GLASGOW CALEDONIAN UNIVERSITY

Programme Specification Pro-forma (PSP)

1.	GENERAL INFORMATION	
1.	**Programme Title:**	BSc (Hons) Construction Management
2.	**Final Award:**	BSc (Hons) Construction Management
3.	**Exit Awards:**	University Certificate of Higher Education: Construction Management [SCQF level 7]. University Diploma of Higher Education: Construction Management [SCQF Level 8] BSc Construction Management [SCQF Level 9] BSc [Hons] Construction Management [SCQF level 10]
4.	**Awarding Body:**	Glasgow Caledonian University (GCU)
5.	**Period of Approval:**	November 2021
6.	**School:**	Computing, Engineering and Built Environment (SCEBE)
7.	**Host Department:**	Construction and Surveying
8.	**UCAS Code:**	K251/ K220 [GCU Pathways]
9.	**PSB Involvement:**	RICS, CIOB, CABE
10.	**Place of Delivery:**	GCU Glasgow
11.	**Subject Benchmark Statement:**	Land, Construction, Real Estate and Surveying (2018)
12.	**Dates of PSP Preparation/Revision:**	August 2021/ November 2021/ March 2022

2. EDUCATIONAL AIMS OF THE PROGRAMME

General Aims:

The BSc (Hons) Construction Management programme has been developed to provide students with the knowledge, understanding and skills needed to become effective Construction Management professionals capable of responding to current and future industry skills and competence requirements. The importance of the course is demonstrated that it is by far the largest provider of Construction Management graduates in Scotland and one of the largest in the UK by numbers. The strength of the course is also further evidenced in the context of future demand. Where, 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 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 percent.[2]

Construction Industry Training Board [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. Its anticipated that in taking on-board the industry downturn and drop in demand, will quickly be reversed to mirror the earlier point made regarding industry demand for graduates.

Programme Philosophy:

The philosophy of the programme is to produce multi-disciplinary 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 Construction Managers [MCIOB] [partially satisfied by BSc(Hons)].

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.
- 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.

The student 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.

The student 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.

The student 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.

The student 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

SCQF Level 7

Module Code	Module Title	Credit	Trimester	
M1K221945	Construction Technology 1	20	A	B
M1K224313	Property Economics	20	A	-
M1K203077	Professional Orientation & Practice (POP)	20	A	B

M1K221884	Construction Materials	20	A	B
M1K226924	Construction Contracts 1	20	-	B
M1K221873	Measurement 1	20	A	B
	Credit Points	**120**		

SCQF Level 8

Module Code	**Module Title**	**Credit**	**Trimester**	
M2K220795	Construction Technology 2	20	A	-
M2N220730	Construction Process Management 1	20	A	B
M2K225247	Construction Cost Studies	20	A	-
M2K223202	Principles of Building Performance	20	-	B
M2K221315	Construction Contracts 2	20	-	B
M2K226937	Design and Regulation 1	20	A	B
M2K226936	C&S Preparation for Placement	10	A	B
	Credit points	**130**		

SCQF Level 9

Module Code	**Module Title**	**Credit**	**Trimester**	
M3K226918	Professional Placement Learning or	60	A	-
MHK202886	Conservation	20	A	-
M3K226781	Design and Regulation 2	20	A	-
M3K226933	Intermediate Cost Studies	20	A	-
M3K220211	Managed Project Learning	20	A	-
M3K220824	Construction Technology 3	20	-	B
M3K226934	Construction Process Management 2	20	-	B
M3K226932	Estimating	20	-	B
	Credit points	**130**		

SCQF Level 10

Module Code	**Module Title**	**Credit**	**Trimester**	
MHK226974	Dissertation	40	A	B
MHN226928	Project Management	20	A	
MHK226545	Sustainability and the Built Environment	20	-	B
MHK223993	Building Information Modelling *or*	20	Ao	
MHN222313	Facilities Management *or*	20	Ao	-
MHK226930	Construction Contracts 3	20	Ao	-
MHK226913	Dispute Management *or*	20	-	Bo
MHK220957	Construction & Project Commercial Management or	20	-	Bo
MHK226926	Negotiation	20		Bo
	Credit points	**120**		
	TOTAL CREDIT POINTS	**490**		

Note the modules that count towards your Hons degree classification are indicated in for 1 optional module in trimesters A & B – giving a total of

The <u>Part-time</u> follows a very similar model to the full-time programme while recognising the value of the work place as a learning environment, with between 80 and 120 credits available at each level of the programme. All modules are 20 credit modules (representing

200 notional hours) apart from the dissertation which is 40 credits.

BSc Construction Management – Part-time – K251

Year	Module Code	MODULE TITLE	Credit	Trimester	
1	M1K221945	Construction Technology 1	20	A	B
	M1K203077	Professional Orientation & Practice (POP)	20	A	B
	M1K224313	Property Economics	20	A	-
	M1K226924	Construction Contracts 1	20	-	B
		Credit points	**80**		
2	M2K220795	Construction Technology 2	20	A	-
	M1K221884	Construction Materials	20	A	B
	M2K221315	Construction Contracts 2	20	-	B
	M1K221873	Measurement 1	20	A	B
		Credit points	**80**		
3	M2N220730	Construction Process Management 1	20	A	B
	M2K225247	Construction Cost Studies	20	A	-
	M2K226937	Design and Regulation 1	20	A	B
	M2K223202	Principles of Building Performance	20	-	B
	M2K226915	Work Based Learning 1	20	A	B
		Credit points	**100**		
4	M3K226932	Estimating	20	A	-
	M3K226934	Construction Process Management 2	20	-	B
	M3K220824	Construction Technology 3	20	-	B
	MHK226545	Sustainability and the Built Environment	20	A	-
	M3K226916	Work Based Learning 2	20	A	B
		Credit points	**100**		
5	MHK226974	Dissertation	40	A	B
	MHN226928	Project Management	20	A	-
	MHK223993	Building Information Modelling *or*	20	Ao	
	MHN222313	Facilities Management *or*	20	Ao	-
	MHK226930	Construction Contracts 3	20	Ao	-
	MHK226913	Dispute Management *or*	20		Bo
	MHK220957	Construction & Project Commercial	20	-	Bo
	MHK226926	Negotiation	20	-	Bo
	MHK226917	Work Based Learning 3	20	A	B
		Credit points	**120**		
		TOTAL CREDIT POINTS	480		

Note the modules that count towards your Hons degree classification are indicated in yellow* this allows for 1 optional module in trimesters A & B – giving a total of 120 credits – note that the sustainability module in Year 4 counts towards your classification, but WBL 3 does not.

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

- Lectures, tutorials and seminars
- Workshops and laboratories

- Industrial/site visits and field trips
- Visiting lecturers from industry and practice
- 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

Strategy for Learning:

The Strategy for Learning (SfL) for this programme has been designed to meet the overall aims of the programme as well as the specific learning outcomes expected of students. The teaching approach is student centred, practical, participative and has been designed to move away from the traditional teacher centred paradigm to a more active, student driven, independent model of learning using state of the art technologies necessary for employability in the digital age.
The learning model for this programme runs over two trimesters, with the third trimester over the summer primarily used for re-sit purposes. This programme allows completion of the full time degree in four years and the part time degree in five years.

Modules are supplemented by an on-line format that supports flexible and distributed delivery, with a changing focus on mastering material through 'flipped classroom' class contact sessions- where possible. In this approach students can study the online learning material before a class contact session and spend their time during the sessions guiding activities to support their learning with the module leader.

While it is anticipated that seminars / tutorials will usually take place on campus at GCU to allow learners to interact with each other and build a community of knowledge it is possible that they may also be conducted via Microsoft Teams, Collaborate Ultra in GCU Learn or other video conferencing software. This is in response to the fact that students may require a flexibility of learning, particularly for the part-time cohorts and given the current public health situation – this is the current learning and assessment mode.

Students are also encouraged to take a broad view of their education and also contextualise course material to their focused personal objectives within the real world and in cooperation and consultation with their employer. A range of delivery methods are used on the programme including: lectures, group based tutorials and seminars (both tutor and student led 'flipped classroom' mode); group based practical exercises (supervised and directed); problem based learning scenarios and case studies; directed study; coursework assignments (individual, group- based, Placement and WBL) and a dissertation.

GCU's Strategy for Learning [SfL] is underpinned by a model comprising of ***eight design principles***. This programme embeds these principles in the following ways:

Engaged Learning:

- Induction is carried out before the students start classes in week 1 of each year and is carried out by members of the programme and module delivery teams. These staff members are involved in teaching the students from the first week of trimester A allowing a continuity of

exposure to key staff in the programme delivery and management. This involves providing a coherent plan for the coming year.

- The programme team are aware of the importance of tracking and monitoring student progress and regular reviews and contact ensure that any identified issues are addressed at an early stage – where possible.
- A range of effective and accessible forms of academic support, including academic advisors and academic development tutors, are available to students on the programme
- Students have been involved in the course development process and will continue to be involved in the development of the programme.
- Students are encouraged to broaden their range of skills, knowledge and strengths by participating in external competitions and events and to apply these experiences to their studies.
- A large number of modules provide further enhancement information for those students wishing to further explore the topic matter – this includes examples across all levels of the programme

Divergent Thinking:

- From Year 1 students develop skills in divergent thinking and creativity in a number of modules. In particular, the Work Placement & Work Based Learning modules encourage cross curricular activity and involve developing solutions to problems incorporating interdisciplinary skills from a range of modules already studied at that level.
- A number of academic modules will have generic assessment that is related to the workplace which will encourage part-time students to critically evaluate their workplace environment. With the full-time students live or recent project settings provide a similar opportunity
- Students are encouraged to engage in the use of collaborative tools and learning.
- The university makes available classroom seminar sessions which the students can attend as required supported by online learning material they engage with. It is expected that the students will collaborate using appropriate social media platforms and using video conferencing when asked to undertake group work. They are also encouraged to engage with academics in a similar manner mainly using the GCU Learn platform.
- At all levels of the programme, students will be encouraged to reflect on how the academic learning they are undertaking relates to their future or current workplace, being lateral thinkers and creative in the application of this new knowledge in the workplace going forward.

Flexible, Inclusive, Accessible Learning:

- Fully committed to the University's vision for Equality and Diversity and to supporting "A culture and environment which is inclusive of all sections of society and responsive to the needs of individuals. Resulting in staff, students and other stakeholders who are free from any form of discrimination in respect of all their dealings with Glasgow Caledonian University, enabling them to participate fully in all aspects of University life and make a valuable contribution to the success of the institution."
- Applicants, as formally employed apprentices, may be eligible for admission under the GCU Recognition for Prior Learning (RPL) Policy. Credit Transfer or Recognition for Prior Learning (RPL) can be applied for by any student. Consideration of pre-admission claims for RPL from

potential apprentices is coordinated centrally by the Student Recruitment and Admissions Services (SRAS) and will normally involve consultation with the Programme Leader or Associate Dean for Learning and Teaching.

- The programme has four exit award opportunities to allow students to exit the programme after one-year with a Certificate of Higher Education: Construction Management , two years with a Diploma of Higher Education: Construction Management, three years with a BSc Unclassified or four years with a BSc(Hons) - Construction Management.
- The individual dissertation/project in Year 4 allows students to work on a capstone project in areas of career interest as well as those of their particular company in the case of part-time students.
- All of the modules are accessible to all students through support from the GCU Learn digital portal. A range of software development tools supporting the programme through all levels have been made available through the Apps everywhere, which means that these programmes can be accessed in the University and off-campus. Such as project planning and BIM related software.
- The School has experience of developing and delivering programmes to a wide range of students. Based on identified needs, specific staff development, adaptation of resources and the development of learning and teaching approaches is continually taking place to ensure access to the curriculum is maximised. In particular expertise and resources are in place to provide access to and support for students with a range of disabilities. The programme team fully supports the University's vision for Equality and Diversity and is fully committed to supporting *"A culture and environment which is inclusive of all sections of society and responsive to the needs of individuals".* This results in staff, apprentices and other stakeholders who are free from any form of discrimination in respect of all their dealings with Glasgow Caledonian University, enabling them to participate fully in all aspects of University life and make a valuable contribution to the success of the institution.
- The programme team is committed to the principles of promoting equality of opportunity through the elimination of discrimination and disadvantage, and recognising the benefits of diversity. The Programme Board for the proposed programmes will ensure that all potential and current staff, students and other stakeholders are treated fairly, and are not discriminated against on grounds of sex, marital status, gender reassignment, racial group, disability, sexual orientation, religion or belief, age socio-economic background, trade union membership, family circumstances, or any other irrelevant distinction. The Programme Board will strive to create an inclusive and supportive environment for students that value diversity and promote equality.

Broad and Deep Learning:

- Modules such as the dissertation is the pinnacle demonstration of such learning – where from initial ideas - a full appraisal / thought and implementation of the study representations – demonstrates such aspects being applied in detail.
- Students in the final year of the programme have the opportunity to choose electives which allow them to tailor their studies to their individual strengths and interests.
- As the student moves through the levels – the emphasis is placed on a

broader context of learning to represent semi- professional consideration of the situation and /or context presented to them.

- Companies with students on the programme will be invited in to deliver specialist 'Guru Lectures' in their area of expertise. It is hoped that these lectures offer apprentices the opportunity to increase their awareness of the broader context of their discipline.
- A variety of assessment methods are used within the modules, depending on the aims, objectives and the learning outcomes of the module. For example, some of the modules are more theoretical in nature and others more practical or software based, while others are more discursive or presentation based. These therefore require different teaching and learning assessment approaches. The most common instruments of assessments used are coursework of various types and unseen examination.

Global Learning:

- The programme has been designed with input from employers through the IAG, many of whom are multinational companies. For example, Muliplex and Robertson. They have provided case studies which include working in international teams, managing distributed projects etc.
- Modules when relevant and as part of the taught syllabus will make students aware of global variations and practices
- Through the nature of their workplace it is expected that the students will be exposed to the global aspects of their employer's business in the placement and WBL settings where relevant.
- Guest lectures have included staff from projects located overseas – inputting with a range of project management differences and expectations overseas – this has proved extremely helpful in modules such as "Project Management" where past graduates have been able to explain this in detail and how this has influenced their career path.

Real World Problem Solving:

- Students will be encouraged to reflect upon the theoretical learning within the work place and the application of newly learned concepts to the work environment.
- As discussed above, assessment for a number of modules will be based on real-world problems and contextualised to the student setting.
- The programme will have a dedicated Programme Board and include representation from employers, along with students engaged on this programme.
- Studying of taught modules throughout the programme in parallel with the dissertation module in Year 4 assists the students with their time planning and workload balance.

Entrepreneurship and Employability:

- The entrepreneurial attitudes of the students are specifically developed through a range of modules and study opportunities, including the work placement & work based learning and Dissertation modules.
- Students are encouraged to attend talks by guest speakers, undertake industrial visits and employer led activities such as CV writing workshops, interview technique classes and employability events.
- Fostering of the employability of graduates via the relevant career services and other mechanisms to develop an awareness of the industry and the opportunities available.

Responsible Leadership and Professionalism:

- The programme will offer professional recognition through Royal Institution of Chartered Surveyors (RICS) and Chartered Institute of Building [CIOB] and Chartered Association of Building Engineers [CABE] accreditation.
- Exploration of leadership and professionalism issues faced by the construction industry – such as tackling the urban climate challenge in the module (Sustainability in the Built Environment) as well as the professional expectations in the elective modules such as Facilities Management / BIM / Negotiation / Construction Contracts 3.
- Reflection activities are embedded within many modules, notably the work placement [FT] and work based learning modules [PT].
- The understanding of standards and professional ethics, behaviours and work activities are embedded within modules at each level of study and supplemented by the provision and promotion of Leadership-focused events, special lectures, by organisations & Professional bodies.

Information about Professional Accreditations and/or specific modules required for each exit point and award listed above.

Where relevant, please provide information noting any specific/core modules or module combinations required to be undertaken to achieve specific exit awards (named or pathways) or PSRB accreditations etc

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

Minimum pass 40% for each module.

360 credits required for unclassified degree, including completion of all

programme requirements 480 credits required for honours degree, including

completion of all programme requirements *Summary of classification of marks:*

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.

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

Distinction and merit are awarded at Level 3 where all 6 modules have been successfully completed at first attempt, where the overall average is 70% or above, and no module average is below 55%

For the awards of Certificate of Higher Education, Diploma of Higher Education and BSc Construction Management & BSc (Hons) 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 SHE 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 SHE credits, of which a minimum of 90 must be SCQF 8
- To qualify for an award of BSc in Construction Management, students must complete all the programme requirements and obtain 360 SHE credits, of which a minimum of 90 must be SCQF 9
- To qualify for an award of BSc (Hons) in Construction Management, students must complete all the programme requirements and obtain 480 SHE credits, of which a minimum of 90 must be SCQF10

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 will also be considered, in accordance with the University Assessment
In the Honours award calculation for the part-time route in Year 5, the module 'sustainability and the built environment' (undertaken in level four part time) will be classification, and the WBL 3 module excluded from the