

Higher National Unit Specification

General information for centres

Unit title: Construction Industry: An Introduction

Unit code: DW41 34

Unit purpose: This Unit is designed to enable candidates to gain knowledge and understanding of the structure of the construction industry, influences on the development process and career opportunities for professionals.

On completion of the Unit candidates should be able to:

- 1 Describe the sectors within the Construction Industry and the Job functions, Professional Bodies and Career Opportunities within it.
- 2 Describe the traditional development process from inception to completion and handover.
- 3 Describe the environmental impact of construction work and how this may be controlled by the planning system.
- 4 Discuss the fundamental elements of Facilities Management.

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: It would be an advantage for candidates to have a basic knowledge and understanding of the construction industry and development process, although this is not essential as the Unit covers all the basic principles. Such knowledge and skills could be evidenced by the possession of an appropriate NC or NQ award.

Core Skills: There are opportunities to develop the Core Skill of Communication 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 covering all Outcomes should not exceed 2 hours in duration. It should be noted that candidates must achieve all 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.

The assessment for Outcomes 1, 2 and 4 in this unit may be combined together into one assessment paper. This paper could be taken by candidates at one single assessment event lasting 1.5 hours. The assessment paper may be composed of a suitable balance of short answer, restricted response and structured questions. This type of assessment will be conducted under controlled supervised conditions.

The assessment for Outcome 3 should take the form of questions which will take the form of self directed study response to an assignment based assessment paper.

An exemplar instrument of assessment and marking guidelines have been produced to provide an example 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 7.

Higher National Unit specification: statement of standards

Unit title: Construction Industry: An Introduction

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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 sectors within the Construction Industry, the Job functions, Professional Bodies and Career Opportunities within it

Knowledge and/or skills

◆ **Sectors:**

- Public Sector
- Private Sector
- Housing, Industrial
- Commercial
- Civil engineering
- Repair and maintenance
- Demolition

◆ **Functions and career opportunities within the Construction Industry:**

- Planning
- Designing
- Costing
- Producing
- Controlling

Evidence Requirements

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

- ◆ identify and describe sectors, functions and career opportunities within the Construction Industry

Evidence for the knowledge and/or skills for this Outcome will be provided on a sample basis. In any assessment a **minimum of three knowledge and/or skills items from each of the two major areas** should be sampled. In order to ensure that candidates will not be able to foresee what items they will be questioned on, a different sample of knowledge/skill items is required each time the Outcome is assessed. Candidates must provide a satisfactory response to all six items.

Higher National Unit specification: statement of standards (cont)

Unit title: Construction Industry: An Introduction

Evidence should be generated through assessment undertaken in controlled, supervised conditions. Assessments should be conducted under closed/open-book conditions and as such candidates should be allowed/not allowed to bring textbooks, handouts or notes to the assessment.

Assessment guidelines

Questions used to elicit candidate evidence may take the form of an appropriate balance of short answer, restricted response and structured questions.

The assessment for this Outcome could be combined with that of Outcome 2 to form a single assessment paper.

Outcome 2

Describe the development process from inception to completion and handover

Knowledge and/or skills

- ◆ Stages of work using the RIBA Plan of Work as a guide, from inception to completion and Handover
- ◆ Typical members of a design team including the type of co-operation and relationships found there in
- ◆ Methods of procurement

Evidence Requirements

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

- ◆ describe stages of a development process from inception to completion and handover

Evidence for the knowledge and/skills for this Outcome will be provided on a sample basis. In any assessment of this Outcome a **minimum of two out of three** knowledge and/or skills items should be sampled. In order to ensure that candidates will not be able to foresee what items they will be questioned on, a different sample of knowledge/skill items is required each time the Outcome is assessed. Candidates must provide a satisfactory response to both items.

Assessment guidelines

Questions used to elicit candidate evidence may take the form of an appropriate balance of short answer, restricted response and structured questions.

The assessment for this Outcome could be combined with that of Outcome 1 to form a single assessment paper.

Higher National Unit specification: statement of standards (cont)

Unit title: Construction Industry: An Introduction

Outcome 3

Describe the environmental impact of construction work and how this may be controlled by the planning system

Knowledge and/or skills

- ◆ Planning Permission
- ◆ Environmental assessment relating to the above application
- ◆ Town and Country Planning system.

Evidence Requirements

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

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

- ◆ describe how the planning system controls the environmental impact of construction work

Evidence for the knowledge and / or skills in this Outcome will be generated through assessment undertaken as an assignment based self-directed study project. Candidates must provide evidence of up to date personal research. A candidates response can be judged to be satisfactory when all items to be considered within the assignment are fully researched, reported on and presented in a logical project format.

Assessment guidelines

Questions used to elicit candidate evidence should take the form of either a scenario based research topic or structured questions which will generate self directed study response to an assignment based assessment paper.

Outcome 4

Discuss the fundamental elements of Facilities Management

Knowledge and/or skills

- ◆ Role of the Facilities Manager
- ◆ Property and premises management
- ◆ People, processes and the workplace
- ◆ Legislation and statutory compliance

Higher National Unit specification: statement of standards (cont)

Unit title: Construction Industry: An Introduction

Evidence Requirements

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

- ◆ identify and explain fundamental elements of Facilities Management

Evidence for the knowledge and/or skills in this Outcome will be provided on a sample basis. In any assessment of this Outcome **two out of four** knowledge and/or skills items is required each time the Outcome is assessed. Candidates must provide a satisfactory response to both items.

In order to ensure the candidate will not be able to foresee what items they will be questioned on, a different sample of **two out of four** knowledge and/or skills items is required each time the Outcome is assessed.

Assessment guidelines

Questions used to elicit candidate evidence should take the form of an appropriate balance of short answer, restricted response and structured questions.

The assessment for this Outcome will be a single assessment paper. The assessment event should be carried out under open-book, supervised and controlled conditions.

Administrative Information

Unit code:	DW41 34
Unit title:	Construction Industry: An Introduction
Superclass category:	TE
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Higher National Unit specification: support notes

Unit title: Construction Industry: 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 has been written to allow candidates to develop knowledge, understanding and skills in the following areas:

- ◆ the sectors within the Construction Industry and the Job functions, Professional Bodies and Career Opportunities within it
- ◆ the traditional development process from inception to completion and handover
- ◆ describe the environmental impact of construction work and how this may be controlled by the planning system
- ◆ the roles and responsibilities of a Facilities Manager in managing property and premises within the related legislative framework

This Unit at SCQF level 7 is a mandatory Unit within the new HNC and HND Built Environment awards.

In designing this Unit the Unit writers have identified the range of topics they would expect to be covered by lecturers. The writers have also given recommendations as to how much time should be spent on each Outcome. This has been done to help the lecturers decide what depth of treatment should be given to the topics attached to each of the Outcomes. Whilst it is not mandatory for a centre to use this list of topics, it is strongly recommended that it does so, to ensure continuity of teaching and learning and because the assessment exemplar pack for this Unit is based on the knowledge and/or skills listed in each of the Outcomes.

The list of topics is given below. Lecturers are advised to study this list of topics in conjunction with the assessment exemplar pack so that they can get a clear indication of the standard of achievement expected of candidates in this Unit.

Outcome 1 (6 hours)

This Outcome should introduce candidates to:

The sectors within the Construction Industry and the Job functions, Professional Bodies and Career Opportunities within it.

Higher National Unit specification: support notes (cont)

Unit title: Construction Industry: An Introduction

◆ **Sectors:**

- Public Sector
- Private Sector
- Housing
- Industrial
- Commercial
- Civil engineering
- Repair and maintenance
- Demolition

◆ **Functions within the Construction Industry:**

- Planning
- Designing
- Costing
- Producing
- Controlling

◆ **Career opportunities within the Construction Industry:**

- Professional
- Technician
- Building Crafts
- Building Operatives

Outcome 2 (10 hours)

This Outcome should introduce candidates to:

The traditional development process from inception to completion and handover.

◆ **Stages of work as per the RIBA Plan of Work:**

- Inception to completion and Handover

◆ **Typical members of a design team:**

- Client: Individual
Property Development Company
Large conglomerate company
Partnership Company

- Professionals: Architect
Surveyors
Engineers
Chartered Builder (main contractor)

Higher National Unit specification: support notes (cont)

Unit title: Construction Industry: An Introduction

◆ **Methods of procurement:**

- Traditional
- Management
- Design and Build
- Partnering

Outcome 3 (10 hours)

This Outcome should provide candidates with knowledge of how:

The process of development is undertaken in terms of the Town and Country Planning system and how environmental impact from construction work is controlled.

◆ **Town and Country Planning:**

- Planning Legislation
- Local Plan's
- Planning applications

◆ **Environmental impact from construction work:**

- Direct impact
- Indirect impact
- Conservation
- Sustainable development
- Recycling of materials
- Pollution
- Manufacturing Processes

Outcome 4 (10 hours)

This Outcome should provide candidates with knowledge of:

Discuss the fundamental elements of Facilities Management. (10 hours)

- ◆ Property assets and premises management will be explained as will the role and responsibilities of the Facilities Manager in relation to the business. Competences will be explained including people and financial management, together with obligations to ensure statutory compliance in property, contract and employment law.

Guidance on the delivery and assessment of this Unit

As this Unit provides core Construction Industry skills which underpins much of the studies done in other areas of the HNC and HND Build Environment awards it is recommended that the Unit be delivered towards the start of these awards.

The Unit can be most productively delivered in parallel with Construction Management Units.

Higher National Unit specification: support notes (cont)

Unit title: Construction Industry: An Introduction

A Case study approach can also be used to integrate all Outcomes, in addition to site visits to allow for 'hands on' knowledge and understanding.

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.

Throughout the Unit emphasis will be placed where appropriate on the application of Health and Safety and Sustainability. Safe working practices should be looked at in accordance with current safety codes of practice and regulations. Sustainability should include reference to criteria affecting sustainability, impact of not implementing sustainability on the environment and the legislation promoting sustainability.

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

Opportunities for developing Core Skills

Core Skill	Outcome 1	Outcome 2	Outcome 3	Outcome 4	Outcome 5
1 Communication					
Reading					
Writing	X	X	X	X	
Oral					
2 Numeric					
Using Numbers					
Using Graphical Information					
3 IT					
Using Information Technology					
4 Problem Solving					
Critical Thinking					
Planning and Organising					
Reviewing and Evaluating					
5 Working with Others					

Open learning

This Unit could be delivered by distance learning, which may incorporate some degree of on-line support and at least two day's in the centre (in order to participate in the site visit elements of the Unit). However, with regard to assessment, planning would be required by the centre concerned to ensure the sufficiency and authenticity of candidate evidence.

For information on normal open learning arrangements, please refer to the SQA guide *Assessment and Quality of Open and Distance Learning (SQA 2000)*.

Higher National Unit specification: support notes (cont)

Unit title: Construction Industry: An Introduction

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 SQA's website: www.sqa.org.uk.

General information for candidates

Unit title: Construction Industry: An Introduction

This Unit has been designed to Introduce you to the Construction Industry it will enable you to study the different sectors within the construction industry and the career opportunities available to you on completion of additional specialised study. The Unit also covers general topics relating to the design, development and construction process, who does what, and how this is achieved. In addition you will be given the opportunity to study local and global environmental issues relating to the construction process and how these are regulated by the Town and Country Planning Legislation.

Site visits are also included in this Unit to allow for 'hands on' knowledge and understanding as to how construction sites are identified and developed.

An introduction to the role and function of a Facilities Manager.

The management techniques of Quality Management and Benchmarking will be discussed, in the context of service delivery and cost.

Discussion on property and premises management will include a brief introduction to basic financial principles.

Discussion on people and processes will be considered in the context of alternative workplaces including cellular, open plan and shared workspace.

Discussion on legislation will include property, contract and employment law.