



UNIVERSITY COLLEGE
OF ESTATE MANAGEMENT

BSc (Hons) Quantity Surveying

Programme Specification

Academic year September 2019 to August 2020

Reference:

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Status: Final

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Summary Programme Details

Final Award	
Award:	BSc (Hons)
Title of (final) Programme	Quantity Surveying
Credit points:	360
Level of award (QAA FHEQ):	6
Intermediate award(s)	
Intermediate award 1:	Ordinary Degree (please note an Ordinary Degree does not carry any PSRB accreditation or recognition).
Credit points:	300
Level of award (QAA FHEQ):	6
Intermediate award 2:	Diploma of Higher Education
Credit points:	240
Level of award (QAA FHEQ):	5
Intermediate award 3:	Certificate of Higher Education
Credit points:	120
Level of award (QAA FHEQ):	4
Validation	
Validating institution:	University College of Estate Management (UCEM)
Date of last validation:	January 2018
Date of next periodic review:	December 2019
Professional accreditation	
Accrediting body:	Royal Institution of Chartered Surveyors (RICS)
Date of last programme accreditation:	November 2015
Date of next periodic review:	TBC
Accrediting body:	The Chartered Institute of Building (CIOB)
Date of last accreditation:	October 2014
Date of next periodic review:	Autumn 2020
Accrediting body:	Chartered Association of Building Engineers (CABE)
Date of last accreditation:	August 2015
Date of next periodic review:	August 2020
Accrediting body:	Hong Kong Institute of Construction Managers (HKICM)
Date of last accreditation:	April 2016
Date of next periodic review:	April 2021

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Accrediting body:	Chartered Institution of Civil Engineering Surveyors (ICES)
Date of last accreditation:	March 2018
Date of next periodic review:	March 2023
Miscellaneous	
QAA benchmark statement	Land, Construction, Real Estate and Surveying QAA (2016)
Date of commencement of first delivery	September 2013
Duration	4 years or 4 years, plus external end point assessment, if taken as part of an apprenticeship programme.
Maximum period of registration	12 years
UCAS Code	K240
Programme Code	UBSCQSS/UBSCQSF/UBSCQSA/UBSCQSE
Other coding as required	N/A

Programme Overview

Rationale

This programme provides students with a rigorous understanding of the principles and practices involved in a quantity surveying role, applicable to an international context up to Bachelor's degree standard.

The programme provides the academic underpinning necessary to prepare students for a career as a professional surveyor, recognised by RICS and/or other related international professional bodies.

The programme is primarily designed for people employed in a quantity surveying role, such as in a private quantity surveying practice, construction company, building contractor or government organisation. Such employment is not mandatory, but is desirable. Students on the UCEM BSc (Hons) Quantity Surveying programme can;

- enrich their CV with a degree accredited by RICS, CABE, HKICM, ICES and CIOB,
- develop skills in quantity surveying, cost consultancy, project management, estimating and facilities management,
- study the leading programme in this subject area, which allows the student to combine work and study through supported online learning.

A project module is compulsory for all students, with the difference that only Apprenticeship Scheme students study the Workbased Research Project module (PRJ6WR1/PRJ6WR2), and only non-apprenticeship students study the Undergraduate Project module (PRJ6PRO).

Apprenticeship students study the majority of the BSc programme modules, alongside all other students. The difference between 'regular' BSc students and Apprenticeship

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students, is that Apprenticeship students only study the Workbased Research Project module, and that the 'regular' BSc students only study the Project module.

The Workbased Research Project is a 40 credit module and runs in year 4. It enables the existing BSc programme to comply with the degree apprenticeship criteria of 4 years to completion. A tutor will be assigned to provide support for the Workbased Research Project module.

Entry requirements

Entrants to this programme normally are required to have:

- obtained 96 UCAS tariff points (please refer to the 2017 UCAS Tariff tables) or an equivalent level of attainment through recognised qualifications not included in the UCAS tariff;*

Or

- completed an Advanced Apprenticeship in Surveying** or an Advanced Apprenticeship in Construction Technical** through which a Construction and Built Environment Diploma with a minimum DD profile was obtained or through which a Construction and Built Environment Extended Diploma with a minimum MMM profile was obtained, or an equivalent qualification;

Or

- a current Royal Institution of Chartered Surveyors (RICS) Associate qualification (AssocRICS) and be in relevant employment;***

And

- GCSE Grade C or above in English and Mathematics (Grade 4 for applicants holding newly reformed GCSEs in England) or an equivalent Level 2 qualification in English and Mathematics as defined by the Regulated Qualifications Framework (RQF) in England.

The academic level of International qualifications that are not listed on the UCAS tariff will be assessed using UK NARIC.

All UCEM programmes are taught and assessed in English. In addition to the programme entry requirements listed above, all applicants will therefore be required to demonstrate adequate proficiency in the language before being admitted to a programme:

- GCSE Grade C or above in English Language or English Literature (Grade 4 for applicants holding newly reformed GCSEs in England), or an equivalent qualification. For further information on equivalent qualifications please contact admissions@ucem.ac.uk.
- Grade 5.5 or above, with at least 5.0 in the reading, writing and listening modules, in the International English Language Testing System (IELTS) academic test administered by the British Council.
- 79 or above in the Internet option, 213 or above in the computer-based option or 550 or above in the paper-based option, of the Teaching of English as a Foreign Language (TOEFL) test.

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Entry requirements

- Grade C or above in Use of English at A/S Level

[For English language requirements please click here.](#)

*Recognised qualifications having an equivalent level of attainment as those recognised by UCAS include: Higher National Certificate (HNC), Higher National Diploma (HND), professional qualifications from recognised institutions, certain armed forces qualifications and partially completed degrees. There are also a wide range of international qualifications that are deemed to have UCAS point equivalent values. For more information on equivalent qualifications please contact admissions@ucem.ac.uk.

** Completion of this apprenticeship will need to be evidenced through a verified copy of the apprenticeship completion certificate as issued by the apprenticeship certification body.

*** Relevant employment is employment in a job role that will support the applicant in developing the required skills, knowledge and behaviours.

If a student does not meet the standard entry requirements, and is over 21 years of age, UCEM will consider the application on an individual basis. In these cases, the application will be assessed by the Programme Leader, who will give careful consideration to any professional and life experiences as well as any academic or vocational qualifications the student may hold. The student may be asked to provide a detailed personal statement and/or a reference or letter of support from an employer or mentor to support the application.

Applications are assessed in accordance with the UCEM [Code of Practice: Admissions and Recognition of Prior Learning \(click here\)](#).

Students may apply to enter the programme in either semester.

Recognition of prior learning (RPL) or recognition of prior experiential learning (RPEL) routes into the Programme

UCEM policy and procedures for Recognition of Prior Experiential Learning (RPEL) and Recognition of Prior Certificated Learning (RPCL) are set out in UCEM's Code of Practice: Admission and Recognition of Prior Learning. This policy statement takes precedence in any such decision.

RPEL may be used for admission onto an undergraduate programme in accordance with the entry requirements stated in the section above.

UCEM also recognises credit awarded by higher education degree awarding bodies, in accordance with the relevant higher education qualifications framework and allows that credit to count towards module exemption from an undergraduate programme.

Normally the maximum credit for prior learning that can be counted towards a programme is 66% (two thirds). RPEL and RPCL do not enable the transfer of credit/exemption from classification modules.

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Programme progression

Successful completion of the BSc may enable the student to progress onto one of UCEM's MSc programmes.

Award Regulations

For details of the award, please view the [Undergraduate Programme Assessment, Progression and Award Regulations](#) and the [Academic and General Regulations for Students](#).

Career prospects

Diverse career opportunities are available for students to pursue after completing this programme. Students typically find employment in the private sector, for instance in consultancy firms, contracting companies involved in both building, M & E and civil engineering projects and developers. Opportunities can also be found in the public sector, such as local and central government or other public sector organisations. Practising as self-employed consultants is also an option. In addition, students are not confined to working in their local construction industries, as international career mobility could also be attained.

The following provide a range of the types of work that students undertake after completing this programme:

Cost management

- Cost consultancy, project management, contractor surveying, building services quantity surveying and facilities management.
- Preparing feasibility estimates and contract documents and providing advice on design economics, tendering and procurement strategies.
- Cost planning and whole life costing.
- Cost and financial control from design to completion and occupation.

Programme Aims

Programme aims

UCEM's BSc (Hons) in Quantity Surveying provides students with a rigorous understanding of the principles and practices involved in a quantity surveying role up to first degree level standard. The programme reflects the academic underpinning necessary to prepare students for a career as a professional surveyor recognised by RICS or other related international professional bodies. It provides students with a progressive development of knowledge and skills over three stages of study.

The programme is designed to ensure that graduates have a stimulating and challenging education, which prepares them well for their professional career and to produce capable individuals with the potential to progress to professional status and prepare for advancement to Master's level study, both in the UK and overseas. Students will develop a broad range of skills which are transferable across other industries.

Market and internationalisation

This programme is aimed at a UK and broad international audience; however, it has as its basis UK law and regulatory controls. The programme aims to utilise international case studies to further understanding and, where possible, international construction and surveying is considered along with international codes and conventions.

Learning Outcomes

Having successfully completed the programme, the student will have met the following learning outcomes.

	Level 6	Relevant modules
A – Knowledge and understanding	<p>A1. The technical, financial and contractual concepts, theories and principles associated with the procurement, production, refurbishment, maintenance and disposal of construction projects.</p> <p>A2. The business environment including the political, economic, legal, social, technological, cultural, health and safety, sustainability and global influences which affect the construction processes and within which construction and client organisations operate.</p> <p>A3. The role of quantity surveyors in the procurement, development and production of construction projects.</p> <p>A4. The roles, linkages and interdisciplinary relationships of the various stakeholders involved in the procurement, development and production of construction projects.</p> <p>A5. The contemporary issues facing the quantity surveying profession.</p> <p>A6. Professional ethics, their impact on the operation of the quantity surveying profession and their influence on the society; communities and the stakeholders with whom they have contact.</p> <p>A7. Research methods and their relative strengths and weaknesses.</p>	See Curriculum Map
B – Intellectual skills	<p>B1. Evaluate critically relevant theoretical frameworks and practical issues.</p> <p>B2. Integrate theory and practice to solve problems.</p> <p>B3. Define, investigate and analyse problems and apply judgement to devise solutions.</p> <p>B4. Work effectively and independently to develop intellectual curiosity consistent with the level of study.</p> <p>B5. Communicate effectively, clearly and concisely at an appropriate academic level on programme related issues.</p>	

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	Level 6	Relevant modules
C – Subject practical skills	<p>B6. Evaluate the appropriateness of various methods of knowledge acquisition and select appropriate methods to solve problems.</p> <p>B7. Assess a range of resources including contemporary sources, draw on evidence to reflect and evaluate competing explanations to provide appropriate conclusions.</p>	
	<p>C1. Provide basic but appropriate advice to the different stakeholders in construction projects guided by professional ethical framework to meet their project and business objectives.</p> <p>C2. Undertake various pre and post contract quantity surveying procedures and processes in construction projects.</p> <p>C3. Appreciate the techniques in pre and post contract risk, value, cost and financial management.</p> <p>C4. Assess the methods to be used when resolving disputes under construction contracts.</p> <p>C5. Communicate clearly and concisely at a professional level.</p> <p>C6. Locate information sources; and assemble and present information in a variety of contexts.</p> <p>C7. Assess the validity of a range of published research consistent with the level of study.</p>	
D – Key / Transferable skills	<p>D1. Select and use appropriate range of numerical approaches for calculating, checking and presenting solutions to problems.</p> <p>D2. Select and apply the necessary range of ICT applications for preparing and presenting information.</p> <p>D3. Source material and knowledge from a variety of resources and effectively judge what can be integrated and applied.</p> <p>D4. Be self-motivated.</p> <p>D5. Effectively and efficiently manage time.</p> <p>D6. Attain and apply research skills consistent with the level of study.</p>	

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Curriculum Map

This table indicates which study units assume responsibility for delivering (X) and summatively assessing (A) particular programme learning outcomes. To make sure our programmes are always high quality and relevant for our students we review and update our programmes on a regular cycle. This is known as "periodic review and revalidation" and this year this programme will be going through this process. Therefore, the programme information presented here may change. Information about any changes will be published in Spring 2020.

Level	STUDY MODULE/UNIT	A1	A2	A3	A4	A5	A6	A7	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	C5	C6	C7	D1	D2	D3	D4	D5	D6		
1	Economics		X A						X A		X A	X	X A		X						X A	X A		X A	X A	X	X	X		
	Building, Environment, Technology and Simple Construction	X A	X A						X A	X A	X		X								X A	X		X A		X	X			
	Building, Environment, Technology and Framed Structures	X A	X A						X A	X A	X		X A								X A	X		X		X	X			
	People and Organisational Management		X A	X	X A		X		X A	X A	X	X	X	X		X					X A	X		X	X A	X	X	X		
	Financial and Resource Management	X A	X A						X A	X A	X	X	X	X A		X			X A		X A	X		X A	X	X A	X	X	X	
	Legal Studies	X A	X A				X		X A		X A	X A	X A	X A		X					X A	X			X	X A	X	X	X	
2	Economics of Property and Construction		X A		X A				X A	X A	X	X	X A		X A						X A	X		X	X A	X A	X	X	X	

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Level	STUDY MODULE/UNIT	A1	A2	A3	A4	A5	A6	A7	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	C5	C6	C7	D1	D2	D3	D4	D5	D6
	Building Economics	X A	X A	X	X	X A	X		X	X	X A	X	X A		X A		X A	X		X A	X A		X A	X	X	X	X	X
	Building, Environment, Technology and Complex Projects	X A	X A						X A	X		X	X A		X					X	X			X		X	X	
	Measurement and Quantification of Construction	X A		X A	X	X A	X		X	X	X A		X A		X	X	X A	X		X A	X		X A	X A	X	X	X	X
	Estimating and Tendering of Construction Projects	X A	X	X A	X	X A	X		X	X	X A	X	X A		X		X A	X		X A	X		X A	X A	X	X	X	X
	Contract Procedures	X A	X	X A	X A	X A	X A		X A	X	X A	X	X A		X A	X A	X A			X A	X			X	X A	X	X	X
3	Contemporary QS Practice	X A	X A	X A	X A	X A	X A		X A	X	X A	X A	X A		X A	X A	X A	X A		X A	X A			X	X A	X	X	X
	Construction Law	X A	X A			X			X A	X	X A	X	X A		X A	X			X A	X A	X			X	X	X	X	
	Project* (the knowledge and understanding assessed are dependent upon individual projects)	X A	X A	X A	X A	X A	X A	X A	X A	X A	X A	X A	X A	X A	X A					X A	X A	X A	X A	X A	X A	X A	X A	X A

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Level	STUDY MODULE/UNIT	A1	A2	A3	A4	A5	A6	A7	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	C5	C6	C7	D1	D2	D3	D4	D5	D6
	Workbased Research Project** (the knowledge and understanding assessed are dependent upon individual projects)	X A	X A	X A	X A	X A	X A	X A	X A	X A	X A	X A	X A	X A	X A					X A	X A	X A	X A	X A	X A	X A	X A	X A
	ELECTIVE (AUTUMN UK SEMESTER)																											
	Commercial Management in Construction	X A	X A	X A	X A	X A		X A	X A	X A	X A	X A	X A		X A	X A	X A	X A		X A	X A		X A	X A	X A	X A	X A	X A
	Commercial Property Management	X A	X A		X A				X A	X A	X A	X A	X A		X A	X A		X A		X A	X A			X A	X A	X A	X A	X A
	ELECTIVE (SPRING UK SEMESTER)																											
	International Construction		X A		X A		X A		X A	X A	X A	X A	X A		X A	X A				X A	X A				X A	X A	X A	X A
	Construction Project Management	X A	X A	X A	X A	X A		X A	X A	X A	X A	X A	X A		X A	X A	X A	X A		X A	X A		X A	X A	X A	X A	X A	X A
	Maintenance Management	X A	X A		X A	X A			X A	X A	X A	X A	X A		X A	X A	X A			X A	X A			X A	X A	X A	X A	X A

*The Project module is core for non-apprenticeship students only.

**The Workbased Research Project is core for Apprenticeship Scheme students only.

Programme Structure

To make sure our programmes are always high quality and relevant for our students we review and update our programmes on a regular cycle. This is known as "periodic review and revalidation" and this year this programme will be going through this process. Therefore, the programme information presented here may change. Information about any changes will be published in Spring 2020.

Module List				
Code	Module	Level	Credits	Core /Elective
LAW4LST	Legal Studies	4	20	Core
MAN4POM	People and Organisational Management	4	20	Core
ECO4ECO	Economics	4	20	Core
TEC4BSC	Building, Environment, Technology and Simple Construction	4	20	Core
MAN4FRM	Financial and Resource Management	4	20	Core
QSP5MQC	Measurement and Quantification of Construction Work	5	20	Core
TEC4BFS	Building, Environment, Technology and Framed Structures	4	20	Core
ECO5EPC	Economics of Property and Construction	5	20	Core
QSP5CPR	Contract Procedures	5	20	Core
QSP5ETC	Estimating and Tendering of Construction Projects	5	20	Core
TEC5BCP	Building, Environment, Technology and Complex Projects	5	20	Core
QSP5BEC	Building Economics	5	20	Core
LAW6CON	Construction Law	6	20	Core
QSP6CQS	Contemporary QS Practice	6	20	Core
PRJ6PRO	Project *	6	40	Core*
PRJ6WR1/ PRJ6WR2	Workbased Research Project**	6	40	Core**
TEC6ICO	International Construction	6	20	Elective
MAN6MMA	Maintenance Management	6	20	Elective
PMA6CPM	Construction Project Management	6	20	Elective
MAN6CMC	Commercial Management in Construction	6	20	Elective
MAN6CPM	Commercial Property Management	6	20	Elective

Notes:

* The Project (PRJ6PRO) module is a mandatory module for non-apprenticeship students only, which will be started in either the Spring or Autumn semester.

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Notes:

**For students studying the programme as part of the Apprenticeship programme only, the Workbased Research Project (PRJ6WR1/PRJ6WR2) is a mandatory module, which will be started in either the Spring or Autumn semester.

Delivery Structure

Standard route (part-time: apprenticeship and non-apprenticeship students)

Year	Semester 1 (autumn UK)	Semester 2 (spring UK)
Year 1 (level 4)	People and Organisational Management	Economics
Year 1 (level 4)	Legal Studies	Building, Environment, Technology and Simple Construction
Year 2 (level 4)	Financial and Resource Management	Building, Environment, Technology and Framed Structures
Year 2 (level 5)	Measurement and Quantification of Construction Works	Economics of Property and Construction
Year 3 (level 5)	Contract Procedures	Building, Environment, Technology and Complex Projects
Year 3 (level 5)	Estimating and Tendering of Construction Projects	Building Economics
Year 4 (level 6)	Construction Law	Contemporary Quantity Surveying Practice
Year 4 (level 6)	Commercial Management in Construction; <i>or</i> Commercial Property Management	Construction Project Management; <i>or</i> Maintenance Management; <i>or</i> International Construction
Year 4 (level 6)	Project*	Project*
Year 4 (level 6)	Workbased Research Project**	Workbased Research Project**

*For non-apprenticeship students only.

**For Apprenticeship Scheme students only.

Delivery Structure

Accelerated route (full time: non-apprenticeship students).

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Year	Semester 1 (autumn UK)	Semester 2 (spring UK)
Year 1 (level 4)	People and Organisational Management	Economics
Year 1 (level 4)	Legal Studies	Building, Environment, Technology and Simple Construction
Year 1 (level 4)	Financial and Resource Management	Building, Environment, Technology and Framed Structures
Year 2 (level 5)	Contract Procedures	Economics of Property and Construction
Year 2 (level 5)	Measurement and Quantification of Construction Works	Building, Environment, Technology and Complex Projects
Year 2 (level 5)	Estimating and Tendering of Construction Projects	Building Economics
Year 3 (level 6)	Construction Law	Contemporary Quantity Surveying Practice
Year 3 (level 6)	Commercial Management in Construction; <i>or</i> Commercial Property Management	International Construction; <i>or</i> Maintenance Management; <i>or</i> Construction Project Management
Year 3 (level 6)	Project*	Project*

*For non-apprenticeship students only.

Module Summaries

Core Modules

Building Economics

This module aims to provide students with an appreciation of construction costs and their control from inception to completion of a project. It provides students with an understanding of the concept of value and its relationship with development opportunities. It then considers what affects the cost of a building and how the costs of the development can be controlled, both at the pre-contract and the post contract stages. The application of the RICS New Rules of Measurement (NRM) is considered when undertaking pre-contract cost control activities and Building Information Modelling (BIM) is used to allow an appreciation of this method. The importance of life cycle costs and the maintenance management of a building are also considered.

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Building, Environment, Technology and Complex Projects

This module develops students' knowledge of the theory and practice of building, environment and technology for complex projects. It comprises the following topics: advanced construction techniques; technology/process innovation and development; components; building services; civil engineering; sustainability; legislation; building regulation; contaminated land; works incorporating existing buildings; (complex sites).

It includes consideration of a range of complexities due to the site, the environment, construction or unusual situations.

Building, Environment, Technology and Framed Structures

This module provides an introduction to building, environment and technology based on framed or similar construction. Topics covered include: the theory and principles of framed structures; components; design; construction techniques; construction; simple services; pathology/surveys; maintenance, sustainability; legislation and fire safety.

Examples of framed buildings are included, such as steel, reinforced concrete and timber construction applicable to buildings with different types of usage such as commercial, industrial and residential. Perspectives such as sustainability are also considered.

Building, Environment, Technology and Simple Construction

This module provides an introduction to building, environment and technology based on simple construction, establishing a foundation of knowledge and understanding to be developed in later modules. It develops students' communication skills, enabling them to describe simple construction in a professional manner.

Simple building examples are included, such as traditional masonry construction and roof construction typical in buildings of up to three storeys. Perspectives such as sustainability are considered.

Construction Law

This module aims to provide students with an understanding of the major issues of law embraced by construction projects. It enables students to analyse professional liability and evaluate methods of extending/limiting liability, and to assess the extent of liability outside the contractual relationship. The module also aims to give students an in-depth understanding of the issues related to construction disputes and the various commonly used methods of dispute resolution.

Contemporary Quantity Surveying Practice

This module explores a range of issues and challenges which contribute to the development of the quantity surveying profession in the UK and other parts of the world.

The significant changes experienced in the construction industry globally over the past decade meant that quantity surveyors have had to adapt their traditional practices and embrace new philosophies in order to contribute effectively in construction projects. This

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Contemporary Quantity Surveying Practice

module therefore provides an opportunity to develop the knowledge, understanding and skills required to operate in a dynamic and contemporary construction environment.

Contract Procedures

This module develops the knowledge gained from contract and tort law to focus on the specific aspects of construction projects where it is common to find standard forms of building contracts.

The purpose of the module is to develop the broader understanding of law and to apply it to common eventualities on construction and building services projects.

This module aims to provide students with the contractual knowledge required to deal on behalf of all parties associated with construction contracts from inception to completion.

Economics

This module provides an introduction to economics and economic reasoning. It comprises the two main divisions of the subject – microeconomics and macroeconomics – as they apply in a typical mixed economy of both private and public sector decision-making. It provides the theoretical and conceptual foundation for property economics including valuation and for construction economics.

Although the focus is on tools, techniques and models, the later applied modules are anticipated both in the study materials and in the assessments by reference to the built environment context.

Economics of Property and Construction

This module covers the application of basic economic theory to the four dimensions of property and construction sector activity: the market dimension, the public policy dimension, the temporal dimension and the spatial dimension. It draws on conventional micro- and macro-economics but also on aspects of managerial economics and economic geography. It encourages recognition of the relevance of economic analysis to property-related issues and facilitates a command of the analytical skills used in property and construction economics.

Estimating and Tendering of Construction Projects

This module focuses on the key aspects of estimating and tendering of construction projects. The module covers the process of cost estimating and the production of key documentation for competitive tendering. It sets out the principles of estimating and tendering, in particular from the contractor's perspective.

It is primarily focused on the costing of construction projects and factors affecting costs of labour, plant and materials and also the profits / overheads mark-ups. The module also focuses on the use of information and communication technologies (ICT) in estimating and tendering and how this is developing in the construction industry.

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Estimating and Tendering of Construction Projects

Financial and Resource Management

This module seeks to explain how managers within organisations in the construction, land and estate management industries, in both the public and private sectors, seek to achieve organisational aims by effectively using financial and other resources. People management does feature in this module but the spotlight is on how managers may use non-human resources in the pursuit of corporate goals. The module covers the role of change throughout the organisation as a central theme especially in the sense of changing techniques and organisational objectives. Internal financial control and external financial reporting are distinguished from each other and the essentials of capital investment appraisal and financial decision making are explored.

Legal Studies

This module provides an introduction to the English legal system and covers the law of contract and the law of tort.

This module aims to:

- Explain the development and sources of English law and how the law is enforced;
- demonstrate how a valid contract can be formed; the importance of contract clauses; how a contract can be breached and how it can be discharged; the consequences of discharge;
- demonstrate the importance of the law of tort to the construction and property industry, with emphasis on: negligence, occupiers' liability, nuisance and trespass to land;
- establish an analytical approach to legal problem solving.

Measurement and Quantification of Construction Work

This module provides an understanding of the role of the quantity surveyor within the construction team during the tendering process. It focuses particularly on the role that the quantity surveyor plays in putting together pricing and tendering documentation and the uses for this documentation throughout a construction project. This module will develop key practical skills in quantifying various elements of construction work from drawings using accepted conventions and appropriate standard methods of measurement.

People and Organisational Management

This module explores the question of "what is management?" and seeks to distinguish it from leadership. It explains the role and function of management within organisations in the construction and the built environment. It also considers the role of change as a central theme as organisations seek to come to terms with issues that are constantly impacting, both positively and negatively, on the people, management and the structures of organisations.

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Project Modules (PRJ6PRO and PRJ6WR1/PRJ6WR2)

A project module is compulsory for all students, with the difference that only Apprenticeship Scheme students study the Workbased Research Project module (PRJ6WR1/PRJ6WR2), and only non-apprenticeship students study the Undergraduate Project module (PRJ6PRO).

Project

This module (PRJ6PRO) is for non-apprenticeship students only, and the aim of this 40 credit module is to enable the student to develop specific research skills and techniques so that they can interrogate issues and situations and resolve problems related to their area of interest.

The module gives students an opportunity to apply their skills and knowledge to the resolution of an industry based problem during a prolonged period of independent study. It is anticipated that the module's outcomes will directly enhance career and educational progression by equipping students with relevant analytical skills and techniques to investigate organisational and industry issues.

Workbased Research Project

This module (PRJ6WR1/PRJ6WR2) is for Apprenticeship Scheme students only, and requires students to develop their research skills within the context of the built environment, their chosen career path and the workplace. The students are required to relate the practicalities of the case study to the academic concepts and ideas that underpin it; providing them with the vehicle to conduct a self-directed study.

This module also requires students to reflect on the knowledge and skills that they have developed during their programme of studies and requires them to demonstrate their development of their professional competence with reference to the appropriate professional framework.

Delivery Structure

Elective Modules.

Commercial Management in Construction

This module explores a range of strategic and operational issues in commercial management of construction experienced by contracting organisations. The dynamic business environment within which contracting organisations operate means that they need to be astute when competing/bidding for work and seeking to sustain their turnover and profit margin whilst enhancing stakeholder value. This module therefore provides an opportunity to develop the knowledge, understanding and skills required to operate in a competitive commercial environment.

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Commercial Property Management

The aims of this module are:

- to examine the role that commercial property plays for both an investor and an occupier;
- to examine the management strategies of property owners and how the commercial property manager helps develop and implement these strategies;
- to examine the breadth of responsibilities of the professional commercial property manager at both a strategic and a fundamental level.

Construction Project Management

This module explores a range of strategic and operational issues in construction project management. The construction project manager (CPM) plays a key role at all stages of the construction process for diverse client organisations that operate in a dynamic environment. The fundamental need for clients to enhance value in their construction projects and, increasingly to also engage stakeholders, means that the CPM has a critical contribution to make. This module therefore provides an opportunity to develop the knowledge, understanding and skills required to operate as a CPM in the context of the property and construction industries.

International Construction

This module focuses on the global construction arena. It comprises the following topics; health and safety, culture, business, resource management, and constructing in tropical climates. The module will enhance the students ability to recognise, analyse and develop many aspects of international construction and apply this in the international construction arena.

Maintenance Management

This module aims to:

- provide an overview of the way that maintenance organisations are structured and the needs of that structure to manage the maintenance of buildings;
- develop existing knowledge in building construction, services and materials focusing on the maintenance and the management of buildings in the global environment;
- integrate sustainable technologies and systems within the maintenance of buildings;
- provide a foundation for the maintenance of the historic environment together with conserving that environment for future generations in the international arena.

Learning, Teaching and Assessment

Study support: Induction module

All students are expected to complete the non-credit bearing Induction Module before the programme commences. The Induction Module is designed to equip students with the skills they need to study at UCEM. The purpose of the Induction Module is to;

- begin to prepare the student for studying with UCEM;
- enable UCEM to identify further ways in which the Institution may be able to facilitate and support the student as they progress through their learning journey.

There is a variety of resources which will help the student to get started. These include tutorials regarding how to use the VLE (Virtual Learning Environment), the VitalSource Bookshelf, the UCEM e-Library and information regarding how to join a webinar. All of this information is key to having a successful start to supported online learning with UCEM.

There is a non-compulsory, 'Writing in Your Own Words' e-learning resource and associated quiz. This resource aims to provide the student with relevant examples of referencing, and a clear understanding of what plagiarism is and how to avoid it. Additionally, the 'Readiness for Learning' questionnaire will prompt the student to consider the practicalities surrounding their studies. This element of the Induction Module is non-compulsory, but designed to provide feedback to the institution, in order to identify further ways in which UCEM may be able to facilitate and support the student as they progress. Further information relating to study skills support is also included.

Student learning support:

The programme is delivered via UCEM's Virtual Learning Environment (VLE) and academic teaching and support is provided online giving student's access to UCEM tutors and other students worldwide.

UCEM's 'Student Central' function will act as the main point of contact for students throughout the duration of their programme. In addition, the programme has a dedicated programme administrator.

International students will be supported through international case studies and guest speakers from the region will be invited to UCEM's webinar delivery.

Special Needs support is provided via a dedicated Disability and Wellbeing team at UCEM. The Learning and Teaching Enhancement Team work across faculties and departments to promote student retention, achievement and success. This work is achieved through a multi-faceted approach, which consists of:

- identifying students who are at risk of deferring, suspending and/or with-drawing at specific points in the academic calendar,
- working with academics to identify ways in which student success can be further facilitated,
- supporting both students and academic staff through timely interventions which may include creating support materials and providing academic study skills support through academic skills surgeries.

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Student learning support:

Relevant research is also carried out to inform proactive interventions, and to develop policy and practice.

English language support:

English is the common language for all programmes. It is appreciated that some students will need additional support. For those students whose first language is not English, or those students who wish to develop their English Language skills, additional support is provided through online resources on the VLE in the resource 'Developing Academic Writing' within the Study Skills area. The resource includes topics such as sentence structure, writing essays and guidance for writing, aimed at developing students' study skills.

Personal and professional development:

Students are undertaking vocational programmes that are intrinsically linked to the accrediting professional bodies. Students are encouraged and supported to understand the need for the recognition of these bodies and guided as to how to meet the professional membership requirements. More generally, UCEM has a dedicated careers advisor to ensure students have appropriate access to careers education, information, advice and guidance.

Programme Specific support:

Each programme has a Programme Leader, Module Leaders and Module Tutors to support the students throughout their time with the programme. The UCEM staff are accessible during normal UK working hours, during which they also monitor the 24/7 forums asynchronously and provide encouragement, assistance and necessary tutor and student feedback services. Access to the UCEM e-Library is on a 24/7 basis and UCEM has a full time librarian during normal UK working hours.

Learning & Teaching Strategy

Knowledge and understanding

The Learning, Teaching & Assessment (TLA) Strategy for the programme is guided by and consistent with the institution-wide LTA Strategy. The approach adopted is learner-centred but guided, as appropriate to supported online learning.

The acquisition of knowledge in the modules of the programme is promoted through the multi-media learning materials provided and is enhanced by synchronous and asynchronous engagement with the students utilising e-learning tools, such as webinars, as appropriate.

Learning materials include formative self-assessment questions with follow-up feedback. Detailed feedback is also given on tutor-assessed work. Progressively through the programme, students are encouraged to undertake independent study and enquiry to broaden their knowledge and understanding of the subject.

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Learning & Teaching Strategy

Self-directed learning and problem-solving, combined with supervisor consultation in the Level 6 Project module and Workbased Research Project module, further enhances knowledge and understanding.

Intellectual skills

These skills are developed through interaction with multimedia learning resources, and through undertaking student-centred learning activities. This approach is tutor-guided, and formative feedback on these skills is given appropriate emphasis.

Coursework varies across the modules but collectively covers skills 1-7.

The Level 6 research Project and Workbased Research Project process further embraces the cognitive skills.

Subject practical skills

The tutorial team has extensive professional experience and contacts, and the learning resources have been developed with practical and professional relevance in mind. Skills 1-3 and 5 are developed collectively in the various coursework, examinations and the multi-media learning and teaching resources.

Skill 4 is mainly developed in the Level 6 Construction Law module.

Skills 6 and 7 are mainly developed through the Level 6 research Project and Workbased Research Project modules.

Key/Transferable skills

The Induction Module sets out the importance of these skills at the beginning of the programme. The discussion of ideas and issues through the UCEM VLE forums, supplemented by problem solving exercises and coursework, provides the means to develop the skills further.

Assessment Strategy

Knowledge and understanding

Knowledge and understanding are tested through a combination of coursework and unseen examinations. The Level 6 Project is a piece of individual research work. All summative assessment is subject to rigorous moderation policies.

Intellectual skills

The format of the coursework and examination questions will include practical situations and scenarios requiring logical and critical thought, analysis and problem-solving. More straightforward problems will be used at Level 4, but at Levels 5 and 6 students will be required to transfer the knowledge from previous modules and apply it to solve particular problems.

Quantitative analysis skills are developed in economics, management, measurement and quantification and estimating modules, whilst essay writing and report writing are practiced and assessed within a number of modules.

The Project (PRJ6PRO) and Workbased Research Project (PRJ6WR1/PRJ6WR2) modules develop time-management, independent research and written communication skills.

Subject practical skills

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Assessment Strategy

Relevant assessment of these skills is undertaken mainly through module coursework and through unseen examination.

Skills 6 and 7 are also assessed through the Project and Workbased Research Project.

Key/Transferable skills

Formative self-assessment such as quizzes and learning activities are used to collectively test the skills. Coursework provides the main means of assessing how the introduction and development of these skills is progressing.

The Level 6 Project (PRJ6PRO) and Workbased Research Project (PRJ6WR1/PRJ6WR2) modules provide the main means to ascertain maturing in some of these areas, at depth, within a focused topic.

Assessment Diet.

The assessment for the institution's supported online learning BSc programmes consist of a variety of assessment modes:

- assessed coursework (in essay, report, problem or short question format),
- written examination papers,
- project submissions,
- work-based learning portfolios and other e-mediated submissions,
- Computer marked assessments (CMAs).

The exact combinations of assessment will vary across programmes and from module to module.

Level 4 (Certificate of Higher Education) 120 credits

BSc (Hons) Quantity Surveying	Assessment Pattern	CATS credits per module
Level 1	1 coursework 1 final assessment (CMA or second coursework)	20

Level 5 (Diploma in Higher Education) 120 credits

BSc (Hons) Quantity Surveying	Assessment Pattern	CATS credits per module
Level 2	1 coursework 1 final assessment (examination or second coursework)	20

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Level 6 (Honours Degree) 120 credits

BSc (Hons) Quantity Surveying	Assessment Pattern	CATS credits per module
Level 3	1 coursework 1 final assessment (examination or second coursework)	20
Level 3	Project: (for non-apprenticeship students) 1 coursework 1 project report	40
Level 3	Workbased Research Project: (for apprenticeship students) 1 presentation 1 reflective summary 1 project report	40