BSc (Hons) Quantity Surveying (Top Up)

Faculty of Computing, Engineering and the Built Environment

School of Engineering and the Built Environment

Validation date 9 December 2016
Course code(s) US0712 US0713

Programme Philosophy

The BSc (Hons) Quantity Surveying is a degree course which seeks to prepare construction professionals for an exciting and challenging career in construction and infrastructure in the UK and abroad.

The programme has been designed in line with the needs of potential employers in the public, private and third sectors. It has also been developed in accordance with the requirements of The Chartered Institute of Building (CIOB) and Royal Institution of Chartered Surveyors (RICS)

Both forms of accreditation will allow you to progress through your studies as a student member and before working towards your professional qualification in Industry.

As a Quantity Surveyor, you will be involved in managing the cost of the project from inception and design through to occupation. This requires a wide range of skills and involves management of people and communities if a project is to be delivered safely, on time, on budget and to the highest possible quality.

The complexity of these projects requires construction professionals to have expertise in risk management, costing techniques, design economics, buildability, procurement, ability to add value and an appreciation of people from different cultural backgrounds and construction disciplines. As our industry has an imminent and long-lasting effect on the environment, sustainable and environmentally sound construction methods and innovative practices are needed. Demand for highly skilled, innovative and far-sighted Quantity Surveyors is constantly increasing.

This Quantity Surveying programme will focus on Integrated Project Delivery, working within a design team and understanding the impact of early decision making on your profession and community.

Embedding social innovation at the core of the programme, through a focus of creative social problem solving and working with our industrial partners, will develop the students' intellectual and practical competence required by the professional bodies such as CIOB and RICS.

The course comprises of five main themes which are:

1. Law
2. Management
3. Quantification & Cost
4. Construction Technology
5. Integrated Project Delivery

All five themes underpin the programme's technical and intellectual philosophy, represented in our dynamic industry, supporting regeneration as well as developing economies

After completing this course, you will have a broad range of knowledge of the legal, technical, managerial, economic, social and environmental aspects of construction projects, and can confidently manage both commercial and civil engineering projects.

The programme equips you with the framework of knowledge, skills and tools to start understanding the complex world of the built environment and also encourages you to become an independent learner and reflective practitioner.

The course design and delivery uses expertise across our Construction Management, Quantity Surveying, Planning and Civil Engineering teams.

We aim to develop the Construction Managers of the future who are equipped with the knowledge, tools and skills to operate efficiently, effectively and confidently within such an environment.

Programme Aims

Through the Academic Plan (2015), the University has expressed its commitment to the following programme aims to enhance student experience in all programmes:

- Pursuing excellence
- Practice-led, knowledge-applied education
- Interdisciplinary approaches
- Employability-driven
- Internationalisation

This section articulates the programme aims framed by the five themes of the Academic Plan.

1. Pursuing Excellence	Based on the understanding of the wider context of strategic cost management and the needs of the wider development community. Students will become capable, creative, reflective and critical cost management professionals.
2. Practice-led, knowledge-applied	A curriculum that cultivate students' problem-solving skills and ability to synthesize complex information and communicate effectively through real-life cases and facilitate students to develop a systematic understanding and a critical awareness of the problems, issues and opportunities in the cost management practice. Opportunity to establish negotiated work-based projects through industry partners or employer sponsors in the second year and final year. Course supplemented by expert guest lectures from across the industry. Regular case study events presented by both academics and industry, and your tutors frequently participating and publishing in international conferences.
3. Interdisciplinarity	Integrated process delivery that will seek to improve students' awareness and appreciation of the conflicting interests within construction projects and the political, social, cultural, economic, technological, environmental, legal and organisational factors involved.
4. Employability-driven	Develop students' knowledge and ability to work in teams on real life scenarios, developing professional competence, aptitude to work independently and prepare them for employment opportunities and career development within a global construction industry.

	On-campus Student Opportunities to get involved in extra curricular activities, project and work.
5. Internationalisation	Based on an existing US and Canadian exchange programme and industry contacts, students are exposed to international construction practices. Exposure to international competitions also encourages intercultural experience and collaboration to foster a strong global perspective.

Programme Learning Outcomes

The following table shows how the programme's learning outcomes are also aligned to these themes.

Outcomes/Aims	Pursuing Excellence	Practice Led Knowledge Applied	Interdiciplinarity	Employability Driven	Internationalisation
1. Subject-specific knowledge and understanding					
1.1 the relevance and application of the subject & the development of integrated, multidisciplinary and interdisciplinary and inter-professional approaches & integration of theory, experiment, investigation and fieldwork, and the development of principles into practice & quantitative and qualitative approaches to information	☒	☒	☒	☒	☒
2.1 an understanding of the importance of entrepreneurship and innovation including the role of intellectual property within the innovation process & awareness of risks of exploitation and the requirement for sustainable processes and outcomes & consideration of rapid and continuing change and development of the subjects and their context & its underlying foundations and principles	☒	☒	☒	☒	☒
1.3 its relevant defining concepts, theories and methods & the current knowledge and development of the subject firmly grounded in technological, legal, socio-economic, environmental political and business contexts & identification of current gaps in knowledge or understanding and current issues of wider concern to society and the world & the global, regional and local contexts of practice issues and challenges	☒	☒	☒	☒	☒
1.4 the location and quality of resources and their procurement, management, sustainable exploitation and pattern of use within socio-economic, public interest, equality and inclusion policy and legal frameworks & award-specific and generic skills including problem definition and resolution and a professional approach to study and lifelong learning & an understanding of issues of sustainability, quality of life and environmental impact & ethics in relation to both academic and professional practice.	☒	☒	☒	☒	☒
2. Intellectual Skills					
2.1 critically analyse, synthesise and summarise information from a variety of sources & recognise and use appropriate theories, methodologies, concepts and principles from a range of subjects & collect, analyse and integrate several lines of evidence to develop balanced arguments demonstrating critical thinking and synthesis	☒	☒	☒	☒	☒
2.2 plan and design an experiment, investigation, survey or other means to test a hypothesis or proposition & apply knowledge and understanding to address multidisciplinary problems within a local and global context	☒	☒	☒	☒	☒

2.3 demonstrate creativity and innovation & demonstrate awareness of the provisional nature of the facts and principles associated with a field of study with those based on opinion and not supported by sound evidence	☒	☒	☒	☒	☒
2.4 make well considered decisions in complex and unpredictable contexts & understand the importance of academic and professional integrity	☒	☒	☒	☒	☒
3. Generic skills					
3.1 demonstrate familiarity with a wide range of subject-specific facts and principles in combination with an awareness of the current limits of theory and applied knowledge & understand the provisional nature of problem definition and associated information and allow for competing and alternative explanations within their subject	☒	☒	☒	☒	☒
3.2 exhibit understanding of the defining elements of the subject as a result of in-depth and/or cross-curricula study or research & tackle problems by collecting, analysing and evaluating appropriate qualitative and quantitative information, and using it creatively and imaginatively to solve problems, introduce and develop innovations, and make decisions and follow them through	☒	☒	☒	☒	☒
3.3 plan and execute research or development work, evaluate the outcomes, draw valid conclusions and make recommendations & display skills in evaluating and interpreting, in a balanced manner, new information provided by others from a range of fields of study	☒	☒	☒	☒	☒
3.4 display generic scholarly and award specific professional skills and demonstrate the ability to acquire new competencies required for career progression & assess the ethical, equality and inclusion consequences of human activities to optimise community and environmental sustainability.	☒	☒	☒	☒	☒
4. Interpersonal and teamwork skills					
4.1 organise teamwork and participate effectively in a team & set realistic targets	☒	☒	☒	☒	☒
4.2 identify individual and collective goals and responsibilities & plan, allocate and evaluate the work of self, individuals and teams	☒	☒	☒	☒	☒
4.3 perform in a manner appropriate to allocated roles and responsibilities & recognise and respect the views and opinions of other team members	☒	☒	☒	☒	☒
4.4 show positive intent and a willingness to resolve conflict & reflect on and evaluate their own performance as an individual or as a team member	☒	☒	☒	☒	☒
5. Self-management and professional development skills					
5.1 develop the skills necessary for self-managed lifelong learning and engagement including for example working independently, effective time management and organisational skills & appreciate the need for professional codes of conduct where applicable	☒	☒	☒	☒	☒

5.2 recognise the moral, ethical, social and equality and inclusion issues related to the programme & assume responsibility for their own actions & identify and work towards targets for personal, academic and career development	☒	☒	☒	☒	☒
5.3 develop an adaptable and flexible approach to study and work & demonstrate the competence, behaviour and attitude required in academic and professional working life, including initiative, reflection, leadership, resilience and team skills	☒	☒	☒	☒	☒
5.4 behave in an ethical and responsible manner to ensure the rights of others and the wider environment are respected and protected & understand the importance of academic, professional and research integrity	☒	☒	☒	☒	☒
6. Communication skills					
6.1 listen and observe attentively, record, evaluate and respond and/or communicate using a wide variety of information sources for example electronic, textual, numerical, verbal, visual/graphical, digital and practical field (site and building) survey based	☒	☒	☒	☒	☒
6.2 communicate accurately, clearly, concisely, confidently and appropriately to a variety of audiences using a range of formats and employing appropriate scientific and/or professional discipline specific language	☒	☒	☒	☒	☒
6.3 contribute constructively to group discussions	☒	☒	☒	☒	☒
6.4 consider, appreciate, evaluate and respect the views of others	☒	☒	☒	☒	☒
7. Digital literacy					
7.1 use the internet in a context which recognises its limitations as a means of communication and a source of information	☒	☒	☒	☒	☒
7.2 demonstrate competence in the use of electronic information handling and data processing and analysis software and applications through the use of digital information systems (for example BIM and GIS)	☒	☒	☒	☒	☒
7.3 use a range of IT platforms (for example desktop, server, tablet and mobile) and social media to communicate information to a range of audiences effectively	☒	☒	☒	☒	☒
7.4 demonstrate an awareness of legal, effective and safe use of digital and social media & use and interpret digital data and information to inform decision making	☒	☒	☒	☒	☒
8. Practical skills					
8.1 plan, conduct and report on investigations, including those using secondary data & collect, record and interpret diverse types of information generated by a wide range of methods and summarise it using appropriate qualitative and/or quantitative techniques	☒	☒	☒	☒	☒
8.2 devise, plan and undertake field, laboratory or other investigations in a responsible, sensitive and safe manner, paying due diligence to risk assessment, ethical and data protection issues, rights of access, and relevant health and safety issues	☒	☒	☒	☒	☒

8.3 take account of safety regulations, legal requirements including those relating to equality and inclusion, and the impact of investigations on the environment	☒	☒	☒	☒	☒
8.4 appreciate and analyse financial and other management information and use it in decision making & acquire programme-specific practical and professional competencies	☒	☒	☒	☒	☒
9. Analytical and data interpretation skills					
9.1 appreciate issues of sample selection, accuracy, precision and uncertainty during collection, recording and analysis of data in the field, in the laboratory or collated from secondary sources	☒	☒	☒	☒	☒
9.2 appreciate and reconcile or mitigate the difficulties of having incomplete information on which to base decisions & understand the nature of risk	☒	☒	☒	☒	☒
9.3 prepare, process, interpret and present information and data, using appropriate qualitative and quantitative techniques and packages	☒	☒	☒	☒	☒
9.4 solve numerical problems using first principles, computer-based and other techniques	☒	☒	☒	☒	☒

Level 6 Core Modules	**Contract Practice**	**Civils Quantification & Cost**	**Individual Honours Project**	**Project Management**	**Professionalism & Citizenship**
Credit level (ECTS value)	20	20	40	20	20
Study Time (%) S/DI/PL	S 24% DI 76% PL %	S 24% DI 76% PL %	S 24% DI 76% PL %	S 24% DI 76% PL %	S 24% DI 76% PL %
Assessment method	100% Coursework - Portfolio	100% Coursework - Portfolio	100% Coursework	100% Coursework - Portfolio	Portfolio: Group presentation **(75%)** Individual reflective self-evaluation "essay" **(25%)**
Assessment scope	100% Portfolio Coursework: Written portfolio equivalent to 3000 words This module may also offer an alternative assessment strategy for those who have successfully completed a placement year, at the end of level 5 and actively participated within a contract team.	Portfolio assessment of two components – Task 1 – 75% Task 2 – 25%	Reports, presentation and supporting materials equivalent to 10,000 words	100% Portfolio Coursework: Two tasks - Written portfolio equivalent to 3000 words in total This module also offers an alternative assessment strategy for those engaging in a relevant study abroad programme or those who successfully completed a placement year, at the end of level 5 who actively participated within a project management capacity.	Group presentation (20 minutes, 75% of module). Teams will have a clear mechanism for varying marks to low or high-performing members. Individual written submission equivalent to 1500 words
Assessment week	TBA	TBA	TBA	TBA	TBA
Feedback scope	<u>Formative Assessment</u> You will be presented with a series of seminar tasks to complete and present your findings in groups to have an opportunity to provide and receive feedback to/from your peers which can then be applied in completing assessment reports. <u>Summative Assessment</u> Written feedback will be provided on each report within 20 days of submission date.	Formative Assessment You will be presented with a series of seminar tasks to complete and present your findings in groups to have an opportunity to provide and receive feedback to/from your peers which can then be applied in completing assessment reports. Summative Assessment Written feedback will be provided on each report within 20 days of submission date.	Your supervisor is responsible for providing assistance, and monitoring progress through to completion of the project. Regular feedback on your work in progress will be provided by the supervisor. This may occur during group or individual tutorials, via email, telephone or online. Feedback may also be provided by peers, other members of staff or professional	<u>Formative Assessment</u> You will be presented with a series of seminar tasks to complete and present your findings in groups to have an opportunity to provide and receive feedback to/from your peers which can then be applied in completing assessment reports. <u>Summative Assessment</u> Written feedback will be provided on each report within 20 days of submission date.	Formative feedback through tutor support at workshops, group/individual tutorials. Summative written feedback, with opportunity for individual verbal discussion if requested.

			practitioners with an interest in the topic. Written feedback on the final project outcome will be provided by your supervisor within 20 days of submission deadline.		
Delivery mode	Reading outside of the delivery Classroom delivery Seminar discussion		Reading outside of the delivery Classroom delivery Supervisor meetings Lab sessions	Reading outside of the delivery Classroom delivery Seminar discussion	Reading outside of the delivery Classroom delivery Seminar discussion
Learning Outcomes	Critically appraise and reflect upon the choice of contract in comparison to the a given alternative	Describe and quantify civil engineering works in accordance with CESMM	Plan a research informed project using appropriate literature and / or professional outputs	Learn how to use industry's standard project planning and control tools and techniques	Identify and effectively communicate successful strategies for coping with difficult contexts, such as vague initial specifications or a rapidly changing environment
	Demonstrate a working knowledge of contract clauses and acknowledge the responsibilities and obligations of those involved in the application of the contract	Interpret civil engineering drawings and specification information to compile a pricing document for tender purposes on selected measured work sections using CATO systems	Design an artefact using appropriate techniques and tools	Develop a critical understanding of complexity and uncertainty inherent in construction projects	Provide reasoned advice and guidance contributing to a group presentation that demonstrates synthesised appraisal of multi-disciplinary stakeholders' priorities
	Evaluate processes and procedures to be adhered to within the contract	Construct descriptions of work appropriate to the work sections being measured and costed and represented as a priced Bill of Quantities	Implement a design to produce an artefact using appropriate techniques	Develop an operational understanding of various project management perspectives which need to be simultaneously in order to deal with complexity and uncertainty inherent in construction projects.	Develop a critical appreciation of consultancy and professionalism, and its strategic significance for an organisation's management and development
	Discuss the different methods of dispute resolution	Apply software to measure, bill and price different works sections by the appropriate standard method using contractors tenders received, record and analyse, adjusting for anomalies, presenting a final recommendation.	Critically evaluate the implementation of the artefact and the overall project		Demonstrate continuing professional development through engagement with the relevant professional body membership routes or requirements
			Assemble and organise information to successfully communicate the results		

			and findings of the project.		
Programme Aim Links	1☑ 2☑ 3☑ 4☑ 5	1☑ 2☑ 3☑ 4☑ 5	1☑ 2☑ 3☑ 4☑ 5	1☑ 2☑ 3☑ 4☑ 5☑	1☑ 2☑ 3☑ 4☑ 5☑
Linked PSRB (if appropriate)	Accredited by the CIOB and RICS	Accredited by the CIOB and RICS	Accredited by the CIOB and RICS	Accredited by the CIOB and RICS	Accredited by the CIOB and RICS

Level 6 Programme				
Entry Requirements and pre-requisites, co-requisites & exclusions	Accreditation of Prior Experience or Learning (APEL)	Study Time Breakdown		Exit award(s)
Successful completion of Level 5 Learning Outcomes.	Students who wish to APEL should contact the programme lead to discuss their prior experience or learning. Subject to discussion and appropriateness of the APEL request, the applicant will need to submit an application through the Faculty APEL application process.	**Scheduled** learning and teaching activities (including time constrained blended or directed tasks, pre-sessional and post-sessional tasks)	17%	Bachelor of Science in Quantity Surveying
		Guided Independent learning (including non-time constrained blended tasks & reading and assessment preparation)	83%	
		Placement (including external activity and study abroad)	0%	
		Impact of options (indicate if/how optional choices will have a significant impact)	N/A	

Additional Information

The Quantity Surveying programme is developed with full cognisance of the CIOB and RICS and as such are accredited by the CIOB and RICS. This programme will be included in future accreditation events.

Relevant subject benchmark statements and other external reference points used to inform programme outcomes are the QAA Benchmark statement for Land, Construction, Real Estate and Surveying 2016.