



Group Award Specification for:

**Architectural Technology with Digital Construction
at SCQF level 7**

Group Award Code: GV03 15

**Architectural Technology with Digital Construction
at SCQF level 8**

Group Award Code: GV04 16

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1. Introduction

The purpose of this document is to:

- ◆ Assist centres to implement, deliver and manage the qualification.
- ◆ Provide a guide for new staff involved in offering the qualification.
- ◆ Inform course managers teaching staff, assessors, learners, employers and higher education institutes (HEIs) of the aims and purpose of the qualification.
- ◆ Provide details of the range of learners the qualification is suitable for and progression opportunities.

The Architectural Technology with digital Construction qualification is designed to embrace an ever-changing workplace where our industry has to swiftly adapt to new technologies and ways of working. This echoes a demand for a rapidly changing curriculum to allow our students to leave equipped ready for the workplace to bridge the skills gap. This new HND course aims to bridge the skills gap between digital and technical knowledge which our industry urgently requires.

The planned holistic nature of delivery will help the course to be fit for purpose and be able to change to adapt with industry to reflect emerging best practice and focus on core skills development. In addition to meeting industry demand, the course will develop students' self-management, social intelligence and innovation skills as well as allowing them to also develop critical industry and subject-specific technical/digital skills.

This course could be delivered on a full-time, part-time or day/block release basis.

The qualifications are aimed at learners wishing to pursue a career working in the construction sector as an Architectural Technician/Technologist or wishing to upgrade and/or broaden their existing skills set. This could include:

- ◆ School leavers.
- ◆ Learners studying related subject areas such as engineering, construction and design related disciplines at NC level.
- ◆ Adult returners to education.
- ◆ Learners in employment who wish to enhance their career prospects.
- ◆ People changing direction/seeking a career change.
- ◆ Part-time learners wishing to broaden skills and knowledge.

Learners could also be employed as CAD or Architectural: Technicians or Junior Designers within the construction and engineering sectors.

These qualifications continue to provide successful learners with a platform to progress towards professional status. Learners studying towards these qualifications may seek to become student members of the Chartered Institute of Architectural Technologists (CIAT). On completion of the award learners may choose to apply for Technician Member CIAT (TCIAT), Associate Member CIAT (ACIAT) or full Member CIAT (MCIAT).

2. Qualification structure

2.1 Structure

This HNC Group Award is made up of 12 SQA unit credits. It comprises 96 SCQF credit points of which 72 are at SCQF level 7 in the mandatory section including a Graded Unit of 8 SCQF credit points at SCQF level 7. The remaining 24 SCQF credit points required for the Group Award are to be selected from the optional section. A mapping of Core Skills development opportunities is available in Section 5.3.

Mandatory units: 9 SQA credits required.

4 code	2 code	Unit title	SQA credit	SCQF credit points	SCQF level
F329	34	Architectural CADT: Residential Design	2	16	7
F3G5	34	Architectural CADT: Construction Detailing	1	8	7
DW3W	34	Statutory Control of Buildings	1	8	7
HE2G	34	Building Information Modelling (BIM): Principles	1	8	7
DW3V	34	Design of Building Structures	1	8	7
DW3R	34	Architectural Design Sketching and Drawing	1	8	7
J6X6	34	3D Draughting for Architecture	1	8	7
J746	34	Architectural Technology with Digital Construction: Graded Unit 1	1	8	7

Optional units: Minimum 3 SQA credits required.

4 code	2 code	Unit title	SQA credit	SCQF credit points	SCQF level
HE28	34	CAD: User Systems	1	8	7
F39F	34	Architectural Professional Practice: Design Management	1	8	7
F32A	34	Architectural CADT: Principles and Practice	2	16	7
DW1E	34	CAD: 2D 1	1	8	7
H728	34	Construction Industry Fundamentals	1	8	7
J50K	34	Construction Materials and Specifications	1	8	7
H729	34	Construction Technology: Industrial/Commercial Superstructure	1	8	7
DW54	33	Construction Technology: Domestic Construction	1	8	6
H72C	35	Scottish Law for Construction	1	8	8
DG6E	34	Work Role Effectiveness (2003)	3	24	7
H72A	34	Construction Technology: Substructure	1	8	7
J6X9	34	Digital Surveying, Analysis and Presentation	1	8	7
J50L	34	Environmental Design	1	8	7

2.2 Structure — HND Architectural Technology with Digital Construction

This HND Group Award is made up of 30 SQA unit credits. It comprises 240 SCQF credit points of which 80 are at SCQF level 7 and 112 are at SCQF level 8 in the mandatory section, this includes a graded unit of 8 SCQF credit points at SCQF level 7 and a graded unit of 16 SCQF credit points at SCQF level 8. The remaining 48 SCQF credit points required for the group award are to be selected from the optional section. A mapping of Core Skills development opportunities is available in Section 5.3.

Mandatory units: 24 SQA credits required.

4 code	2 code	Unit title	SQA credit	SCQF credit points	SCQF level
F329	34	Architectural CADT: Residential Design	2	16	7
F3G5	34	Architectural CADT: Construction Detailing	1	8	7
J6X9	34	Digital Surveying, Analysis and Presentation	1	8	7
DW3W	34	Statutory Control of Buildings	1	8	7
HE2G	34	Building Information Modelling (BIM): Principles	1	8	7
DW3V	34	Design of Building Structures	1	8	7
DW3R	34	Architectural Design Sketching and Drawing	1	8	7
J6X6	34	3D Draughting for Architecture	1	8	7
J746	34	Architectural Technology with Digital Construction: Graded Unit 1	1	8	7
J6X7	35	Design of Building Services	2	16	8
F4NH	35	Architectural CADT: Commercial Building Systems	2	16	8
HE2E	35	Building Information Modelling (BIM): Building Science	1	8	8
HE2H	35	CAD: Digital Collaboration Practices	2	16	8
J50R	35	Conversion and Adaptation of Buildings	1	8	8
J6X8	35	Low Energy Construction Technology	2	16	8
J50N	35	Fire Safety in Buildings	1	8	8
J747	35	Architectural Technology with Digital Construction: Graded Unit 2	2	16	8
H72D	35	Sustainability and Modern Methods of Construction	1	8	8

Optional units: Minimum 6 SQA credits required.

4 code	2 code	Unit title	SQA credit	SCQF credit points	SCQF level
HE28	34	CAD: User Systems	1	8	7
J50K	34	Construction Materials and Specifications	1	8	7
F32A	34	Architectural CADT: Principles and Practice	2	16	7
DW1E	34	CAD: 2D 1	1	8	7
H728	34	Construction Industry Fundamentals	1	8	7
H729	34	Construction Technology: Industrial/Commercial Superstructure	1	8	7
DW54	33	Construction Technology: Domestic Construction	1	8	6
H72C	35	Scottish Law for Construction	1	8	8
DG6E	34	Work Role Effectiveness (2003)	3	24	7
H72A	34	Construction Technology: Substructure	1	8	7
DW18	34	CAD: Visualisation, Rendering and Presentation	1	8	7
J50L	34	Environmental Design	1	8	7
J50J	35	Construction Contracts: Conditions and Procedures	1	8	8
F39F	34	Architectural Professional Practice: Design Management	1	8	7

3. Aims of the qualification

The main aim of the HNC and HND CAADT Group Awards is to provide learners with the opportunity to develop a high level of CAD knowledge and skills, underpinned by a firm grasp of technical design, digital construction and technology knowledge relevant to Architectural Engineering and Construction (AEC) industries. Learners will develop knowledge and understanding of the design process and the stages of design where CAD skills can be exploited in the achievement of a desirable design solution, and the production of digital design solutions in the solving of technical problems for architecture and construction.

In addition, the HND CAADT Group Award is specifically tailored at providing learners with opportunities to gain knowledge and skills sets appropriate to more formal recognition as an Architectural Technician and to provide pathways with governing institutions, primarily CIAT, to formalise professional status and achieve recognition for academic achievement.

The aims of the qualifications have been split into general aims and specific aims.

3.1 General aims of the qualification

1. To develop knowledge, understanding and skills across a range of core Architectural Technology, CAD and digital construction principles and technologies at Higher National level.
2. To develop a range of communication and information technology knowledge and skills relevant to the needs of Architectural CAD specialists.
3. To develop knowledge, understanding and skills in applying a structured approach to advanced Architectural CAD principles in the production of complex drawings, particularly as they apply to more sophisticated design projects relative to the professional activities of the qualified Architectural Technician.
4. To develop an ability to apply analysis and synthesis to the solution of Architectural CAD related problems, particularly as they apply to more sophisticated design projects relative to the professional activities of the qualified Architectural Technician.
5. To develop skills of study, research, analysis and resource management.
6. To develop skills of evaluation, organisation and problem solving.
7. To develop responsibility for individual learning and progression.
8. To develop skills, knowledge and motivation towards progression to higher education routes.
9. To develop key skills for employability while building on previously acquired transferable skills which that could allow progression within the SCQF (Scottish Credit and Qualification Framework) or lead to employment.
10. To support learners' continuing professional development and career development.

3.2 Specific aims of the qualification

11. To prepare learners for employment as Architectural Technicians in private or public practice, working with a range of associated professional disciplines.
12. To prepare learners with a range of the most contemporary vocational skills, including the preparation, co-ordination and communication of technical information relevant to the Architectural industry, using the most advanced CAD and IT platforms available.
13. To provide learners with underpinning knowledge and skills contributing to the efficient operation and management of architectural design projects through control of specified regulatory, quality or management standards.
14. To provide opportunities for learners to achieve appropriate professional recognition, particularly, but not exclusively, with the Chartered Institute of Architectural Technology (CIAT).
15. To provide an award that, on successful completion, will allow learners to progress to appropriate degree level programmes.
16. To provide learners with the opportunity to develop knowledge and skills in the use of digital construction software and practices.
17. To develop contextual computer-aided design knowledge, understanding and skills in the resolution of core Architectural and Construction design problems.
18. To allow a degree of flexibility within subject specific disciplines, such as Building Services, History and Conservation, Construction Management.
19. To provide learners with the opportunity to develop knowledge and skills in the process of design collaboration.
20. To provide an opportunity to achieve industry recognised vendor qualifications.

3.3 Graded units

There are two Computer Aided Architectural Design and Technology Graded Units:

Architectural Technology with Digital Construction: Graded Unit 1
1 SQA unit credit, 8 SCQF points at SCQF level 7.

Architectural Technology with Digital Construction: Graded Unit 2
2 SQA unit credits, 16 SCQF points at SCQF level 8.

Both Graded Units 1 and 2 are project-based and are designed to test the knowledge and skills across the units of the qualification within a context reflective of industry practice. The tasks are designed to assess the knowledge and skills gained from studying the mandatory units within the framework. Learners are challenged to demonstrate that they can recall, apply and integrate the knowledge and skills gained during their studies.

Graded Unit 2, delivered in Year 2 of the HND qualification will be broader and deeper in the assessment of knowledge and skills across the units of the qualification.

Further to the development of technical knowledge and skills assessed in the graded units, the learners through the tasks set will further enhance and develop essential skills and attributes that are deemed desirable for employment. These essential skills should include, planning and organising, working to deadlines and time management.

4. Recommended entry to the qualification

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 by the Qualification Design Team (QDT) 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:

Formal qualifications considered suitable for access to HNC or HND Year 1

Learners who enter with at least one of the following qualifications are likely to benefit more readily from the programme:

- ◆ NC or HNC in a related discipline, these could include but not limited to the NC Computer Aided Design and Technology, NC Built Environment, NC in an Engineering discipline or HNC Construction.
- ◆ At least two Higher level passes, with appropriate supporting passes at Standard Grade Credit/National 5 or equivalent in appropriate subjects, desirably this would include Maths, English, Product Design, Graphic Communication and/or a science subject.
- ◆ SVQ in Construction or Engineering related discipline.

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 qualifications. Centres may wish to use Core Skills profiling to assist them in this process.

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 would 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.

Core Skill	Recommended SCQF entry profile	Associated assessment activities
Communication	5	Good communication skills will be required for learners doing these qualifications as they will need to research, analyse, report, and present technical data and documentation.

Core Skill	Recommended SCQF entry profile	Associated assessment activities
Numeracy	5	<p>Good numerical skills will be required for learners doing these qualifications as they will need to a range of numerical skills for a range of draughting and design tasks.</p> <p>These tasks could include calculating dimensional geometry, tolerances, design calculations and costings.</p>
Information and Communication Technology (ICT)	5	<p>Good ICT skills are core to these qualifications. Learners will need a sound understanding of basic ICT as the foundation to use the systems to search online material for research purposes. Also, the creation of CAD, graphical and technical documentation for communication and presentation tasks.</p>
Problem Solving	5	<p>Critical thinking, planning and organisation, review and evaluation are fundamental to all elements of these qualifications. Learners will need to analyse and evaluate existing designs and or design briefs for the purpose of finding and/or creating a design solution.</p>
Working with Others	5	<p>Working as part of a team co-operatively is essential when progressing to industry. There are several opportunities throughout these qualifications for working with others to take place.</p>

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.

5.1 Mapping of qualification aims to units

General aims:

Code	Unit title	Aim 1	Aim 2	Aim 3	Aim 4	Aim 5	Aim 6	Aim 7	Aim 8	Aim 9	Aim 10
F32A 34	Architectural CADT: Principles and Practice	X	X	X				X	X	X	X
F329 34	Architectural CADT: Residential Design	X	X	X	X			X	X	X	X
DW3W 34	Statutory Control of Buildings		X			X	X	X	X	X	X
F3G5 34	Architectural CADT: Construction Detailing	X	X	X	X	X			X	X	X
HE2G 34	Building Information Modelling (BIM): Principles	X	X	X	X	X	X	X	X	X	X
DW3V 34	Design of Building Structures	X	X	X	X	X	X	X		X	X
DW3R 34	Architectural Design Sketching and Drawing		X	X	X	X	X	X			X
J6X6 34	3D Draughting for Architecture	X	X	X	X	X	X	X	X	X	X
J746 34	Architectural Technology with Digital Construction: Graded Unit 1	X	X	X	X	X	X	X	X	X	X
HE28 34	CAD: User Systems	X	X					X	X	X	X
F39F 34	Architectural Professional Practice: Design Management		X			X	X	X	X	X	X
DW1E 34	CAD: 2D 1	X	X	X	X	X	X	X	X	X	X
H728 34	Construction Industry Fundamentals	X	X			X	X	X			X
J50K 34	Construction Materials and Specifications	X	X	X	X	X	X	X	X	X	X
H729 34	Construction Technology: Industrial/Commercial Superstructure	X	X	X		X		X	X	X	X
DW54 33	Construction Technology: Domestic Construction	X	X	X	X	X	X	X	X	X	X
H72C 35	Scottish Law for Construction	X	X	X	X	X	X	X	X	X	X

Code	Unit title	Aim 1	Aim 2	Aim 3	Aim 4	Aim 5	Aim 6	Aim 7	Aim 8	Aim 9	Aim 10
DG6E 34	Work Role Effectiveness (2003)	X	X	X	X	X	X	X	X	X	X
H72A 34	Construction Technology: Substructure	X	X	X	X	X	X	X	X	X	X
F4NH 35	Architectural CADT: Commercial Building Systems	X	X	X		X		X	X	X	X
J6X7 35	Design of Building Services	X	X	X	X	X	X	X	X	X	X
J6X9 34	Digital Surveying, Analysis and Presentation	X	X	X	X	X	X	X	X	X	X
HE2E 35	Building Information Modelling (BIM): Building Science	X	X	X	X	X	X	X	X	X	X
HE2H 35	CAD: Digital Collaboration Practices	X	X	X			X	X	X	X	X
J50R 35	Conversion and Adaptation of Buildings	X	X	X	X	X	X	X	X	X	X
J6X8 35	Low Energy Construction Technology	X	X	X	X	X	X	X	X	X	X
J50N 35	Fire Safety in Buildings					X	X	X	X	X	X
J747 35	Architectural Technology with Digital Construction: Graded Unit 2	X	X	X	X	X	X	X	X	X	X
H72D 35	Sustainability and Modern Methods of Construction	X	X	X	X	X	X	X	X	X	X
J50J 35	Construction Contracts: Conditions and Procedures	X	X	X	X	X	X	X	X	X	X
J50K 34	Construction Materials and Specifications	X	X	X	X	X	X	X	X	X	X
DW18 34	CAD: Visualisation, Rendering and Presentation	X	X	X				X	X	X	X
J50L 34	Environmental Design	X	X	X	X	X	X	X	X	X	X

Specific aims:

Code	Unit title	Aim 11	Aim 12	Aim 13	Aim 14	Aim 15	Aim 16	Aim 17	Aim 18	Aim 19	Aim 20
F32A 34	Architectural CADT: Principles and Practice	X	X	X	X	X					
F329 34	Architectural CADT: Residential Design	X	X	X	X	X	X				
DW3W 34	Statutory Control of Buildings	X		X	X	X			X		
F3G5 34	Architectural CADT: Construction Detailing	X	X	X	X	X	X	X	X		
HE2G 34	Building Information Modelling (BIM): Principles	X	X		X	X	X	X		X	X
DW3V 34	Design of Building Structures	X	X	X		X			X		
DW3R 34	Architectural Design Sketching and Drawing	X							X	X	
J6X6 34	3D Draughting for Architecture	X	X	X	X	X	X	X	X	X	X
J746 34	Architectural Technology with Digital Construction: Graded Unit 1	X	X	X	X	X	X	X	X	X	
HE28 34	CAD: User Systems	X	X	X	X	X		X			X
F39F 34	Architectural Professional Practice: Design Management	X		X	X	X			X		
DW1E 34	CAD: 2D 1	X	X	X	X	X			X	X	
H728 34	Construction Industry Fundamentals	X		X				X		X	
J50K 34	Construction Materials and Specifications	X		X	X	X			X	X	
H729 34	Construction Technology: Industrial/Commercial Superstructure	X	X	X	X	X			X	X	
DW54 33	Construction Technology: Domestic Construction	X	X	X	X	X			X	X	
H72C 35	Scottish Law for Construction	X	X	X	X				X	X	
DG6E 34	Work Role Effectiveness (2003)	X	X	X	X	X	X	X	X	X	X
H72A 34	Construction Technology: Substructure	X	X	X	X	X	X	X	X	X	

Code	Unit title	Aim 11	Aim 12	Aim 13	Aim 14	Aim 15	Aim 16	Aim 17	Aim 18	Aim 19	Aim 20
F4NH 35	Architectural CADT: Commercial Building Systems	X	X	X	X	X	X	X	X	X	
J6X7 35	Design of Building Services	X	X	X	X	X	X	X	X	X	X
J6X9 34	Digital Surveying, Analysis and Presentation	X	X	X	X	X	X	X	X	X	X
HE2E 35	Building Information Modelling (BIM): Building Science	X	X	X	X	X	X			X	
HE2H 35	CAD: Digital Collaboration Practices	X	X	X	X	X	X			X	X
J50R 35	Conversion and Adaptation of Buildings	X	X	X	X	X	X	X	X	X	
J6X8 35	Low Energy Construction Technology	X	X	X	X	X	X	X	X	X	X
J50N 35	Fire Safety in Buildings	X		X	X	X			X		
J747 35	Architectural Technology with Digital Construction: Graded Unit 2	X	X	X	X	X	X	X	X	X	
H72D 35	Sustainability and Modern Methods of Construction	X	X	X	X	X			X	X	
J50J 35	Construction Contracts: Conditions and Procedures	X	X	X	X	X			X	X	
J50K 34	Construction Materials and Specifications	X	X	X	X	X			X	X	
DW18 34	CAD: Visualisation, Rendering and Presentation	X	X	X	X	X					
J50L 34	Environmental Design	X	X	X	X	X			X	X	

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

Code	Unit title	National Occupational Standards (NOS)
F32A 34	Architectural CADT: Principles and Practice	2 and 5.
F329 34	Architectural CADT: Residential Design	1, 5, 7, 11, 12, 16,17,18, 19 and 20.
DW3W 34	Statutory Control of Buildings	2, 4, 5, 6, 7 and 11.
F3G5 34	Architectural CADT: Construction Detailing	1, 2, 5, 12, 16 and 20
HE2G 34	Building Information Modelling (BIM): Principles	2, 4, 6, 11, 14 and 15.
DW3V 34	Design of Building Structures	2, 5, 7, 8, 10, 12, 13, 14 and 16.
DW3R 34	Architectural Design Sketching and Drawing	1, 2 and 12
J6X6 34	3D Draughting for Architecture	1, 2, 4, 7, 12, 16, 17 and 18.
J746 34	Architectural Technology with Digital Construction: Graded Unit 1	1, 2, 5, 7, 8, 11, 12, 13, 16, 17, 18, 19 and 20.
HE28 34	CAD: User Systems	1, 2, 9, 10 and 17
F39F 34	Architectural Professional Practice: Design Management	2, 6 and 12.
DW1E 34	CAD: 2D 1	2 and 16.
J50K 34	Construction Materials and Specifications	16.
H729 34	Construction Technology: Industrial/Commercial Superstructure	12 and 16.
DW54 33	Construction Technology: Domestic Construction	12 and 16.
H72C 35	Scottish Law for Construction	6 and 12.
DG6E 34	Work Role Effectiveness (2003)	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 and 20.
H72A 34	Construction Technology: Substructure	16.
F4NH 35	Architectural CADT: Commercial Building Systems	1, 2, 8, 12, 13, 16 and 20.
J6X7 35	Design of Building Services	1, 4, 7, 8, 12, 13, 16, 17, 18, 19 and 20.

Code	Unit title	National Occupational Standards (NOS)
J6X9 34	Digital Surveying, Analysis and Presentation	2, 3, 11, 12, 15, 17 and 20.
HE2E 35	Building Information Modelling (BIM): Building Science	1, 2, 3, 4, 5, 6, 7, 8, 11, 12, 13, 15, 16, 17, 18 and 20.
HE2H 35	CAD: Digital Collaboration Practices	1, 2, 9, 10 and 17.
J50R 35	Conversion and Adaptation of Buildings	1, 2, 3, 5, 7, 8, 10, 12, 14, 16, 17, 18, 19 and 20.
J6X8 35	Low Energy Construction Technology	5, 8, 9, 10, 12, 14, 16 and 17.
J50N 35	Fire Safety in Buildings	5 and 10.
J747 35	Architectural Technology with Digital Construction: Graded Unit 2	1, 2, 5, 7, 8, 12, 13, 14, 16, 17, 18, 19 and 20.
H72D 35	Sustainability and Modern Methods of Construction	10
J50K 34	Construction Materials and Specifications	5.
DW18 34	CAD: Visualisation, Rendering and Presentation	12 and 20.
J50L 34	Environmental Design	1, 2, 8, 12 and 13.

Key for National Occupational Standards

No	NOS title	No	NOS title
1.	COSBEDMC03: Develop and agree detailed design information in built environment design management.	11.	COSBEDMO18: Control projects in built environment design management.
2.	COSBEDMC04: Develop and maintain professional relationships and practice in built environment design management.	12.	COSBEDMO20: Develop self and other people in built environment design management.
3.	COSBEDMO09: Conduct condition surveys in built environment design management.	13.	COSBEDMO22: Assess and confirm project energy sources and mechanisms in built environment design management.

No	NOS title	No	NOS title
4.	COSBEDMO13: Manage project information and document requirements in built environment design management.	14.	COSBEDMO23: Produce and recommend integrated conservation, repair and maintenance solutions in built environment design management.
5.	COSBEDMO14: Prepare specifications in built environment design management.	15.	COSBEDMO25: Manage project building information modelling protocols in built environment design management.
6.	COSBEDMO17: Prepare and agree forms of contract in built environment design management.	16.	COSBEDO01: Produce and recommend detailed design solutions in built environment design.
7.	COSBEDPC01: Direct design projects in the built environment.	17.	COSBIMD34.3: Obtain and evaluate project feedback information and make improvements in a Building Information Modelling environment.
8.	COSBIMB55.4: Integrate the design of fabric, services and systems in a Building Information Modelling environment.	18.	PROFFI410: Create designs using CA.
9.	COSBIMD21.2: Develop a schedule of work in a Building Information Modelling environment.	19.	PROFFI411 Design solutions to meet technical and ergonomic requirements for kitchen, bedroom and bathroom design.
10.	COSBIMD34.1: Provide information and guidance to support use and maintenance planning of works and installations in a Building Information Modelling environment.	20.	SKSANIM15: 3D Render and Animation

5.3 Mapping of Core Skills development opportunities across the qualifications

Communication

Unit code	Unit title	Written (Reading)	Written (Writing)	Oral
F32A 34	Architectural CADT: Principles and Practice			Signposted
F329 34	Architectural CADT: Residential Design			S
DW3W 34	Statutory Control of Buildings	Signposted	Signposted	Signposted
F3G5 34	Architectural CADT: Construction Detailing	Signposted	Signposted	Signposted
HE2G 34	Building Information Modelling (BIM): Principles	Signposted	Signposted	
DW3V 34	Design of Building Structures			
DW3R 34	Architectural Design Sketching and Drawing	Signposted	Signposted	Signposted
J6X6 34	3D Draughting for Architecture	Signposted		
J746 34	Architectural Technology with Digital Construction: Graded Unit 1	Signposted	Signposted	Signposted
HE28 34	CAD: User Systems	Signposted	Signposted	Signposted
F39F 34	Architectural Professional Practice: Design Management	Signposted	Signposted	
DW1E 34	CAD: 2D 1	Signposted		
H728 34	Construction Industry Fundamentals			Signposted
J50K 34	Construction Materials and Specifications	Signposted	Signposted	
H729 34	Construction Technology: Industrial/Commercial Superstructure	Signposted	Signposted	
DW54 33	Construction Technology: Domestic Construction	Signposted	Signposted	
H72C 35	Scottish Law for Construction			
DG6E 34	Work Role Effectiveness (2003)	Signposted	Signposted	Signposted
H72A 34	Construction Technology: Substructure	Signposted	Signposted	
F4NH 35	Architectural CADT: Commercial Building Systems	Signposted	Signposted	
J6X7 35	Design of Building Services	Signposted	Signposted	
J6X9 34	Digital Surveying, Analysis and Presentation	Signposted	Signposted	Signposted
HE2E 35	Building Information Modelling (BIM): Building Science	Signposted	Signposted	Signposted
HE2H 35	CAD: Digital Collaboration Practices	Signposted	Signposted	Signposted
J50R 35	Conversion and Adaptation of Buildings	Signposted	Signposted	Signposted

Unit code	Unit title	Written (Reading)	Written (Writing)	Oral
J6X8 35	Low Energy Construction Technology	Signposted	Signposted	Signposted
J50N 35	Fire Safety in Buildings	Signposted	Signposted	
J747 35	Architectural Technology with Digital Construction: Graded Unit 2	Signposted	Signposted	Signposted
H72D 35	Sustainability and Modern Methods of Construction	Signposted	Signposted	
J50J 35	Construction Contracts: Conditions and Procedures	Signposted	Signposted	Signposted
J50K 34	Construction Materials and Specifications	Signposted	Signposted	Signposted
DW18 34	CAD: Visualisation, Rendering and Presentation	Signposted	Signposted	Signposted
J50L 34	Environmental Design	Signposted	Signposted	Signposted

Numeracy

Unit code	Unit title	Using Number	Using Graphical Information
F32A 34	Architectural CADT: Principles and Practice	X	X
F329 34	Architectural CADT: Residential Design	X	X
DW3W 34	Statutory Control of Buildings	X	
F3G5 34	Architectural CADT: Construction Detailing	X	X
HE2G 34	Building Information Modelling (BIM): Principles		
DW3V 34	Design of Building Structures	X	X
DW3R 34	Architectural Design Sketching and Drawing		
J6X6 34	3D Draughting for Architecture	X	X
J746 34	Architectural Technology with Digital Construction: Graded Unit 1	X	X
HE28 34	CAD: User Systems	X	X
F39F 34	Architectural Professional Practice: Design Management		
DW1E 34	CAD: 2D 1	X	X
H728 34	Construction Industry Fundamentals		
J50K 34	Construction Materials and Specifications	X	X
H729 34	Construction Technology: Industrial/Commercial Superstructure	X	X
DW54 33	Construction Technology: Domestic Construction	X	X
H72C 35	Scottish Law for Construction		
DG6E 34	Work Role Effectiveness (2003)		
H72A 34	Construction Technology: Substructure	X	X
F4NH 35	Architectural CADT: Commercial Building Systems	X	X
J6X7 35	Design of Building Services	X	X
J6X9 34	Digital Surveying, Analysis and Presentation	X	X
HE2E 35	Building Information Modelling (BIM): Building Science	X	
HE2H 35	CAD: Digital Collaboration Practices		
J50R 35	Conversion and Adaptation of Buildings	X	X
J6X8 35	Low Energy Construction Technology	X	X
J50N 35	Fire Safety in Buildings	X	X

Unit code	Unit title	Using Number	Using Graphical Information
J747 35	Architectural Technology with Digital Construction: Graded Unit 2	X	X
H72D 35	Sustainability and Modern Methods of Construction		
J50J 35	Construction Contracts: Conditions and Procedures	X	X
J50K 34	Construction Materials and Specifications	X	X
DW18 34	CAD: Visualisation, Rendering and Presentation		
J50L 34	Environmental Design		

Information and Communication Technology (ICT)

Unit code	Unit title	Accessing Information	Providing/Creating Information
F32A 34	Architectural CADT: Principles and Practice	X	X
F329 34	Architectural CADT: Residential Design	X	X
DW3W 34	Statutory Control of Buildings		
F3G5 34	Architectural CADT: Construction Detailing	X	X
HE2G 34	Building Information Modelling (BIM): Principles		
DW3V 34	Design of Building Structures		
DW3R 34	Architectural Design Sketching and Drawing	X	X
J6X6 34	3D Draughting for Architecture	X	X
J746 34	Architectural Technology with Digital Construction: Graded Unit 1	X	X
HE28 34	CAD: User Systems	X	
F39F 34	Architectural Professional Practice: Design Management		
DW1E 34	CAD: 2D 1	X	X
H728 34	Construction Industry Fundamentals		
J50K 34	Construction Materials and Specifications	X	X
H729 34	Construction Technology: Industrial/Commercial Superstructure		
DW54 33	Construction Technology: Domestic Construction		
H72C 35	Scottish Law for Construction		
DG6E 34	Work Role Effectiveness (2003)		

Unit code	Unit title	Accessing Information	Providing/Creating Information
H72A 34	Construction Technology: Substructure		
F4NH 35	Architectural CADT: Commercial Building Systems	X	X
J6X7 35	Design of Building Services	X	
J6X9 34	Digital Surveying, Analysis and Presentation	X	X
HE2E 35	Building Information Modelling (BIM): Building Science	X	X
HE2H 35	CAD: Digital Collaboration Practices	X	
J50R 35	Conversion and Adaptation of Buildings	X	X
J6X8 35	Low Energy Construction Technology	X	
J50N 35	Fire Safety in Buildings	X	X
J747 35	Architectural Technology with Digital Construction: Graded Unit 2	X	X
H72D 35	Sustainability and Modern Methods of Construction		
J50J 35	Construction Contracts: Conditions and Procedures	X	
J50K 34	Construction Materials and Specifications	X	X
DW18 34	CAD: Visualisation, Rendering and Presentation	X	X
J50L 34	Environmental Design		

Problem Solving

Unit code	Unit title	Critical Thinking	Planning and Organising	Reviewing and Evaluating
F32A 34	Architectural CADT: Principles and Practice	X	X	
F329 34	Architectural CADT: Residential Design		X	
DW3W 34	Statutory Control of Buildings			
F3G5 34	Architectural CADT: Construction Detailing	X	X	
HE2G 34	Building Information Modelling (BIM): Principles			
DW3V 34	Design of Building Structures			X
DW3R 34	Architectural Design Sketching and Drawing			
J6X6 34	3D Draughting for Architecture			X
J746 34	Architectural Technology with Digital Construction: Graded Unit 1			X
HE28 34	CAD: User Systems			
F39F 34	Architectural Professional Practice: Design Management			
DW1E 34	CAD: 2D 1	X	X	
H728 34	Construction Industry Fundamentals			
J50K 34	Construction Materials and Specifications	X	X	X
H729 34	Construction Technology: Industrial/Commercial Superstructure	X		
DW54 33	Construction Technology: Domestic Construction	X		
H72C 35	Scottish Law for Construction			
DG6E 34	Work Role Effectiveness (2003)	X	X	X
H72A 34	Construction Technology: Substructure	X		
F4NH 35	Architectural CADT: Commercial Building Systems	X	X	X
J6X7 35	Design of Building Services	X		
J6X9 34	Digital Surveying, Analysis and Presentation	X	X	X
HE2E 35	Building Information Modelling (BIM): Building Science	X	X	X
HE2H 35	CAD: Digital Collaboration Practices			
J50R 35	Conversion and Adaptation of Buildings	X	X	X
J6X8 35	Low Energy Construction Technology	X		
J50N 35	Fire Safety in Buildings	X	X	X

Unit code	Unit title	Critical Thinking	Planning and Organising	Reviewing and Evaluating
J747 35	Architectural Technology with Digital Construction: Graded Unit 2	X	X	X
H72D 35	Sustainability and Modern Methods of Construction			
J50J 35	Construction Contracts: Conditions and Procedures			
J50K 34	Construction Materials and Specifications	X		X
DW18 34	CAD: Visualisation, Rendering and Presentation	X	X	X
J50L 34	Environmental Design	X		

Working with Others

Unit code	Unit title	Working Co-operatively with Others	Reviewing Co-operative Contribution
F32A 34	Architectural CADT: Principles and Practice		
F329 34	Architectural CADT: Residential Design		
DW3W 34	Statutory Control of Buildings		
F3G5 34	Architectural CADT: Construction Detailing		
HE2G 34	Building Information Modelling (BIM): Principles		
DW3V 34	Design of Building Structures		
DW3R 34	Architectural Design Sketching and Drawing		
J6X6 34	3D Draughting for Architecture		
J746 34	Architectural Technology with Digital Construction: Graded Unit 1		X
HE28 34	CAD: User Systems	X	
F39F 34	Architectural Professional Practice: Design Management		
DW1E 34	CAD: 2D 1		
H728 34	Construction Industry Fundamentals		
J50K 34	Construction Materials and Specifications		
H729 34	Construction Technology: Industrial/Commercial Superstructure		
DW54 33	Construction Technology: Domestic Construction		
H72C 35	Scottish Law for Construction		

Unit code	Unit title	Working Co-operatively with Others	Reviewing Co-operative Contribution
DG6E 34	Work Role Effectiveness (2003)	X	X
H72A 34	Construction Technology: Substructure		
F4NH 35	Architectural CADT: Commercial Building Systems		
J6X7 35	Design of Building Services		
J6X9 34	Digital Surveying, Analysis and Presentation	X	
HE2E 35	Building Information Modelling (BIM): Building Science		
HE2H 35	CAD: Digital Collaboration Practices	X	X
J50R 35	Conversion and Adaptation of Buildings	X	
J6X8 35	Low Energy Construction Technology		
J50N 35	Fire Safety in Buildings	X	X
J747 35	Architectural Technology with Digital Construction: Graded Unit 2		X
H72D 35	Sustainability and Modern Methods of Construction		
J50J 35	Construction Contracts: Conditions and Procedures		
J50K 34	Construction Materials and Specifications		
DW18 34	CAD: Visualisation, Rendering and Presentation		
J50L 34	Environmental Design		

5.4 Assessment strategy for the qualifications

Unit	Assessment: Outcome 1	Assessment: Outcome 2	Assessment: Outcome 3	Assessment: Outcome 4	Assessment: Outcome 5
F32A 34 Architectural CADT: Principles and Practice	<p>The explanation of architectural CAD drawing types for this outcome is a closed-book assessment and must be supervised and held under controlled conditions.</p> <p>Practical evidence for outcome 1 should be generated under open-book supervised conditions.</p>	<p>Outcomes 2, 3 and 4 could be delivered and assessed holistically with the creation of a continuing progressive assessment process. Each outcome must be completed before moving to the next. This assessment could be in the form of a project-based activity with each outcome identified as a milestone towards completion.</p>	<p>Outcomes 2, 3 and 4 could be delivered and assessed holistically with the creation of a continuing progressive assessment process. Each outcome must be completed before moving to the next. This assessment could be in the form of a project-based activity with each outcome identified as a milestone towards completion.</p>	<p>Outcomes 2, 3 and 4 could be delivered and assessed holistically with the creation of a continuing progressive assessment process. Each outcome must be completed before moving to the next. This assessment could be in the form of a project-based activity with each outcome identified as a milestone towards completion.</p>	Not applicable.
F329 34 Architectural CADT: Residential Design	<p>Outcomes 1, 2, 3, 4 and 5 could be delivered and assessed holistically with the creation of a continuing progressive assessment process. Each outcome must be completed before moving to the next.</p>	<p>Outcomes 1, 2, 3, 4 and 5 could be delivered and assessed holistically with the creation of a continuing progressive assessment process. Each outcome must be completed before moving to the next.</p>	<p>Outcomes 1, 2, 3, 4 and 5 could be delivered and assessed holistically with the creation of a continuing progressive assessment process. Each outcome must be completed before moving to the next.</p>	<p>Outcomes 1, 2, 3, 4 and 5 could be delivered and assessed holistically with the creation of a continuing progressive assessment process. Each outcome must be completed before moving to the next.</p>	<p>Outcomes 1, 2, 3, 4 and 5 could be delivered and assessed holistically with the creation of a continuing progressive assessment process. Each outcome must be completed before moving to the next.</p>

Unit	Assessment: Outcome 1	Assessment: Outcome 2	Assessment: Outcome 3	Assessment: Outcome 4	Assessment: Outcome 5
	This assessment could be in the form of a project-based activity with each outcome identified as a milestone towards completion. Evidence should be generated under open-book supervised conditions.	This assessment could be in the form of a project-based activity with each outcome identified as a milestone towards completion. Evidence should be generated under open-book supervised conditions.	This assessment could be in the form of a project-based activity with each outcome identified as a milestone towards completion. Evidence should be generated under open-book supervised conditions.	This assessment could be in the form of a project-based activity with each outcome identified as a milestone towards completion. Evidence should be generated under open-book supervised conditions.	This assessment could be in the form of a project-based activity with each outcome identified as a milestone towards completion. Evidence should be generated under open-book supervised conditions.
DW3W 34 Statutory Control of Buildings	It is possible to assess learners either on an individual outcome basis, combinations of outcomes or by a single holistic assessment combining all outcomes. The assessment paper/s should be composed of an appropriate balance of short answer, restricted response and structured questions. Assessment should be conducted under supervised, controlled conditions.	It is possible to assess learners either on an individual outcome basis, combinations of outcomes or by a single holistic assessment combining all outcomes. The assessment paper/s should be composed of an appropriate balance of short answer, restricted response and structured questions. Assessment should be conducted under supervised, controlled conditions.	It is possible to assess learners either on an individual outcome basis, combinations of outcomes or by a single holistic assessment combining all outcomes. The assessment paper/s should be composed of an appropriate balance of short answer, restricted response and structured questions. Assessment should be conducted under supervised, controlled conditions.	Not applicable.	Not applicable.

Unit	Assessment: Outcome 1	Assessment: Outcome 2	Assessment: Outcome 3	Assessment: Outcome 4	Assessment: Outcome 5
	A single assessment covering all outcomes should not exceed 2 hours in duration. Learners must achieve all the minimum evidence specified for each outcome in order to pass this unit.	A single assessment covering all outcomes should not exceed 2 hours in duration. Learners must achieve all the minimum evidence specified for each outcome in order to pass this unit.	A single assessment covering all outcomes should not exceed 2 hours in duration. Learners must achieve all the minimum evidence specified for each outcome in order to pass this unit.		
F3G5 34 Architectural CADT: Construction Detailing	Assessment for this unit could be delivered as individual assessment tasks or could be integrated into one single assessment covering all outcomes. Different building types or project briefs could be used for separate outcome tasks.	Assessment for this unit could be delivered as individual assessment tasks or could be integrated into one single assessment covering all outcomes. Different building types or project briefs could be used for separate outcome tasks.	Assessment for this unit could be delivered as individual assessment tasks or could be integrated into one single assessment covering all outcomes. Different building types or project briefs could be used for separate outcome tasks.	Assessment for this unit could be delivered as individual assessment tasks or could be integrated into one single assessment covering all outcomes. Different building types or project briefs could be used for separate outcome tasks.	Not applicable.
HE2G 34 Building Information Modelling (BIM): Principles	All outcomes could be assessed by means of a series of short answers to structured questions, a formal report or a	All outcomes could be assessed by means of a series of short answers to structured questions, a formal report or a	All outcomes could be assessed by means of a series of short answers to structured questions, a formal report or a	All outcomes could be assessed by means of a series of short answers to structured questions, a formal report or a	Not applicable.

Unit	Assessment: Outcome 1	Assessment: Outcome 2	Assessment: Outcome 3	Assessment: Outcome 4	Assessment: Outcome 5
	<p>presentation addressing all components of the knowledge and/or skills.</p> <p>Use of a case study would allow centres to integrate all outcomes into a whole or combination of outcomes.</p> <p>Assessments should be carried out in supervised, controlled, open-book conditions. Learners should be allowed to refer to relevant course material. There may be opportunity for investigations to be conducted by groups, however any individual work produced for assessment should be authenticated through turnitin or similar resources.</p>	<p>presentation addressing all components of the knowledge and/or skills.</p> <p>Use of a case study would allow centres to integrate all outcomes into a whole or combination of outcomes.</p> <p>Assessments should be carried out in supervised, controlled, open-book conditions. Learners should be allowed to refer to relevant course material. There may be opportunity for investigations to be conducted by groups, however any individual work produced for assessment should be authenticated through turnitin or similar resources.</p>	<p>presentation addressing all components of the knowledge and/or skills.</p> <p>Use of a case study would allow centres to integrate all outcomes into a whole or combination of outcomes.</p> <p>Assessments should be carried out in supervised, controlled, open-book conditions. Learners should be allowed to refer to relevant course material. There may be opportunity for investigations to be conducted by groups, however any individual work produced for assessment should be authenticated through turnitin or similar resources.</p>	<p>presentation addressing all components of the knowledge and/or skills.</p> <p>Use of a case study would allow centres to integrate all outcomes into a whole or combination of outcomes.</p> <p>Assessments should be carried out in supervised, controlled, open-book conditions. Learners should be allowed to refer to relevant course material. There may be opportunity for investigations to be conducted by groups, however any individual work produced for assessment should be authenticated through turnitin or similar resources.</p>	

Unit	Assessment: Outcome 1	Assessment: Outcome 2	Assessment: Outcome 3	Assessment: Outcome 4	Assessment: Outcome 5
DW3V 34 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.	Not applicable.	Not applicable.
DW3R 34 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.	Not applicable.	Not applicable.
J6X6 34 3D Draughting for Architecture	Graphical assignment in open-book, supervised conditions. Drawings produced as natural products of teaching and learning processes.	Graphical assignment in open-book, supervised conditions. Drawings produced as natural products of teaching and learning processes.	Graphical assignment in open-book, supervised conditions. Drawings produced as natural products of teaching and learning processes.	Not applicable.	Not applicable.
J746 34 Architectural Technology with Digital Construction: Graded Unit 1	Project based graded unit assessment.	Project based graded unit assessment.	Project based graded unit assessment.	Project based graded unit assessment.	Project based graded unit assessment.

Unit	Assessment: Outcome 1	Assessment: Outcome 2	Assessment: Outcome 3	Assessment: Outcome 4	Assessment: Outcome 5
HE28 34 CAD: User Systems	Practical evidence with written and/or oral recorded element generated under open-book supervised conditions.	Practical evidence generated under open-book supervised conditions.	Practical evidence generated under open-book supervised conditions.	Practical evidence generated under open-book supervised conditions.	Not applicable.
F39F 34 Architectural Professional Practice: Design Management	An integrated assessment approach for all outcomes is recommended. This could consist of a closed-book examination, conducted under controlled, supervised conditions. Such an examination could contain a combination of short answer, restricted and extended response questions and an assessment time of no more than 3 hours should be sufficient for the learner to generate all evidence.	An integrated assessment approach for all outcomes is recommended. This could consist of a closed-book examination, conducted under controlled, supervised conditions. Such an examination could contain a combination of short answer, restricted and extended response questions and an assessment time of no more than 3 hours should be sufficient for the learner to generate all evidence.	An integrated assessment approach for all outcomes is recommended. This could consist of a closed-book examination, conducted under controlled, supervised conditions. Such an examination could contain a combination of short answer, restricted and extended response questions and an assessment time of no more than 3 hours should be sufficient for the learner to generate all evidence.	Not applicable.	Not applicable.

Unit	Assessment: Outcome 1	Assessment: Outcome 2	Assessment: Outcome 3	Assessment: Outcome 4	Assessment: Outcome 5
DW1E 34 CAD: 2D 1	Graphical assignment in open-book, supervised conditions. Drawings produced as natural products of teaching and learning processes.	Graphical assignment in open-book, supervised conditions. Drawings produced as natural products of teaching and learning processes.	Graphical assignment in open-book, supervised conditions. Drawings produced as natural products of teaching and learning processes.	Graphical assignment in open-book, supervised conditions. Drawings produced as natural products of teaching and learning processes.	Not applicable.
H728 34 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.	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.	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.	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.	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.

Unit	Assessment: Outcome 1	Assessment: Outcome 2	Assessment: Outcome 3	Assessment: Outcome 4	Assessment: Outcome 5
J50K 34 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.	Not applicable.	Not applicable.
H729 34 Construction Technology: Industrial/ Commercial 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.	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.	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.	Not applicable.	Not applicable.
DW54 33	Outcomes 1, 2, 3 and 4 may be assessed on an individual basis	Outcomes 1, 2, 3 and 4 may be assessed on an individual basis	Outcomes 1, 2, 3 and 4 may be assessed on an individual basis	Not applicable.	Not applicable.

Unit	Assessment: Outcome 1	Assessment: Outcome 2	Assessment: Outcome 3	Assessment: Outcome 4	Assessment: Outcome 5
Construction Technology: Domestic Construction	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.	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.	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.		
H72C 35 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	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	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	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	Not applicable.

Unit	Assessment: Outcome 1	Assessment: Outcome 2	Assessment: Outcome 3	Assessment: Outcome 4	Assessment: Outcome 5
	under similar conditions of maximum 3 hours duration.	under similar conditions of maximum 3 hours duration.	under similar conditions of maximum 3 hours duration.	under similar conditions of maximum 3 hours duration.	
DG6E 34 Work Role Effectiveness (2003)	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.	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.	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.	Not applicable.	Not applicable.
H72A 34 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	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	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	Not applicable.	Not applicable.

Unit	Assessment: Outcome 1	Assessment: Outcome 2	Assessment: Outcome 3	Assessment: Outcome 4	Assessment: Outcome 5
	assessed as a single, integrated assessment event in a final, end-of-unit assessment under similar conditions of maximum 3 hours duration.	assessed as a single, integrated assessment event in a final, end-of-unit assessment under similar conditions of maximum 3 hours duration.	assessed as a single, integrated assessment event in a final, end-of-unit assessment under similar conditions of maximum 3 hours duration.		
F4NH 35 Architectural CADT: Commercial Building Systems	Assessment for this unit could be delivered as individual assessment events or could be integrated into one single assessment covering all outcomes. Different building types or project briefs could be used for separate outcome tasks. If assessment is conducted using an integrated approach, it is recommended that building project brief guidelines should be provided based on contemporary design in significant,	Assessment for this unit could be delivered as individual assessment events or could be integrated into one single assessment covering all outcomes. Different building types or project briefs could be used for separate outcome tasks. If assessment is conducted using an integrated approach, it is recommended that building project brief guidelines should be provided based on contemporary design in significant,	Assessment for this unit could be delivered as individual assessment events or could be integrated into one single assessment covering all outcomes. Different building types or project briefs could be used for separate outcome tasks. If assessment is conducted using an integrated approach, it is recommended that building project brief guidelines should be provided based on contemporary design in significant,	Assessment for this unit could be delivered as individual assessment events or could be integrated into one single assessment covering all outcomes. Different building types or project briefs could be used for separate outcome tasks. If assessment is conducted using an integrated approach, it is recommended that building project brief guidelines should be provided based on contemporary design in significant,	Assessment for this unit could be delivered as individual assessment events or could be integrated into one single assessment covering all outcomes. Different building types or project briefs could be used for separate outcome tasks. If assessment is conducted using an integrated approach, it is recommended that building project brief guidelines should be provided based on contemporary design in significant,

Unit	Assessment: Outcome 1	Assessment: Outcome 2	Assessment: Outcome 3	Assessment: Outcome 4	Assessment: Outcome 5
	specialist, commercial building types and a project driven approach to the development of solutions adopted. Suitable building types could include, but not be limited to, commercial office buildings, colleges and universities, shopping malls, or other.	specialist, commercial building types and a project driven approach to the development of solutions adopted. Suitable building types could include, but not be limited to, commercial office buildings, colleges and universities, shopping malls, or other.	specialist, commercial building types and a project driven approach to the development of solutions adopted. Suitable building types could include, but not be limited to, commercial office buildings, colleges and universities, shopping malls, or other.	specialist, commercial building types and a project driven approach to the development of solutions adopted. Suitable building types could include, but not be limited to, commercial office buildings, colleges and universities, shopping malls, or other.	specialist, commercial building types and a project driven approach to the development of solutions adopted. Suitable building types could include, but not be limited to, commercial office buildings, colleges and universities, shopping malls, or other.
J6X7 35 Design of Building Services	Not applicable.	Not applicable.	Not applicable.	Not applicable.	Not applicable.
J6X9 34 Digital Surveying, Analysis and Presentation	Not applicable.	Not applicable.	Not applicable.	Not applicable.	Not applicable.
HE2E 35 Building Information Modelling (BIM): Building Science	Assessment for this unit could be undertaken as a case study to analyse a building, in terms of energy usage and to	Assessment for this unit could be undertaken as a case study to analyse a building, in terms of energy usage and to	Assessment for this unit could be undertaken as a case study to analyse a building, in terms of energy usage and to	Not applicable.	Not applicable.

Unit	Assessment: Outcome 1	Assessment: Outcome 2	Assessment: Outcome 3	Assessment: Outcome 4	Assessment: Outcome 5
	<p>make recommendations for improvements in energy efficiency.</p> <p>Assessment for this unit requires learners to use industry-standard software, to analyse a building in terms of its energy performance. The final output will be a report to a client; thus all assessments are inter-related and sequential in nature, in that the activities and results from one outcome are integrated and progressed in the subsequent outcome assessment. Evidence for all outcomes will be generated under controlled, supervised open-book conditions. Learners will be allowed access to course material,</p>	<p>make recommendations for improvements in energy efficiency.</p> <p>Assessment for this unit requires learners to use industry-standard software, to analyse a building in terms of its energy performance. The final output will be a report to a client; thus all assessments are inter-related and sequential in nature, in that the activities and results from one outcome are integrated and progressed in the subsequent outcome assessment. Evidence for all outcomes will be generated under controlled, supervised open-book conditions. Learners will be allowed access to course material,</p>	<p>make recommendations for improvements in energy efficiency.</p> <p>Assessment for this unit requires learners to use industry-standard software, to analyse a building in terms of its energy performance. The final output will be a report to a client; thus all assessments are inter-related and sequential in nature, in that the activities and results from one outcome are integrated and progressed in the subsequent outcome assessment. Evidence for all outcomes will be generated under controlled, supervised open-book conditions. Learners will be allowed access to course material,</p>		

Unit	Assessment: Outcome 1	Assessment: Outcome 2	Assessment: Outcome 3	Assessment: Outcome 4	Assessment: Outcome 5
	textbooks, the internet and the Help files associated to the software used. All evidence must be generated during the assessment period.	textbooks, the internet and the Help files associated to the software used. All evidence must be generated during the assessment period.	textbooks, the internet and the Help files associated to the software used. All evidence must be generated during the assessment period.		
HE2H 35 CAD: Digital Collaboration Practices	Outcome 1 could be assessed by means of a series of short answers to structured questions, a formal report or a presentation addressing all components of the knowledge and/or skills. Evidence should be generated under controlled, supervised open-book conditions.	Use of a case study would allow centres to integrate outcomes 2, 3 and 4 into a whole or combination of outcomes. Assessments should be carried out in controlled, supervised, open-book conditions. Learners should be allowed to refer to relevant course material as well as current standards such as British Standards/Publicly Available Standards. There may be opportunity for investigations to be conducted by groups, however any	Use of a case study would allow centres to integrate outcomes 2, 3 and 4 into a whole or combination of outcomes. Assessments should be carried out in controlled, supervised, open-book conditions. Learners should be allowed to refer to relevant course material as well as current standards such as British Standards/Publicly Available Standards. There may be opportunity for investigations to be conducted by groups, however any	Use of a case study would allow centres to integrate outcomes 2, 3 and 4 into a whole or combination of outcomes. Assessments should be carried out in controlled, supervised, open-book conditions. Learners should be allowed to refer to relevant course material as well as current standards such as British Standards/Publicly Available Standards. There may be opportunity for investigations to be conducted by groups, however any	Not applicable.

Unit	Assessment: Outcome 1	Assessment: Outcome 2	Assessment: Outcome 3	Assessment: Outcome 4	Assessment: Outcome 5
		individual written or presented work produced for assessment should be authenticated.	individual written or presented work produced for assessment should be authenticated.	individual written or presented work produced for assessment should be authenticated.	
J50R 35 Conversion and Adaptation of Buildings	<p>Where possible, a site/s should be selected which would allow group working and which include an existing building. All outcomes should be assessed in relation to the site identified.</p> <p>Outcome 1 requires the development of a technical report on the condition of the existing building with recommendations for 'making good'.</p> <p>Outcome 2 is the preparation of drawings of the existing site, including the building, showing boundaries and existing features to identify design constraints and sketched proposals.</p>	<p>Where possible, a site/s should be selected which would allow group working and which include an existing building. All outcomes should be assessed in relation to the site identified.</p> <p>Outcome 1 requires the development of a technical report on the condition of the existing building with recommendations for 'making good'.</p> <p>Outcome 2 is the preparation of drawings of the existing site, including the building, showing boundaries and existing features to identify design constraints and sketched proposals.</p>	<p>Where possible, a site/s should be selected which would allow group working and which include an existing building. All outcomes should be assessed in relation to the site identified.</p> <p>Outcome 1 requires the development of a technical report on the condition of the existing building with recommendations for 'making good'.</p> <p>Outcome 2 is the preparation of drawings of the existing site, including the building, showing boundaries and existing features to identify design constraints and sketched proposals.</p>	<p>Where possible, a site/s should be selected which would allow group working and which include an existing building. All outcomes should be assessed in relation to the site identified.</p> <p>Outcome 1 requires the development of a technical report on the condition of the existing building with recommendations for 'making good'.</p> <p>Outcome 2 is the preparation of drawings of the existing site, including the building, showing boundaries and existing features to identify design constraints and sketched proposals.</p>	Not applicable.

Unit	Assessment: Outcome 1	Assessment: Outcome 2	Assessment: Outcome 3	Assessment: Outcome 4	Assessment: Outcome 5
	<p>outcome 3 should provide outline scheme design drawings showing the proposed extension and/or adaptation including proposals for 'making good'.</p> <p>Outcome 4 requires the preparation of a part-set of working drawings with specifications and dimensions to show how the proposals could be implemented.</p>	<p>Outcome 3 should provide outline scheme design drawings showing the proposed extension and/or adaptation including proposals for 'making good'.</p> <p>Outcome 4 requires the preparation of a part-set of working drawings with specifications and dimensions to show how the proposals could be implemented.</p>	<p>Outcome 3 should provide outline scheme design drawings showing the proposed extension and/or adaptation including proposals for 'making good'.</p> <p>Outcome 4 requires the preparation of a part-set of working drawings with specifications and dimensions to show how the proposals could be implemented.</p>	<p>Outcome 3 should provide outline scheme design drawings showing the proposed extension and/or adaptation including proposals for 'making good'.</p> <p>Outcome 4 requires the preparation of a part-set of working drawings with specifications and dimensions to show how the proposals could be implemented.</p>	
J6X8 35 Low Energy Construction Technology	Not applicable.	Not applicable.	Not applicable.	Not applicable.	Not applicable.
J50N 35 Fire Safety in Buildings	It is possible to assess learners either on an individual outcome basis, combinations of outcomes or by a	It is possible to assess learners either on an individual outcome basis, combinations of outcomes or by a	It is possible to assess learners either on an individual outcome basis, combinations of outcomes or by a	It is possible to assess learners either on an individual outcome basis, combinations of outcomes or by a	Not applicable.

Unit	Assessment: Outcome 1	Assessment: Outcome 2	Assessment: Outcome 3	Assessment: Outcome 4	Assessment: Outcome 5
	single holistic assessment combining all outcomes. The assessment paper/s could be composed of an appropriate balance of short answer, restricted response and structured questions. Assessment should be conducted under supervised, controlled conditions. A single assessment covering all outcomes should not exceed 3 hours in duration.	single holistic assessment combining all outcomes. The assessment paper/s could be composed of an appropriate balance of short answer, restricted response and structured questions. Assessment should be conducted under supervised, controlled conditions. A single assessment covering all outcomes should not exceed 3 hours in duration.	single holistic assessment combining all outcomes. The assessment paper/s could be composed of an appropriate balance of short answer, restricted response and structured questions. Assessment should be conducted under supervised, controlled conditions. A single assessment covering all outcomes should not exceed 3 hours in duration.	single holistic assessment combining all outcomes. The assessment paper/s could be composed of an appropriate balance of short answer, restricted response and structured questions. Assessment should be conducted under supervised, controlled conditions. A single assessment covering all outcomes should not exceed 3 hours in duration.	
J747 35 Architectural Technology with Digital Construction: Graded Unit 2	Project based graded unit assessment.	Project based graded unit assessment.	Project based graded unit assessment.	Project based graded unit assessment.	Project based graded unit assessment.
H72D 35	Outcomes 1, 2, 3 and 4 should be conducted under closed-book	Outcomes 1, 2, 3 and 4 should be conducted under closed-book	Outcomes 1, 2, 3 and 4 should be conducted under closed-book	Outcomes 1, 2, 3 and 4 should be conducted under closed-book	Not applicable.

Unit	Assessment: Outcome 1	Assessment: Outcome 2	Assessment: Outcome 3	Assessment: Outcome 4	Assessment: Outcome 5
Sustainability and Modern Methods of Construction	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.	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.	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.	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.	
J50J 35 Construction Contracts: Conditions and Procedures	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.	Not applicable.
J50K 34 Construction Materials and Specifications	Not applicable.	Not applicable.	Not applicable.	Not applicable.	Not applicable.
DW18 34	Outcomes 1, 2 and 3 could be delivered and assessed	Outcomes 1, 2 and 3 could be delivered and assessed	Outcomes 1, 2 and 3 could be delivered and assessed	Not applicable.	Not applicable.

Unit	Assessment: Outcome 1	Assessment: Outcome 2	Assessment: Outcome 3	Assessment: Outcome 4	Assessment: Outcome 5
CAD: Visualisation, Rendering and Presentation	holistically with the creation of one integrated open-book supervised assessment. This assessment would be in the form of a project-based activity.	holistically with the creation of one integrated open-book supervised assessment. This assessment would be in the form of a project-based activity.	holistically with the creation of one integrated open-book supervised assessment. This assessment would be in the form of a project-based activity.		
J50L 34 Environmental Design	Not applicable.	Not applicable.	Not applicable.	Not applicable.	Not applicable.

6. Guidance on approaches to delivery and assessment

The HNC and HND Computer Aided Architectural Design and Technology qualifications aim to give learners the opportunity to develop industry relevant CAD skills and knowledge of the design process related to the AEC sector. Learners who choose to study these qualifications would be aiming to become Architectural Technicians/Technologists with high end CAD skills

Each of the qualifications has relevant unit specifications that provide detailed guidance for the Evidence Requirements and assessment procedures for each assessment event. Where possible and appropriate, integrated assessments should be used to provide a more holistic approach to assessing the learners. Suggestion as to where integration of assessment could be achieved is given in Section 5.4 Assessment Strategy for the qualifications.

The following section gives suggested sequence of unit delivery for the HNC and HND.

6.1 Sequencing/integration of units

HNC/HND Year 1 Architectural Technology with digital Construction

Suggested sequencing of delivery — Semester 1

Unit code	Unit title	SQA credit
F329 34	Architectural CADT: Residential Design	2
J6X6 34	3D Draughting for Architecture	1
J6X9 34	Digital Surveying, Analysis and Presentation	1
F3G5 34	Architectural CADT: Construction Detailing	1

Total SQA credits = 5

Suggested sequencing of delivery — Semester 2

Unit code	Unit title	SQA credit
F39F 34	Architectural Professional Practice: Design Management	1
DW3R 34	Architectural Design Sketching and Drawing	1
DW3W 34	Statutory Control of Buildings	1
J746 34	Architectural Technology with Digital Construction: Graded Unit 1	0.5

Total SQA credits = 3.5

Suggested sequencing of delivery — Semester 3

Unit code	Unit title	SQA credit
DW3V 34	Design of Building Structures	1
J746 34	Architectural Technology with Digital Construction: Graded Unit 1	0.5
HE2G 34	Building Information Modelling (BIM): Principles	1
H728 34	Construction Industry Fundamentals	1

Total SQA credits = 3.5

HNC/HND Year 2 Architectural Technology with digital Construction

Suggested sequencing of delivery — Semester 1

Unit code	Unit title	SQA credit
J50R 35	Conversion and Adaptation of Buildings	1
J6X8 35	Low Energy Construction Technology	2
F4NH 35	Architectural CADT: Commercial Building Systems	2
J50J 35	Construction Contracts: Conditions and Procedures	1

Total SQA credits = 6

Suggested sequencing of delivery — Semester 2

Unit code	Unit title	SQA credit
J747 35	Architectural Technology with Digital Construction: Graded Unit 2	1
J6X7 35	Design of Building Services	2
HE2H 35	CAD: Digital Collaboration Practices	2
F32A 34	Architectural CADT: Principles and Practice	2

Total SQA credits = 7

Suggested sequencing of delivery — Semester 3

New Code	Unit title	SQA credit
J747 35	Architectural Technology with Digital Construction: Graded Unit 2	1
H72D 34	Sustainability and Modern Methods of Construction	1
J50N 35	Fire Safety in Buildings	1
HE2E 35	Building Information Modelling (BIM): Building Science	1
J50L 35	Environmental Design	1

Total SQA credits = 5

6.2 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:

- ◆ HN 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.

The following sub-sections outline how existing SQA units may contribute to this group award. Additionally, they also outline how this group award may be recognised for professional and articulation purposes.

6.2.1 Articulation and/or progression

Articulation from Year 1 HNC Architectural Technology with Digital Construction to Year 2 HND Architectural Technology with Digital Construction.

Career progression from HNC and HND to professional practice/employment.

Progression from HND to Degree and thereafter Honours.

Progression to professional recognition with Chartered Institute of Architectural Technology (CIAT).

6.2.2 Professional recognition

The Higher National qualifications in Architectural Technology with digital Construction has been developed to facilitate the career progression of the learners to achieve professional status in the future. Whilst studying on the awards, learners can apply to become student members of the Chartered Institute of Architectural Technologists (CIAT). On completion of the award, learners can apply to become Technician Member CIAT (TCIAT), Associate Member CIAT (ACIAT) or full Member CIAT (MCIAT). As with most professional bodies, CIAT provide recognition of HNC and HND awards against their educational requirements for membership. Professional body membership requires a combination of the educational base and verification of professional experience.

6.2.3 Credit transfer

All decisions relating to credit transfer remain with centres. However, the table below provides details and guidance on credit transfer arrangements agreed by the Qualifications Development Team.

Centres must retain proof of all credit transfer arrangements (normally a photocopy of the learner's Scottish Qualifications Certificate) for the purposes of internal and external verification.

New Unit code	New Unit title	Old Unit code	Old Unit title	Credit transfer	Comments
J6X6 34	3D Draughting for Architecture	DW1D 34	CAD Architectural 1	Yes	None

6.3 Opportunities for e-assessment

E-assessment may be appropriate for some elements in these qualifications. 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 <http://www.sqa.org.uk/sqa/68835.5665.html>.

6.4 Support materials

A list of existing Assessment Support Packs (ASPs) is available to view on SQA's website.

6.5 Resource requirements

Staff involved in the delivery of these qualifications should be suitably qualified and skilled in the use of advanced level CAD software for digital construction and architectural design. Staff would be required to have good IT skills.

Centres delivering these qualifications would be required to have a high specification CAD and digital Construction facility with powerful CAD and Digital Construction hardware and up to date industry CAD, animation and graphic design software. Access to appropriate office-based software for word processing, spreadsheets and databases is essential for delivery of the qualifications.

Access to the internet is essential for research purposes throughout the course.

It is recommended that appropriate journals, books, standards and e-books are sourced to support the learning and teaching process.

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.

Internal and external verification

All assessments used within these qualifications 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).

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:

- ◆ candidates 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

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 candidates 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.

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 Higher National 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. HNCs and HNDs are available at SCQF levels 7 and 8 respectively. Higher National 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.

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

History of changes

It is anticipated that changes will take place during the life of the qualification and this section will record these changes. This document is the latest version and incorporates the changes summarised below. Centres are advised to check SQA's APS Navigator 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
03	<p>The structures for HNC and HND have been changed due to request from a centre to make them more flexible, helping other centres to be able to deliver this qualification.</p> <p>HNC:</p> <ul style="list-style-type: none"> • Digital Surveying, Analysis and Presentation (J6X934) has been moved from the mandatory to optional section. The mandatory credits have changed from 10 to 9 and optional credits from 2 to 3. <p>Additionally:</p> <ul style="list-style-type: none"> • Environmental Design (J50L 34) has been added to the framework as an optional unit. <p>HND:</p> <p>The following 2 units have been moved from the mandatory to optional section.</p> <ul style="list-style-type: none"> • Construction Contracts: Conditions and Procedures (J50J 35) • Architectural Professional Practice: Design Management (F39F 34) <p>The mandatory section has been changed from 26 credits to 24, increasing the optional section from 4 to 6 credits.</p>	24/06/2024

Version number	Description	Date
02	<p>The structure of the HND qualification has been updated on the Group Award Specification due to errors.</p> <p>The following units are part of the mandatory section only and have therefore been removed from the optional section:</p> <ul style="list-style-type: none"> • Construction Contracts: Conditions and Procedures (J50J 35) • Architectural Professional Practice: Design Management (F39F 34) <p>The following unit appeared twice in the optional section and one of them has therefore been removed:</p> <p>Scottish Law for Construction (H72C 35)</p>	19/04/2024

Acknowledgement

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

Template version: October 2022.

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 HNC and HND programme 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.

HNC Year 1 Expectations

- ◆ The HNC architectural technology course will teach and develop the skills required for a successful career in the Construction industry.
- ◆ The HNC Year 1 course includes the fundamentals in built environment, building design requirements from development through to completion with honing best practice Digital Construction skills.
- ◆ Key skills in areas of design, technology and digital construction development will allow students to become proficient in advising on and working with innovative architecture technology.
- ◆ This course will help you gain a creative attitude, be skilled in detailing to design by using both digital construction and computer-aided drafting techniques.

HND Year 2 Expectations

- ◆ The HND Year 2 course builds upon the foundation of the knowledge and skills developed in HNC Year 1.
- ◆ Key focus skills in areas of low carbon technology including low energy construction, microgeneration systems further develop design and construction projects from concept design to best practice solutions.
- ◆ This course will help build confidence in technical detailing, collaborative working, liaising with clients and contractors, industry partners and stakeholders. Key elements of the course are focused on developing essential digital skills in industry relevant digital platforms and software packages.

Progression and employment

Learners who achieve an HNC Architectural Technology can progress to the HND in Architectural Technology. HNCs and HNDs can provide progression to degree-level study. For example, the HNC in Architectural Technology with Digital Construction allows direct entry into the second year of most degree programmes, and the HND in Architectural Technology with Digital Construction allows direct entry into the third year of most degree programmes.