



Programme Specification Pro-forma [PSP]:

Graduate Apprenticeship: BSc [Hons] Construction and the Built Environment [Quantity Surveying]

Graduate Apprenticeship: BSc [Hons] Construction and the Built Environment [construction Management]

June 2019



GLASGOW CALEDONIAN UNIVERSITY

Programme Specification

1. GENERAL INFORMATION

1. Programme Titles:	Graduate Apprenticeship: BSc (Hons) Construction and the Built Environment [Quantity Surveying] Graduate Apprenticeship: BSc (Hons) Construction and the Built Environment [Construction Management]
2. Final Awards:	Graduate Apprenticeship: BSc (Hons) Construction and the Built Environment [Quantity Surveying] Graduate Apprenticeship: BSc (Hons) Construction and the Built Environment [Construction Management]
4. Awarding Body:	Glasgow Caledonian University (GCU)
8. UCAS Code:	K240 / K220

2. EDUCATIONAL AIMS OF THE PROGRAMME

General Aims:

The Graduate Apprenticeship: BSc (Hons) Construction and the Built Environment [Quantity Surveying] or [Construction Management] programme has been developed to provide apprentices with the knowledge, understanding and skills needed to become effective Quantity Surveying or Construction Management 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

Additionally, further comments state That employment growth in the sector is forecast to continue and

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

accelerate. By 2020, employment in the sector will have shown an increase of three -five per cent. This is compared to static employment across all industries. The sector's growth is expected to increase over the longer term; by 2027 employment in the sector will have increased by 11 per cent making it the fastest growing sector. By comparison, the employment growth across all industries will be three per cent.²

CITB forecast the industry will require 70 new project managers each year for the next five years with the total number of project managers anticipated to reach 3,580 by 2021. In addition, some 6,730 surveyors and 23,430 other construction professional and technical roles will be required by 2021. With an increasingly ageing workforce there is demand for new entrants into the sector.

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

1. This is the first provision being offered within Scotland at Graduate Apprentice level in these discipline areas. 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 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.
2. The GA in Construction and Built Environment will play a key role in attracting the next generation of employees, recruiting to replace those who have left the industry during the economic crisis, and upskilling the existing workforce to succeed those in senior roles who will retire. And quite simply helps to address the much highlighted shortages "skills gaps" reported continually regarding the low numbers of new construction professionals entering the sector.
3. This programme is derived from and has the same learning outcomes as the current BSc/BSc (Hons) Quantity Surveying & Construction Management programmes which are accredited by the Royal Institution of Chartered Surveyors (RICS) and by the Chartered Institute of Building [CIOB] Core Requirements for Accreditation of Honours Programmes. On successful approval we would present this variation of the programme seeking accreditation.

Programme Philosophy:

The philosophy of the programme is to produce multi-disciplinary professional Graduate Apprentice (GA) Quantity Surveyors and Construction Managers. 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] or Construction Managers [MCIOB] [partially satisfied by BSc(Hons)]. This will be reinforced through significant formal integration of Work-Based Learning opportunities and Academic Assessment

² Construction Skills Network Forecast (2017-21)

as negotiated with employers at each year of the provision.

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.

Expected levels of attainment through the Programme:

Year 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.

Year 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.

Year 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.

Year 4 (Honours)

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 will be 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 will have 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 which are work based. There will also be the possibility of negotiated Work Based Assessment for a number of other modules if possible 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. Appendix 3 highlights both Work Based Learning and Work Based Assessment for individual modules as a percentage.

Apprentices will not be 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. Both pathway options for the Graduate Apprenticeship award are indicated on pages 14 & 15:

Accompanying Notes for Graduate Apprenticeship Award structures :

[1] Modules in *italics* delivered Flipped Classroom with GA Tutorials on specified day of Tri A or B

[2] These modules will have coursework negotiated between the employer and the academic team, contextualised to the individual's work environment.

[3] Module is delivered wholly/partially by distance learning- attendance at GCU can be negotiated if required.

Graduate Apprenticeship: BSc [Hons] Construction & the Built Environment [Quantity Surveying]

SCQF Level-7

	Module Code	Module Title	Credits
Year 1	M1K225119	<i>Property Economics</i> ^[1]	20
	M1K225122	Construction Technology 1	20
	M1K225126	<i>Professional Orientation and Practice</i> ^[1,2]	20
	M1K225125	Construction Materials	20
	M1K225121	<i>Construction Contracts 1</i> ^[1]	20
	M3K225118	Work Based Learning (WBL) 1 ^[3]	20
		Credits	120

Exit Award – Certificate of Higher Education- Construction and the Built Environment- *if the apprentice has achieved 120 credits*

SCQF Level-8

	Module Code	Module Title	Credits
Year 2	M2K225132	Construction Technology 2	20
	M2N225129	<i>Construction Process Management 1</i> ^[1]	20
	M1K225134	Measurement 1	20
	M2K225131	<i>Construction Contracts 2</i> ^[1,2]	20
	M2K225133	<i>Construction Development & Economics [QS only]</i> ^[1,2]	20
	M3K225128	Work Based Learning (WBL) 2 ^[3]	20
		Credits	120

Exit Award – Diploma of Higher Education- Construction and the Built Environment - *if the apprentice has achieved 240 credits*

SCQF Level-9

	Module Code	Module Title	Credits
Year 3	M2K225143	<i>Construction Cost Studies</i> ^[1,2]	20
	M2K225142	Measurement 2	20
	M3K225137	<i>Construction Technology 3</i> ^[1]	20
	M3K225138	<i>Estimating</i> ^[1,2]	20
	M3K225136	<i>Contemporary QS Practice</i> ^[1,2]	20
	MHK225135	Work Based Learning (WBL) 3 ^[3]	20
		Credits	120

Exit Award – Graduate Apprenticeship: BSc Construction and the Built Environment [Quantity Surveying] - *if the apprentice has achieved 360 credits*

SCQF Level-10

	Module Code	Module Title	Credits
Year 4 [Hons]	MHK225155	Dissertation Honours (Project) ^[3]	40



MHN225145	<i>Project Management</i> ^[1,2]	20
MHK225150	<i>Construction Contracts 3</i> ^[1,2]	20
MHN325167	<i>Value and Risk Appraisal</i> ^[1,2]	20
Option modules (shaded) select one		
MHK225152	<i>Dispute Resolution</i> ^[1,2] or	20
MHK225156	<i>Construction & Project Commercial Management</i> ^[1,2] or	20
MHK225153	<i>Negotiation</i> ^[1,2]	20
		Credits
		120
Exit Award – Graduate Apprenticeship: BSc (Hons) Construction and the Built Environment [Quantity Surveying] - if the apprentice has achieved <u>480 credits</u>		480

 Shading represents module options - Apprentices select one option from the highlighted grouping.

Graduate Apprenticeship: BSc [Hons] Construction & the Built Environment [Construction Management]

SCQF Level-7			
	Module Code	Module Title	Credits
Year 1	M1K225119	<i>Property Economics</i> ^[1]	20
	M1K225122	<i>Construction Technology 1</i>	20
	M1K225126	<i>Professional Orientation and Practice</i> ^[1,2]	20
	M1K225125	<i>Construction Materials</i>	20
	M1K225121	<i>Construction Contracts 1</i> ^[1]	20
	M3K225118	<i>Work Based Learning (WBL) 1</i> ^[3]	20
			Credits
Exit Award – Certificate of Higher Education- Construction and the Built Environment- if the apprentice has achieved <u>120 credits</u>			
SCQF Level-8			
	Module Code	Module Title	Credits
Year 2	M2K225132	<i>Construction Technology 2</i>	20
	M2N225129	<i>Construction Process Management 1</i> ^[1]	20
	M1K225134	<i>Measurement 1</i>	20
	M2K225131	<i>Construction Contracts 2</i> ^[1,2]	20
	M2K225130	<i>Introduction to Maths & Structures</i>	20
	M3K225128	<i>Work Based Learning (WBL) 2</i> ^[3]	20
			Credits
Exit Award – Diploma of Higher Education- Construction and the Built Environment - if the apprentice has achieved <u>240 credits</u>			
SCQF Level-9			
	Module Code	Module Title	Credits
Year 3	M2K225143	<i>Construction Cost Studies</i> ^[1,2]	20
	M3K225140	<i>Construction Process Management 2</i> ^[1,2]	20
	M3K225137	<i>Construction Technology 3</i> ^[1]	20
	M3K225138	<i>Estimating</i> ^[1,2]	20
	M2K225141	<i>Principles of Building Performance</i>	20
	MHK225135	<i>Work Based Learning (WBL) 3</i> ^[3]	20
			Credits
Exit Award – Graduate Apprenticeship: BSc Construction and the Built Environment [Construction Management] - if the apprentice has achieved <u>360 credits</u>			
SCQF Level-10			
	Module Code	Module Title	Credits

	MHK225155	Dissertation Honours (Project) ^[3]	40
	MHN225145	<i>Project Management</i> ^[1,2]	20
	MHK225154	<i>Sustainability and the Built Environment</i> ^[1,2]	20
Year 4 [Hons]	Option modules (shaded) select one		
	MHK225146	<i>Building Information Modelling</i> ^[1,2] or	20
	MHN225144	<i>Facilities Management</i> ^[1,2]	20
	Option modules (shaded) select one		
	MHK225152	<i>Dispute Resolution</i> ^[1,2] or	20
	MHK225156	<i>Construction & Project Commercial Management</i> ^[1,2] or	20
	MHK225153	<i>Negotiation</i> ^[1,2]	20
		Credits	120
	<i>Exit Award – Graduate Apprenticeship :BSc (Hons)Construction and the Built Environment [Construction Management] - if the apprentice has achieved <u>480 credits</u></i>		480



 Shaded areas represents module options - Apprentices select one option from each of the highlighted groupings.

8. ASSESSMENT REGULATIONS

The current University Assessment Regulations apply to the Programme in all respects. There are no programme-specific regulations which deviate from the standard University Assessment Regulations.

The Programme's structure, progression, credits and awards are wholly consistent with the GCU Qualifications Framework.

Awards:

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

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.

DATE: **June 2019.**