

## **Group Award Specification for:**

### **SQA Advanced Certificates and SQA Advanced Diplomas in Built Environment:**

**(GN0G 47) SQA Advanced Certificate in  
Built Environment**

**(GN0H 47) SQA Advanced Certificate in  
Architectural Technology**

**(GN0J 47) SQA Advanced Certificate in  
Construction Management**

**(GN0K 47) SQA Advanced Certificate in  
Building Surveying**

**(GN0L 47) SQA Advanced Certificate in  
Quantity Surveying**

**(GM8V 48) SQA Advanced Diploma in  
Architectural Technology**

**(GM8D 48) SQA Advanced Diploma in  
Construction Management**

**(GN0M 48) SQA Advanced Diploma in  
Building Surveying**

**(GM8N 48) SQA Advanced Diploma in  
Quantity Surveying**

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## SQA Advanced Certificates and Diplomas

### Acknowledgement

SQA acknowledges the valuable contribution that Scotland's colleges have made to the development of SQA Advanced Qualifications.

### Further information

Call SQA's Customer Contact Centre on 44 (0) 141 500 5030 or 0345 0345 279 1000. Alternatively, complete our Centre Feedback Form.

### History of changes

It is anticipated that changes will take place during the life of the qualification and this section will record these changes. Centres are advised to check SQA Connect to confirm they are using the up to date qualification structure.

**NOTE:** Where a Unit is revised by another Unit:

- ◆ No new centres may be approved to offer the Unit which has been revised.
- ◆ Centres should only enter candidates for the Unit which has been revised where they are expected to complete the Unit before its finish date.

Version number	Description	Date
07	<b>Addition of Optional Unit:</b> HR4D 47 Building Measurement and Cost Studies has been added as an optional unit to the Advanced Certificate in Quantity Surveying (GN0L 47)	12/06/24
06	<b>Addition of Optional Unit:</b> The unit 'J53M 48' Conversion and Adaptation of Buildings' has been added as an optional unit to the Advanced Certificate in Architectural Technology (GN0H 47) framework.	20/10/23
05	<b>Addition of Optional Unit:</b> J53L 47 – Architectural Procedures added to the Advanced Diploma in Construction Management (GM8D 48) framework.	04/09/23
04	<b>Addition of units:</b> HR7N 47 – Building Information Modelling (BIM): Principles and HR7T 48 – CAD: Digital Collaboration Practices added as Optional units to Frameworks for:  Advanced Diploma Architectural Technology (GM8V 48) Advanced Diploma Construction Management (GM80 48) Advanced Diploma Quantity Surveying (GM8N 48)  <b>Addition of unit:</b> HR7N 47 – Building Information Modelling (BIM): Principles added as Optional unit to Frameworks for:  Advanced Certificate Architectural Technology (GN0H 47) Advanced Certificate Built Environment (GN0G 47) Advanced Certificate Construction Management (GN07 47) Advanced Certificate Quantity Surveying (GN0L 47)	17/08/21
03	<b>Addition of unit:</b> J53H 47- Environmental Design added to the Advanced Diploma in Architectural Technology (GM8V	03/02/21

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	48) framework as an alternative to HR48 47 - Construction Site Surveying A.	
02	<p><b>Revision of Units:</b></p> <p><b>Construction Management/Quantity Surveying</b>            HR4M 48 Standard Forms of Construction Contract (finish date 31/07/2021) has been replaced by J53F 48 Construction Contracts: Conditions and Procedures (start date 01/08/2020)            HR45 47 Construction Materials and Specification (finish date 31/07/2021) has been replaced by J53G 47 Construction Materials and Specification (start date 01/08/2020).            HR3W 47 Health and Safety in Construction (finish date 31/07/2021) has been replaced by J53J 47 Health and Safety in Construction (start date 01/08/2020).</p> <p><b>Built Environment</b>            HR45 47 Construction Materials and Specification (finish date 31/07/2021) has been replaced by J53G 47 Construction Materials and Specification (start date 01/08/2020).            HR3W 47 Health and Safety in Construction (finish date 31/07/2021) has been replaced by J53J 47 Health and Safety in Construction (start date 01/08/2020).</p> <p><b>Architectural Technology</b>            HR4M 48 Standard Forms of Construction Contract (finish date 31/07/2021) has been replaced by J53F 48 Construction Contracts: Conditions and Procedures (start date 01/08/2020)            HR45 47 Construction Materials and Specification (finish date 31/07/2021) has been replaced by J53G 47 Construction Materials and Specification (start date 01/08/2020).            HR3W 47 Health and Safety in Construction (finish date 31/07/2021) has been replaced by J53J 47 Health and Safety in Construction (start date 01/08/2020).            HR4C 47 Architectural Procedures (finish date 31/07/2021) has been replaced by J53L 47 Architectural Procedures (start date 01/08/2020).            HR43 48 Fire Safety in Buildings (finish date 31/07/2021) has been replaced by J53K 48 Fire Safety in Buildings (start date 01/08/2020).            HR3N 48 Conversion and Adaptation of Buildings (finish date 31/07/2021) has been replaced by J53M 48 Conversion and Adaptation of Buildings (start date 01/08/2020)</p>	09/11/20

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# 1 Introduction

This is the Arrangements Document for Group Awards in SQA Advanced Certificates and SQA Advanced Diplomas in Built Environment. This document includes background information on the Group Award, its aims, details of the Group Award structure, and guidance on delivery.

## 2 Qualifications structures

### 2.1 SQA Advanced Certificate in Built Environment

Unit code	Unit title	SQA credit	SCQF credit points	SCQF level
<b>Mandatory Units (10 SQA Credits required)</b>				
HR3P 47	Architectural Design Sketching and Drawing	1	8	7
HR4D 47	Building Measurement and Cost Studies	1	8	7
HT85 47	Environmental Building Science	1	8	7
HR42 46	Building Services: An Introduction	1	8	6
J53G 47*	Construction Materials and Specification	1	8	7
HR48 47	Construction Site Surveying A	1	8	7
HR46 46	Construction Technology: Domestic Construction	1	8	6
HT87 47	Construction Technology: Substructure	1	8	7
HR4K 48	Sustainability and Modern Methods of Construction	1	8	8
HR4P 47	Built Environment: Graded Unit 1	1	8	7
<b>Mandatory Option (1 SQA Credit needed)</b>				
HR3L 47	CAD: 2D I	1	8	7
HR3H 47	CAD: 2D II	1	8	7
<b>Optional Units (1 SQA Credit needed)</b>				
J53J 47*	Health and Safety in Construction	1	8	7
HR4F 47	Construction Industry Fundamentals	1	8	7
HR4N 46	Mathematics for Construction	1	8	6
HR4J 48	Scottish Law for Construction	1	8	8
HR3V 47	Structural Mechanics	1	8	7
HR4V 46	Mathematics for the Built Environment	1	8	6
HR7N 47*	Building Information Modelling (BIM): Principles	1	8	7

**This Group Award is made up of 12 SQA Credits. It comprises 96 SCQF credit points. 16 are at level 6, 64 are at SCQF level 7 and 8 are at SCQF level 8 in the mandatory section. A further 8 SCQF credit points are required to be achieved from the selection of Units at SCQF level 6, level 7 and level 8 in the optional section.**



## 2.2 SQA Advanced Certificate and SQA Advanced Diploma in Architectural Technology

### 2.2.1 SQA Advanced Certificate in Architectural Technology

Unit code	Unit title	SQA credit	SCQF credit points	SCQF level
<b>Mandatory Units (9 SQA Credits required)</b>				
HR3P 47	Architectural Design Sketching and Drawing	1	8	7
J53L 47*	Architectural Procedures	1	8	7
HR4E 48	Building Services in Large Buildings	1	8	8
J53G 47*	Construction Materials and Specification	1	8	7
HT87 47	Construction Technology: Substructure	1	8	7
HR4G 47	Construction Technology: Industrial/Commercial Superstructure	1	8	7
HR3R 47	Design of Building Structures	1	8	7
HR3T 47	Statutory Control of Buildings	1	8	7
HR4R 47	Architectural Technology: Graded Unit 1	1	8	7
<b>Mandatory option (minimum 1 SQA Credit required)</b>				
HR3L 47	CAD: 2D I	1	8	7
HR3H 47	CAD: 2D II	1	8	7
<b>Optional Units (minimum 2 SQA Credits required)</b>				
HR4D 47	Building Measurement and Cost Studies	1	8	7
HR42 46	Building Services: An Introduction	1	8	6
HR41 48	Building Services: Heating, Lighting and Acoustics	1	8	8
HR46 46	Construction Technology: Domestic Construction	1	8	6
HR4F 47	Construction Industry Fundamentals	1	8	7
HT85 47	Building Science	1	8	7
J53J 47*	Health and Safety in Construction	1	8	7
HR4N 46	Mathematics for Construction	1	8	6
HP6M 47	Personal Development Planning	1	8	7

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HR3X 47	Quality in Construction	1	8	7
HR4J 48	Scottish Law for Construction	1	8	8
HT88 47	Site Administration	1	8	7
J53F 48*	Construction Contracts: Conditions and Procedures	1	8	8
HR3V 47	Structural Mechanics	1	8	7
HR4K 48	Sustainability and Modern Methods of Construction	1	8	8
HR4V 46	Mathematics for the Built Environment	1	8	6
HR7N 47*	Building Information Modelling (BIM): Principles	1	8	7
J53M 48*	Conversion and Adaptation of Buildings	1	8	8

\*Refer to History of Changes Table

**This Group Award is made up of 12 SQA Credits.**

**It comprises 96 SCQF credit points.**

**72 are at SCQF level 7 and 8 are at SCQF level 8 in the mandatory section.**

A further 16 SCQF credit points are required to be achieved from the selection of Units at SCQF level 6, level 7 and level 8 in the optional section.

## 2.2.2 SQA Advanced Diploma in Architectural Technology

Unit code	Unit title	SQA credit	SCQF credit points	SCQF level
<b>Mandatory Units (25 SQA Credits required)</b>				
HR3P 47	Architectural Design Sketching and Drawing	1	8	7
HR4A 47	Architecture: Influences on the Development of Scottish Architecture	1	8	7
J53L 47*	Architectural Procedures	1	8	7
HR4D 47	Building Measurement and Cost Studies	1	8	7
HT85 47	Building Science	1	8	7
HR42 46	Building Services: An Introduction	1	8	6
HR4E 48	Building Services in Large Buildings	1	8	8
HR4F 47	Construction Industry Fundamentals	1	8	7
J53G 47*	Construction Materials and Specifications	1	8	7
HR48 47 OR J53H 47*	Construction Site Surveying A OR Environmental Design	1 1	8 8	7 7
HR46 46	Construction Technology: Domestic Construction	1	8	6
HT87 47	Construction Technology: Substructure	1	8	7
HR4G 47	Construction Technology: Industrial/Commercial Superstructure	1	8	7
HR47 48	Construction Technology: Specialist Systems	1	8	8
J53M 48*	Conversion and Adaptation of Buildings	1	8	8
HR3R 47	Design of Building Structures	1	8	7
J53K 48*	Fire Safety in Buildings	1	8	8
HR4J 48	Scottish Law for Construction	1	8	8
HR3T 47	Statutory Control of Buildings	1	8	7
J53F 48*	Construction Contracts: Conditions and Procedures	1	8	8
HR3V 47	Structural Mechanics	1	8	7
HR4K 48	Sustainability and Modern Methods of Construction	1	8	8
HR4T 48	Architectural Technology: Graded Unit 2	2	16	8

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<b>Mandatory Option (1 SQA Credit required)</b>				
HR4R 47	Architectural Technology: Graded Unit 1	1	8	7
HR4P 47	Built Environment: Graded Unit 1	1	8	7
<b>Mandatory Option (minimum 1 SQA Credit required)</b>				
HR3L 47	CAD: 2D I	1	8	7
HR3H 47	CAD: 2D II	1	8	7
<b>Mandatory Option (minimum 1 SQA Credit required)</b>				
HR4N 46	Mathematics for Construction	1	8	6
HR4V 46	Mathematics for the Built Environment	1	8	6
<b>Optional Units (minimum 3 SQA Credits required)</b>				
HR44 47	Building Maintenance Technology	1	8	7
HR41 48	Building Services: Heating, Lighting and Acoustics	1	8	8
HR3K 47	CAD: Architectural 1	1	8	7
HR40 48	Construction Planning	1	8	8
J53J 47*	Health and Safety in Construction	1	8	7
HR3X 47	Quality in Construction	1	8	7
HR49 47	Renewable Energy Systems: Microregeneration Systems	1	8	7
HR0M 47	Work Role Effectiveness (2003)	3	24	7
HR3J 47	CAD: 3D Modelling	2	16	7
HP6M 47	Personal Development Planning	1	8	7
HT88 47	Site Administration	1	8	7
HR7N 47*	Building Information Modelling (BIM): Principles	1	8	7
HR7T 48*	CAD: Digital Collaboration Practices	2	16	8

**This Group Award is made up of 30 SQA Credits.**

**It comprises 240 SCQF credit points.**

**24 are at SCQF level 6, 120 are at SCQF level 7 and 72 are at SCQF level 8 in the mandatory section.**

**A further 24 SCQF credit points are required to be achieved from the selection of Units at SCQF level 7 and level 8 in the optional section.**

## 2.3 SQA Advanced Certificate and SQA Advanced Diploma in Building Surveying

### 2.3.1 SQA Advanced Certificate in Building Surveying

Unit code	Unit title	SQA credit	SCQF credit points	SCQF level
<b>Mandatory Units (8 SQA Credits required)</b>				
HR44 47	Building Maintenance Technology	1	8	7
HT16 47	Building Inspection	1	8	7
HR4E 48	Building Services in Large Buildings	1	8	8
J53G 47*	Construction Materials and Specification	1	8	7
HR4G 47	Construction Technology: Industrial/Commercial Superstructure	1	8	7
HT87 47	Construction Technology: Substructure	1	8	7
HR4D 47	Building Measurement and Cost Studies	1	8	7
HV85 47	Building Surveying: Graded Unit 1	1	8	7
<b>Mandatory Option (1 SQA Credit required)</b>				
HR3L 47	CAD: 2D I	1	8	7
HR3H 47	CAD: 2D II	1	8	7
<b>Optional Units (3 SQA Credits required)</b>				
HR42 46	Building Services: An Introduction	1	8	6
HV85 47	Building Maintenance Management	1	8	7
HR48 47	Construction Site Surveying A	1	8	7
HR46 46	Construction Technology: Domestic Construction	1	8	6
HR47 48	Construction Technology: Specialist Systems	1	8	8
J53M 48*	Conversion and Adaptation of Buildings	1	8	8
HT85 47	Building Science	1	8	7
HV84 48	Facilities Management: Operational and Support Services	1	8	8
J53J 47*	Health and Safety in Construction	1	8	7
HR4N 46	Mathematics for Construction	1	6	8

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HP6M 47	Personal Development and Planning	1	8	7
HT2W 47	Quantitative Building Studies: Floors and Roofs	1	8	7
HR3T 47	Statutory Control of Buildings	1	8	7
HR3V 47	Structural Mechanics	1	8	7
HR4V 46	Mathematics for the Built Environment	1	8	6

**This Group Award is made up of 12 SQA Credits.**

**It comprises 96 SCQF credit points.**

**64 are at SCQF level 7 and 8 are at SCQF level 8 in the mandatory section.**

A further 24 SCQF credit points are required to be achieved from the selection of Units at SCQF level 6, level 7 and level 8 in the optional section.

### 2.3.2 SQA Advanced Diploma in Building Surveying

Unit code	Unit title	SQA credit	SCQF credit points	SCQF level
<b>Mandatory Units (25 SQA Credits required)</b>				
HR3P 47	Architectural Design Sketching and Drawing	1	8	7
HT16 47	Building Inspection	1	8	7
HR44 47	Building Maintenance Technology	1	8	7
HR4D 47	Building Measurement and Cost Studies	1	8	7
HR42 46	Building Services - Introduction	1	8	6
HR4E 48	Building Services in Large Buildings	1	8	8
HR41 48	Building Services: Heating, Lighting and Acoustics	1	8	8
HR4F 47	Construction Industry Fundamentals	1	8	7
J53G 47*	Construction Materials and Specification	1	8	7
HR48 47	Construction Site Surveying A	1	8	7
HR46 46	Construction Technology: Domestic Construction	1	8	6
HR4G 47	Construction Technology: Industrial/Commercial Superstructure	1	8	7
HT87 47	Construction Technology: Substructure	1	8	7
J53M 48*	Conversion and Adaptation of Buildings	1	8	8
HT85 47	Building Science	1	8	7
HR3V 47	Structural Mechanics	1	8	7
J53K 48*	Fire Safety in Buildings	1	8	8
HT2W 47	Quantitative Building Studies: Floors and Roofs	1	8	7
HR4J 48	Scottish Law for Construction	1	8	7
HR3T 47	Statutory Control of Buildings	1	8	7
HV87 48	Surveying Historic Buildings	1	8	8
HR4K 48	Sustainability and Modern Methods of Construction	1	8	8
HV8H 48	Building Surveying: Graded Unit 2	2	16	8

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<b>Mandatory Option (1 SQA Credit required)</b>				
HR3L 47	CAD: 2D I	1	8	7
HR3H 47	CAD: 2D II	1	8	7
<b>Mandatory Option (1 SQA Credit required)</b>				
HV8G 47	Building Surveying: Graded Unit 1	1	8	7
HR4P 47	Built Environment: Graded Unit 1	1	8	7
<b>Mandatory Option (1 SQA Credit required)</b>				
HR4N 46	Mathematics for Construction	1	8	6
<b>Optional Units (minimum 3 SQA Credits required)</b>				
J53L 47*	Architectural Procedures	1	8	7
HV8F 47	Building Maintenance Management	1	8	7
HV88 48	Building Services: Ventilation, Air Conditioning and Refrigeration	1	8	8
HR3J 47	CAD: 3D Modelling	2	16	7
HR3K 47	CAD: Architectural 1	1	8	7
HR47 48	Construction Technology: Specialist Systems	1	8	8
HT10 47	Estimating	1	8	7
HV89 48	Facilities Management: Operational and Support Services	1	8	8
J53J 47*	Health and Safety in Construction	1	8	7
HP6M 47	Personal Development and Planning	1	8	7
HT12 47	Quantitative Building Studies: Substructure and Drainage	1	8	7
J53F 48*	Construction Contracts: Conditions and Procedures	1	8	8
HR3R 47	Design of Building Structures	1	8	7
HR0M 47	Work Role Effectiveness (2003)	3	24	7
HR40 48	Construction Planning	1	8	8
HT0Y 48	Economics and the Built Environment	1	8	8
HV8A 48	Facilities Management: Property Services	1	8	8
HV8C 48	Facilities Resource Planning and Construction Management	1	8	8
HT11 48	Financial Studies for the Construction Industry	1	8	8



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HT14 48	Human Resource Management in Construction	1	8	8
HT13 48	Managing Construction Organisations	1	8	8
HR3X 47	Quality in Construction	1	8	7
HR49 47	Renewable Energy Systems: Microgeneration Systems	1	8	7

**This Group Award is made up of 12 SQA Credits.**

**It comprises 240 SCQF credit points.**

**24 are at SCQF level 6, 128 are at SCQF level 7 and 64 are at SCQF level 8 in the mandatory section.**

**A further 24 SCQF credit points are required to be achieved from the selection of Units at SCQF level 7 and level 8 in the optional section.**

## 2.4 SQA Advanced Certificate and SQA Advanced Diploma in Construction Management

### 2.4.1 SQA Advanced Certificate in Construction Management

Unit code	Unit title	SQA credit	SCQF credit points	SCQF level
<b>Mandatory Units (9 SQA Credits required)</b>				
HR4E 48	Building Services in Large Buildings	1	8	8
J53G 47*	Construction Materials and Specifications	1	8	7
HR48 47	Construction Site Surveying A	1	8	7
HT87 47	Construction Technology: Substructure	1	8	7
HR4G 47	Construction Technology: Industrial/Commercial Superstructure	1	8	7
HT88 47	Site Administration	1	8	7
J53F 48*	Construction Contracts: Conditions and Procedures	1	8	8
J53J 47*	Health and Safety in Construction	1	8	7
HT18 47	Construction Management: Graded Unit 1	1	8	7
<b>Mandatory option (1 SQA Credit required)</b>				
HR3L 47	CAD: 2D1	1	8	7
HR3H 47	CAD: 2D2	1	8	7
<b>Optional Units (2 SQA Credits required)</b>				
HR3P 47	Architectural Design Sketching and Drawing	1	8	7
HR4D 47	Building Measurement and Cost Studies	1	8	7
HR42 46	Building Services: An Introduction	1	8	6
HR4F 47	Construction Industry Fundamentals	1	8	7
HR40 48	Construction Planning	1	8	8
HR46 46	Construction Technology: Domestic Construction	1	8	6
HT85 47	Building Science	1	8	7
HT10 47	Estimating	1	8	7
HT11 48	Financial Studies for the Construction Industry	1	8	8

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HT14 48	Human Resource Management in Construction	1	8	8
HT13 48	Managing Construction Organisations	1	8	8
HR4N 46	Mathematics for Construction	1	8	6
HP6M 47	Personal Development Planning	1	8	7
HT12 47	Quantitative Building Studies: Substructure and Drainage	1	8	7
HR3X 47	Quality in Construction	1	8	7
HR49 47	Renewable Energy Systems: Microgeneration Systems	1	8	7
HR4J 48	Scottish Law for Construction	1	8	8
HR3V 47	Structural Mechanics	1	8	7
HR4K 48	Sustainability and Modern Methods of Construction	1	8	8
HR4V 46	Mathematics for the Built Environment	1	8	6
HR7N 47*	Building Information Modelling (BIM): Principles	1	8	7

**This Group Award is made up of 12 SQA Credits.**

**It comprises 96 SCQF credit points.**

**64 are at SCQF level 7 and 16 are at SCQF level 8 in the mandatory section.**

**A further 16 SCQF credit points are required to be achieved from the selection of Units at SCQF level 6, SCQF level 7 and level 8 in the optional section.**

## 2.4.2 SQA Advanced Diploma in Construction Management

Unit code	Unit title	SQA credit	SCQF credit points	SCQF level
<b>Mandatory Units (26 SQA Credits required)</b>				
HR3P 47	Architectural Design Sketching and Drawing	1	8	7
HR4D 47	Building Measurement and Cost Studies	1	8	7
HR42 46	Building Services: An Introduction	1	8	6
HR4E 48	Building Services in Large Buildings	1	8	8
HR4F 47	Construction Industry Fundamentals	1	8	7
J53G 47*	Construction Materials and Specifications	1	8	7
HR40 48	Construction Planning	1	8	8
HR48 47	Construction Site Surveying A	1	8	7
HR59 47	Construction Site Surveying B	1	8	7
HR46 46	Construction Technology: Domestic Construction	1	8	6
HT87 47	Construction Technology: Substructure	1	8	7
HR4G 47	Construction Technology: Industrial/Commercial Superstructure	1	8	7
HT0Y 48	Economics and the Built Environment	1	8	8
HT85 47	Building Science	1	8	7
J53J 47*	Health and Safety in Construction	1	8	7
HT14 48	Human Resource Management in Construction	1	8	8
HT13 48	Managing Construction Organisations	1	8	8
HR3X 47	Quality in Construction	1	8	7
HR4J 48	Scottish Law for Construction	1	8	8
HT88 47	Site Administration	1	8	7
HR3T 47	Statutory Control of Buildings	1	8	7
J53F 48*	Construction Contracts: Conditions and Procedures	1	8	8
HR4K 48	Sustainability and Modern Methods of Construction	1	8	8

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HT19 48	Construction Management: Graded Unit 2	2	16	8
<b>Mandatory Option (1 SQA Credit required)</b>				
HR3L 47	CAD: 2D I	1	8	7
HR3H 47	CAD: 2D II	1	8	7
<b>Mandatory Option (1 SQA Credit required)</b>				
HR4P 47	Built Environment: Graded Unit 1	1	8	7
HT18 47	Construction Management: Graded Unit 1	1	8	7
<b>Mandatory Option (1 SQA Credit required)</b>				
HR4N 46	Mathematics for Construction	1	8	6
HR4V 46	Mathematics for the Built Environment	1	8	6
<b>Optional Units (2 SQA Credits required)</b>				
HT16 47	Building Inspection	1	8	7
HR47 48	Construction Technology: Specialist Systems	1	8	8
HR3R 47	Design of Building Structures	1	8	7
HT10 47	Estimating	1	8	7
HT11 48	Financial Studies for the Construction Industry	1	8	8
HP6M 47	Personal Development Planning	1	8	7
HT12 47	Quantitative Building Studies: Substructure and Drainage	1	8	7
HR49 47	Renewable Energy Systems: Microregeneration Systems	1	8	7
HR3V 47	Structural Mechanics	1	8	7
HR0M 47	Work Role Effectiveness (2003)	3	24	7
HR7N 47*	Building Information Modelling (BIM): Principles	1	8	7
HR7T 48*	CAD: Digital Collaboration Practices	2	16	8
J53L 47*	Architectural Procedures	1	8	7

This Group Award is made up of 30 SQA Credits.

**It comprises 240 SCQF credit points.**

**24 are at SCQF level 6, 120 are at SCQF level 7 and 80 are at SCQF level 8 in the mandatory section.**

**A further 16 SCQF credit points are required to be achieved from the selection of Units at SCQF level 6, level 7 and level 8 in the optional section.**

## 2.5 SQA Advanced Certificate and SQA Advanced Diploma in Quantity Surveying

### 2.5.1 SQA Advanced Certificate in Quantity Surveying

Unit code	Unit title	SQA credit	SCQF credit points	SCQF level
<b>Mandatory Units (9 SQA Credits required)</b>				
HR4E 48	Building Services in Large Buildings	1	8	8
J53G 47*	Construction Materials and Specifications	1	8	7
HT87 47	Construction Technology: Substructure	1	8	7
HR4G 47	Construction Technology: Industrial/Commercial Superstructure	1	8	7
HT10 47	Estimating	1	8	7
HT2W 47	Quantitative Building Studies: Floors and Roofs	1	8	7
HT12 47	Quantitative Building Studies: Substructure and Drainage	1	8	7
J53F 48*	Construction Contracts: Conditions and Procedures	1	8	8
HT30 47	Quantity Surveying: Graded Unit 1	1	8	7
<b>Mandatory option (1 SQA Credit required)</b>				
HR3L 47	CAD: 2D I	1	8	7
HR3H 47	CAD: 2D II	1	8	7
<b>Optional Units (2 SQA Credits required)</b>				
HR42 46	Building Services: An Introduction	1	8	6
HR4F 47	Construction Industry Fundamentals	1	8	7
HR46 46	Construction Technology: Domestic Construction	1	8	6
HT85 47	Building Science	1	8	7
HT11 48	Financial Studies for the Construction Industry	1	8	8
J53J 47*	Health and Safety in Construction	1	8	7
HR4N 46	Mathematics for Construction	1	8	6
HP6M 47	Personal Development Planning	1	8	7
HT2X 48	Quantity Surveying Practice	1	8	8

## SQA Advanced Certificates and Diplomas

HR49 47	Renewable Energy Systems: Microgeneration Systems	1	8	7
HT88 47	Site Administration	1	8	7
HR4K 48	Sustainability and Modern Methods of Construction	1	8	8
HR4J 48	Scottish Law for Construction	1	8	8
HR4V 46	Mathematics for the Built Environment	1	8	6
HR7N 47*	Building Information Modelling (BIM): Principles	1	8	7
HR4D 47*	Building Measurement and Cost Studies	1	8	7

**This Group Award is made up of 12 SQA Credits.**

**It comprises 96 SCQF credit points.**

**64 are at SCQF level 7 and 16 are at SCQF level 8 in the mandatory section**

**A further 16 SCQF credit points are required to be achieved from the selection of Units at SCQF level 6, SCQF level 7 and level 8 in the optional section.**

## 2.5.2 SQA Advanced Diploma in Quantity Surveying

Unit code	Unit title	SQA credit	SCQF credit points	SCQF level
<b>Mandatory Units (24 SQA Credits required)</b>				
HR3P 47	Architectural Design Sketching and Drawing	1	8	7
HR4D 47	Building Measurement and Cost Studies	1	8	7
HR42 46	Building Services: An Introduction	1	8	6
HR4E 48	Building Services in Large Buildings	1	8	8
HR4F 47	Construction Industry Fundamentals	1	8	7
J53G 47*	Construction Materials and Specifications	1	8	7
HR48 47	Construction Site Surveying A	1	8	7
HR46 46	Construction Technology: Domestic Construction	1	8	6
HT87 47	Construction Technology: Substructure	1	8	7
HR4G 47	Construction Technology: Industrial/Commercial Superstructure	1	8	7
HT0Y 48	Economics and the Built Environment	1	8	8
HT85 47	Environmental Building Science	1	8	7
HT10 47	Estimating	1	8	7
HT11 48	Financial Studies for the Construction Industry	1	8	8
HT2W 47	Quantitative Building Studies: Floors and Roofs	1	8	7
HT12 47	Quantitative Building Studies: Substructure and Drainage	1	8	7
HT2X 48	Quantity Surveying Practice	1	8	8
HR4J 48	Scottish Law for Construction	1	8	8
J53F 48*	Construction Contracts: Conditions and Procedures	1	8	8
HR3T 47	Statutory Control of Buildings	1	8	7
HR4K 48	Sustainability and Modern Methods of Construction	1	8	8
HT31 48	Quantity Surveying: Graded Unit 2	2	16	8



## SQA Advanced Certificates and Diplomas

<b>Mandatory Option (1 SQA Credit required)</b>				
HR3L 47	CAD: 2D I	1	8	7
HR3H 47	CAD: 2D II	1	8	7
<b>Mandatory Option (1 SQA Credit required)</b>				
HR4P 47	Built Environment: Graded Unit 1	1	8	7
HT30 47	Quantity Surveying: Graded Unit 1	1	8	7
<b>Mandatory Option (1 SQA Credit required)</b>				
HR4N 46	Mathematics for Construction	1	8	6
HR4V 46	Mathematics for the Built Environment	1	8	6
<b>Optional Units (4 SQA Credits required)</b>				
HR40 48	Construction Planning	1	8	8
HR47 48	Construction Technology: Specialist Systems	1	8	8
J53J 47*	Health and Safety in Construction	1	8	7
HT14 48	Human Resource Management in Construction	1	8	8
HP6M 47	Personal Development Planning	1	8	7
HR3X 47	Quality in Construction	1	8	7
HT2T 47	Quantitative Building Studies: Building Services	1	8	7
HR49 47	Renewable Energy Systems: Microgeneration Systems	1	8	7
HT88 47	Site Administration	1	8	7
HR3V 47	Structural Mechanics	1	8	7
HR0M 47	Work Role Effectiveness (2003)	3	24	7
HR7N 47*	Building Information Modelling (BIM): Principles	1	8	7
HR7T 48*	CAD: Digital Collaboration Practices	2	16	8

This Group Award is made up of 30 SQA Credits.

**It comprises 240 SCQF credit points.**

**24 are at SCQF level 6, 112 are at SCQF level 7 and 72 are at SCQF level 8 in the mandatory section.**

**A further 32 SCQF credit points are required to be achieved from the selection of Units at SCQF level 7 and level 8 in the optional section.**

## 3 Aims of the qualifications

### 3.1 Aims of Built Environment

#### Target learner group

The SQA Advanced Certificate is suitable for a wide range of learners including:

- ◆ school leavers
- ◆ learners progressing from a lower level award in construction or a closely related discipline
- ◆ adult returners to education
- ◆ learners in employment who wish to enhance their career prospects
- ◆ Modern Apprentices

#### General aims — to develop:

- ◆ skills of study, research and analysis
- ◆ ability to define and solve problems
- ◆ transferable skills
- ◆ ability to be flexible and work cooperatively with others
- ◆ responsibility for own learning
- ◆ planning, organisational and review/evaluation skills
- ◆ technical skills — broadening and deepening
- ◆ oral, written and pictorial communication skills
- ◆ numerical and ICT skills
- ◆ resource management ability
- ◆ flexibility, knowledge, skills and motivation as a basis for progression to graduate and postgraduate studies

#### Principle aims:

- 1 Prepare learners for employment as technicians, and supervisors in the mainstream construction industry with a range of employers including Architects, Contractors, Building Control, Housing Associations and other property responsibilities.
- 2 Provide learners with a range of basic contemporary vocational skills utilising modern equipment and techniques available for surveying, setting out, construction drawing and correct use of building materials thus enabling learners to make an immediate contribution in employment in the Built Environment sector.
- 3 Provide a choice of optional Units that will allow learners to develop in other areas relevant to future employment or progression via an SQA Advanced Diploma in one of the Built Environment disciplines or higher education.
- 4 Provide learners with a range of skills to support learning in the SVQ 3 and SVQ 4 Construction: Technical Modern Apprenticeship Frameworks.
- 5 Enable learners to achieve appropriate professional body recognition, in particular but not exclusively, the Chartered Institute of Building.

### **3.2 Aims of SQA Advanced Certificate and SQA Advanced Diploma in Architectural Technology**

Architectural Technicians are employed in private practice and work with Architects, Surveyors, Interior Designers and Architectural Technologists. They can also be employed by specialist design/build contractors, local authorities and larger organisations to provide in-house design/drafting services.

Specific skills include:

- ◆ preparing design proposals using CAD and traditional methods
- ◆ contributing to the detailed design process and co-ordinating detailed design information
- ◆ preparing specifications for construction work
- ◆ preparing drawings, plans and documents for statutory approvals
- ◆ contribute to design stage risk assessment
- ◆ collating and organising technical information
- ◆ contributing to meetings and document preparation

Investigating technical information and factors that affect developments, including:

- ◆ user needs
- ◆ site and building surveys
- ◆ regulatory requirements
- ◆ preparing regulatory applications

The SQA Advanced Certificate is suitable for a wide range of learners including:

- ◆ school leavers
- ◆ learners progressing from a lower level award in Architectural Technology or a closely related discipline
- ◆ adult returners to education
- ◆ learners in employment who wish to enhance their career prospects

The SQA Advanced Diploma is suitable for a wide range of learners including:

- ◆ school leavers
- ◆ learners progressing from an SQA Advanced Certificate in Architectural Technology or SQA Advanced Certificate in Built Environment or a closely related discipline
- ◆ adult returners to education
- ◆ learners in employment who wish to enhance their career prospects

## **SQA Advanced Certificates and Diplomas**

### **SQA Advanced Certificate**

The principle aims are to:

- 1 Prepare learners for employment as Architectural Technicians in private practice working with Architects, Surveyors, Interior Designers and Architectural Technologists in specialist design/build contractors, local authorities and larger organisations with in-house design/drafting services.
- 2 Provide learners with a range of basic contemporary vocational skills including the preparation, co-ordination and communication of technical information including drawings, graphical information, reports and schedules, contributing to meeting relevant statutory regulations and controlling projects by monitoring agreed quality standards and obtaining, recording and organising information.
- 3 Provide a choice of optional Units that will allow learners to develop in other areas relevant to future employment or progression via an SQA Advanced Diploma in Architectural Technology or higher education.
- 4 Provide learners with a range of skills to support learning in the SVQ 3 and SVQ 4 Construction: Technical Modern Apprenticeship Frameworks.
- 5 Enable learners to achieve appropriate professional body recognition, in particular but not exclusively, the Chartered Institute of Architectural Technology.

### **SQA Advanced Diploma**

The principle aims are to:

- 6 Prepare learners for employment as senior Architectural Technicians in private practice working with Architects, Surveyors, Interior Designers and Architectural Technologists in specialist design/build contractors, local authorities and larger organisations with in-house design/drafting services.
- 7 Provide learners with a range of contemporary vocational skills including the preparation, co-ordination and communication of technical information including drawings, graphical information, reports and schedules, contributing to meeting relevant statutory regulations and controlling projects by monitoring agreed quality standards and obtaining, recording and organising information.
- 8 Provide a choice of optional Units that will allow learners to develop in other areas relevant to future employment or progression via higher education.
- 9 Provide learners with a range of skills to support learning in the SVQ 4 Construction: Technical Modern Apprenticeship Frameworks.
- 10 Enable learners to achieve appropriate professional body recognition, in particular but not exclusively, the Chartered Institute of Architectural Technology.

### 3.3 Aims of SQA Advanced Certificate and SQA Advanced Diploma in Building Surveying

Building surveyors provide professional advice on property and construction for commercial companies and consultants, central and local government, and private individuals.

The SQA Advanced Certificate and SQA Advanced Diploma contribute significantly to learners' education and personal development in promoting core and transferable skills important for future employment within the construction and other industries. The development of competencies in this vocational context will improve generic skills in communication, presentation of technical information and working with others.

The SQA Advanced Certificate is suitable for a wide range of learners including:

- ◆ school leavers
- ◆ learners progressing from a lower level award in Building Surveying or a closely related discipline
- ◆ adult returners to education
- ◆ learners in employment who wish to enhance their career prospects

The SQA Advanced Diploma is suitable for a wide range of learners including:

- ◆ school leavers
- ◆ learners progressing from an SQA Advanced Certificate in Building Surveying or SQA Advanced Certificate in Built Environment or a closely related discipline
- ◆ adult returners to education
- ◆ learners in employment who wish to enhance their career prospects

#### **General aims — to develop:**

- ◆ skills of study, research and analysis
- ◆ ability to define and solve problems
- ◆ transferable skills
- ◆ ability to be flexible and work cooperatively with others
- ◆ responsibility for own learning
- ◆ planning, organisational and review/evaluation skills
- ◆ technical skills — broadening and deepening
- ◆ oral, written and pictorial communication skills
- ◆ numerical and ICT skills
- ◆ resource management ability
- ◆ flexibility, knowledge, skills and motivation as a basis for progression to graduate and postgraduate study.

## **SQA Advanced Certificates and Diplomas**

### **SQA Advanced Certificate**

The principle aims are to:

- 1 Prepare learners for employment as technical surveyors providing professional advice on property and construction for commercial companies and consultants, central and local government, and private individuals.
- 2 Provide learners with a range of basic contemporary vocational skills including preparation of drawings, specification writing, land surveying, surveying historic buildings, maintenance schedules, etc, contributing significantly to learners' education and personal development in promoting core and transferable skills important for future employment within the construction and other industries.
- 3 Provide a choice of optional Units that will allow learners to develop in other areas relevant to future employment or progression via an SQA Advanced Diploma in Building Surveying or higher education.
- 4 Provide learners with a range of skills to support learning in the SVQ 3 and SVQ 4 Construction: Technical Modern Apprenticeship Frameworks.
- 5 Enable learners to achieve appropriate professional body recognition, in particular but not exclusively, the Royal Institute of Chartered Surveyors.

### **SQA Advanced Diploma**

The principle aims are to:

- 6 Prepare learners for employment as senior technical surveyors providing professional advice on property and construction for commercial companies and consultants, central and local government, and private individuals.
- 7 Provide learners with a range of contemporary vocational skills including preparation of drawings, specification writing, land surveying, surveying historic buildings, maintenance schedules, etc, contributing significantly to learners' education and personal development in promoting core and transferable skills important for future employment within the construction and other industries.
- 8 Provide a choice of optional Units that will allow learners to develop in other areas relevant to future employment or progression via higher education.
- 9 Provide learners with a range of skills to support learning in the SVQ 4 Construction: Technical Modern Apprenticeship Frameworks.
- 10 Enable learners to achieve appropriate professional body recognition, in particular but not exclusively, the Royal Institute of Chartered Surveyors.

### **3.4 Aims of SQA Advanced Certificate and SQA Advanced Diploma in Construction Management**

Construction carried out under modern procurement systems must by necessity, bring many different types of organisation together, perhaps from different countries, in constructing buildings of ever increasing complexity. Effective participation in, and management of, this process requires an understanding of group dynamics and the effect of different management styles and organisation structures on the planning and execution of construction projects.

Because of the wide diversity in both scale and output of companies working within the industry the Units chosen for inclusion in the new framework focus on those key knowledge and skills required by a technician employed in a construction management role. The SQA Advanced Certificate/SQA Advanced Diploma frameworks cover management principles, including a specialist core embracing the management of construction organisations and human resources, together with basic construction planning and elements of site administration.

A mixture of technology, contracts, law, financial and information technology supports the four generic management Units. These awards aim to produce desirable qualifications with graduates capable of employment within and across the whole spectrum of organisations engaged in construction.

#### **Target learner group**

The SQA Advanced Certificate are suitable for a wide range of learners including:

- ◆ school leavers
- ◆ learners progressing from a lower level award in Construction or a closely related discipline
- ◆ adult returners to education
- ◆ learners in employment who wish to enhance their career prospects

The SQA Advanced Diploma is suitable for a wide range of learners including:

- ◆ school leavers
- ◆ learners progressing from an SQA Advanced Certificate in Built Environment, Construction Management or a closely related discipline
- ◆ adult returners to education
- ◆ learners in employment who wish to enhance their career prospects

## **SQA Advanced Certificates and Diplomas**

### **General aims — to develop:**

- ◆ skills of study, research and analysis
- ◆ ability to define and solve problems
- ◆ transferable skills
- ◆ ability to be flexible and work cooperatively with others
- ◆ responsibility for own learning
- ◆ planning, organisational and review/evaluation skills
- ◆ technical skills- broadening and deepening
- ◆ oral, written and pictorial communication skills
- ◆ numerical and ICT skills
- ◆ resource management ability
- ◆ flexibility, knowledge, skills and motivation as a basis for progression to graduate and postgraduate studies

### **SQA Advanced Certificate**

Principle aims are to:

- 1 Prepare learners for employment as construction project officers involving coordination of many different types of organisation, perhaps from different countries, in constructing buildings of ever increasing complexity under modern procurement systems.
- 2 Provide learners with a range of basic contemporary vocational skills embracing the management of construction organisations and human resources, together with construction, technology, contracts, law, financial and information technology, planning and elements of site administration.
- 3 Provide a choice of optional Units that will allow learners to develop in other areas relevant to future employment or progression via an SQA Advanced Diploma in Construction Management or higher education.
- 4 Provide learners with a range of skills to support learning in the SVQ 3 and SVQ 4 Construction: Technical Modern Apprenticeship Frameworks.
- 5 Enable learners to achieve appropriate professional body recognition, in particular but not exclusively, the Chartered Institute of Building.

### **SQA Advanced Diploma**

Principle aims are to:

- 6 Prepare learners for employment in the management of construction projects involving coordination of many different types of organisation, perhaps from different countries, in constructing buildings of ever increasing complexity under modern procurement systems.
- 7 Provide learners with a range of contemporary vocational skills embracing the management of construction organisations and human resources, together with construction, technology, contracts, law, financial and information technology, planning and elements of site administration.
- 8 Provide a choice of optional Units that will allow learners to develop in other areas relevant to future employment or progression via higher education.
- 9 Provide learners with a range of skills to support learning in the SVQ 4 Construction: Technical Modern Apprenticeship Frameworks.
- 10 Enable learners to achieve appropriate professional body recognition, in particular but not exclusively, the Chartered Institute of Building.



### 3.5 Aims of SQA Advanced Certificate and SQA Advanced Diploma in Quantity Surveying

The SQA Advanced Certificate and SQA Advanced Diploma in Quantity Surveying are well-established routes towards the Tech RICS award as part of a Degree route to RICS membership or as qualifications in their own right. Quantity Surveying firms and Construction companies have used these routes to train their technicians in technology, estimating cost planning, financial studies and measurement and the new awards will continue to serve these ever expanding groups.

These awards have been updated from the existing SQA Advanced Certificate and SQA Advanced Diploma in Quantity Surveying Awards, to meet the current and future needs of the construction industry and are part of the Built Environment suite of awards.

The SQA Advanced Certificate and SQA Advanced Diploma have long been recognised as providing a broad spectrum of knowledge necessary for a diverse range of future employment opportunities.

The SQA Advanced Certificate is suitable for a wide range of learners including:

- ◆ school leavers
- ◆ learners progressing from a lower level award in Construction or a closely related discipline
- ◆ adult returners to education
- ◆ learners in employment who wish to enhance their career prospects

The SQA Advanced Diploma is suitable for a wide range of learners including:

- ◆ school leavers
- ◆ learners progressing from a Quantity Surveying or a closely related discipline
- ◆ adult returners to education
- ◆ learners in employment who wish to enhance their career prospects

#### **General aims — to develop:**

- ◆ skills of study, research and analysis
- ◆ ability to define and solve problems
- ◆ transferable skills
- ◆ ability to be flexible and work cooperatively with others
- ◆ responsibility for own learning
- ◆ planning, organisational and review/evaluation skills
- ◆ technical skills- broadening and deepening
- ◆ oral, written and pictorial communication skills
- ◆ numerical and ICT skills
- ◆ resource management ability
- ◆ flexibility, knowledge, skills and motivation as a basis for progression to graduate and postgraduate studies

## SQA Advanced Certificates and Diplomas

### SQA Advanced Certificate

The principle aims are to:

- 1 Prepare learners for employment as technicians in private quantity surveying practices and construction organisations.
- 2 Provide learners with a range of basic contemporary vocational skills embracing technology, estimating cost planning, financial studies and measurement.
- 3 Provide a choice of optional Units that will allow learners to develop in other areas relevant to future employment or progression via an SQA Advanced Diploma in Quantity Surveying or higher education.
- 4 Provide learners with a range of skills to support learning in the SVQ 3 and SVQ 4 Construction: Technical Modern Apprenticeship Frameworks.
- 5 Enable learners to aspire to appropriate professional body recognition, in particular but not exclusively, the Royal Institute of Chartered Surveyors, as 'Tech RICS'.

### SQA Advanced Diploma

The principle aims are to:

- 6 Prepare learners for employment as senior technicians in private quantity surveying practices and construction organisations.
- 7 Provide learners with a range of contemporary vocational skills embracing technology, estimating cost planning, financial studies and measurement.
- 8 Provide a choice of optional Units that will allow learners to develop in other areas relevant to future employment or progression via higher education.
- 9 Provide learners with a range of skills to support learning in the SVQ 4 Construction: Technical Modern Apprenticeship Frameworks.
- 10 Enable learners to aspire to appropriate professional body recognition, in particular but not exclusively, the Royal Institute of Chartered Surveyors, as 'Tech RICS'.

## 3.6 Graded Units

There are nine Graded Units in the framework:

- ◆ *SQA Advanced Certificate in Built Environment* — 1 credit Unit of 8 points at SCQF level 7
- ◆ *SQA Advanced Certificate in Architectural Technology* — 1 credit Unit of 8 points at SCQF level 7
- ◆ *SQA Advanced Certificate in Construction Management* — 1 credit Unit of 8 points at SCQF level 7
- ◆ *SQA Advanced Certificate in Quantity Surveying* — 1 credit Unit of 8 points at SCQF level 7
- ◆ *SSQA Advanced Certificate in Building Surveying* — 1 credit Unit of 8 points at SCQF level 7
- ◆ *SQA Advanced Diploma in Architectural Technology* — 2 credit Units of 16 points at SCQF level 8
- ◆ *SQA Advanced Diploma in Construction Management* — 2 credit Units of 16 points at SCQF level 8
- ◆ *SQA Advanced Diploma in Quantity Surveying* — 2 credit Units of 16 points at SCQF level 8
- ◆ *SQA Advanced Diploma in Building Surveying* — 2 credit Units of 16 points at SCQF level 8

## SQA Advanced Certificates and Diplomas

The *SQA Advanced Certificate Built Environment: Graded Unit 1* is interchangeable with the *Graded Unit 1* for the SQA Advanced Certificates in *Architectural Technology, Construction Management, Quantity Surveying* or *Building Surveying*.

The Graded Units are designed to test knowledge and skills across the Units of the award in the context of a typical work related activity.

Where learners are progressing from SQA Advanced Certificate to SQA Advanced Diploma the *SQA Advanced Diploma Graded Unit 2* might be an extension, in depth or breadth, of the *SQA Advanced Certificate Graded Unit 1*.

The Graded Unit is designed as a project-based case study. The structure and tasks are drawn from the constituent mandatory Units in the Group Award and are designed to assess the learner's ability to retain and integrate the knowledge and skills gained in the study of the award.

The subject and design of the case study reflect actual industry practice therefore offering the learner valuable, relevant and realistic experience which is transferrable to both employment and educational situations.

In addition, the case study will allow the learner to develop a variety of supplementary skills and attributes which enhance life skills and the educational experience. Such skills tied to enterprise, employability, sustainable development and citizenship are deemed essential to success in learning, life and work.

## **4 Recommended entry to the qualifications**

Entry to this qualification is at the discretion of the centre. The following information on prior knowledge, skills, experience or qualifications that provide suitable preparation for this qualification has been provided as guidance only.

Learners would benefit from having attained the skills, knowledge and understanding required by one or more of the following or equivalent qualifications and/or experience:

### **Access to SQA Advanced Certificate Qualifications**

SQA Advanced programmes are intended primarily for people who are in, or plan to enter employment. Learners who enter with at least one of the following qualifications are likely to benefit more readily from the programme:

- ◆ an NC or SQA Advanced Certificate in a related discipline
- ◆ at least one Higher level pass, with appropriate supporting passes at Standard Grade Credit/National level 5 in appropriate subjects, which should include science and/or technology
- ◆ an SVQ in Construction or a related discipline
- ◆ those with other entry qualifications who demonstrate a realistic chance of success
- ◆ a craft qualification combined with appropriate further study, prior to, or in parallel with, the SQA Advanced Certificate programme

### **Access to SQA Advanced Diploma Qualifications**

SQA Advanced programmes are intended primarily for people who are in, or plan to enter employment. Learners who enter with at least one of the following qualifications are likely to benefit more readily from the programme:

- ◆ an SQA Advanced Certificate in Built Environment or related discipline
- ◆ at least one Higher level pass, with appropriate supporting passes at Standard Grade Credit/National level 5 in appropriate subjects, which should include mathematics and science and/or technology
- ◆ an SVQ in Construction or a related discipline
- ◆ those with other entry qualifications who demonstrate a realistic chance of success

### **Work Experience**

Mature learners with suitable relevant work experience may be accepted for entry, or advanced entry; provided the enrolling centre believes that the learner is likely to benefit from undertaking the awards. Centres may wish to use Core Skills profiling to assist them in this process.

### **Accreditation of Prior Experiential Learning (APEL)**

Learners may be granted Accreditation of Prior Experiential Learning (APEL) in respect of underpinning knowledge previously gained or skills developed in relevant employment. Such APEL might allow a learner entry to, or advanced entry in, an SQA Advanced Certificate or SQA Advanced Diploma. All such decisions should be referred to a Moderator.

### 4.1 Core Skills entry profile

The Core Skill entry profile provides a summary of the associated assessment activities that exemplify why a particular level has been recommended for this qualification. The information should be used to identify if additional learning support needs to be put in place for learners whose Core Skills profile is below the recommended entry level or whether learners should be encouraged to do an alternative level or learning programme.

*For this reason the level stated should be reflective of the main focus of the qualification which is likely to require a certain level of ability in one or two of the Core Skills. Learners will naturally use and develop aspects of all five Core Skills as they work through the Units making up the qualification through teaching and learning approaches which require to be mapped in the next section.*

Applied problem solving, including creative thinking and on-going evaluation of proposed and actual design solutions are essential elements in all Built Environment activities. There are also ample opportunities within the award to develop key numerical and graphical competencies in the context of applied knowledge and skills. The focus in the award on technology as a current industry tool in the design process ensures sound competence and understanding of its applications and uses. Access to technology, with appropriate support systems, is available at all centres for reference, research and the production and presentation of accurate written and graphic materials. As learners undertake the award, formative activities will replicate group problem solving approaches using the communication techniques required in the industry today.

Awareness and development of Core Skills is also incorporated into the award by the fact that learners, supported by assessors, have to take responsibility for their own learning programmes and produce and present a project.

The Qualifications Design Team has agreed, therefore, that the delivery of mandatory and optional Units should provide many opportunities for tailoring relevant elements of the Core Skills to the specific demands of the vocational area.

## SQA Advanced Certificates and Diplomas

Core Skill	Recommended SCQF entry profile	Associated assessment activities
Communication	SCQF level 5	Research, analysis, report preparation and presentation.
Numeracy	SCQF level 4	Numerical and graphical exploration and presentation of elements of design, surveying and measurement.
Information and Communication Technology (ICT)	SCQF level 5	Accessing information for base research purposes. Assimilation and analysis of research information. Creation of graphical and narrative materials for presentation purposes.
Problem Solving	SCQF level 5	Critical thinking, planning and organisation, review and evaluation are fundamental to all elements of these qualifications
Working with Others	SCQF level 4	Co-operatively, as part of a team in practical situations.

## **5 Additional benefits of the qualification in meeting employer needs**

This qualification was designed to meet a specific purpose and what follows are details on how that purpose has been met through mapping of the Units to the aims of the qualification. Through meeting the aims, additional value has been achieved by linking the Unit standards with those defined in National Occupational Standards and/or trade/professional body requirements. In addition, significant opportunities exist for learners to develop the more generic skill, known as Core Skills through doing this qualification.

Study of each of these qualifications will allow the learner to develop a variety of supplementary skills and attributes which enhance life skills and the educational experience. Such skills tied to enterprise, employability, sustainable development and citizenship are deemed essential to success in learning, life and work. They should be nurtured wherever possible. The wide range of work to be completed within the qualifications will provide the learner with opportunity to reflect upon collateral soft skills found, for example, in career development, developing self-confidence, team working, inter-dependence, problem solving, understanding rights and responsibilities, etc.

## SQA Advanced Certificates and Diplomas

### 5.1 Mapping of qualification aims to Units

#### SQA Advanced Certificate in Built Environment

Code	Unit title	Aims				
		1	2	3	4	5
HR3P 47	Architectural Design Sketching and Drawing	X	X	X	X	X
HR4D 47	Building Measurement and Cost Studies	X	X	X	X	X
HT85 47	Building Science	X	X	X	X	X
HR42 46	Building Services: An Introduction	X	X	X	X	X
HR45 47	Construction Materials and Specification	X	X	X	X	X
HR48 47	Construction Site Surveying A	X	X	X	X	X
HR46 46	Construction Technology: Domestic Construction	X	X	X	X	X
HT87 47	Construction Technology: Substructure	X	X	X	X	X
HR4K 48	Sustainability and Modern Methods of Construction	X	X	X	X	X
HR3L 47	CAD: 2D I	X	X	X	X	X
HR3H 47	CAD: 2D II	X	X	X	X	X
HR3W 47	Health and Safety in Construction	X	X	X	X	X
HR4F 47	Construction Industry Fundamentals	X	X	X	X	X
HR4N 46	Mathematics for Construction	X	X	X	X	X
HR4V 46	Mathematics for the Built Environment	X	X	X	X	X
HR4J 48	Scottish Law for Construction	X	X	X	X	X
HR3V 47	Structural Mechanics	X	X	X	X	X



## SQA Advanced Certificates and Diplomas

### SQA Advanced Certificate and SQA Advanced Diploma in Architectural Technology

Code	Unit title	Aims									
		1	2	3	4	5	6	7	8	9	10
HR3P 47	Architectural Design Sketching and Drawing	X	X		X	X	X	X		X	X
HR4A 47	Architecture: Influences on the Development of Scottish Architecture	X	X		X	X	X	X		X	X
HR4C 47	Architectural Procedures	X	X		X	X	X	X		X	X
HR4D 47	Building Measurement and Cost Studies	X	X	X	X	X	X	X		X	X
HT85 47	Building Science	X	X	X	X	X	X	X		X	X
HR42 46	Building Services: An Introduction	X	X	X	X	X	X	X		X	X
HR4E 48	Building Services in Large Buildings	X	X		X	X	X	X		X	X
HR4F 47	Construction Industry Fundamentals	X	X	X	X	X	X	X		X	X
HR45 47	Construction Materials and Specifications	X	X		X	X	X	X		X	X
HR48 47	Construction Site Surveying A	X			X	X	X	X		X	X
HR46 46	Construction Technology: Domestic Construction	X	X	X	X	X	X	X		X	X
HT87 47	Construction Technology: Substructure	X	X		X	X	X	X		X	X
HR4G 47	Construction Technology: Industrial/Commercial Superstructure	X	X		X	X	X	X		X	X
HR47 48	Construction Technology: Specialist Systems	X	X		X	X	X	X		X	X
HR3N 48	Conversion and Adaptation of Buildings	X	X		X	X	X	X		X	X
HR3R 47	Design of Building Structures	X	X		X	X	X	X		X	X
HR43 48	Fire Safety in Buildings	X	X		X	X	X	X		X	X
HR4N 46	Mathematics for Construction	X	X	X	X	X	X	X		X	X
HR4V 46	Mathematics for the Built Environment	X	X	X	X	X	X	X		X	X
HR4J 48	Scottish Law for Construction	X	X	X	X	X	X	X		X	X
HR3T 47	Statutory Control of Buildings	X	X		X	X	X	X		X	X
HR4M 48	Standard Forms of Construction Contracts	X	X	X	X	X	X	X		X	X
HR3V 47	Structural Mechanics	X	X	X	X	X	X	X		X	X
HR4K 48	Sustainability and Modern Methods of Construction	X	X	X	X	X	X	X		X	X
HR3L 47	CAD: 2D I	X	X		X	X	X	X		X	X
HR3H 47	CAD: 2D II	X	X		X	X	X	X		X	X
HR44 47	Building Maintenance Technology	X	X		X	X	X	X	X		X

## SQA Advanced Certificates and Diplomas

Code	Unit title	Aims									
		1	2	3	4	5	6	7	8	9	10
HR41 48	Building Services: Heating, Lighting and Acoustics	X	X	X	X	X	X	X	X		X
HR3K 47	CAD Architectural 1	X	X		X	X	X	X	X		X
HR40 48	Construction Planning	X	X		X	X	X	X	X		X
HR3W 47	Health and Safety in Construction	X	X	X	X	X	X	X	X		X
HR3X 47	Quality in Construction	X	X	X	X	X	X	X	X		X
HR49 47	Renewable Energy Systems: Microregeneration Systems	X	X		X	X	X	X	X		X
HR0M 47	Work Role Effectiveness (2003)	X	X		X	X	X	X	X		X
HR3J 47	CAD: 3D Modelling	X	X		X	X	X	X	X		X
HP6M 47	Personal Development Planning	X	X	X	X	X	X	X	X		X
HT88 47	Site Administration	X	X	X	X	X	X	X	X		X

## SQA Advanced Certificates and Diplomas

### SQA Advanced Certificate and SQA Advanced Diploma in Building Surveying

Code	Unit title	Aims									
		1	2	3	4	5	6	7	8	9	10
HR3P 47	Architectural Design Sketching and Drawing	X	X		X	X	X	X		X	X
HT16 47	Building Inspection	X	X		X	X	X	X		X	X
HR44 47	Building Maintenance Technology	X	X		X	X	X	X		X	X
HR4D 47	Building Measurement and Cost Studies	X	X		X	X	X	X		X	X
HR42 46	Building Services: An Introduction	X	X	X	X	X	X	X		X	X
HR4E 48	Building Services in Large Buildings	X	X		X	X	X	X		X	X
HR41 48	Building Services: Heating, Lighting and Acoustics	X	X		X	X	X	X		X	X
HR4F 47	Construction Industry Fundamentals	X	X		X	X	X	X		X	X
HR45 47	Construction Materials and Specification	X	X		X	X	X	X		X	X
HR48 47	Construction Site Surveying A	X	X	X	X	X	X	X		X	X
HR46 46	Construction Technology: Domestic Construction	X	X	X	X	X	X	X		X	X
HR4G 47	Construction Technology: Industrial/Commercial Superstructure	X	X		X	X	X	X		X	X
HT87 47	Construction Technology: Substructure	X	X		X	X	X	X		X	X
HR3N 48	Conversion and Adaptation of Buildings	X	X	X	X	X	X	X		X	X
HT85 47	Building Science	X	X	X	X	X	X	X		X	X
HR3V 47	Structural Mechanics	X	X	X	X	X	X	X		X	X
HR43 48	Fire Safety in Buildings		X		X	X	X	X		X	X
HR4N 46	Mathematics for Construction	X	X	X	X	X	X	X		X	X
HR4V 46	Mathematics for the Built Environment	X	X	X	X	X	X	X		X	X

## SQA Advanced Certificates and Diplomas

Code	Unit title	Aims		3	4	5	6	7	8	9	10
		1	2								
HT2W 47	Quantitative Building Studies: Floors and Roofs	X	X	X	X	X	X	X		X	X
HR4J 48	Scottish Law for Construction	X	X		X	X	X	X		X	X
HR3T 47	Statutory Control of Buildings	X	X	X	X	X	X	X		X	X
HV89 48	Surveying Historic Buildings	X	X		X	X	X	X		X	X
HR4K 48	Sustainability and Modern Methods of Construction	X	X		X	X	X	X		X	X
HR3L 47	CAD: 2D1	X	X		X	X	X	X		X	X
HR3H 47	CAD: 2D II	X	X		X	X	X	X		X	X
HR4C 47	Architectural Procedures	X	X		X	X	X	X	X		X
HV8F 47	Building Maintenance Management	X	X	X	X	X	X	X	X		X
HV88 48	Building Services: Ventilation, Air Conditioning and Refrigeration	X	X		X	X	X	X	X		X
HR3J 47	CAD: 3D Modelling	X	X		X	X	X	X	X		X
HR3K 47	CAD: Architectural 1	X	X		X	X	X	X	X		X
HR47 48	Construction Technology: Specialist Systems	X	X	X	X	X	X	X	X		X
HT10 47	Estimating				X	X	X	X	X		X
HV89 48	Facilities Management: Operational and Support Services	X	X	X	X	X	X	X	X		X
HR3W 47	Health and Safety in Construction	X	X	X	X	X	X	X	X		X
HP6M 47	Personal Development Planning	X	X	X	X	X	X	X	X		X
HT12 47	Quantitative Building Studies: Substructures and Drainage	X	X		X	X	X	X	X		X
HR4M 48	Standard Forms of Construction Contract	X	X		X	X	X	X	X		X
HR3R 47	Design of Building Structures	X	X		X	X	X	X	X		X
HR0M 47	Work Role Effectiveness (2003)	X	X		X	X	X	X	X		X
HR40 48	Construction Planning	X	X		X	X	X	X	X		X

## SQA Advanced Certificates and Diplomas

Code	Unit title	Aims			4	5	6	7	8	9	10
		1	2	3							
HT0Y 48	Economics and the Built Environment	X	X		X	X	X	X	X		X
HV8A 48	Facilities Management: Property Services	X	X		X	X	X	X	X		X
HV8C 48	Facilities Resource Planning and Construction Management	X	X		X	X	X	X	X		X
HT11 48	Financial Studies for the Construction Industry	X	X		X	X	X	X	X		X
HT14 48	Human Resource Management in Construction	X	X		X	X	X	X	X		X
HT13 48	Managing Construction Organisations	X	X		X	X	X	X	X		X
HR3X 47	Quality in Construction	X	X		X	X	X	X	X		X
HR49 47	Renewable Energy Systems: Microgeneration Systems	X	X		X	X	X	X	X		X

## SQA Advanced Certificates and Diplomas

### SQA Advanced Certificate and SQA Advanced Diploma in Construction Management

Code	Unit title	Aims									
		1	2	3	4	5	6	7	8	9	10
HR3P 47	Architectural Design Sketching and Drawing	X	X	X	X	X	X	X		X	X
HR4D 47	Building Measurement and Cost Studies	X	X	X	X	X	X	X		X	X
HR42 46	Building Services: An Introduction	X	X	X	X	X	X	X		X	X
HR4E 48	Building Services in Large Buildings	X	X		X	X	X	X		X	X
HR4F 47	Construction Industry Fundamentals	X	X	X	X	X	X	X		X	X
HR45 47	Construction Materials and Specification	X	X		X	X	X	X		X	X
HR40 48	Construction Planning	X	X	X	X	X	X	X		X	X
HR48 47	Construction Site Surveying A	X	X		X	X	X	X		X	X
HR59 47	Construction Site Surveying B	X	X		X	X	X	X		X	X
HR46 46	Construction Technology: Domestic Construction	X	X	X	X	X	X	X		X	X
HT87 47	Construction Technology: Substructure	X	X		X	X	X	X		X	X
HR4G 47	Construction Technology: Industrial/Commercial Superstructure	X	X		X	X	X	X		X	X
HT0Y 48	Economics and the Built Environment	X	X		X	X	X	X		X	X
HT85 47	Building Science	X	X	X	X	X	X	X		X	X
HR3W 47	Health and Safety in Construction	X	X		X	X	X	X		X	X
HT14 48	Human Resource Management in Construction	X	X	X	X	X	X	X		X	X
HT13 48	Managing Construction Organisations	X	X	X	X	X	X	X		X	X
HR4N 46	Mathematics for Construction	X	X	X	X	X	X	X		X	X
HR4V 46	Mathematics for the Built Environment	X	X	X	X	X	X	X		X	X
HR3X 47	Quality in Construction	X	X	X	X	X	X	X		X	X
HR4J 48	Scottish Law for Construction	X	X	X	X	X	X	X		X	X
HT88 47	Site Administration	X	X		X	X	X	X		X	X
HR3T 47	Statutory Control of Buildings	X	X		X	X	X	X		X	X
HR4M 48	Standard Forms of Construction Contracts	X	X		X	X	X	X		X	X
HR4K 48	Sustainability and Modern Methods of Construction	X	X	X	X	X	X	X		X	X
HR3L 47	CAD: 2D I	X	X		X	X	X	X		X	X
HR3H 47	CAD: 2D II	X	X		X	X	X	X		X	X
HT16 47	Building Inspection	X	X		X	X	X	X	X		X
HR47 48	Construction Technology: Specialist Systems	X	X		X	X	X	X	X		X
HR3R 47	Design of Building Structures	X	X		X	X	X	X	X		X

## SQA Advanced Certificates and Diplomas

Code	Unit title	Aims									
		1	2	3	4	5	6	7	8	9	10
HT10 47	Estimating	X	X	X	X	X	X	X	X		X
HT11 48	Financial Studies for the Construction Industry	X	X	X	X	X	X	X	X		X
HP6M 47	Personal Development Planning	X	X	X	X	X	X	X	X		X
HT12 47	Quantitative Building Studies: Substructure and Drainage	X	X	X	X	X	X	X	X		X
HR49 47	Renewable Energy Systems: Microregeneration Systems	X	X	X	X	X	X	X	X		X
HR3V 47	Structural Mechanics	X	X	X	X	X	X	X	X		X
HR0M 47	Work Role Effectiveness (2003)	X	X		X	X	X	X	X		X

## SQA Advanced Certificates and Diplomas

### SQA Advanced Certificate and SQA Advanced Diploma in Quantity Surveying

Code	Unit title	Aims									
		1	2	3	4	5	6	7	8	9	10
HR3P 47	Architectural Design Sketching and Drawing	X	X		X	X	X	X		X	X
HR4D 47	Building Measurement and Cost Studies	X	X		X	X	X	X		X	X
HR42 46	Building Services: An Introduction	X	X	X	X	X	X	X		X	X
HR4E 48	Building Services in Large Buildings	X	X		X	X	X	X		X	X
HR4F 47	Construction Industry Fundamentals	X	X	X	X	X	X	X		X	X
HR45 47	Construction Materials and Specification	X	X		X	X	X	X		X	X
HR48 47	Construction Site Surveying A	X	X		X	X	X	X		X	X
HR46 46	Construction Technology: Domestic Construction	X	X	X	X	X	X	X		X	X
HT87 47	Construction Technology: Substructure	X	X		X	X	X	X		X	X
HR4G 47	Construction Technology: Ind./Comm. Superstructure	X	X		X	X	X	X		X	X
HT0Y 48	Economics and the Built Environment	X	X		X	X	X	X		X	X
HT85 47	Building Science	X	X	X	X	X	X	X		X	X
HT10 47	Estimating	X	X		X	X	X	X		X	X
HT11 48	Financial Studies for the Construction Industry	X	X	X	X	X	X	X		X	X
HR4N 46	Mathematics for Construction	X	X		X	X	X	X		X	X
HT2W 47	Quantitative Building Studies: Floors and Roofs	X	X		X	X	X	X		X	X
HT12 47	Quantitative Building Studies:: Substructure and Drainage	X	X		X	X	X	X		X	X
HT2X 48	Quantity Surveying Practice	X	X	X	X	X	X	X		X	X
HR4J 48	Scottish Law for Construction	X	X	X	X	X	X	X		X	X
HR4M 48	Standard Forms of Construction Contracts	X	X		X	X	X	X		X	X
HR3T 47	Statutory Control of Buildings	X	X		X	X	X	X		X	X
HR4K 48	Sustainability and Modern Methods of Construction	X	X	X	X	X	X	X		X	X
HR3L 47	CAD: 2D I	X	X		X	X	X	X		X	X
HR3H 47	CAD: 2D II	X	X		X	X	X	X		X	X
HR40 48	Construction Planning	X	X		X	X	X	X	X		X
HR47 48	Construction Technology: Specialist Systems	X	X		X	X	X	X	X		X
HR3W 47	Health and Safety in Construction	X	X	X	X	X	X	X	X		X
HT14 48	Human Resource Management in Construction	X	X		X	X	X	X	X		X
HP6M 47	Personal Development Planning	X	X	X	X	X	X	X	X		X
HR3X 47	Quality in Construction	X	X		X	X	X	X	X		X



## SQA Advanced Certificates and Diplomas

Code	Unit title	Aims									
		1	2	3	4	5	6	7	8	9	10
HT2T 47	Quantitative Building Studies: Building Services	X	X		X	X	X	X	X		X
HR49 47	Renewable Energy Systems: Microgeneration Systems	X	X	X	X	X	X	X	X		X
HT88 47	Site Administration	X	X		X	X	X	X	X		X
HR3V 47	Structural Mechanics	X	X		X	X	X	X	X		X
HR0M 47	Work Role Effectiveness (2003)	X	X		X	X	X	X	X		X

## 5.2 Mapping of National Occupational Standards (NOS) and/or trade body standards

Qualification title	Scottish Vocational Qualifications incorporating National Occupational Standards	
SQA Advanced Certificate in Built Environment SQA Advanced Certificate in Architectural Technology SQA Advanced Certificate in Construction Management SQA Advanced Certificate in Building Surveying SQA Advanced Certificate in Quantity Surveying	GJ1C 23	SVQ 3 Construction Site Supervision (Construction): Building and Civil Engineering
	GC2A 23	SVQ 3 Construction Contracting Operations: Estimating
	GJ1D 23	SVQ 3 Construction Site Supervision (Construction): Highways Maintenance and Repair
	GC2F 23	SVQ 3 Construction Site Supervision: Residential Development
	GC29 23	SVQ 3 Construction Contracting Operations: Buying
	GC2E 23	SVQ 3 Construction Contracting Operations: Surveying
	G95L 23	SVQ 3 Construction Contracting Operations: Site Technical Support
	GC2D 23	SVQ 3 Construction Contracting Operations: Planning
	GC2C 23	SVQ 3 Construction Contracting Operations: General
	GJ18 23	SVQ 3 Built Environment Design
	GF5N 23	SVQ 3 Occupational Work Supervision (Construction)
	GC70 23	SVQ 4 Controlling Lifting Operations: Planning Lifts (Construction)
	GC71 23	SVQ 3 Controlling Lifting Operations: Supervising Lifts (Construction)

## SQA Advanced Certificates and Diplomas

Qualification title	Scottish Vocational Qualifications incorporating National Occupational Standards	
SQA Advanced Diploma in Architectural Technology SQA Advanced Diploma in Construction Management SQA Advanced Diploma in Building Surveying SQA Advanced Diploma in Quantity Surveying	GJ1C 24	SVQ 4 Built Environment Design
	GC4K 24	SVQ 4 Construction Contracting Operations: Buying
	GC4L 24	SVQ 4 Construction Contracting Operations: Estimating
	GC4M 24	SVQ 4 Construction Contracting Operations: General
	GC4N 24	SVQ 4 Construction Contracting Operations: Planning
	GC4P 24	SVQ 4 Construction Contracting Operations: Surveying
	GJ19 24	SVQ 4 Construction Site Management (Construction): Building and Civil Engineering
	GJ1A 24	SVQ 4 Construction Site Management (Construction): Highways Maintenance and Repair
	GH0K 24	SVQ 4 Controlling Lifting Operations: Planning Lifts (Construction)
	GC2G 24	SVQ 4 Construction Site Management: Residential Development

Each Scottish Vocational Qualification (SVQ) identified in the above table contains a range of National Occupational Standards (NOS) that are specific to the discipline/vocational area to which the SVQ applies. In turn, the SQA Advanced Certificate and Diploma Qualifications supply the broad-based underpinning knowledge for each SVQ and relate directly to the constituent National Occupational Standards.

### 5.3 Mapping of Core Skills development opportunities across the qualifications

Unit code	Unit title	Communication		Numeracy		ICT		Problem Solving			Working with Others	
		Written	Oral	Using Number	Using Graphical Information	Accessing Information	Providing/Creating Information	Critical Thinking	Planning and Organising	Reviewing and Evaluating	Working Co-operatively with Others	Reviewing Co-operative Contribution
HR3P 47	Architectural Design Sketching and Drawing			X	X			X	X	X	X	x
HR4A 47	Architecture: Influences on the Development of Scottish Architecture	X				X	X					
HR4C 47	Architectural Procedures			X	X			X	X	X		
HT16 47	Building Inspection	X				X	X	X	X	X		
HV8F 47	Building Maintenance Management	X		X	X	X	X	X	X	X		
HR44 47	Building Maintenance Technology			X	X			X	X	X		
HR4D 47	Building Measurement and Cost Studies			X	X			X	X	X		
HT85 47	Building Science			X	X			X	X	X		
HR42 46	Building Services: An Introduction			X	X			X	X	X		
HR4E 48	Building Services in Large Buildings			X	X			X	X	X		
HR41 48	Building Services: Heating, Lighting and Acoustics			X	X			X	X	X		
HV88 48	Building Services: Ventilation, Air conditioning and Refrigeration			X	X			X	X	X		

## SQA Advanced Certificates and Diplomas

Unit code	Unit title	Communication		Numeracy		ICT		Problem Solving			Working with Others	
		Written	Oral	Using Number	Using Graphical Information	Accessing Information	Providing/Creating Information	Critical Thinking	Planning and Organising	Reviewing and Evaluating	Working Co-operatively with Others	Reviewing Co-operative Contribution
HR3L 47	CAD: 2D I			X	X	X	X	X	X	X		
HR3H 47	CAD: 2D II			X	X	X	X	X	X	X		
HR3J 47	CAD: 3D Modelling			X	X	X	X	X	X	X		
HR3K 47	CAD: Architectural 1			X	X	X	X	X	X	X	X	X
HR4F 47	Construction Industry Fundamentals											
HR45 47	Construction Materials and Specifications	X		X	X	X	X	X	X	X		
HR40 48	Construction Planning	X		X	X	X	X	X	X	X		
HR48 47	Construction Site Surveying A	X		X	X	X	X	X	X	X	X	X
HR59 47	Construction Site Surveying B	X		X	X	X	X	X	X	x	X	X
HR46 46	Construction Technology: Domestic Construction			X	X	X	X	X	X	X	X	X
HR4G 47	Construction Technology: Industrial/Commercial Superstructure			X	X	X	X	X	X	X		
HR47 48	Construction Technology: Specialist Systems			X	X	X	X	X	X	X		
HT87 47	Construction Technology: Substructure			X	X	X	X	X	X	X		
HR3N 48	Conversion and Adaptation of Buildings			X	X			X	X	X		
HR3R 47	Design of Building Structures			X	X			X	X	X		

## SQA Advanced Certificates and Diplomas

Unit code	Unit title	Communication		Numeracy		ICT		Problem Solving			Working with Others	
		Written	Oral	Using Number	Using Graphical Information	Accessing Information	Providing/Creating Information	Critical Thinking	Planning and Organising	Reviewing and Evaluating	Working Co-operatively with Others	Reviewing Co-operative Contribution
HT0Y 48	Economics and the Built Environment			X	X			X	X	X		
HT10 47	Estimating			X	X			X	X	X		
HV89 48	Facilities Management: Operational and Support Services		X	X	X	X	X	X	X	X	X	X
HV8A 48	Facilities Management: Property Services			X	X			X	X	X		
HV8C 48	Facilities Resource Planning and Contract Management	X		X	X	X	X	X	X	X	X	X
HT11 48	Financial Studies for the Construction Industry			X	X	X	X	X	X	X		
HR43 48	Fire Safety in Buildings	X		X	X	X	X	X	X	X	X	X
HR3W 47	Health and Safety in Construction											
HR4R 47	Architectural Technology: Graded Unit 1	X	X	X	X	X	X	X	X	X	X	X
HV86 47	Building Surveying: Graded Unit 1	X	X	X	X	X	X	X	X	X	X	X
HR4P 47	Built Environment: Graded Unit 1	X	X	X	X	X	X	X	X	X	X	X
HT18 47	Construction Management: Graded Unit 1	X	X	X	X	X	X	X	X	X	X	X
HT30 47	Quantity Surveying: Graded Unit 1	X	X	X	X	X	X	X	X	X	X	X

## SQA Advanced Certificates and Diplomas

Unit code	Unit title	Communication		Numeracy		ICT		Problem Solving			Working with Others	
		Written	Oral	Using Number	Using Graphical Information	Accessing Information	Providing/Creating Information	Critical Thinking	Planning and Organising	Reviewing and Evaluating	Working Co-operatively with Others	Reviewing Co-operative Contribution
HR4T 48	Architectural Technology: Graded Unit 2	X	X	X	X	X	X	X	X	X	X	X
HV8H 48	Building Surveying: Graded Unit 2	X	X	X	X	X	X	X	X	X	X	X
HT19 48	Construction Management: Graded Unit 2	X	X	X	X	X	X	X	X	X	X	X
HT31 48	Quantity Surveying: Graded Unit 2	X	X	X	X	X	X	X	X	X	X	X
HT14 48	Human Resource Management in Construction	X	X	X				X	X	X	X	X
HT13 48	Managing Construction Organisations	X	X	X	X	X	X				X	X
HR4N 46	Mathematics for Construction			X	X			X	X	X		
HR4V 46	Mathematics for the Built Environment			X	X			X	X	X		
HP6M 47	Personal Development and Planning (HP6M 47)		X					X	X	X	X	X
HR3X 47	Quality in Construction			X	X			X	X	X		
HT2T 47	Quantitative Building Studies: Building Services			X	X			X	X	X		
HT2W 47	Quantitative Building Studies: Floors and Roofs		X	X	X			X	X	X		
HT12 47	Quantitative Building Studies: Substructure and Drainage			X	X			X	X	X		

## SQA Advanced Certificates and Diplomas

Unit code	Unit title	Communication		Numeracy		ICT		Problem Solving			Working with Others	
		Written	Oral	Using Number	Using Graphical Information	Accessing Information	Providing/Creating Information	Critical Thinking	Planning and Organising	Reviewing and Evaluating	Working Co-operatively with Others	Reviewing Co-operative Contribution
HT2X 48	Quantity Surveying Practice	X	X	X	X			X	X	X		
HR49 47	Renewable Energy Systems: Microgeneration Systems											
HR4J 48	Scottish Law for Construction	X						X	X	X		
HT88 47	Site Administration			X		X	X				X	X
HR4M 48	Standard Forms of Construction Contracts	X	X	X	X	X	X					
HR3T 47	Statutory Control of Buildings			X		X	X					
HR3V 47	Structural Mechanics			X	X			X	X	X		
HV87 48	Surveying Historic Buildings	X		X	X			X	X	X	X	X
HR4K 48	Sustainability and Modern Methods of Construction											
HR0M 47	Work Role Effectiveness (2003)	X	X					X	X	X	X	X



## 5.4 Assessment Strategy for the qualifications

Unit	Assessment				
	Outcome 1	Outcome 2	Outcome 3	Outcome 4	Outcome 5
Architectural Design Sketching and Drawing	Freehand graphical assignment in open-book, supervised conditions. Sketches produced as natural products of teaching and learning processes.	Freehand graphical assignment in open-book, supervised conditions. Sketches produced as natural products of teaching and learning processes.	Short answer and/or restricted-response questions under closed-book, supervised conditions of 60 minutes duration maximum.		
Architecture: Influences on the Development of Scottish Architecture	Report or extended essay with portfolio of evidence produced as a product of research and review.	Report or extended essay with portfolio of evidence produced as a product of research and review.			
Architectural Procedures	Outcomes 1, 2, 3 and 4 may be assessed on an individual basis in closed-book conditions with a balance of short answer, restricted-response and extended-response questions. Alternatively, all four Outcomes may be assessed as a single, integrated assessment event in a final, end-of-Unit assessment under similar conditions of maximum 3 hours duration.				
Building Inspection	Outcomes 1, 2, and 3 may be assessed on an individual basis in closed-book conditions with a balance of short answer, restricted-response and extended-response questions. Alternatively, all three Outcomes may be assessed as a single, integrated assessment event in a final, end-of-Unit assessment under similar conditions of maximum 3 hours duration.				

## SQA Advanced Certificates and Diplomas

Unit	Assessment				
	Outcome 1	Outcome 2	Outcome 3	Outcome 4	Outcome 5
Building Maintenance Management	Outcomes 1, 2, 3 and 4 may be assessed on an individual basis in closed-book conditions with a balance of short answer, restricted-response, graphical-response and extended-response questions. Alternatively, all four Outcomes may be assessed as a case study in a final, end-of-Unit assessment under similar conditions.				
Building Maintenance Technology	Restricted and extended-response questions under closed-book, supervised conditions of 90 minutes duration.	Practical assignment/case study in open-book, supervised conditions. Sketches and reports produced for subject building.			
Building Measurement and Cost Studies	Practical assignment/case study in open-book, supervised conditions of 90 minutes duration.	Restricted and extended-response questions under closed-book, supervised conditions of 90 minutes duration.			
Building Services: Introduction	Outcomes 1, 2, 3, 4 and 5 may be assessed on an individual basis in open-book conditions with a balance of short answer, restricted-response, graphical-response and extended-response questions. Alternatively, all five Outcomes may be assessed as a case study in a final, end-of-Unit assessment under similar conditions.				
Building Services in Large Buildings	Outcomes 1, 2, 3, 4 and 5 may be assessed on an individual basis in open-book conditions with a balance of short answer, restricted-response, graphical-response and extended-response questions. Alternatively, all five Outcomes may be assessed as a case study in a final, end-of-Unit assessment under similar conditions.				

## SQA Advanced Certificates and Diplomas

Unit	Assessment				
	Outcome 1	Outcome 2	Outcome 3	Outcome 4	Outcome 5
Building Services: Heating, Lighting and Acoustics	Outcomes 1, 2 and 3 may be assessed on an individual basis in closed-book conditions with a balance of short answer, restricted-response and extended-response questions. Alternatively, all three Outcomes may be assessed as a single, integrated assessment event in a final, end-of-Unit assessment under similar conditions of maximum 3 hours duration.				
Building Services: Ventilation, Air-conditioning & Refrigeration	Outcomes 1, 2, 3 and 4 may be assessed on an individual basis in closed-book conditions with a balance of short answer, restricted-response and extended-response questions. Alternatively, all four Outcomes may be assessed as a single, integrated assessment event in a final, end-of-Unit assessment under similar conditions of maximum 2 hours duration.				
CAD 2-D 1	Graphical assignment in open-book, supervised conditions. Drawings produced as natural products of teaching and learning processes.				
CAD 2-D2	Outcomes 1, 2 and 3 may be assessed under controlled, supervised conditions.				
CAD: 3-D Modelling	Graphical assignment in open-book, supervised conditions. Drawings produced as natural products of teaching and learning processes.				
CAD: Architectural 1	Graphical assignment in open-book, supervised conditions. Drawings produced as natural products of teaching and learning processes.				
Construction Industry Fundamentals	An assessment paper covering Outcomes 1, 3 and 4 should be taken as a single closed-book assessment lasting 1.5 hours and carried out under supervised, controlled conditions. Short answer, restricted response and structured questions.			Outcome 2; evidence for the Knowledge and/or Skills in this Outcome will be generated by the participation in a simulated formal meeting.	

## SQA Advanced Certificates and Diplomas

Unit	Assessment				
	Outcome 1	Outcome 2	Outcome 3	Outcome 4	Outcome 5
Construction Materials and Specifications	Short answer and/or restricted-response questions under closed-book, supervised conditions of 45 minutes duration.	Series of practical laboratory tasks combined with written reports undertaken in controlled, supervised conditions.	Restricted-response and/or structured questions under closed-book, supervised conditions of 90 minutes duration.		
Construction Planning	Outcomes 1, 2, and 3 may be assessed on an individual basis in controlled supervised conditions in a computer suite with appropriate software, with a balance of short answer, restricted-response, graphical-response and extended-response questions. Alternatively, all three Outcomes may be assessed as a case study in a final, end-of-Unit assessment under similar conditions.				
Construction Site Surveying A	Short answer and/or restricted-response questions under open-book, supervised conditions of 60 minutes duration.	Evidence for Outcomes 2, 3 and 4 is produced in open-book, supervised conditions. The learner will actively participate in practical survey fieldwork events as part of a team and will produce appropriate documentation and drawings to confirm the survey elements.			
Construction Site Surveying B	Evidence for Outcomes 1, 2 and 3 is produced in open-book, supervised conditions. The learner will actively participate in practical survey fieldwork events as part of a team and will produce appropriate documentation and drawings to confirm the survey elements.				

## SQA Advanced Certificates and Diplomas

Unit	Assessment				
	Outcome 1	Outcome 2	Outcome 3	Outcome 4	Outcome 5
Construction Technology: Domestic Construction	Outcomes 1, 2, 3 and 4 may be assessed on an individual basis in closed-book conditions with a balance of short answer, restricted-response, extended-response and graphical questions. Alternatively, all four Outcomes may be assessed as a single, integrated assessment event in a final, end-of-Unit assessment under similar conditions of maximum 3 hours duration.				
Construction Technology: Indust/Comm Superstructure	Outcomes 1, 2, 3 and 4 may be assessed on an individual basis in closed-book conditions with a balance of short answer, restricted-response, extended-response and graphical questions. Alternatively, all four Outcomes may be assessed as a single, integrated assessment event in a final, end-of-Unit assessment under similar conditions of maximum 3 hours duration.				
Construction Technology: Specialist Systems	Outcomes 1, 2, 3 and 4 may be assessed on an individual basis in closed-book conditions with a balance of short answer, restricted-response, extended-response and graphical questions. Alternatively, all four Outcomes may be assessed as a single, integrated assessment event in a final, end-of-Unit assessment under similar conditions of maximum 3 hours duration.				
Construction Technology: Substructure	Outcomes 1, 2, 3 and 4 may be assessed on an individual basis in closed-book conditions with a balance of short answer, restricted-response, extended-response and graphical questions. Alternatively, all four Outcomes may be assessed as a single, integrated assessment event in a final, end-of-Unit assessment under similar conditions of maximum 3 hours duration.				

## SQA Advanced Certificates and Diplomas

Unit	Assessment				
	Outcome 1	Outcome 2	Outcome 3	Outcome 4	Outcome 5
Conversion and Adaptation of Buildings	All Outcomes should be assessed in a single, integrated case study. A significant part of the project can be without close supervision although the assessor may provide guidance and support. While time constraints are relaxed, project work must be carried out within an agreed, set time frame, with pre-determined sanctions in operation when deadlines are not met.				
Design of Building Structures	Short answer and/or restricted-response and graphical questions under closed-book, supervised conditions.	Short answer and/or restricted-response questions under closed-book, supervised conditions.	Short answer and/or restricted-response and graphical questions under closed-book, supervised conditions.		
Economics and the Built Environment	Outcomes 1, 2, 3, 4 and 5 may be assessed on an individual basis in closed-book conditions with a balance of short answer, restricted-response, extended-response and graphical questions. Alternatively, all five Outcomes may be assessed as a single, integrated assessment event in a final, end-of-Unit assessment under similar conditions of maximum 2 hours duration.				
Environmental Building Science	Outcomes 1, 2, 3 and 4 may be assessed on an individual basis in closed-book conditions with a balance of short answer, restricted-response, graphical-response and extended-response questions. Alternatively, all four Outcomes may be assessed as a case study in a final, end-of-Unit assessment under similar conditions.				
Estimating	Outcomes 1, 2, 3 and 4 may be assessed on an individual basis in closed-book conditions with a balance of short answer, restricted-response and extended-response questions. Alternatively, all four Outcomes may be assessed as a case study in a final, end-of-Unit assessment under similar conditions of maximum 3 hours duration.				

## SQA Advanced Certificates and Diplomas

Unit	Assessment				
	Outcome 1	Outcome 2	Outcome 3	Outcome 4	Outcome 5
Facilities Management: Operational and Support Services	Outcomes 1, 2, 3 and 4 may be assessed on an individual basis in closed-book conditions with a balance of short answer, restricted-response and extended-response questions. Alternatively, all four Outcomes may be assessed as a case study in a final, end-of-Unit assessment under similar conditions of maximum 3 hours duration.				
Facilities Management: Property Services	Outcomes 1, 2, 3 and 4 may be assessed on an individual basis in closed-book conditions with a balance of short answer, restricted-response and extended-response questions. Alternatively, all four Outcomes may be assessed as a case study in a final, end-of-Unit assessment under similar conditions of maximum 3 hours duration.				
Facilities Resource Planning and Contract Management	Outcomes 1, 2, 3 and 4 may be assessed on an individual basis in closed-book conditions with a balance of short answer, restricted-response and extended-response questions. Alternatively, all four Outcomes may be assessed as a case study in a final, end-of-Unit assessment under similar conditions of maximum 3 hours duration.				
Financial Studies for the Construction Industry	Outcomes 1, 2, 3 and 4 may be assessed on an individual basis in closed-book conditions with a balance of short answer, restricted-response and extended-response questions. Alternatively, all four Outcomes may be assessed as a case study in a final, end-of-Unit assessment under similar conditions of maximum 3 hours duration.				
Fire Safety in Buildings	Outcomes 1, 2, 3 and 4 may be assessed on an individual basis in closed-book conditions with a balance of short answer, restricted-response and extended-response questions. Alternatively, all four Outcomes may be assessed as a case study in a final, end-of-Unit assessment under similar conditions of maximum 3 hours duration.				

## SQA Advanced Certificates and Diplomas

Unit	Assessment				
	Outcome 1	Outcome 2	Outcome 3	Outcome 4	Outcome 5
Health and Safety in Construction	Outcomes 1, 2 and 3 may be assessed on an individual basis in closed-book conditions with a balance of short answer, restricted-response and extended-response questions. Alternatively, all three Outcomes may be assessed as a single, integrated assessment event in a final, end-of-Unit assessment under similar conditions of maximum 3 hours duration.				
SQA Advanced Certificate in Architectural Technology: Graded Unit 1	All Outcomes should be assessed in a single, integrated case study. A significant part of the project can be without close supervision although the assessor may provide guidance and support. While time constraints are relaxed, project work must be carried out within an agreed, set time frame, with pre-determined sanctions in operation when deadlines are not met.				
SQA Advanced Certificate in Building Surveying: Graded Unit 1	All Outcomes should be assessed in a single, integrated case study. A significant part of the project can be without close supervision although the assessor may provide guidance and support. While time constraints are relaxed, project work must be carried out within an agreed, set time frame, with pre-determined sanctions in operation when deadlines are not met.				
SQA Advanced Certificate in Built Environment: Graded Unit 1	All Outcomes should be assessed in a single, integrated case study. A significant part of the project can be without close supervision although the assessor may provide guidance and support. While time constraints are relaxed, project work must be carried out within an agreed, set time frame, with pre-determined sanctions in operation when deadlines are not met.				



## SQA Advanced Certificates and Diplomas

Unit	Assessment				
	Outcome 1	Outcome 2	Outcome 3	Outcome 4	Outcome 5
SQA Advanced Certificate in Construction Management: Graded Unit 1	All Outcomes should be assessed in a single, integrated case study. A significant part of the project can be without close supervision although the assessor may provide guidance and support. While time constraints are relaxed, project work must be carried out within an agreed, set time frame, with pre-determined sanctions in operation when deadlines are not met.				
SQA Advanced Certificate in Quantity Surveying: Graded Unit 1	All Outcomes should be assessed in a single, integrated case study. A significant part of the project can be without close supervision although the assessor may provide guidance and support. While time constraints are relaxed, project work must be carried out within an agreed, set time frame, with pre-determined sanctions in operation when deadlines are not met.				
SQA Advanced Diploma in Architectural Technology: Graded Unit 2	All Outcomes should be assessed in a single, integrated case study. A significant part of the project can be without close supervision although the assessor may provide guidance and support. While time constraints are relaxed, project work must be carried out within an agreed, set time frame, with pre-determined sanctions in operation when deadlines are not met.				
SQA Advanced Diploma in Building Surveying: Graded Unit 2	All Outcomes should be assessed in a single, integrated case study. A significant part of the project can be without close supervision although the assessor may provide guidance and support. While time constraints are relaxed, project work must be carried out within an agreed, set time frame, with pre-determined sanctions in operation when deadlines are not met.				

## SQA Advanced Certificates and Diplomas

Unit	Assessment				
	Outcome 1	Outcome 2	Outcome 3	Outcome 4	Outcome 5
SQA Advanced Diploma in Construction Management: Graded Unit 2	All Outcomes should be assessed in a single, integrated case study. A significant part of the project can be without close supervision although the assessor may provide guidance and support. While time constraints are relaxed, project work must be carried out within an agreed, set time frame, with pre-determined sanctions in operation when deadlines are not met.				
SQA Advanced Diploma in Quantity Surveying: Graded Unit 2	All Outcomes should be assessed in a single, integrated case study. A significant part of the project can be without close supervision although the assessor may provide guidance and support. While time constraints are relaxed, project work must be carried out within an agreed, set time frame, with pre-determined sanctions in operation when deadlines are not met.				
Human Resource Management in Construction	Assessment takes the form of a case study in which the learners work in small groups. All evidence is produced in controlled and supervised conditions.	Assessment takes the form of a case study in which the learners work in small groups. All evidence is produced in controlled and supervised conditions.	Restricted-response or structured questions under open-book, supervised conditions of 60 minutes duration maximum.		

## SQA Advanced Certificates and Diplomas

Unit	Assessment				
	Outcome 1	Outcome 2	Outcome 3	Outcome 4	Outcome 5
Managing Construction Organisations	Outcomes 1, 2 and 3 may be assessed on an individual basis in closed-book conditions with a balance of short answer, restricted-response and extended-response questions. Alternatively, all three Outcomes may be assessed as a single, integrated assessment event in a final, end-of-Unit assessment under similar conditions of maximum 3 hours duration.				
Mathematics for Construction/Mathematics for the Built Environment	Outcomes 1, 2 and 3 may be assessed on an individual basis in closed-book conditions with a balance of short answer, restricted-response and extended-response questions. Alternatively, all three Outcomes may be assessed as a single, integrated assessment event in a final, end-of-Unit assessment under similar conditions of maximum 1 hour duration.				
Personal Development and Planning	All Outcomes should be assessed as an integrated case study by the production of a personal development portfolio. A significant part of the evidence can be produced without close supervision although the assessor may provide guidance and support. While time constraints are relaxed, project work must be carried out within an agreed, set time frame, with pre-determined sanctions in operation when deadlines are not met.				
Quality in Construction	Outcomes 1, 2 and 3 may be assessed on an individual basis in closed-book conditions with a balance of short answer, restricted-response and extended-response questions. Alternatively, all three Outcomes may be assessed as a single, integrated assessment event in a final, end-of-Unit assessment under similar conditions of maximum 3 hours duration.				

## SQA Advanced Certificates and Diplomas

Unit	Assessment				
	Outcome 1	Outcome 2	Outcome 3	Outcome 4	Outcome 5
Quantitative Building Studies: Building Services	Outcomes 1, 2 and 3 may be assessed on an individual basis in closed-book conditions with a balance of short answer, restricted-response and extended-response questions. Alternatively, all three Outcomes may be assessed as a single, integrated assessment event in a final, end-of-Unit assessment under similar conditions of maximum 3 hours duration.				
Quantitative Building Studies: Floors and Roofs	Outcomes 1, 2 and 3 may be assessed on an individual basis in closed-book conditions with a balance of short answer, restricted-response and extended-response questions. Alternatively, all three Outcomes may be assessed as a single, integrated assessment event in a final, end-of-Unit assessment under similar conditions of maximum 3 hours duration.				
Quantitative Building Studies: Substructure and Drainage	Outcomes 1, 2 and 3 may be assessed on an individual basis in closed-book conditions with a balance of short answer, restricted-response and extended-response questions. Alternatively, all three Outcomes may be assessed as a single, integrated assessment event in a final, end-of-Unit assessment under similar conditions of maximum 3 hours duration.				
Quantity Surveying Practice	Short answer and/or restricted-response questions under open-book, supervised conditions of 90 minutes duration.		Short answer and/or restricted-response questions under open-book, supervised conditions of 90 minutes duration.		
Scottish Law for Construction	Outcomes 1, 2, 3 and 4 may be assessed on an individual basis in closed-book conditions with a balance of short answer, restricted-response and extended-response questions. Alternatively, all four Outcomes may be assessed as a case study in a final, end-of-Unit assessment under similar conditions of maximum 3 hours duration.				

## SQA Advanced Certificates and Diplomas

Unit	Assessment				
	Outcome 1	Outcome 2	Outcome 3	Outcome 4	Outcome 5
Site Administration	Assessment takes the form of a case study. All evidence is produced in controlled and supervised conditions.	Assessment takes the form of a case study. All evidence is produced in controlled and supervised conditions.	Assessment takes the form of a case study in which the learners work in small groups. All evidence is produced in controlled and supervised conditions.	Restricted-response and structured questions under open-book, supervised conditions of 60 minutes duration.	
Standard Forms of Construction Contract	Restricted-response or structured questions under open-book, supervised conditions of 45 minutes duration maximum.	Restricted-response or structured questions under open-book, supervised conditions of 45 minutes duration maximum.	Restricted-response or structured questions under open-book, supervised conditions of 45 minutes duration maximum.	Restricted-response or structured questions under open-book, supervised conditions of 45 minutes duration maximum.	
Statutory Control of Buildings	Short answer and/or restricted-response questions under open-book, supervised conditions of 60 minutes duration.	Short answer and/or restricted-response questions under open-book, supervised conditions of 60 minutes duration.	Short answer and/or restricted-response questions under open-book, supervised conditions of 60 minutes duration.		

## SQA Advanced Certificates and Diplomas

Unit	Assessment				
	Outcome 1	Outcome 2	Outcome 3	Outcome 4	Outcome 5
Structural Mechanics	Outcomes 1, 2, 3 and 4 may be assessed on an individual basis in closed-book conditions with a balance of short answer, restricted-response and extended-response questions. Alternatively, all four Outcomes may be assessed as a case study in a final, end-of-Unit assessment under similar conditions of maximum 3 hours duration.				
Surveying Historic Buildings	Both Outcomes should be assessed in a single, integrated case study. A significant part of the project can be without close supervision although the assessor may provide guidance and support. While time constraints are relaxed, project work must be carried out within an agreed, set time frame.				
Sustainability and Modern Methods of Construction	Outcomes 1, 2, 3 and 4 should be conducted under closed-book conditions but may incorporate material specified by the centre and produced by the learner over the period of delivery, for example, research and investigation portfolio. Questions should be structured to give learners the opportunity to give short and extended responses.				
Work Role Effectiveness	Practical assignment involving personal appraisal, evaluation and development aims. While time constraints are relaxed, project work must be carried out within an agreed, set time frame, with pre-determined sanctions in operation when deadlines are not met.				

## 6 Guidance on approaches to delivery and assessment

### 6.1 Sequencing/integration of Units

There are many driving forces which determine a full-time delivery programme for any qualification such as, accommodation, staff availability and materials and equipment. The following tables indicate a suggested delivery programme for a typical SQA Advanced Diploma over a two-year, full-time, two-semester Session.

<b>SQA Advanced Diploma in Architectural Technology</b>	
<b>Suggested Delivery for a full-time, FIRST YEAR Programme</b>	
<b>Semester 1</b>	<b>Semester 2</b>
Construction Technology: Domestic Construction	Architectural Design Sketching and Drawing
Building Services: An Introduction	Building Measurement and Cost Studies
Construction Materials and Specification	Construction Site Surveying A
Building Science	Construction Technology: Substructure
Sustainability and Modern Methods of Construction	Structural Mechanics
CAD: 2D I/ CAD: 2D II	Architecture: Influences on the Development of Scottish Architecture
Health and Safety in Construction	SQA Advanced Certificate in Built Environment: Graded Unit 1
Mathematics for Construction/Mathematics for the Built Environment	

<b>SQA Advanced Diploma in Architectural Technology</b>	
<b>Suggested Delivery for a full-time, SECOND YEAR Programme</b>	
<b>Semester 1</b>	<b>Semester 2</b>
Design of Building Structures	Construction Technology: Specialist Systems
Building Services in Large Buildings	Architectural Procedures
Construction Industry Fundamentals	Statutory Control of Buildings
Construction Technology: Industrial/Commercial Superstructure	Standard Forms of Construction Contracts
Scottish Law for Construction	Fire Safety in Buildings
CAD Architectural 1 or other optional Unit	Architectural Technology: Graded Unit 2
Quality in Construction or other optional Unit	
Personal Development Planning or other optional Unit	

### 6.2 Delivery

The structure of the qualifications allows for a high degree of flexibility in the delivery mode. The awards could be offered on full-time, block-release, day release or evening modes. A distance learning delivery mode is possible providing adequate materials, tutorial support and assessment facilities exist. Combination of delivery modes is also a possibility. Such combined modes of study may enable learners to complete the awards within a shorter time period.

There are many opportunities for integrative delivery of Units within each of the awards. Teaching and learning for mathematics and science Units could be integrated with technology Units, and assessment should be encouraged to be within the application of technology Units. Graded Units provide the opportunity for integration of knowledge and skills across the Units in an award. Supporting Notes with each Unit identify specific opportunities for integration with other Units.

Centres will define which order Units are undertaken based on learner recruitment patterns, mode of delivery, resource issues and logical progression dictated by topic and Unit content.

Provided that adequate material and tutorial expertise existed these awards could be delivered by Open/Distance learning as well as on an online basis. Centre devised supervision agreements should detail controlled conditions to ensure authenticity of evidence.

The awards lend themselves to a wide range of delivery mechanisms including case studies, formal teaching, tutorial, group work, laboratory/practical work and, where appropriate, work based learning. Centres should develop clear delivery and assessment strategies taking into account the efficacy of teaching, learning, and the use of resources, modes of attendance and the need for a rigorous but not excessively demanding assessment regime.

### 6.3 Assessment

The assessment strategy is designed to ensure an appropriate level of rigour whilst not imposing excessive demands on centres or learners.

The design principles for SQA Advanced awards encourage a more holistic approach to assessment and this has been adopted in this award. The SQA Advanced specification places the emphasis on assessing the whole Outcome or a combination of Outcomes rather than on individual Performance Criteria. There is also the intention to reduce the assessment loading for both learners and centres and Unit definitions allow the use of 'sampling' of Knowledge and/or Skills where appropriate.

Each Unit Descriptor includes guidance on delivery and assessment and, where appropriate, any relationship with delivery and assessment of other Units. Requirements for knowledge, skills, sampling, evidence and conduct of assessments is provided for each Outcome in the Unit. Opportunities for integrative assessment across Units is provided and it is generally recommended that topics such as mathematics and fluid mechanics are assessed within Units which apply fundamental theory to practical applications. Assessment guidance includes a variety of conditions including open/closed-book, case study, etc.



## SQA Advanced Certificates and Diplomas

Exemplar assessment instruments are available for all mandatory Units and optional Units. The exemplar provides guidance on content, conduct, evidence required and marking and grading. Centres are expected to use these exemplars as templates when producing further assessment instruments.

### 6.4 Recognition of Prior Learning

SQA recognises that learners gain knowledge and skills acquired through formal, non-formal and informal learning contexts.

In some instances, a full Group Award may be achieved through the recognition of prior learning. However, it is unlikely that a learner would have the appropriate prior learning and experience to meet all the requirements of a full Group Award.

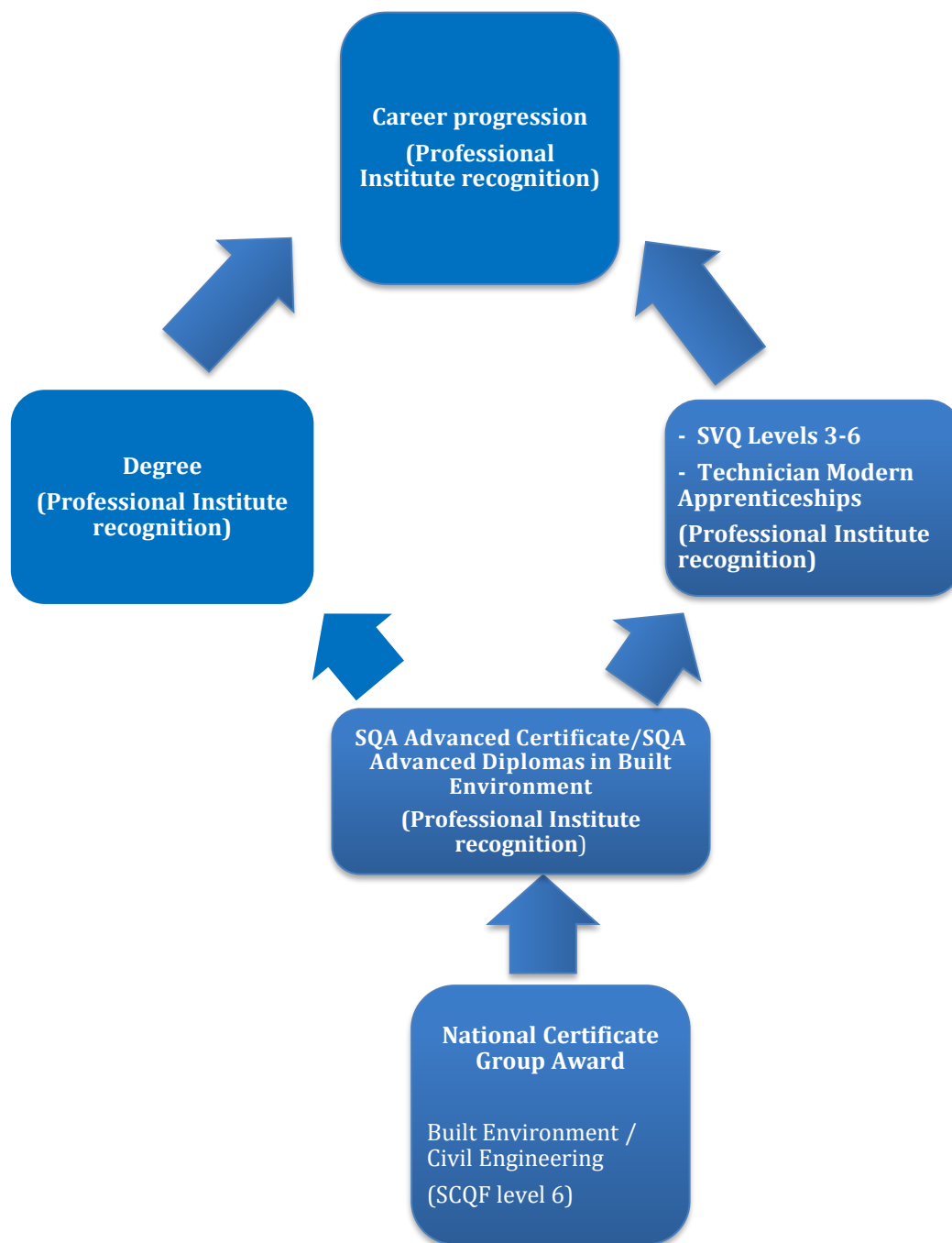
The recognition of prior learning may **not** be used as a method of assessing in the following types of Units and assessments:

- ◆ SQA Advanced Graded Units
- ◆ Course and/or external assessments
- ◆ Other integrative assessment Units (which may or not be graded)
- ◆ Certain types of assessment instruments where the standard may be compromised by not using the same assessment method outlined in the Unit
- ◆ Where there is an existing requirement for a licence to practice
- ◆ Where there are specific health and safety requirements
- ◆ Where there are regulatory, professional or other statutory requirements
- ◆ Where otherwise specified in an Assessment Strategy

More information and guidance on the *Recognition of Prior Learning* (RPL) may be found on our website **[www.sqa.org.uk](http://www.sqa.org.uk)**.

The following sub-sections outline how existing SQA Unit(s) may contribute to this Group Award. Additionally, they also outline how this Group Award may be recognised for professional and articulation purposes.

### 6.4.1 Articulation and/or progression



### 6.4.2 Professional recognition

The SQA Advanced qualifications in the Built Environment have been developed with both career progression and professional development in mind. It is essential that students gain the maximum benefit from their programme of study.

The major professional bodies related to the range of built environment disciplines covered by these awards are:

Architectural Technology: Chartered Institute of Architectural Technologists (CIAT)

Building/Quantity Surveying: Royal Institution of Chartered Surveyors (RICS)

Construction Management: Chartered Institute of Building (CIOB)

Most professional bodies provide broad recognition of SQA Advanced Certificate and SQA Advanced Diploma awards against their educational requirements for membership. Some professional bodies accredit individual courses at colleges and universities. Professional body membership requires a combination of the educational base and verification of professional experience.

CIAT is the lead qualifying body for Architectural Technology. The required level of academic qualification for the function of the Architectural Technician is an SQA Advanced Certificate with appropriate experiential learning or the full-time SQA Advanced Diploma followed by structured and evidenced experiential learning. These are recognised routes towards TCAT and access routes to degree programmes which lead to MCAT.

CIOB has a wide ranging membership portfolio. In addition to Built Environment and Construction Management learners, those working in other construction disciplines, including those above, are eligible to apply for CIOB.

The SQA Advanced Certificate and SQA Advanced Diploma awards in Quantity Surveying and Building Surveying are well-established routes towards the Tech RICS award and as part of a Degree route to RICS membership or as qualifications in their own right. There is no reason to believe that these awards will not receive continuing recognition from RICS as an educational base.

The awards are also recognised as underpinning knowledge to appropriate SVQ/NVQ qualifications at levels 3 and 4.

### 6.5 Opportunities for e-assessment

E-assessment may be appropriate for some elements in these Awards. By e-assessment we mean assessment which is supported by Information and Communication Technology (ICT), such as e-testing or the use of e-portfolios or social software. Centres which wish to use e-assessment must ensure that the national standard is applied to all learner evidence and that conditions of assessment as specified in the Evidence Requirements are met, regardless of the mode of gathering evidence.

The most up-to-date guidance on the use of e-assessment to support SQA's qualifications is available at [www.sqa.org.uk/e-assessment](http://www.sqa.org.uk/e-assessment).

### 6.6 Support materials

A **list of existing ASPs** is available to view on SQA's website.

### 6.7 Resource requirements

Much of the content of these SQA Advanced Qualifications can be delivered in a traditional academic learning and teaching environment. However, certain Units demand specialist resources and equipment to ensure proper coverage of vocational and technical content.

HR45 47     *Construction Materials and Specifications*

Access to a materials testing laboratory would be required along with an appropriate selection of construction materials to ensure the Outcomes of the 'Materials' Units could be met.

HR48 47     *Construction Site Surveying A*

Construction Site Surveying A requires an array of land surveying equipment in sufficient quantity to permit learners to operate in small groups and in turn, contribute to the group dynamic.

HR3L 47     *Computer Aided Drafting 2D I*  
HR3H 47     *Computer Aided Drafting 2D II*  
HR3K 47     *CAD Architectural 1*  
HR3J 47     *CAD 3D Modelling*

Access to a computer suite is essential. A selection of software is required, to allow word-processing and CAD activities. Internet access is essential to enhance research activities.

Each discipline has specific requirements in terms of documents, texts, IT software and hardware that are required to support the learning processes. Examples are: Scottish Building Standards: Technical Handbooks, Standard Methods of Measurement and contract planning programmes.

Investment in a selection of appropriate, construction-specific texts and journals would be essential to provide a comprehensive and balanced resource pool which, in turn, would ensure a broad and effective learning environment for the learner.

## 7 General information for centres

### Equality and inclusion

The Unit specifications making up this Group Award have been designed to ensure that there are no unnecessary barriers to learning or assessment. The individual needs of learners will be taken into account when planning learning experiences, selecting assessment methods or considering alternative evidence. Further advice can be found on our website [www.sqa.org.uk/assessmentarrangements](http://www.sqa.org.uk/assessmentarrangements).

### Internal and external verification

All instruments of assessment used within this/these qualification(s) should be internally verified, using the appropriate policy within the centre and the guidelines set by SQA.

External verification will be carried out by SQA to ensure that internal assessment is within the national guidelines for these qualifications.

Further information on internal and external verification can be found in *SQA's Guide to Assessment* ([www.sqa.org.uk/GuideToAssessment](http://www.sqa.org.uk/GuideToAssessment)).

## 8 Glossary of terms

**Embedded Core Skills:** is where the assessment evidence for the Unit also includes full evidence for complete Core Skill or Core Skill components. A learner successfully completing the Unit will be automatically certificated for the Core Skill. (This depends on the Unit having been successfully audited and validated for Core Skills certification.)

**Finish date:** The end of a Group Award's lapsing period is known as the finish date. After the finish date, the Group Award will no longer be live and the following applies:

- ◆ learners may not be entered for the Group Award
- ◆ the Group Award will continue to exist only as an archive record on the Awards Processing System (APS)

**Graded Unit:** Graded Units assess learners' ability to integrate what they have learned while working towards the Units of the Group Award. Their purpose is to add value to the Group Award, making it more than the sum of its parts, and to encourage learners to retain and adapt their skills and knowledge. (**Note to writer:** delete if not applicable to product type)

**Lapsing date:** When a Group Award is entered into its lapsing period, the following will apply:

- ◆ the Group Award will be deleted from the relevant catalogue
- ◆ the Group Award specification will remain until the qualification reaches its finish date at which point it will be removed from SQA's website and archived
- ◆ no new centres may be approved to offer the Group Award
- ◆ centres should only enter learners whom they expect to complete the Group Award during the defined lapsing period

**SQA credit value:** The credit value allocated to a Unit gives an indication of the contribution the Unit makes to an SQA Group Award. An SQA credit value of 1 given to an SQA Unit represents approximately 40 hours of programmed learning, teaching and assessment.

**SCQF:** The Scottish Credit and Qualification Framework (SCQF) provides the national common framework for describing all relevant programmes of learning and qualifications in Scotland. SCQF terminology is used throughout this guide to refer to credits and levels. For further information on the SCQF visit the SCQF website at [www.scqf.org.uk](http://www.scqf.org.uk).

**SCQF credit points:** SCQF credit points provide a means of describing and comparing the amount of learning that is required to complete a qualification at a given level of the Framework. One National Unit credit is equivalent to 6 SCQF credit points. One National Unit credit at Advanced Higher and one SQA Advanced Unit credit (irrespective of level) is equivalent to 8 SCQF credit points.

**SCQF levels:** The level a qualification is assigned within the framework is an indication of how hard it is to achieve. The SCQF covers 12 levels of learning. SQA Advanced Certificates and SQA Advanced Diplomas are available at SCQF levels 7 and 8 respectively. SQA Advanced Units will normally be at levels 6–9 and Graded Units will be at level 7 and 8. National Qualification Group Awards are available at SCQF levels 2–6 and will normally be made up of National Units which are available from SCQF levels 2–7.

**Subject Unit:** Subject Units contain vocational/subject content and are designed to test a specific set of knowledge and skills.

## **SQA Advanced Certificates and Diplomas**

**Signposted Core Skills:** refers to opportunities to develop Core Skills arise in learning and teaching but are not automatically certificated.

**Qualification Design Team:** The QDT works in conjunction with a Qualification Manager/Development Manager to steer the development of the National Certificate/National Progression Award from its inception/revision through to validation. The group is made up of key stakeholders representing the interests of centres, employers, universities and other relevant organisations.

## **9 General information for learners**

This section will help you decide whether this is the qualification for you by explaining what the qualification is about, what you should know or be able to do before you start, what you will need to do during the qualification and opportunities for further learning and employment.

The SQA Advanced Certificates and Diplomas in the Built Environment disciplines are mainly a knowledge-based qualifications which require you to spend the majority of your time in a classroom location as well as participating in local site visits, research and fieldwork.

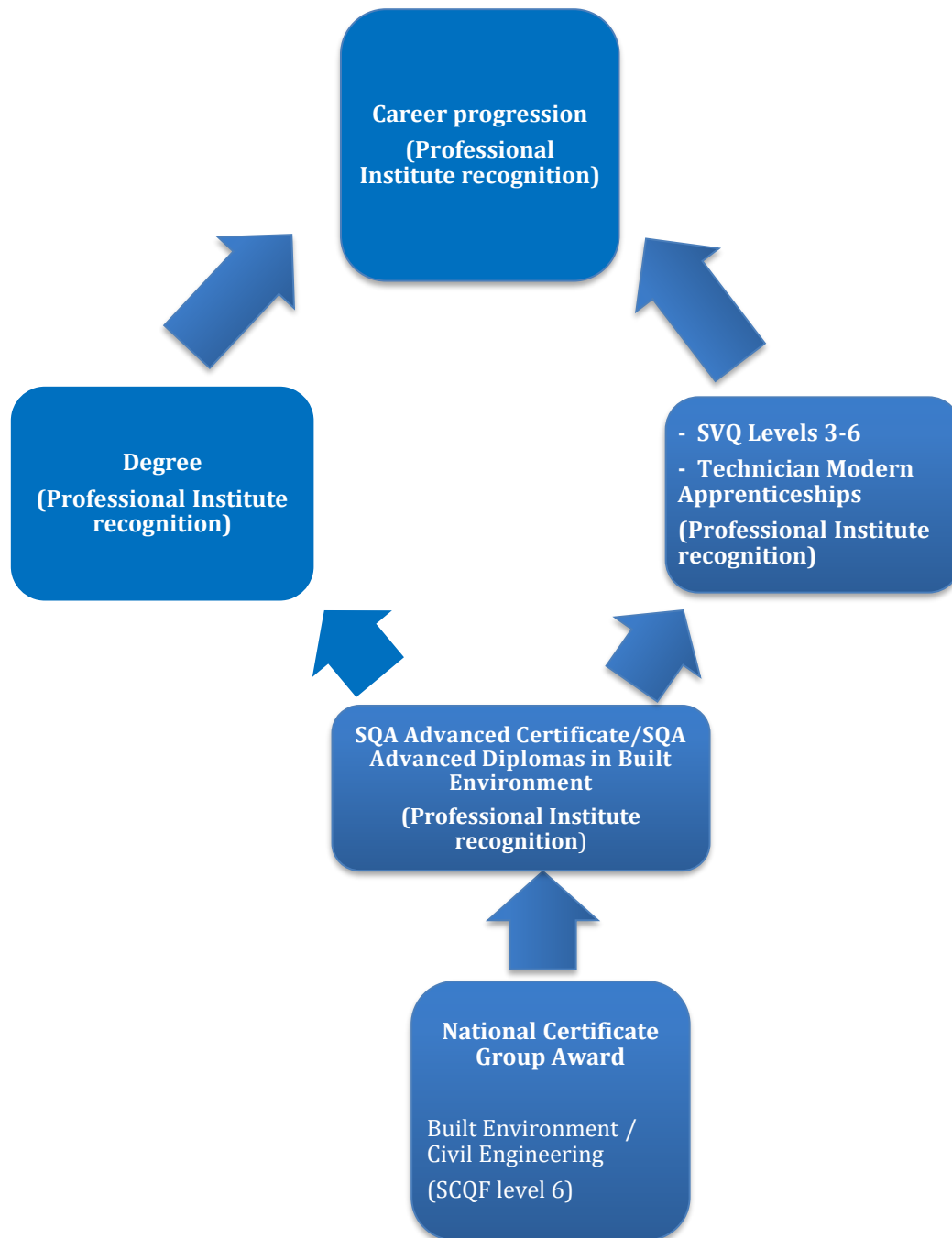
The SQA Advanced Certificates and Diplomas in the various disciplines are designed to equip you with the knowledge, understanding and skills to allow you to gain employment in the construction industry, eg:

- ◆ Architectural Technician
- ◆ Construction Technician
- ◆ Materials Technician
- ◆ Quantity Surveying Technician
- ◆ Land Surveyor
- ◆ Buyer
- ◆ Planner
- ◆ Estimator

all at trainee or technician level, or to progress to a higher level qualification.



## SQA Advanced Certificates and Diplomas



Each SQA Advanced Certificate requires you to achieve a minimum of 12 credits by completion of all mandatory Units and the required number of optional Units. You may of course, undertake additional Units (credits) to add to your portfolio and these also will be credited to you in your certification.

Each National Diploma requires you to achieve a minimum of 30 credits by completion of all mandatory Units and the required number of optional Units. You may of course, undertake additional Units (credits) to add to your portfolio and these also will be credited to you in your certification.

If you wish to investigate career opportunities in the construction industry, you can contact Construction Skills at [www.citb.org.uk](http://www.citb.org.uk)