types of budgets
- ◆ Annual budgeting

Evidence Requirements

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

- ◆ produce an annual budget for a small/medium sized construction firm from the information provided
- ◆ identify the various different types of budgets commonly used in construction

In any assessment of this Outcome **all** Knowledge and/or Skills items should be included. Candidates must provide a satisfactory response to all items.

Evidence should be generated through assessment undertaken in closed book supervised conditions. Candidates are not be allowed to bring textbooks, handouts or notes to the assessment.

Figures must be accurate within a tolerance of two arithmetic or computational errors, with a maximum of two errors of principle.

Assessment guidelines

The assessment of this Outcome may be combined with that for Outcomes 1 and 3.

Higher National Unit specification: statement of standards (cont)

Unit title: Financial Studies for the Construction Industry

Outcome 3

Analyse cash flow requirements for a construction firm from given data.

Knowledge and/or skills

- ◆ Preparation of cash flow forecast in the form of a spreadsheet
- ◆ Graphical illustration of cash flow forecast
- ◆ Action related to negative cash flows

Evidence Requirements

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

- ◆ produce a cash flow forecast for a construction firm using a spreadsheet package
- ◆ graphically illustrate the cash flow forecast
- ◆ provide commercially sound recommendations to deal with negative cash flows

In any assessment of this Outcome **all** Knowledge and/or Skills items should be included. Candidates must provide a satisfactory response to all items.

Evidence should be generated through assessment undertaken in closed book supervised conditions. Candidates are not be allowed to bring textbooks, handouts or notes to the assessment.

Figures must be accurate within a tolerance of two arithmetic or computational errors, with a maximum of two errors of principle.

Assessment guidelines

The assessment of this Outcome may be combined with that for Outcomes 1 and 2.

Higher National Unit specification: statement of standards (cont)

Unit title: Financial Studies for the Construction Industry

Outcome 4

Produce a report interpreting annual financial statements for two contracting firms.

Knowledge and/or skills

- ◆ Appropriate ratios for inter company comparison
- ◆ Appropriate reports
- ◆ Concise company comparisons

Evidence Requirements

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

- ◆ produce a report comparing and contrasting the financial status and performance of two limited companies, operating in the construction industry, over a one year period
- ◆ provide a minimum of **five** financial ratios for each company
- ◆ provide suitable comments and/or recommendations for the attention of the directors of one of the companies

In any assessment of this Outcome **all** Knowledge and/or Skills items should be included. Candidates must provide a satisfactory response to all items.

Evidence should be generated through assessment undertaken in open book supervised conditions. Candidates should have access to their own notes and copies of annual financial statements from two contracting firms.

Figures must be accurate within a tolerance of two arithmetic or computational errors, with a maximum of one error of principle.

Assessment guidelines

It is recommended that the two contracting firms used in the assessment operate in a similar sector.

Administrative Information

Unit code:	DW3J 35
Unit title:	Financial Studies for the Construction Industry
Superclass category:	AK
Date of publication:	June 2006
Version:	02 (June 2017)
Source:	SQA

History of Changes:

Version	Description of change	Date
02	Terminology and reference to financial statements revised to reflect requirements of FRS102. Error tolerances inserted.	01/06/2017

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Higher National Unit specification: support notes

Unit title: Financial Studies for the Construction Industry

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 provides candidates with the knowledge and understanding of the relationship between economic concepts and theories within a construction industry context. Attention should be paid in the delivery of this Unit to the content of other Units in the programme, particularly *Construction Industry: An Introduction*.

Recommended time allocations to each Outcome are given as guidance towards the depth of treatment which might be applied to each topic. This guidance has been used in the design of the assessment exemplar material provided with the Unit.

1 Produce an S-curve of anticipated rate of spend from given data (8 hours)

Preparation of S-Curve

$\frac{1}{4}$ – $\frac{1}{3}$ S curve cash flow approximations for 2 to 3 contracts

2 Produce an annual budget for a construction firm from given data (10 hours)

Introductory Items

Overheads

Statement of percentage of overheads to net cost

Statement of percentage profit

Budgets

Understanding of the following types of budget:

- ◆ zero based budgeting
- ◆ functional budget
- ◆ sales budget
- ◆ production budget
- ◆ purchases budget
- ◆ budgetary control
- ◆ fixed budgets
- ◆ flexible budgets
- ◆ production of an annual budget for a firm from information supplied

Production of an annual budget for the firm in Outcome 1 conforming to a set of criteria.
Additional S-curves for projects required to conform with criteria 2.

Higher National Unit specification: support notes (cont)

Unit title: Financial Studies for the Construction Industry

3 Analyse cash flow requirements for a construction firm from given data (12 hours)

Introductory Items

Time payment of overheads

Cash Flow

- ◆ production of time payments of labour and materials for each project
- ◆ production of time payment of valuations for each project to incorporate the retention and retention release
- ◆ production of a cash flow chart incorporating all overheads, project costs and payments
- ◆ allowance within the cash flow chart for bank overdraft interest payments
- ◆ annual cash flow shown in the form of a chart
- ◆ recommendations for actions to deal with negative cash flows

4 Produce a report interpreting annual financial statements for two contracting firms (8 hours)

Introductory Items:

- ◆ Annual Financial Statements of two contracting firms
- ◆ Interpretation of Financial Statements

Report on Financial Statements:

- ◆ profitability
- ◆ the current ratio
- ◆ the acid test
- ◆ the gearing ratio
- ◆ interest cover for lenders
- ◆ return on capital employed
- ◆ inventory turnover
- ◆ trade receivables turnover (average collection period)
(individual companies and inter company comparison)
- ◆ liquidity
- ◆ capital structure
- ◆ activity and efficiency
- ◆ profitability

Guidance on the delivery and assessment of this Unit

This Unit is a specialist quantitative building studies Unit which is recommended as a second year Unit in the HNC and HND Quantity Surveying programme. It appears in other areas of HNC and HND Built Environment awards. As a specialist Unit, it is recommended that the Unit be delivered towards the end of these awards and after candidates have acquired a knowledge of construction technology.

Higher National Unit specification: support notes (cont)

Unit title: Financial Studies for the Construction Industry

Where this Unit is incorporated into other group awards it is recommended that it be delivered in the context of the specific occupational area(s) that the award is designed to cover.

Details on approaches to assessment are given under Evidence Requirements and Assessment Guidelines under each Outcome in the Higher National Unit specification: statement of standards section. It is recommended that these sections be read carefully before proceeding with assessment of candidates.

The volume of evidence required for each assessment should take into account the overall number of assessments being contemplated within this unit and the design of the overall teaching programme.

Opportunities for developing Core Skills

The Unit provides opportunities for the development of Core Skills in Communication, Numeracy, ICT, and Problem Solving. Opportunities for the development of Core Skills at the output level are more fully identified in the Core Skills Signposting Guide.

Core Skill	Outcome 1	Outcome 2	Outcome 3	Outcome 4	Outcome 5
1 Communication					
Reading				✓	
Writing				✓	
Oral					
2 Numeracy					
Using Number	✓	✓	✓	✓	
Using Graphical Information	✓	✓	✓	✓	
3 ICT					
Using Information Technology	✓	✓	✓	✓	
4 Problem Solving					
Critical Thinking	✓	✓	✓	✓	
Planning and Organising	✓	✓	✓	✓	
Reviewing and Evaluating	✓	✓	✓	✓	
5 Working with Others					

Higher National Unit specification: support notes (cont)

Unit title: Financial Studies for the Construction Industry

Open learning

Given that appropriate materials exist this Unit could be delivered by distance learning, which may incorporate some degree of on-line support. However, with regard to assessment, planning would be required by the centre concerned to ensure the sufficiency and authenticity of candidate evidence. Arrangements would be required to be put in place to ensure that assessment(s) were conducted under closed book supervised conditions.

Candidates with additional support needs

This Unit specification is intended to ensure that there are no artificial barriers to learning or assessment. 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 the SQA website **www.sqa.org.uk**.

General information for candidates

Unit title: Financial Studies for the Construction Industry

This Unit is designed to enable you to develop and apply basic financial management and accounting skills required by the construction industry.

In Outcome 1 you will look at the income/time relationship of the construction process.

In Outcome 2 you will look at types of budgets used within a construction firm. This Outcome also covers allocation of overheads and profits.

In Outcome 3 you will be required to produce a cash flow forecast using a spreadsheet package. This will assist you to action negative cash flows.

In Outcome 4 you will look at financial ratios used to interpret financial statements in order to compare different firms and different financial years.

On completion of the Unit you should be able to:

- 1 Produce an S-Curve of anticipated rate of spend from given data.
- 2 Produce an annual budget for a construction firm from given data.
- 3 Analyse cash flow requirements for a construction firm from given data.
- 4 Produce a report interpreting annual financial statements for two contracting firms.

Outcomes 1 to 3 may be assessed by a combined assessment. The assessment will be undertaken in closed book supervised conditions. You will not be allowed to bring textbooks, handouts or notes to the assessment.

Outcome 4 will be assessed in open book supervised conditions. You will be allowed access to your own notes and copies of annual financial statements from two contracting firms.