Programme Specification Pro-forma [PSP]:

Graduate Apprenticeship: BSc (Hons) Construction and the Built Environment [Quantity Surveying]
2023-24

GLASGOW CALEDONIAN UNIVERSITY

Programme Specification Pro-forma (PSP)

1. GENERAL INFORMATION

1.	**Programme Title:**	Graduate Apprenticeship: BSc (Hons) Construction and the Built Environment [Quantity Surveying]
2.	**Final Award:**	Graduate Apprenticeship: BSc (Hons) Construction and the Built Environment [Quantity Surveying]
3.	**Exit Awards:**	University Certificate of Higher Education: Construction and the Built Environment University Diploma of Higher Education: Construction and the Built Environment BSc Quantity Surveying (Graduate Apprenticeship) BSc Hons Quantity Surveying (Graduate Apprenticeship)
4.	**Awarding Body:**	Glasgow Caledonian University
5.	**Period of Approval:**	September 2022 - 2027
6.	**School:**	Computing, Engineering and the Built Environment (SCEBE)
7.	**Host Department:**	Construction and Surveying
8.	**UCAS Code:**	K240/ K220
9.	**PSB Involvement:**	RICS, CIOB
10.	**Place of Delivery:**	GCU
11.	**Subject Benchmark Statement:**	Land, Construction, Real Estate and Surveying (2016)
12.	**Dates of PSP Preparation/Revision:**	October 2021/ June 2023

2. EDUCATIONAL AIMS OF THE PROGRAMME

General Aims:

The Graduate Apprenticeship: BSc (Hons) Construction and the Built Environment [Quantity Surveying] programme has been developed to provide apprentices with the knowledge, understanding and skills needed to become effective Quantity Surveying professionals capable of responding to current and future industry skills and competence requirements. Specifically, this programme of study provides work-based learning opportunities at a BSc / BSc (Hons) level. Apprentices combine academic study with employer-specific knowledge acquisition and skills development, enabling participants to become more effective and productive in the workplace.

In 2017, employment in the sector was 233,600 accounting for eight per cent of all employment in Scotland. This makes it the third largest employing sector. Since the recession in 2008 employment in the sector has declined by ten per cent, which is faster than the one per cent decline for all industries. However, more recently (since 2015) employment has grown by two per cent, compared to no growth across all industries.

This suggests a large sector which declined during the recession but has experienced recent recovery and growth. [1]

This programme distinguishes itself from other Construction and Built Environment programmes in the following ways:

- This is the first provision being offered within Scotland at Graduate Apprentice level in these discipline areas and through industrial and partner engagement, we recognise the need for a more focussed work-based degree programme that offers the learner work-based experience while studying for a degree level

[1] Oxford Economics Regional and Sector Forecast Data (2000-2027)

qualification. It is also recognised and agreed with industrial partners that this requires a different and accelerated learning model completed in four years just as for full-time delivery.

- The GA in Construction and Built Environment is playing a key role in attracting the next generation of employees, recruiting to replace those who have left the industry for various reasons (e.g. economic crisis, Covid 19 pandemic) and upskilling the existing workforce to succeed those in senior roles who will retire or have retired. It quite simply helps to address the much-highlighted shortages "skills gaps" reported continually regarding the low numbers of new construction professionals entering the sector.

- This programme is derived from and has the same learning outcomes as the current BSc/BSc (Hons) Quantity Surveying programme which is accredited by the Royal Institution of Chartered Surveyors (RICS) and by the Chartered Institute of Building [CIOB] Core Requirements for Accreditation of Honours Programmes.

Programme Philosophy:

The philosophy of the programme is to produce multi-disciplinary professional Graduate Apprentice (GA) Quantity Surveyors. These Graduates will have the required knowledge and understanding of specific Built Environment principles, integrated with an understanding of quantity surveying, building performance, commercial and project management, and reinforced with good personal, inter-personal, team-working and project management skills, to enable them to perform effectively in any appropriate environment as highly skilled Quantity Surveyors [MRICS]. This will be reinforced through significant formal integration of Work-Based Learning opportunities and Academic Assessment.

The broad educational aims of the programme are:

- Competence in project and delivery management including the knowledge, skills, and professional competences necessary to begin practice as a professional in the construction and the built environment sector.
- An understanding of appropriate solutions around the principles of design and technology.
- The ability to reconcile conflicting project objectives, finding appropriate solutions which recognise, cost, time, quality, life cycle aspects and sustainability.
- The ability to learn new methods, and technologies as they emerge and appreciate the necessity of such continuing professional development.
- Apply and understand relevant laws – describe standards, regulations and their consequences across the sector.
- An understanding of business management concepts, such as data management, business finance and business strategies.
- The ability to confidently work both as an individual and part of a team to develop and deliver solutions within construction and the built environment.
- An understanding of the importance of applying negotiation, effective work habits, leadership, and good communication with stakeholders.
- The ability to take responsibility for obligations for health, safety, welfare, environment and quality issues.
- Understand the need for and maintain a commitment to a high level of professional and ethical conduct, recognising obligations to society, the profession, and the wider environment.

Student Journey through the Programme:

Level 1

Foundation for study of the discipline, establishment of "ground rules". An outline knowledge of the scope and main areas of the discipline; an understanding of the main theories, principles and concepts.

An apprentice will be able to:

- Use their knowledge of the subject and its techniques to evaluate a range of arguments and solutions to problems and issues of a routine nature.
- Apply their discipline-related and transferable skills in contexts which have well defined criteria.
- Undertake further learning in a structured and managed environment.

Level 2

Engagement with the core areas of the discipline to consolidate increasing competency levels. Developing knowledge and understanding of the scope and main areas of the discipline and its interaction with related areas/disciplines; familiarity and understanding of the essential theories, concepts and awareness of major issues within the discipline.

An apprentice will be able to use their knowledge, understanding and skills to:

- Critically evaluate evidence-based arguments and identify solutions to clearly defined problems of a routine nature.
- Apply their discipline-related and transferable skills to contexts where the task and criteria for decisions are generally well defined but where responsibility and initiative is required.

Level 3

Focusing on the key specialist areas of the discipline. Developing a broad and comparative knowledge of the general scope of the different areas and applications, and interactions with related areas/disciplines. Critical understanding of the essential theories, principles and concepts of the discipline, and the ways in which these are developed.

An apprentice will be able to use their knowledge, understanding and skills to:

- Both identify problems and issues and formulate, evaluate and apply evidence and arguments
- Apply their discipline-related and transferable skills to contexts where criteria and the scope of the task may be well defined but where personal responsibility and decision making is also required.

Level 4 (Honours)

Further extend knowledge of the specialist areas of the discipline. A systematic, extensive and further extend knowledge of the specialist areas of the discipline. A systematic, extensive and comparative knowledge and understanding of the discipline, and its links to related areas/disciplines. A critical understanding of the established theories, principles and concepts of a number of advanced and emerging issues at the forefront of the discipline.

An apprentice will be able to use their knowledge, understanding and skills:

- In the systematic assessment of a wide range of concepts, ideas and data
- In identifying and analysing complex problems and issues, demonstrating originality and creativity in formulating, evaluation and applying evidence-based solutions and arguments
- To apply their discipline-related and transferable skills in contexts where there is a requirement for:
  - (a) The exercise of personal responsibility and initiative
  - (b) Decision-making in complex and unpredictable contexts
  - **(c)** The ability to undertake further developments of a professional nature

4. PROGRAMME STRUCTURES AND REQUIREMENTS, LEVELS, MODULES, CREDITS AND AWARDS

There is a minimum of 40 credits per trimester and a minimum of 20 at each level of dedicated Work Based Assessment in Years 1-3 over the academic year. Year 4 has a minimum of 40 credits of Work Based Assessment over the academic year. Trimester C has a lighter taught module load throughout the programme since it includes the work-based modules. There is also Work Based Assessment for a number of other modules as identified in the individual module descriptors. The module descriptors also contain an

allocation to Work Based Learning, which is defined as the reflection upon the theoretical learning for each module within the work place and the application of newly learned concepts to the work environment.

Apprentices are not in Full-Time attendance mode and each Trimester will have a Graduate Apprentice specific timetable, with a combination of traditional module delivery and 'Flipped Classroom' sessions as appropriate.

Teaching learning and assessment methods used to enable the above outcomes to be achieved and demonstrated include:

- Lectures, tutorials and seminars
- Workshops and laboratories
- Industrial/site visits and field trips where practicable (industry/project availability dependent)
- Visiting lecturers from industry and practice (availability dependent)
- Web-based materials through a managed learning environment (GCU Learn)
- Problem-based learning scenarios
- Individual projects
- Computer application activities
- Self-directed learning facilitated by study packs
- Use of research-based learning materials and methods
- Group work and projects

Assessment:

The totality of approaches to assessment (formal unseen examinations, formal open-book examinations, major and minor coursework activities, class tests, poster displays, student oral presentations, computer-based exercises, dissertation) is based on the appropriateness to the learning outcomes in each module and the Learning Outcomes of the Programme.

Methods of assessment include:

- Exams
- Class tests
- Coursework
- Student oral presentations
- Computer-based tests and other exercises
- Case study analysis
- Reports
- Role play
- Dissertation
- Other discipline-specific assessments

Learning, Teaching and Assessment Strategy

The development of the Programme Board's learning teaching and assessment strategy has been informed by the University's Strategy for Learning (SfL) 2030 and the School's current Learning Teaching and Assessment Strategy.

The balance between methods of assessment is based on the appropriateness to the learning outcomes in each module and the Learning Outcomes of the Programme. The range of learning teaching and assessment methods are listed above.

The School's Admission Tutors endeavour to provide appropriate guidance and support to all applicants, to ensure that students entering a particular programme of study are fully aware of the core skills and knowledge required, and the core activities which must be undertaken to achieve the award.

Where a student highlights a need for additional support the School, in conjunction with the School's Learning Development Centre, and the University Student Support Services, will determine an appropriate course of action to address the needs of the student.

The staff within the School have considerable experience in supporting students who have/experience difficulties, and work closely with the University Student Support Services to ensure that appropriate

support is provided to suit each student's individual needs. A number of strategies have been adopted as required to allow such students to fully participate in their programme of study, including the provision of materials in advance, use of scribes, signers, and other specialist software.

The following tables (overleaf) illustrate the Full-Time and Part-Time Programme Structures.

PROGRAMME STRUCTURE

Level	Honours	Module Code	MODULE TITLE	Credit Points	Trimester		Assessment			
							Exam %	c/w %	Exam Hrs	CA
1		M1K225122	Construction Technology 1	20	A	B	-	-	-	100
		M1K225126	Professional Orientation & Practice	20	A	B	-		-	100
		M1K225119	Property Economics	20	A	-	-		-	100
		M1K225121	Construction Contracts 1	20	-	B	100	-	2	-
		M1K225125	Construction Materials	20	A	B	-	-	-	100
		M2K226569	Work Based Learning (WBL) 1	20	A, B, C		-	-	-	100
			Credit points	120						
2		M3K227082	Work Based Learning (WBL) 2	20	A, B, C		-	-	-	100
		M2K225132	Construction Technology 2	20	A	-	50	50	2	-
		M2K226920	Construction & Development	20	-	B	-	-	-	100
		M2K225131	Construction Contracts 2	20	-	B	60	40	2	-
		M2N225129	Construction Process Management	20	A	B	-	-	-	100
		M1K225134	Measurement 1	20	A	B	-	-	-	100
			Credit points	120						
3		M2K225143	Construction Cost Studies	20	A					100
		M2K226922	Measurement 2	20	A	B				100
		M3K226960	Estimating	20	A		-	-	-	100
		M3K225137	Construction Technology 3	20		B	60	40	3	-
		M3K225136	Contemporary QS Practice	20		B	-	-	-	100
		MHK227083	Work Based Learning (WBL) 3	20	A, B, C					100
			Credit points	120						
4	H	MHK226975	Dissertation	40	A	B	-	-	-	100
	H	MHN226929	Project Management	20	A		-	-	-	100
	H	MHK226931	Construction Contracts 3	20	A		60	40	2	-
	H	MHN325167	Value & Risk Appraisal	20		B	65	35	3	-
			PLUS ONE OPTION							
	H	MHK226914	Dispute Management *or*	20		Bo	-	-	-	100
	H	MHK225156	Construction & Project Commercial	20		Bo	-	-	-	100
	H	MHK226927	Negotiation	20		Bo	40	60	2	-
			Credit points	120						
			TOTAL CREDIT POINTS	480						

**LEVEL 4 REPRESENT MODULE OPTIONS & STUDENTS ARE REQUIRED TO CHOOSE ONE OPTION.

8. ASSESSMENT REGULATIONS

Students should expect to complete their programme of study under the Regulations that were in place at the commencement of their studies on that programme, unless proposed changes to University Regulations are advantageous to students.

The Glasgow Caledonian University Assessment Regulations which apply to this programme, dependent on year of entry can be found at:
GCU Assessment Regulations

or

The Glasgow Caledonian University Assessment Regulations which apply to this programme, dependent on the year of entry and with the following approved exceptions can be found at:
GCU Assessment Regulations

Awards:
For the awards of Certificate of Higher Education, Diploma of Higher Education, Graduate Apprenticeship: BSc Construction & the Built Environment [Quantity Surveying] and Graduate Apprenticeship: BSc (Hons) Construction & the Built Environment [Quantity Surveying]

- Minimum pass mark of 40% for each taught module
- Minimum pass mark of 40% for Dissertation/Honours Project module
- To qualify for an award of Certificate of Higher Education, students must complete all the programme requirements and obtain 120 credits, of which a minimum of 90 must be SCQF 7
- To qualify for an award of Diploma of Higher Education, students must complete all the programme requirements and obtain 240 credits, of which a minimum of 90 must be SCQF 8
- To qualify for an award of Graduate Apprenticeship: BSc in Construction & the Built Environment [Quantity Surveying] or [Construction Management], students must complete all the programme requirements and obtain 360 credits, of which a minimum of 90 must be SCQF 9
- To qualify for an award of Graduate Apprenticeship: BSc (Hons) in Construction & the Built Environment [Quantity Surveying or Construction Management], students must complete all the programme requirements and obtain 480 credits, of which a minimum of 90 must be SCQF 10

Regulations for Distinction:
The Programme complies with the University Assessment Regulations in respect of the award of Distinction. To be awarded a Certificate/Diploma/BSc with Distinction, a student must obtain an overall average of 70% or more with no individual module mark below 55%, all at the first attempt.

Honours Classification:
The honours classification will be determined by the student's performance in the final year (Level 4 / Year 5) (Honours) modules and will be based on the overall average achieved across all modules. Where the overall average falls on the threshold between two classifications, the student's profile of achievement will also be considered, in accordance with the University Assessment Regulations.

Please refer to Programme Structures in Section 4 for modules considered in calculation

1st class	70-100%	Excellent
2.1	60-69%	Very good
2.2	50-59%	Good
3rd class	40-49%	Satisfactory

Role of External Examiner:
Senate appoints External Examiners to the Progression and Assessment Board (PAB) on the basis of nominations from Schools and approval through the University QA and QE processes.

The duties of an External Examiner will include the following:

- To moderate the work of the internal assessors in respect of the assessments under his/her jurisdiction
- To attend Assessment Boards at which the results of final stage assessment will be determined
- To satisfy himself/herself that the work and decisions of the Assessment Board(s) are consistent with the policies and regulations of the University and best practice in higher education
- To ensure that students are assessed within the regulations approved by the University for the progression of students and to inform the University on any matter which, in his/her view, mitigates against the maintenance of proper academic standards
- To report annually to the Clerk to Senate on the standards attained by students on the programme and on other matters which may seem appropriate for their report

A curriculum map is attached showing how the outcomes are being developed and assessed within the programme. This relates the modules from Section 4 to the outcomes in Section 3.

REVISED DATE: JUNE 2023

Curriculum Map for Graduate Apprenticeship: BSc (Hons) Construction and the Built Environment [Quantity Surveying]

PSMAP

The curriculum map links the modules (Section 4) to the Outcomes listed in Section 3

This map provides both a design aid to help academic staff identify where the programme outcomes are being developed and assessed within the course. It also provides a checklist for quality assurance purposes and could be used in approval, accreditation and external examining processes. This also helps students monitor their own learning, and their personal and professional development as the course progresses. The map shows only the main measurable learning outcomes which are assessed. There are additional learning outcomes (e.g. attitudes and behaviour) detailed in the module specifications which are developed but do not lend themselves to direct measurement

Modules			Programme outcomes																						
	Code	Title	A1	A2	A3	A4	A5	A6	B1	B2	B3	B4	B5	B6	C1	C2	C3	C4	C5	C6	D1	D2	D3	D4	D5	D6
YEAR 1	M1K225122	Construction Technology 1	X					X	X	X	X		X	X						X	X	X	X	X	X	X
	M1K225119	Property Economics		X	X					X	X		X							X	X	X	X			X
	M1K225126	Professional Orientation and Practice (POP)			X	X			X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X
	M1K225125	Construction Materials						X	X	X				X	X		X		X		X	X	X			X
	M1K225121	Construction Contracts 1		X			X			X	X		X							X	X	X	X			X
	M2K226569	Work Based Learning (WBL) 1	X	X	X	X	X	X	X	X	X	X	X							X	X	X	X			
YEAR 2	M2K225132	Construction Technology 2	X						X	X	X		X							X	X	X	X			X
	M2N225129	Construction Process Management 1			X			X	X	X	X		X							X	X	X	X			X
	M1K225134	Measurement 1.	X	X					X	X	X	X	X		X	X	X			X	X	X	X			X
	M2K226920	Construction and Development Economics		X	X	X	X		X	X	X	X	X		X	X	X			X	X	X	X			X
	M2K225131	Construction Contracts 2		X		X	X		X		X		X	X	X		X						X			X
	M3K227082	Work Based Learning (WBL) 2	X	X	X	X	X	X	X	X	X	X	X													
YEAR 3	M2K226922	Measurement 2.	X	X					X	X	X	X	X		X	X	X			X	X	X	X			X
	M2K225143	Construction Cost Studies	X	X	X	X	X		X	X	X		X	X	X				X		X	X	X			X
	M3K225137	Construction Technology 3	X							X	X		X							X	X	X	X			X
	M3K225136	Contemporary QS Practice			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	M3K226960	Estimating		X	X	X	X	X		X			X	X	X	X	X				X		X			
	MHK227083	Work Based Learning (WBL) 3	X	X	X	X	X	X	X	X	X	X	X													
YEAR 4 - HONOURS	MHK226975	Dissertation						X		X	X		X	X	X	X	X	X	X	X	X	X	X			X
	MHN226929	Project Management			X			X	X	X	X		X							X	X	X	X			X
	MHK226931	Construction Contracts 3	X			X	X		X	X	X	X	X		X	X	X			X	X	X	X			X
	MHN325167	Value and Risk Appraisal		X	X	X	X		X	X		X	X		X	X	X			X	X	X	X			X
	MHK226914	Dispute Management		X			X		X	X	X	X	X	X	X	X	X			X	X	X	X			X
	MHK225156	Construction & Project Commercial Management		X	X	X	X						X	X	X	X	X				X		X			
	MHK226927	Negotiation		X				X	X	X	X	X	X	X	X	X	X			X	X		X			