UNIVERSITY COLLEGE
OF ESTATE MANAGEMENT

BSc (Hons) Building Control

Programme Specification

Academic year 2019 - 2020

Reference:

Version: V6.00

Status: Final

Date: 17/02/2020

Summary Programme Details

Final Award	
Award:	BSc (Hons)
Title of (final) Programme:	Building Control
Credit points:	360
Level of award (QAA FHEQ):	6
Intermediate award(s)	
Intermediate award 1:	BSc Building Control
	Ordinary Degree
Credit points:	300
Level of award (QAA FHEQ):	6
Intermediate award 2:	Diploma of Higher Education Building Control
Credit points:	240
Level of award (QAA FHEQ):	5
Intermediate award 3:	Certificate of Higher Education Construction Studies
Credit points:	120
Level of award (QAA FHEQ):	4
Validation	
Validating institution:	University College of Estate Management (UCEM)
Date of last validation:	April 2019
Date of next periodic review:	September 2024
Professional accreditation/recognition	
Accreditation/recognising body:	Royal Institution of Chartered Surveyors (RICS)
Details of the accreditation/recognition:	Accreditation pending
Date of last programme accreditation/recognition:	N/A
Date of next periodic review:	TBC
Accreditation/recognising body:	Chartered Institute of Building (CIOB)
Details of the accreditation/recognition:	Accreditation pending
Date of last programme accreditation/recognition:	N/A
Date of next periodic review:	TBC
Accreditation/recognising body:	Chartered Association of Building Engineers (CABE)

Details of the accreditation/recognition:	Accreditation pending
Date of last programme accreditation/recognition:	N/A
Date of next periodic review:	TBC
Miscellaneous	
QAA benchmark statement:	The Frameworks for Higher Education Qualifications of UK Degree-Awarding Bodies (click here). QAA Benchmark Statement Land, Construction Real Estate and Surveying (Oct 2016).
Date of commencement of first delivery:	Autumn 2019
Duration:	4 years (non-apprenticeship route) or 54 months (apprenticeship route)
Maximum period of registration:	12 years
UCAS / HECoS code:	K231 / 100120
Programme code:	UBSCBCS
Other coding as required:	N/A

Programme Overview

Rationale

This programme provides students with a rigorous understanding of the principles and practice involved in the discipline of building control, up to Bachelor's degree standard.

The programme provides the academic underpinning necessary to prepare students for a career as a Chartered Building Control Surveyor.

This programme is primarily designed for people with an interest in building technology, building standards, fire safety, inclusive environments and energy conservation, who wish to further their career with a degree and gain professional membership of one of the accrediting organisations. Many of our students often already work within the built environment sector. Such employment is not mandatory but is desirable.

This academic programme also serves students studying as apprentices on the Building Control Surveyor Apprenticeship Programme.

Entry requirements

Entrants to this programme normally are required to have:

- obtained 96 UCAS tariff points 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.

Entry requirements

- 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.
- 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 certificated learning (RPCL) 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 the Code of Practice: Admissions and Recognition of Prior Learning (click here). 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.

Recognition of prior certificated learning (RPCL) or recognition of prior experiential learning (RPEL) routes into the Programme
Please note that no module exemption will be offered before the academic year 2021/22.

Programme progression
For details of progression arrangements, please view the Undergraduate Programme Assessment, Progression and Award Regulations, and the Academic and General Regulations for Students.

Award Regulations
For details of award arrangements, please view the Undergraduate Programme Assessment, Progression and Award Regulations, and the Academic and General Regulations for Students.

Career prospects
The following provide a range of the types of careers that students may pursue after completing this programme: • Local authority building control surveyor, working with architects, engineers and contractors to ensure building designs meet the required standards and ensuring these standards are adhered to during the course of construction. • Private sector building control surveyor, working with architects, engineers and contractors to ensure building designs meet the required standards and ensuring these standards are adhered to during the course of construction. • Advising on specific aspects of the building regulations, such as advice on energy conservation, fire safety management strategies or accessibility. • Work in relation to safety of sports grounds, issuing safety certificates and liaison with police, fire and ambulance services. • Similar work in respect of entertainment licences, safety at open air events, safety in cinemas and theatres, and other buildings and structures used for public events. Building control surveyors work in both the private and public sectors in many countries, administering the relevant legislation and building codes.

Programme Aims

Programme aims
The UCEM BSc (Hons) Building Control aims to provide students with a thorough understanding of the principles and practices of building control, up to first degree level standard. The programme reflects the academic underpinning necessary to prepare students for a career as a Chartered Building Control Surveyor with RICS, or other UK and international professional bodies, and provides students with a progressive development of knowledge and skills over three levels of study: levels 4, 5 and 6. 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 in a building control, or related role, and prepare for advancement to postgraduate level of study. Students will develop a broad range of skills which are transferable across other industries. For apprenticeship students the programme also includes the End Point Assessment which is the culmination of the Building Control Surveyor Apprenticeship Programme.

Market and internationalisation
This programme is aimed at UK and international students. While UK law, regulatory controls and practice are at the core of the study materials, the programme aims to contextualise within an international framework. Where possible, comparative examples are used to highlight the difference in regional approaches, and thus foster further understanding of the principles and applications introduced.

Learning Outcomes

	Level 4	Relevant module codes
A – Knowledge and understanding	A4.1 Recognise the basic principles that underpin the theory and practice of building control.	4BLTENV TEC4BSC
	A4.2 Outline the ethical, legal and regulatory frameworks and systems impacting on the design, construction and occupancy of buildings.	4LAWBEV/ LAW4LST TEC4BSC 4BLTENV 4DESSTR
	A4.3 Relate environment and sustainability issues to the design, construction and occupancy of buildings.	TEC4BSC 4BLTENV
	A4.4 Explain the basic principles of the technology of construction.	4DIGTEC TEC4BSC 4DESSTR
	A4.5 Identify the benefits and drawbacks of digital tools used by building surveyors.	4DIGTEC TEC4BSC
B – Intellectual skills	B4.1 Describe the impact of sustainability on buildings and construction.	TEC4BSC 4BLTENV
	B4.2 Demonstrate the ability to write in a range of formats	4BLTENV MAN4POM ECO4ECO 4LAWBEV/ LAW4LST
	B4.3 Develop an awareness and ability to evaluate and appraise information.	4LAWBEV/ LAW4LST TEC4BSC 4DESSTR
	C4.1 Recognise the uses of technology in the construction industry.	4DIGTEC

C – Subject practical skills	C4.2 Illustrate the development of manual and computer-based drawing skills.	4BLTENV 4DIGTEC TEC4BSC
	C4.3 Understand areas of legislation which affect the built environment.	TEC4BSC 4DESSTR
D – Key / Transferable skills	D4.1 Record the development and planning of individual learning.	4BLTENV 4LAWBEV/ LAW4LST
	D4.2 Demonstrate the development of written, numeric and communication skills.	4BLTENV MAN4POM ECO4ECO 4LAWBEV/ LAW4LST TEC4BSC
	D4.3 Demonstrate various methods of communicating information.	4BLTENV ECO4ECO TEC4BSC 4DIGTEC
	D4.4 Identify and solve problems within guided environments.	TEC4BSC 4LAWBEV/ LAW4LST 4DESSTR
	D4.5 Develop a knowledge and understanding of the principles of sustainability.	4BLTENV TEC4BSC

	Level 5	Relevant module codes
A – Knowledge and understanding	A5.1 Analyse the legal and regulatory frameworks and systems impacting on the design, construction and occupancy of buildings.	5CONTEC 5INTPR1 5INTPR2
	A5.2 Distinguish the theories and principles used in construction, relevant to building control practice.	5ENVSCI 5CONTEC 5INTPR1 5INTPR2

	A5.3 Appraise the requirements of building control in different circumstances.	5BUICON 5INTPR1 5INTPR2
	A5.4 Evaluate the effects of sustainable approaches upon the built environment and construction industry.	5CONTEC 5PLACON 5ENVSCI 5INTPR1 5INTPR2 5BUICON
	A5.5 Examine the principles of building technologies and appraise their application in different circumstances.	5ENVSCI 5CONTEC 5INTPR1 5INTPR2
	A5.6 Appraise buildings in relation to inclusivity and relevant legislation and appreciate the wider aim of society living in dignity with equality.	5INTPR1 5INTPR2 5CONTEC
B – Intellectual skills	B5.1 Integrate and transfer appropriate knowledge, skills and learning from level 4 to the range of subject areas covered at level 5.	5CONTEC 5ENVSCI 5INTPR1 5INTPR2
	B5.2 Interpret legal issues and put these into the context of a range of different circumstances.	5PLACON 5BUICON 5INTPR1 5INTPR2
	B5.3 Demonstrate the ability to plan, conduct and write a report on an independent project.	5CONTEC 5INTPR1 5INTPR2 5PLACON 5BUICON
C – Subject practical skills	C5.1 Evaluate the appropriateness of different approaches to solving a range of problems arising in a professional environment, both technical and ethical.	5PLACON 5INTPR1 5INTPR2 5BUICON

D – Key / Transferable skills	C5.2 Analyse the influence of the wider environment on the implementation of sustainable features in buildings.	5INTPR1 5INTPR2 5ENVSCI
	D5.1 Communicate and collaborate effectively using a range of media.	5PLACON 5INTPR1 5INTPR2
	D5.2 Organise and manage study workflow independently and efficiently.	5INTPR1 5INTPR2 5PLACON 5ENVSCI 5CONTEC 5BUICON
	D5.3 Solve problems and make decisions through reflective thinking and analysis.	5INTPR1 5INTPR2
	D5.4 Identify where and how sustainable principles can be adopted thereby considering wider sustainable opportunities and constraints.	5CONTEC 5PLACON 5ENVSCI 5INTPR1 5INTPR2

	Level 6	Relevant modules
A – Knowledge and understanding	A6.1 Critically appraise the wider business environment including the political, economic, legal, social, technological, cultural, ethical and global influences under which construction and client organisations operate and ability to integrate this understanding into coursework.	6BUIPAT 6SUMAPR 6FIRSAF 6PUBSAF 6BCSEPA
	A6.2 Critically assess, analyse and apply building control surveying skillsets through individual work.	6BUIPAT 6SUMAPR 6FIRSAF 6PUBSAF 6PROJT1 6BCSEPA

	A6.3	Critically evaluate theories and techniques common to building control and the wider built environment.	6BUIPAT 6SUMAPR 6FIRSAF 6PUBSAF 6PROJT1 6CASPRJ 6BCSEPA
	A6.4	Synthesise the methods required to undertake a research project.	6PROJT1 6BUIPAT 6CASPRJ
	A6.5	Demonstrate a critical appreciation of the uncertainties, ambiguities and limits of knowledge and practice in the field of building control.	6BUIPAT 6SUMAPR 6FIRSAF 6PUBSAF 6CASPR 6BCSEPA
B – Intellectual skills	B6.1	Critically assess a range of resources including contemporary sources, draw on evidence to reflect and evaluate competing explanations to provide appropriate conclusions.	6BUIPAT 6SUMAPR 6FIRSAF 6PUBSAF 6PROJT1 6CASPRJ 6BCSEPA
	B6.2	Critically analyse and solve complex problems using appropriate models and methods.	6BUIPAT 6SUMAPR 6FIRSAF 6PUBSAF 6BCSEPA
	B6.3	Critically analyse and transfer appropriate knowledge and methods from one topic to another within or between modules.	6BUIPAT 6SUMAPR 6FIRSAF 6PUBSAF 6BCSEPA

	B6.4 Select and apply appropriate techniques of research, analysis and appraisal.	6PROJT1 6CASPRJ
C – Subject practical skills	C6.1 Acquire, analyse and critically evaluate data and judge its relevance and validity to a range of building control situations.	6BUIPAT 6SUMAPR 6FIRSAF 6PUBSAF 6BCSEPA
	C6.2 Critically assess the validity and rigour of a range of published research and assess its relevance to further research.	6PROJT1 6SUMAPR 6CASPRJ 6BCSEPA
	C6.3 Apply technology and decision analysis tools to solve complex problems.	6PROJT1 6BUIPAT 6SUMAPR 6FIRSAF 6PUBSAF 6CASPRJ 6BCSEPA
	C6.4 Critique the application of ethics and professional standards in building control.	6PROJT1 6CASRJP 6BCSEPA
D – Key / Transferable skills	D6.1 Communicate effectively and professionally in a range of mediums to both industry and academic stakeholders.	6BUIPAT 6SUMAPR 6FIRSAF 6PUBSAF 6PROJT1 6CASPRJ 6BCSEPA
	D6.2 Demonstrate the ability to identify, use, interrogate, interpret and critically evaluate a range of sources of information.	6BUIPAT 6SUMAPR 6FIRSAF 6PUBSAF 6PROJT1 6CASPRJ

		6BCSEPA
	D6.3 Demonstrate competence in applying learning experience to practical building control scenarios.	6BUIPAT 6SUMAPR 6FIRSAF 6PUBSAF 6BCSEPA
	D6.4 Have developed the attitudes and applied skills to make informed decisions that reflect care, concern and responsibility for themselves, for others and the environment, now and in the future.	6SUMAPR 6FIRSAF 6PUBSAF 6BCSEPA

Programme Structure

Level 4

Students commencing in autumn 2019

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*
4DESSTR	Design and Structures**	4	20	Core
4DIGTEC	Digital Technologies**	4	20	Core

Students commencing in spring 2020

Code	Module	Level	Credits	Core / Elective
ECO4ECO	Economics*	4	20	Core*
TEC4BSC	Building, Environment, Technology and Simple Construction*	4	20	Core*
4BLTENV	Introduction to the Built Environment**	4	20	Core
4DIGTEC	Digital Technologies**	4	20	Core
4DESSTR	Design and Structures**	4	20	Core
4LAWBEV	Law for the Built Environment**	4	20	Core

Students commencing after autumn 2020

Code	Module	Level	Credits	Core/Elective
4BLTENV	Introduction to the Built Environment**	4	20	Core
4DIGTEC	Digital Technologies**	4	20	Core
4REGFMK	Introduction to Regulatory Frameworks**	4	20	Core
4CONTEC	Construction Technology 1**	4	20	Core
4DESSTR	Design and Structures**	4	20	Core
4LAWBEV	Law for the Built Environment**	4	20	Core

Levels 5 and 6

Code	Module	Level	Credits	Core /Elective
5ENVSCI	Environmental Science	5	20	Core
5CONTEC	Construction Technology 2	5	20	Core
5BUICON	Building Control	5	20	Core
5PLACON	Planning and Conservation	5	20	Core
5INTPR1	Integrated Project 1	5	20	Core
5INTPR2	Integrated Project 2	5	20	Core
6BUIPAT	Building Pathology	6	20	Core
6FIRSAF	Fire Safety	6	20	Core
6SUMAPR	Sustainable Management of Property	6	20	Core
6PUBSAF	Public Safety in Buildings	6	20	Core
6PROJT1	Project	6	40	Core for non-apprenticeship students only
6CASPRJ	Case Study Project	6	20	Core for Apprenticeship students only
6BCSEPA	Building Control End Point Assessment***	6	20	Core for apprenticeship students only

* These modules will not be offered from 2020/21

** These modules will not be offered until 2020/21. They will be core for students starting from 2020/21.

*** This module may only be taken when the full gateway conditions, as specified in the Assessment Plan for the Building Control Surveyor Degree Apprenticeship Standard, have been met, which includes successful completion of all other modules (i.e. 340 credits achieved).

Delivery Structure

Autumn 2019 entry

Year 1, Autumn 2019 semester

Module	Level
Legal Studies	4
People and Organisational Management	4

Year 1, Spring 2020 semester

Module	Level
Economics	4
Building, Environment, Technology and Simple Construction	4

Year 2, Autumn 2020 semester

Module	Block	Level
Design and Structures	A	4
Digital Technologies	B	4

Year 2, Spring 2021 semester

Module	Block	Level
Environmental Science	A	5
Construction Technology 2	B	5

Spring 2020 entry

Year 1, Spring 2020 semester

Module	Level
Economics	4
Building, Environment, Technology and Simple Construction	4

Year 1, Autumn 2020 semester

Module	Block	Level
Introduction to the Built Environment	A	4
Digital Technologies	B	4

Year 2, Spring 2021 semester

Module	Block	Level
Environmental Science	A	5
Construction Technology 2	B	5

Year 2, Autumn 2021 semester

Module	Block	Level
Design and Structures	A	4
Law for the Built Environment	B	4

Year 3, Semester 1

Module	Block	Level
Building Control	A	5
Planning and Conservation	B	5

Year 3, Semester 2

Module	Block	Level
Integrated Project 1	A	5

Module	Block	Level
Integrated Project 2	B	5

Year 4 for Non apprenticeship students

Year 4, Semester 1

Module	Block	Level
Building Pathology	A	6
Fire Safety	B	6
Project	A & B	6

Year 4, Semester 2

Module	Block	Level
Sustainable Management of Property	A	6
Public Safety in Buildings	B	6
Project	A & B	6

Year 4 onwards for Apprenticeship students

Year 4, Semester 1

Module	Block	Level
Building Pathology	A	6
Fire Safety	B	6
Case Study Project	A & B	6

Year 4, Semester 2

Module	Block	Level
Sustainable Management of Property	A	6
Building Safety	B	6
Case Study Project	A & B	6

Year 5, Semester 1

Module	Block	Level
Building Control EPA	A & B	6

Module Summaries
Core Modules

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.

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.

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.

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.

Introduction to the Built Environment
This module covers the core skills needed to succeed when studying in Higher Education, and when progressing toward accreditation with a Professional, Statutory and Regulatory Body (PSRB). This module provides an introduction to the different roles within the surveying, real estate and architectural technology professions. The main emphasis of the learning focuses on the student's ability to communicate information in clear and concise terms.

Digital Technologies
The Digital Technologies module takes the R.A.T. model (Replacement, Amplification, Transformation) (Hughes, 2005) and applies it to the use of technology specific to surveying, construction management and architectural technology professions. This enables the student to begin defining what role technology plays in their studies and in the workplace, and to evaluate the worth of each piece for that digital world.

Design and Structures
This module covers key aspects of the theory and practice of design for buildings and building structures. It applies building technology theory and practice to straightforward design situations. The main study topics include the nature and relevance of design, design parameters, information and data, site analysis, spatial considerations, technology of fabric and services, building aesthetics. In addition, structural elements of design are introduced, looking at the theory and principles of structural calculation, and the requirements for building approval.

Law for the Built Environment
This module enables the student to develop a basic understanding of aspects of the law in as much as they relate to the property and construction sectors in England and Wales as well as in Scotland. This will include an understanding of terminology used and the relevant principles of tort (delict in Scotland) and contract law. This module provides the underpinning legal knowledge for further legal studies later in the programme.

Environmental Science
Environmental Science can cover many academic subjects related to the study of the environment: this module focuses on the understanding of how a building is affected by its environment and its occupants, and vice versa, with regard to how it affects the environment and people living in and around it. That relationship is a complex one, which is addressed here by using ‘human comfort’ as the overarching theme, and breaking that down into individual factors of heat, air, moisture, sound and light. These studies are designed to give some insight into the interaction between people, policies and perceptions regarding the natural and built environments.

Construction Technology 2
This module covers the construction technology and environmental control of long span and high rise framed structures. It aims to enable the student to respond effectively and professionally to the following series of questions: • What is the purpose of a building? • What statutory & voluntary regulation applies? • What are appropriate building performance criteria? • How is the building constructed? • Why is it constructed that way?

Building Control

This module introduces building control students to one of the core competencies within the BSc Building Control Programme. The module examines the requirements for site inspections of building work to ensure that the work carried out meets relevant performance standards. Students will examine the Building Act 1984 or relevant equivalent in the country the student is based, together with the regulations or guidance which stem from this. Students will apply the standards and regulations to different scenarios, consider the phases of compliance and examine the mechanisms for dealing with non-compliant work.

Planning and Conservation

This module provides a brief introduction to the evolution of buildings from the 18th to the 21st century. It discusses the UK planning system and why planning is important in promoting and maintaining the 'triple bottom line sustainability' of the built environment. It comprises the dating of buildings through the evolution of materials and architectural styles, planning theory, policy and plan making, the regulations affecting development, and contemporary planning issues. The overall emphasis is on a practical applied approach to the subject.

Integrated Project 1

This module enables students to consolidate their knowledge and skills gained from previous studies, and to work collaboratively in multi-disciplinary groups, within a project scenario.

The scenario will focus on preparation of a feasibility study for a client which provides reasoned advice on the potential for reconstruction or adaption of an existing commercial or industrial property for a new use. It provides the context for the further development of the study into Integrated Project 2.

Whilst Building Surveying, Architectural Design Technology and Building Control students will have studied many of the same modules in their respective programmes, the scenario presents opportunities to demonstrate how each discipline can contribute to different elements of a scheme design and for students to appreciate the strengths of each other's disciplines.

Critically, this module provides an opportunity for elements of collaboration and personal reflection.

Integrated Project 2

This module enables students to consolidate their knowledge and skills gained from the previous module, working collaboratively in multi-disciplinary groups, within a project scenario.

The context of the project was set in the Integrated Project 1 module whereby students undertook due diligence work for a commercial or industrial building and provided feasibility advice to a client on the options available in terms of reconstruction or adaption of the property for a new use.

This second stage of the project is to identify procedures required for the adaption and refurbishment of the building based on a client's brief and to produce a scheme design for this and other associated data and documentation.

Integrated Project 2
Whilst Building Surveying, Architectural Design Technology and Building Control students will have studied many of the same modules in their respective programmes, the scenario presents opportunities to demonstrate how each discipline can contribute to different elements of a scheme design and for students to appreciate the strengths of each other's disciplines. Critically, this module provides an opportunity for elements of collaboration and personal self-reflection.

Building Pathology
This module is concerned with the pathology of buildings. It will develop students' ability to effectively diagnose and evaluate a range of commonly encountered building defects through a process of inspection, testing, survey and analysis.

Fire Safety
The module draws on students' learning in earlier construction technology and law modules and Building Control module studied at level 5. Students study the combustion process, the nature of fire, relevant regulations and standards, methods of protection of buildings and occupiers, and means of escape, as well as looking at events that have shaped the legislation and controls.

Sustainable Management of Property
This module aims to provide students with an appreciation of the essential link between the management of property – in terms of both utility and investment – and the business objectives of the client organisation. It considers the broader context of property management, in relation to clients, sustainability, legislation and the lifecycle of property. It also examines the nature of data required for an asset management plan and the collection of this.

Public Safety in Buildings
A core skill for building control surveyors is the ability to assess the use of a building or venue for public events to ensure the safety of those attending. This module looks at safety in buildings and venues such as sports grounds, licenced premises and concert venues. Students will examine the legislation and guidance around the safety of buildings and venues and explore the application of these in different scenarios. They will use knowledge and skills already gained in earlier modules relating to construction technology, law, building control and fire safety.

Project
This module requires students to develop their research skills whilst providing them with a vehicle to conduct a self-directed investigation and research that reflects their studies in the relevant Programme. The topics selected are expected to reflect the issues that concern the built environment and /or the businesses and organisations that operate within it.

Case Study Project
This module requires students to develop their research skills whilst providing them with a vehicle to present their self-directed investigation and research into a Building Control case study. The students will reflect on the knowledge skills and behaviours that they have developed during their programme and from their experience and training in the workplace, recorded in their Logbook, with reference to the Building Control Surveyor Apprenticeship Standard. The purpose of this module is to take one of the projects undertaken in the workplace and recorded in their Logbook, and then to expand and investigate it further as a case study research project.

Building Control End Point Assessment
This module is the final element of the student's apprenticeship journey. Having successfully achieved all mandatory elements of the apprenticeship programme to date, as signed off by the employer and UCEM, students will be enrolled on this unit in order to prepare for, and undertake, the government-approved End-Point Assessment (EPA). Students will collate and present evidence in a variety of ways to demonstrate their achievement of the Standard's Knowledge, Skills and Behaviours (KSBs) competencies and how these have been developed and applied throughout the programme. Students will be required to attend a panel interview led by an independent assessor and an industry expert.

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 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, ithe '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' 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.

The academic team will guide and support students' learning. Furthermore, all students who do not engage with initial assessment or the VLE will receive additional support from the Programme Team. Other UCEM administrative teams provide support for assessments and technical issues including ICT. Each student, wherever their location, will have access to a wealth of library and online materials to support their studies. (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 with 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.

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 UCEM 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'. The resource includes topics such as sentence structure, writing essays and guidance aimed at developing students' study skills.

Personal and professional development:

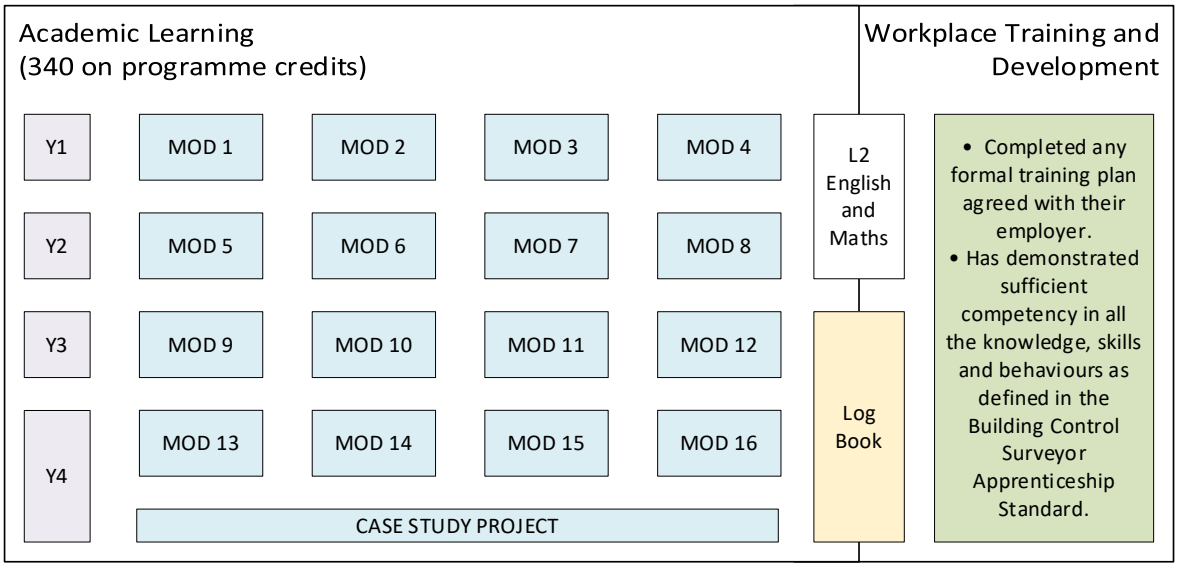
Students are undertaking vocational programmes that are intrinsically linked to the accrediting professional bodies. Students are encouraged and supported to understand the need for the recognition of these bodies and guided as to how to meet the professional membership requirements. More generally,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

Apprenticeship Students

Apprenticeship students are undertaking this degree as part of the Building Control Surveyor Apprenticeship programme. The aim of which is all about personal and

Personal and professional development:

professional development and intrinsically linked to career progression. As per the diagram below the overall Building Control Surveyor Apprenticeship programme contains both workplace training and development and the degree. The Building Control End Point Assessment module presents and integrated end point assessment for the Apprenticeship and the final 20 credits for the degree.



Completion of above a requirement of passing through the Gateway to the final module/ EPA

Employer confirms apprentice ready for EPA

Y4.5 BUILDING CONTROL EPA

or

Month					
1-12	13-24	25-36	37-48	49	50-54
Development of the required knowledge, skills and behaviours in the workplace				Gateway Review	Integrated EPA (20 credits) Plan Evaluation Report Exam Panel Interview supported by Logbook
Agreed training plan		Agreed training and completion of log book			
Completion BSc (Hons) Building Control					
4 x 20 credit modules	4 x 20 credit modules	4 x 20 credit modules	3 x 20 credit modules + 20 credit Case study module (running year long)		
Completion of L2 maths/English qualifications (if required)					

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

Learning & Teaching Strategy
Academic year 2019-20 is a transition year between UCEM's current and future delivery approaches. The modules that students undertake in 19/20 autumn and spring are delivered in the current concurrent delivery model which are delivered over the entirety of the semester. Students will study two 20 credit modules alongside each other. From 2020-21 all students will undertake modules delivered in a linear pattern. Students complete two nine-week 20 credit modules within a semester, but a single module at a time. *Knowledge and understanding* The teaching, learning and assessment strategy for the programme is guided by the UCEM-wide Learning, Teaching and Assessment (LTA) Strategy. The approach adopted is learner-centred, but supported and guided, as appropriate to supported online learning. Students can acquire knowledge in the modules through online learning resources available to them, including customised text material, core texts, web-based material and media for communication. These are complemented by teaching sessions using various medias, for enhancement of the learning experience. Students are encouraged to research beyond the material provided, and undertake self-directed learning throughout their programme, increasing this towards the final stage – such as the Project module – with self-directed learning and problem-solving, combined with Supervisor guidance. *Intellectual skills* Learning and teaching methods are applied to enable the development of cognitive skills. These skills are aligned to those used by building control surveyors, but also meet the needs of working in other industries. These skills are developed through interaction with multi-media learning resources, self-directed learning and via participation in student-centred learning activities. The approach to assessment is tutor-guided and formative feedback on these skills is given appropriate emphasis. *Subject practical skills* The subject themes of the programme introduce the theoretical foundations at level 4, and develop them in an increasingly applied and specialised context through levels 5 and 6. Examples of the subjects specific to building control surveying include the Construction Technology Modules at levels 4 and 5, Building Control at level 5 and Public Safety in Buildings and Fire Safety at Level 6. The Law for the Built Environment module in level 4 provides a general legal background to law which is then used at Levels 5 and 6 to develop more specialist, core legal knowledge in the modules Fire Safety, Building Control and Public Safety in Buildings. Building Control students work collaboratively with students on other programmes (Building Surveying and Architectural Design Technology) at level 5 in the two Integrated Project modules, focusing on the elements of the collaborative project work which are relevant to

Learning & Teaching Strategy

their discipline but gaining insight into the work of other professionals in a project environment.

The refurbishment, alteration, maintenance and restoration of properties is developed in modules at levels 5 and 6, in particular by the Integrated Project modules and Planning and Conservation at level 5 and Building Pathology and Sustainable Management of Property at level 6. These modules expand on the general construction content taught at level 4 in relation to low rise domestic construction and at stage two in relation to framed construction and more complex structures.

Building Control students study modules specifically designed for this pathway and which provide key skills. Building Control at level 5 and Fire Safety and Public Safety in Buildings at level 6.

A project-based research module is compulsory for all students. Non-apprenticeship students will undertake the Project module that supports reflection and professional competency readiness whilst apprenticeship students undertake a smaller alternative Case Study Project module The expectation is that apprenticeship scheme students will use data and information from within the workplace whereas non-apprenticeship students may use data and information from within or beyond the workplace. Both modules are the catalyst for students to reflect on their learning throughout the programme and it hones their research and critical analysis skills.

Students on the apprenticeship programme also undertake a Building Control End Point Assessment (EPA) module in line with the apprenticeship standard.

Key/Transferable skills

The Induction Module sets out the importance of transferable skills. These skills are developed through the programme, utilising study and assessment. This can be via virtual learning environment (VLE) discussion, tuition discussion, problem-solving exercises – which are conducted individually or in groups – and coursework, which provides the ideal combination to internalise these aspects though different learning methods.

Assessment Strategy

The assessment strategy used on any modules you take will be different before and after autumn 2020. All assessments will allow you an opportunity to demonstrate what they have learned using a range of formats.

Current assessment strategy

Students are required to complete various pieces of coursework in the modules which are assessed within strict time frames. Detailed feedback is provided on tutor-assessed work. Objective testing can also be utilised in formative (including self-assessment) and summative assessment. The format of the coursework questions will generally be based around problem solving. All assessment contributing to progression or award are subject to moderation policies.

Assessment strategy from autumn 2020

The aim of UCEM's assessments is to allow students an opportunity to demonstrate what they have learned using a range of formats and which encourage critical self-reflection

Assessment Strategy
linked to personal development. To support this, assessments are clearly related to learning outcomes and the activities within the module support students in achieving these. UCEM's practice is to require assessments to be vocationally and professionally relevant. This involves the generation of tasks based on problems, scenarios or case studies from recent real-world situations that reflect and/or replicate the vocational requirements of the industry and the international nature of the subject matter. By studying one module at a time, students will be able to focus on each module's assessment individually, without the pressures of conflicting deadlines. Students are also provided with formative assessment opportunities to provide constructive feedback to motivate and guide them through their learning. Students are encouraged to engage in group discussions and collaborative learning with their peers and tutors. The summative assessment methods comprise of: (i) a piece of coursework or; (ii) a piece of coursework and a computer marked assessment Coursework could include activities such as essays, reports, portfolios, reflections, problem or short questions or presentations.

QAA Benchmark Mapping
See Appendix A.

PSRB Benchmark Mapping
RICS and CIOB: see Appendix B.

Appendix A: QAA Benchmark Mapping

Table 1: Benchmark Standards - Subject-specific knowledge and understanding on graduating with an honours degree in Land, Construction, Real Estate and Surveying

	Threshold	
Programmes broadly concerned with real estate, property and asset management:	Graduates will be able to:	Demonstrated in:
	i. Demonstrate an appreciation of the performance requirements of buildings and facilities.	**Level 4 Construction Technology 1** introduces students to different types of domestic and framed building construction and their performance requirements in differing circumstances, such as location, ground conditions and client's requirements.
	ii. Describe the technical factors affecting the design and construction of buildings.	**Level 5 Construction Technology 2** covers framed building structures and students examine the purpose of a building, appropriate building performance criteria, how is the building constructed and why is it constructed that way.
	iii. Recognise that differing design options may be employed in the construction of buildings.	**Level 5 Construction Technology 2** covers framed building structures and students examine the purpose of a building, appropriate building performance criteria, how is the building constructed and why is it constructed that way.
	iv. Demonstrate an awareness of the mainstream technology for constructing domestic, industrial and commercial buildings.	**Level 4 Construction Technology 1 and Level 5 Construction Technology 2** cover domestic, industrial and commercial buildings and students study **Digital Technologies at Level 4** which examines the benefits and drawbacks of various technologies and the added value to a business that technology can provide.

Benchmark Standards - Subject-specific knowledge (cont)	v. Describe the broad categories of building components and materials together with the pathological processes resulting in their degradation and failure.	**Level 4 Construction Technology 1** and **Level 5 Construction Technology 2** introduce students to different types of building and construction. **Level 6 Building Pathology** develops students' awareness of building components further and provides them with the ability to effectively diagnose and evaluate a range of commonly encountered building defects and to understand the mechanisms of failure.
	vi. Describe the broad approaches available to manage, repair and maintain buildings and facilities.	**Level 6 Sustainable Management of Property** introduces students to the concept of asset management and planned maintenance. **Level 6 Building Pathology** examines the cause of certain building defects, their prevention and their remedy.
	vii. Demonstrate awareness of the legal and regulatory frameworks and systems impacting on the design, construction and occupancy of buildings and facilities.	**Law for the Built Environment at Level 4** introduces students to the law of contract and tort and their relevance to the construction sector. Students also study **Introduction to Regulatory Frameworks at Level 4** to familiarise them with these legal and regulatory concepts in relation to the built environment. Students learn mainly about Building Regulations, planning legislation and health and safety legislation. **Fire Safety at Level 6**, **Building Control at Level 5** and **Public Safety in Buildings at Level 6** all contain strong elements of regulatory frameworks in relation to building control. **In Planning and Conservation at Level 5** students learn about the planning process in more detail, why it is needed and specialist planning applications such as Listed Building Consent.

Benchmark Standards - Subject-specific knowledge (cont)	viii. Recognise the socio-economic factors influencing property development, construction and use.	**Planning and Conservation at Level 5** looks at the drivers for planning policy and discusses sustainability in the built environment, providing students with an understanding of the balance of cultural, economic and environmental factors influencing sustainability within the built environment. **Level 6 Sustainable Management of Property** looks at the essential link between the management of facilities assets and business objectives. Students examine these factors in the **Level 5 Integrated Project** module where they are required to assess a building for redevelopment and will have to take into account the impact of each of these options from a socio-economic perspective.
	ix. Have an awareness of the environmental impact of buildings and facilities.	**Level 5 Environmental Science** looks at how a building is affected by its environment and its occupants and vice versa. **Sustainable Management of Property at Level 6** introduces students to the management of assets in relation to sustainability and relevant legislation. **Planning and Conservation at Level 5** examines sustainability in relation to the development of property. At **Level 5 Building Control** introduces students to Building Regulations and Approved Documents, and one of the key aims of these is ‘to achieve an inclusive environment and address climate change through energy conservation’ (RICS 2018).

Benchmark Standards - Subject-specific knowledge (cont)	x. Appreciate the nature of organisations that own and operate buildings.	**Level 4 People and Organisations** explains the role and function of management within organisations in the construction, land and estate management industries, both public and private sectors. **Level 4 Economics** provides students with an understanding of the organization in terms of the property and construction context. It helos students test their understanding of the factors that affect the orgnaisation and the impact of the market globally. **Level 6 Sustainable Management of Property** gives students insight into the nature of organisations that own property, how they manage this property.
	xi. Be aware of the professional roles and responsibilities of key players in the property development cycle.	**Level 5 Integrated Project** requires students to consider the roles in property acquisition and development from a client's perspective and the roles of the consultants employed by the client. **Level 5 Building Control** introduces the key players in the development process to which building control surveyors are exposed.
	xii. Describe the main costs associated with the construction and use of buildings and facilities.	**Level 6 Strategic Facilities Management** looks at the management of buildings and portfolios of buildings, planning and costing of maintenance works and cycles of repair and maintenance.
	xiii. Be aware of the professional and ethical frameworks associated with the development and use of buildings and facilities.	Professional ethics is threaded through the modules at all levels but **Level 5 Building Control** introduces ethics specifically in relation to building control surveyors, their roles and responsibilities.
	xiv. Demonstrate an understanding of the principles and processes that deliver an inclusive environment recognizing the diversity of user needs by putting	**Level 4 People and Organisations** explains the role and function of management within organisations in the construction, land and estate

	people (of all ages and abilities) at the heart of the building surveying process.	management industries, both public and private sectors. Inclusivity underlies many of the modules and is discussed in **Level 4 Introduction to Regulatory Frameworks** and is considered in relation to domestic and framed buildings in **Construction Technology 1 at Level 4** and **Construction Technology 2 at Level 5**. It is necessary for students to consider inclusive design in the **Level 5 Integrated Project** module in relation to the building project they are given which requires them to apply Part M of the Building Regulations and refer to the Equality Act 2010, as does **Level 5 Building Control**.

Table 2: Benchmark standards - Generic skills: on graduating with an honours degree in Land, Construction, Real Estate and Surveying, graduates should be able to:

	Threshold	
6.6.8 **Intellectual skills**	i. apply knowledge from taught programmes to solve problems.	A number of modules require this skill but particularly **Level 5 Integrated Project** where students bring together knowledge from other modules and apply this to the tasks set them, which are the acquisition and adaption and refurbishment of a case study building.
	ii. Demonstrate some understanding of subject-specific theories, paradigms, concepts and principles.	**Level 4 Design and Structures** introduces students to the key aspects of the theory and practice of design for buildings and applies theory learnt in the preceding **Construction Technology 1** module.
	iii. Demonstrate an ability to define and solve routine problems.	Students are required to define and solve routine problems in the assessment of the modules for this programme. For example, **Law for the Built Environment at Level 4** requires students to apply the knowledge learned to a series of tasks and scenarios and to address these, define the legal principles and to provide an answer or solution. **Level 6 Public Safety in Buildings** requires students to make an assessment of a building in relation to safety in respect of public events and apply the knowledge they have gained in this module and ones preceding it.
	iv. Collate, summarise and analyse information.	Students begin to collate and analyse information in **Introduction to the Built Environment at Level 4** where they learn to draw and sketch and they are also required to produce two reports and present these in a video. Level 4 Economics exposes students to market data and how these needs to analyzed to inform business decisions.

6.6.8 **Intellectual skills (cont)**	v. Integrate lines of evidence from a limited range of sources to support findings and hypotheses.	Most of the assignments set for this programme require students to find lines of evidence from sources other than the course materials and to integrate this evidence into their analysis and interpretation of a particular subject area. This ranges from the legal modules, such as **Law for the Built Environment at Level 4** where they are required to cite case law to back up their arguments, to **Level 6 Project / Case Study Project** which are in depth research projects.
	vi. Demonstrate some ability to consider issues from a range of multidisciplinary and interdisciplinary perspectives.	Building control surveying generally requires study of a number of different areas such as law, environmental issues, construction technology and building pathology in particular and students need to understand the extent of a building control surveyors' skills and where they require the expertise of another. The **Level 5 Integrated Project** enables them to gain an understanding of the different consultants that would be involved in a refurbishment project, such as a structural engineer and mechanical and electrical engineer. Students are required to work in groups which include students from the BSc Architectural Design Technology and BSc Building Surveying programmes and these groups will need to appropriate tasks between them and appreciate the strengths and limitations of each other's area of study and expertise.
6.6.8 **Intellectual skills (cont)**	vii. Appraise academic literature and extract relevant points.	Students are introduced to wider research beyond the course materials and shown how to reference this correctly in the **Level 4** module **Introduction to the Built Environment** but are encouraged to undertake research in all of the modules, with increasing

		significance through each of the levels. Certain publications will be referred to in teaching materials for students to find, analyse and extract relevant points and UCEM provide students with access to a wide range of literature through the e library. Greater weighting is given to this skill in coursework marking which through the levels of study.
6.6.9 **Practical skills**	i. Plan, conduct and present an independent investigation with significant guidance.	**Level 5 Integrated Project** tests all of these practical skills by setting students a task requiring them to draw on previously learned knowledge and apply this to a case study building and some problems set. Students have to produce drawings, analyse building data, such as asbestos surveys, evaluate the building in relation to planning and building control requirements, and provide evidence based solutions to the tasks set them. Throughout this module, which runs over two teaching blocks, students will be supported by tutors in their learning and task preparation and by a variety of learning materials such as webinars, forums, reading, videos, e books and quizzes. **In Level 6 Building Pathology** students are required to understand the use of surveying equipment, such as damp meters, and interpret the data recorded. They are tested in the coursework which involves inspecting, finding and analysing building defects. The formats required for these tasks are drawings, photographs and professional reports.
	ii. Relate investigations to some prior work and reference it appropriate.	
	iii. Where appropriate use laboratory and field equipment safely.	
	iv. Apply a range of methods to solve problems.	
	v. Use appropriate technologies to address problems.	
	vi. Where appropriate, describe and record in the field and laboratory.	
	vii. Interpret practical results with guidance.	
	viii. Present results of investigations in a number of formats.	
	ix. Apply survey measurements and evaluation techniques as appropriate to the programme.	
	x. Recognise and record visual information when on site or from graphical sources.	
	xi. Apply professional judgement in drawing skills and knowledge together and applying them to real world	

	problems.	
6.6.10 **Analytical and data interpretation skills**	i. Recognise when information is incomplete.	Students are required to examine information relating to the case study building and task set in **Level 5 Integrated Project** and ensure sufficient information is available, identify any further information needed to enable them to complete their task or to recommend further information the client needs to procure.
	ii. Appreciate risk.	**Fire Safety at Level 6** examines risk profiles in relation to building fires and **Level 6 Public Safety in Buildings** examines the risk in relation to sports grounds and buildings used for public events.
	iii. Process and interpret data and information.	A number of modules require students to process and interpret data and information.These include **Level 4 Economics** that aids students understanding of market data inform businsess decisions. Further, in **Construction Technology 1** they are required to determine ground conditions by use of the data contained in the British Geological Survey website and analyse this data to determine the best foundation design for these conditions. In the same module, they have to review Building Regulations to determine foundation dimensions in relation to their ground conditions. In **Level 6 Public Safety in Buildings** students have to analyse drawings and other data, interpret this data and apply building safety principles to it in order to advise a client.
6.6.10 **Analytical and data interpretation skills (cont)**	iv. Critically appraise spatial data.	Students are introduced to the concept of topography, orientation, micro climate etc. in the **Level 4** module **Construction Technology 1** and also in the **Level 4** module **Design and Structures** where they consider the form and function of a building, site analysis, aesthetics and sustainable options in recommending

		a particular building design.
	v. Solve basic numerical problems using appropriate techniques.	In **Design and Structures at Level 4** students are required to understand the methods used to calculate structural loads, stresses and forces acting on structural components. They use mathematical tools to anaylse structures and calculate forces acting on and within them and use drawings to calculate simple loadings. **Level 4 Construction Technology 1** requires students to understand basic loading calculations to enable adequate foundation design and how to calculate size and spans of floor joists. **Level 5 Environmental Science** teaches students about heat losses and gains and the calculation of these, along with other calculations relating to human comfort in buildings.
	vi. Undertake simple statistical analysis. vii. Select and apply appropriate methods of collecting, analysing, and synthesizing data appreciate the importance of intellectual property and its role within the innovation process.	Students take a compulsory project module **(Project Module / Case Study Project) at Level 6** in the final years of study which enables them 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, supported by a dedicated tutor.
6.6.11 Communication skills	i. Communicate to a variety of audiences in appropriate written, graphical, electronic and verbal forms.	Students are introduced to methods of communication in **Level 4 Introduction to the Built Environment** in which they have to complete an academic essay and a professional report and to appreciate the differences between report types. They then have to summarise

		both of these reports in a five minute video presentation. In **Level 4 Digital Technologies** students look at a variety of digital tools used to communicate from writing to drawing and including Building Information Modelling (BIM). Both of these modules provide a good grounding for other modules where students are required to complete coursework which have to be orientated towards different audiences.
	ii. Make contributions to group discussions.	**Level 5 Integrated Project** requires students to work collaboratively in groups to produce the work required and they have to reflect on this group work at the end of the module. This reflection counts towards their overall mark. Every module has the facility for group discussions through **VLE** forums and webinars. Students can communicate in webinars via the microphone facility or typing in the text box.
	iii. Watch, listen and respond to others.	
	iv. Negotiate and mediate with others.	
	v. Use social media for communication.	
6.6.12 **Digital literacy skills**	i. Use the internet for communication and information retrieval.	As an on-line learning University, students are required to retrieve all of the information required for their studies from the UCEM VLE (virtual learning environment) and use the e-library and Vitalsource for reading materials, as well as other databases to which UCEM subscribe. Students are expected to carry out independent research in preparing coursework and are taught the value of using reputable on-line sources for this research.
	ii. Handle electronic information with guidance, applying appropriate techniques, digital tools and applications to support key subjects.	**Level 4 Digital Technologies** introduces students in the early stage of their studies to digital tools and electronic information, software and hardware, its

	iii. Have an awareness of the safe, ethical and legal use of digital media.	value and how to use these tools to enhance their learning experience in the subsequent modules.
	iv. demonstrate the application of information technology and digital tools and techniques to support key subjects.	
6.6.13 **Interpersonal and teamwork skills**	i. Make a constructive contribution to teamwork.	**Level 5 Integrated Project** requires students to work collaboratively in groups over the two teaching blocks of the module. Groups where students work well as a team should achieve better marks due to the collaborative nature of the project.
	ii. Identify individual goals.	In **Introduction to the Built Environment at Level 4** students produce a professional development plan, including a SWOT analysis and they are required to reflect on this and produce two pieces of reflective writing.
	iii. Recognise and respect the views of others.	Students interact with each other in forums and webinars in all modules and are expected to respect the views of others and challenge these if appropriate.
6.6.13 **Interpersonal and teamwork skills (cont)**	iv. Recognise equality, diversity and inclusion in all its forms.	Students interact with each other in forums and webinars in all modules and are expected to respect the views of others and challenge these if appropriate. At the beginning of **Level 5 Integrated Project 1**, students will study some interactive material about diversity and inclusion and will also be directed to RICS guidance (https://www.rics.org/uk/about-rics/responsible-business/inclusive-employer/diversity-best-practice/).
6.6.13 **Interpersonal and**	v. Reflect on team performance.	**Level 5 Integrated Project 1 and 2** require students to work in groups (with building surveying and architectural technology students) and effective

teamwork skills (cont)		teamworking will be a key competency students need to display. 10% of the mark for each module relates to the student's participation in and reflection on teamworking. Students are required to submit a reflection on the teamworking experience.
6.6.14 **Self- management and professional development skills**	i. Recognise and be able to comment on the moral and ethical issues associated with the subject.	Students study ethics and professional standards throughout the modules. They learn to appreciate the regulations of the professional bodies in **Level 4 Introduction to Regulatory Frameworks** and those more specific to building control in **Building Control at Level 5** and **Public Safety in Buildings Level 6**.
	ii. Appreciate the need for professional codes of conduct.	As above.
	iii. Accept responsibility for their own learning.	Students are responsible for their own learning due in the main to the nature of the delivery of UCEM courses which are on-line distance learning. They are provided with support and guidance to enable them to achieve this, particularly in the early stages of their studies.
	iv. Identify targets for personal, career and academic development.	In **Introduction to the Built Environment at Level 4** students produce a professional development plan and produce two pieces of reflective writing. They are required to assess their own progress and create an individual learning plan. They are introduced to personal reflection as a useful addition to professional activities and to enhance their development as well as a tool for lifelong learning.
6.6.14 **Self- management and professional development skills**	v. Be adaptable and have a flexible approach to study and work.	Students are responsible for their own learning due in the main to the nature of the delivery of UCEM courses which are on-line distance learning. The VLE helps them with this and they have structured learning

(cont)		for each week of the module they are studying to help them manage their learning. Teaching and learning is also via a number of mediums such as active seminars, podcasts, focused reading, videos and synchronous webinars which are recorded for students to watch if they cannot attend the live session.
	vi. Develop skills necessary for self-managed, independent and lifelong learning.	In **Level 4 Introduction to the Built Environment** provides students with the fundamental tools and access to resources needed for their period of study at UCEM and as a basis for lifelong learning in whatever subject arises. They produce a portfolio of work that demonstrates their skills and personal development towards a first degree in the built environment.
	vii. Recognise personal strengths and weaknesses.	In **Introduction to the Built Environment at Level 4** students produce a professional development plan which includes a SWOT analysis (Strengths, Weaknesses, Opportunities, Threats) which is personal to them and is something which can be reviewed throughout their studies.

Appendix B: PSRB Benchmark Mapping

RICS Mapping

		Building Control																									
		RICS competencies																									
		Mandatory											Core				Optional										
		Ethics, Rules of Conduct and professionalism	Client care	Communication and negotiation	Health and safety	Accounting principles and procedures	Business planning	Conflict avoidance, management and dispute resolution procedures	Data management	Diversity, inclusion and teamworking	Inclusive environments	Sustainability	Building control inspections	Fire safety	Inspection	Legal/regulatory requirements	BIM management	Building pathology	Client care	Conservation and restoration	Construction technology and environmental services	Contaminated land	Data management	Measurement	Planning and development management	Risk management	Sustainability	Works progress and quality management
Programme modules	MAN4POM	X					X			X	X																	
	ECO4ECO	X		X		X			X																	X		
	4BLTENV	X		X																		X		X	X			
	4DIGTEC								X								X							X				
	TEC4BSC										X	X						X			X							
	4DESSTR			X																	X			X				
	4LAWBEV/LAW4LST							X								X						X			X			
	5ENVSCI																				X		X	X			X	
	5CONTEC										X	X						X			X						X	
	5BUICON				X	X	X	X			X	X	X	X	X	X	X												X

	Building Control																									
	RICS competencies																									
	Mandatory											Core				Optional										
	Ethics, Rules of Conduct and professionalism	Client care	Communication and negotiation	Health and safety	Accounting principles and procedures	Business planning	Conflict avoidance, management and dispute resolution procedures	Data management	Diversity, inclusion and teamworking	Inclusive environments	Sustainability	Building control inspections	Fire safety	Inspection	Legal/regulatory requirements	BIM management	Building pathology	Client care	Conservation and restoration	Construction technology and environmental services	Contaminated land	Data management	Measurement	Planning and development management	Risk management	Sustainability	Works progress and quality management
5PLACON			X								X				X				X						X	
5INTPR1		X	X	X		X			X	X		X	X			X		X	X	X			X	X		X	
5INTPR2		X	X	X		X			X	X		X	X			X		X	X	X			X	X		X	
6BUIPAT																	X		X								
6FIRSAF													X		X										X		
6SUMAPR		X				X		X		X						X		X								X	
6PUBSAF			X	X						X		X		X	X										X		X
6PROJT1/ 6CASPRJ			X																			X					

CIOB Mapping

Initial mapping completed. Detailed mapping to be completed for re-accreditation exercise following validation.

SECTION G CONTINUED APPLICATION MAPPING TO CIOB EDUCATIONAL FRAMEWORK

Please provide a detailed comparison to the respective levels of the CIOB Educational Framework 2017. The CIOB does not prescribe how the themes are to be incorporated into the programme and there is not a requirement to meet all of the outcomes of the framework in order to achieve accreditation, although it is expected that core modules meet all the threshold outcomes at level 4 and 5 which are highlighted by being shaded grey.

Construction Management

LEARNING OUTCOME	CROSS REFERENCE TO PROGRAMME MODULES	METHOD OF ASSESSMENT	FURTHER COMMENTS
PROCESS MANAGEMENT			
L4 Understand the management of construction processes as they relate to the project from inception to recycling. Understanding corporate organisations, industry, clients and society	Introduction to the Built Environment People & Organisations Economics	Coursework Coursework Coursework	
L5 Apply knowledge of the construction process to the examination and selection of procurement methodology.	Building Pathology		
L6 Analyse and solve problems relating to the construction process.	Public Safety in Buildings and Fire Safety	Assignment and CMA	

LEARNING OUTCOME	CROSS REFERENCE TO PROGRAMME MODULES	METHOD OF ASSESSMENT	FURTHER COMMENTS
HUMAN RESOURCE MANAGEMENT			
L4 Understand the role and responsibilities of people involved in the construction process.	Introduction to the Built Environment People and Organisations	Coursework Coursework	
L5 Explain how human resource management methods affect the construction process. For example: • Employee Relations Frameworks • Recruitment and selection of personnel • time management • Considerate Constructors • people, motivation and behaviour • performance management and appraisal • teams and integrated teams • leadership and leadership styles • inclusion and equality • training and development	Integrated Project 1 and 2 People & Organisations	Assignments, video submission and CMA Assignments Assignments	Students will be working in teams for the Integrated Project Module and will experience for themselves the styles of leadership, the dynamics of team working and people motivation and behaviour, together with respecting including and equality within this teamworking environment.
L6 Evaluate Organisational HRM policies to ensure fair treatment of all personnel. Evaluate different leadership styles at: • Project level • Organisational level • National level	Sustainable Management of Property People & Organisations	Assignments, Assignments	Student learning will incorporate aspects of working environments as part of advice to Clients in the management of their property

LEARNING OUTCOME	CROSS REFERENCE TO PROGRAMME MODULES	METHOD OF ASSESSMENT	FURTHER COMMENTS
Review HRM approaches to ensure effective harmonious working environments.			
CONSTRUCTION PSYCHOLOGY			
L4 Appreciate the importance of understanding the person. Understand how the construction process impacts on individual welfare, wellbeing and inclusion.	Introduction to the Built Environment People & Organisations	Coursework Assignments	
L5 Apply person understanding to the development of a variety of processes, including: • stress management • negotiation	Integrated Project 1 and 2	Assignments, video submission and CMA	Students will be working in teams for the Integrated Project Module and will experience for themselves the styles of leadership, the dynamics of team working and people motivation and behaviour, together with respecting including and equality within this teamworking environment. This in turn will expose them to the stresses of team working and how negotiation within a team can provide a better solution.
L6 Evaluate the application of individual person understanding to change management in construction organisations.	Building Control Fire Safety Public Safety in Buildings	Assignments	Work in all these modules considers the impact of legislation, safety and wellbeing for the individual as well as the organisation. Consequences of this will mean the students have to demonstrate an understanding of that change process impacting on the organisation and it functions within the building or the design of the building

LEARNING OUTCOME	CROSS REFERENCE TO PROGRAMME MODULES	METHOD OF ASSESSMENT	FURTHER COMMENTS
	People & Organisations	Assignments	
PLANNING AND SCHEDULING OF PROJECTS			
L4 Understand the importance of time, cost and resource management to complete projects effectively. Be aware of external benchmarks such as CIOB Good Practice in Management of Time in Complex Projects and Codes of Practice.	Introduction to the Built Environment	Coursework	
L5 Demonstrate the ability to use a range of digital planning tools, to apply them to construction processes including: • Project planning • critical path analysis, • resource levelling	Integrated Project 1 and 2	Assignments, video submission and CMA	
L6 Evaluate and apply different project management techniques to complex projects: • Progress and completion • management and decision processes • Project Evaluation and Review Technique (PERT) • Risk analysis • Building Information Modelling (BIM)	Sustainable Management of Property Fire Safety Public Safety in Buildings	Assignments	
PROCESS PERFORMANCE MANAGEMENT			
L4 Define performance management for process improvement, including definition and use of Key Performance Indicators (KPIs)	Digital Technologies Construction Technology 1 Design & Structures	Assignments & CMAs	

LEARNING OUTCOME	CROSS REFERENCE TO PROGRAMME MODULES	METHOD OF ASSESSMENT	FURTHER COMMENTS
L5 Apply Key Performance Indicators (KPIs) to a construction project.	All	Assignments & CMAs plus video submission within the Integrated Project modules	All the modules relay upon legislative standards and KPI's to ensure quality and performance is met. The Integrated Projects take this further in using the project work to ensure students design and develop their solutions to meet Client objectives and KPI's
L6 Evaluate and apply different performance management techniques to complex projects. For example: • procurement and contract performance • process improvement • incentivisation • best practices and feedback and reflection business and market development, product development and research/innovation management	All	Assignments & CMAs	The modules cover meeting specific standards, the processes to benchmark change and improvement as well how best practice, innovation and research impacts and feeds back into the industry. Students can demonstrate independent research and potential for informing industry changes through the Project/ Case Study Project.

Ethics and Professionalism

LEARNING OUTCOME	CROSS REFERENCE TO PROGRAMME MODULES	METHOD OF ASSESSMENT	FURTHER COMMENTS/NOTES
ROLES AND CONDUCT			
L4 Appreciate the role of the Construction Manager (e.g. Bale, 2010) in an international context, including • management, development, conservation and improvement of the built environment • role of the professional manager in construction	Introduction to the Built Environment Introduction to Regulatory Frameworks	Coursework Assignment and CMA	

Demonstrate an understanding of professional Codes of Conduct and ethics, including CIOB's Rules and Regulations of Professional Competence and Conduct Understand the CIC Essential Principles for achieving an accessible and inclusive environment. Recognise the need for online security of personal and project-specific information. Awareness of the intellectual property rights associated with built assets.	People & Organisations	Assignments	
L5 Discuss the issues relating to the application of ethical behaviour and Codes of Conduct. Apply CIC Essential Principles for achieving an accessible and inclusive environment. Understand the methods used to provide online security of personal and project-specific information. Understand the application of intellectual property rights to a built asset.	Construction Technology 2 Building Control	Assignment and CMA Assignment and CMA	
L6 Recommend improvements to practice to further enhance the image and efficiency of the construction industry.			
EQUALITY, DIVERSITY, DISABILITY, AGE, GENDER, SEXUAL ORIENTATION, BELIEF, ETHNICITY: CULTURE AND BEHAVIOUR			
L4 Demonstrate an awareness of the meaning and relevance of equality, diversity and inclusivity in the construction industry.	Introduction to the Built Environment Introduction to Regulatory Frameworks People & Organisations	Coursework Assignment and CMA Assignment	

L5 Give examples and prepare plans for the application of ethical and inclusive practice in the built environment workplace, demonstrating consideration of people as clients, customers and consumers of built environment 'products' and services	Integrated Project 1 and 2	Assignments, video submission and CMA	This level 5 project requires students to work collaboratively and appreciate and implement inclusivity both in their collaborative working practices but also in the designs they submit for a refurbishment project and a rebuilding project.
L6 Analyse the role and value of openness and transparency versus confidentiality and commercial sensitivity, i.e. Whistleblowing Examine company, industry or government policies for inclusivity and their value to the construction industry,	Fire Safety Public Safety in Buildings People & Organisations	Assignments & CMA Assignments	The modules are centred around recent changes to legislative frameworks and best practice which highlight in part commercial profit countered safety and the Government process that have affected change.
PROCUREMENT AND TENDERING PRACTICE			
L4 Describe the principles of fair trade and fair economy.	Introduction to the Built Environment Economics	Coursework	
L5 Apply professional standards of reporting and accountancy. Demonstrate understanding of the need for honesty and accuracy in reporting	Building Control	Assignment and CMA	
L6 Review and recommend national and international procedures to comply with professional obligations, e.g. bribery, money laundering			
GOVERNANCE AND CORPORATE SOCIAL RESPONSIBILITY			

L4 Identify responsibilities in relation to Governance and Corporate Social Responsibility within public and private bodies and to individuals, including modern slavery such as CIOB's Modern Slavery Toolkit: http://stronger2gether.org/construction/.	Introduction to the Built Environment Introduction to Regulatory Frameworks Economics People & Organisations	Coursework Assignment and CMA Assignments	
L5 Apply ethical frameworks as an aid to decision making.	Integrated Project 1 and 2	Assignments, video submission and CMA	
L6 Compare the Governance and Corporate Social Responsibility of organisations and the wider society. Evaluate company decisions from individual and professional ethical perspectives.	People & organisations Fire Safety Public Safety in Buildings	Assignments Assignments & CMA	
SELF DEVELOPMENT AND REFLECTION			
L4 Identify personal strengths, understanding of self and areas for development.	Introduction to the Built Environment	Coursework	Whilst this is a level 4 module, students are required to prepare a self-development plan and encouraged to review and reflect on this throughout their studies, from levels 4 to 6.
L5 Prepare a self-development plan with provision for review and reflection.	Introduction to the Built Environment Integrated Project 1 and 2	Coursework Assignments, video submission and CMA	As part of their assignment, students have to reflect on the effectiveness of collaborative working with other students, both their role and performance as part of this team and the performance of others.

L6 Implement a review of and reflection on self-development and self-awareness.	Introduction to the Built Environment	Coursework	

Health, Safety and Wellbeing*

LEARNING OUTCOMES	CROSS REFERENCE TO PROGRAMME MODULES	METHOD OF ASSESSMENT	FURTHER COMMENTS/NOTES
LEGISLATION AND PRACTICE			
L4 Understand the legal environment and terminology of health and safety as it applies to the design and management of construction projects. Understand the importance and management of construction health, safety and wellbeing.	Introduction to the Built Environment Introduction to Regulatory Frameworks Sustainable Management of Property	Coursework Assignment and CMA Assignment and CMA	
L5 Prepare a risk assessment, Understand the roles of the main parties in the CDM Regulations, with particular emphasis on the Principal Contractor.	Introduction to Regulatory Frameworks Building Control Fire Safety	Assignment and CMA Assignment and CMA Assignment and CMA	
L6 Critically evaluate health and safety legislation from a corporate perspective.	Public Safety in Buildings, Sustainable Management of Buildings.	Assignment and CMA	

PERSONAL RESPONSIBILITY			
L4 Understand the importance of and provide an overview of the duties of all persons involved in construction projects with regard to health, safety and wellbeing.	Introduction to the Built Environment Introduction to Regulatory Frameworks	Coursework Assignment and CMA	
L5 Appraise a range of case studies and statistical data regarding accidents and review impact as well as causes and effects.	Introduction to Regulatory Frameworks	Assignment and CMA	
L6 Reflect on personal responsibility for health, safety and wellbeing at all levels within an organisation and the consequences of action and inaction.	Fire Safety Public Safety in Buildings	Assignment & CMA	
MANAGEMENT			
L4 Demonstrate an understanding of the various health and safety management tools and techniques, and recent developments in health, safety and wellbeing management and training	Introduction to Regulatory Frameworks	Assignment and CMA	
L5 In the context of design and construction, identify and manage both potential and actual health, safety and wellbeing hazards and risks.	Integrated Project 1 and 2 Sustainable Management of Property	Assignments, video submission and CMA Assignment and CMA	
L6 Critically evaluate health and safety management procedures on a variety of projects	Fire Safety Public Safety in Buildings	Assignment and CMA Assignment and CMA	
WELLBEING AND SAFETY CULTURE			

L4 Understand the issues associated with the management of wellbeing and safety culture in construction.	People & Organisations Introduction to the Built Environment Integrated Project 1 and 2	Assignments Coursework Assignments, video submission and CMA	
L5 Identify the barriers associated with establishing and maintaining an organisation's health, safety and wellbeing culture and practices.	Integrated Project 1 and 2	Assignments, video submission and CMA	
L6 Analyse how the Construction Industry should enhance competence, behaviour and commitment to health, safety and wellbeing in both the design and management of construction projects.	Fire Safety Public Safety in Buildings	Assignment & CMA	

**Further guidance on Health and Safety can be found in Appendix 2*

Sustainability

LEARNING OUTCOMES	CROSS REFERENCE TO PROGRAMME MODULES	METHOD OF ASSESSMENT	FURTHER COMMENTS/NOTES
GLOBAL ISSUES			
L4 Demonstrate an understanding of: • social sustainability and quality of life • economic sustainability • environmental sustainability For example – Brundtland Report, environmental impact, low and zero carbon, energy generation.	Construction Technology 1	Assignment and CMA	

L5 Explain the scale of the Built Environment's impact on the environment.	Construction Technology 2 Environmental Science	Assignment and CMA Assignment and CMA	
L6 Analyse the main sustainability impacts that a building has over the duration of its life cycle, from design through construction, use, refurbishment and adaptation to demolition and disposal.	Construction Technology 1 and Construction Technology 2 Integrated Project 1 and 2 Sustainable Management of Property	Assignments and CMAs Assignments, video submission and CMA Assignment and CMA	This LO is covered in detail within the BSc Building Control at all levels and within a number of modules.
LEGISLATION AND POLICY			
L4 In relation to sustainable development demonstrate an understanding of: • issues • terminology • policy • legislation • design	Introduction to Regulatory Frameworks Construction Technology 1	Assignment and CMA Assignment and CMA	
L5 Describe the key legislative drivers which seek to minimise the impact of construction industry activity and the built environment.	Environmental Science Construction Technology 2 Building Control	Assignment and CMA Assignment and CMA Assignment and CMA	
L6 Examine the Construction Industry's challenges, opportunities and responsibilities with regards to the three themes of sustainability. • social sustainability and quality of life	Sustainable Management of Property	Assignment and CMA	

• economic sustainability • environmental sustainability			
NEW BUILD DESIGN AND RETROFIT			
L4 Recognise the impact on a building's carbon emissions of providing a comfortable and healthy internal environment through the provision of: • heating and cooling • air tightness and quality • lighting quality	Construction Technology 1 and Construction Technology 2 Environmental Science	Assignments and CMAs Assignment and CMA	
L5 Explain key principles of 'low energy' and 'passive' design.	Construction Technology 1 and Construction Technology 2 Integrated Project 1 and 2	Assignments and CMAs Assignments, video submission and CMA	
L6 Undertake cost-benefit and feasibility analysis of carbon issues in relation to building design and operational management.	Not met at level 6		
ASSESSMENT OF BUILDINGS			
L4 Understand key principles of environmental impact and energy/carbon assessment methodologies.	Introduction to the Built Environment Environmental Science	Coursework	

	Construction Technology 1 and Construction Technology 2	Assignment and CMA Assignments and CMAs	
L5 Apply appropriate environmental impact and/or carbon/energy assessment techniques.	Environmental Science Construction Technology 1 and Construction Technology 2	Assignment and CMAs Assignments and CMAs	
L6 Carry out an impact assessment of the provision of a comfortable and healthy internal environment on a building's carbon emissions.	Not met at level 6		
WASTE			
L4 Demonstrate an understanding of the sources of waste in the built environment including: • material waste and re-cycling, • labour resourcing.	Construction Technology 1	Assignment and CMA	
L5 Develop and apply policies to eliminate waste within the lifecycle of a construction project.	Construction Technology 2	Assignment and CMA	
L6 Evaluate techniques available to reduce all waste and enhance recycling including lean construction.	Not met at level 6		
CONSTRUCTION SITE SPECIFIC ISSUES			
L4 Identify and explain how construction sites and operations impact on the environment.	Construction Technology 1	Assignment and CMA	

L5 Identity and apply appropriate methods to mitigate negative sustainability impacts during the construction process.	Building Control	Assignment and CMA	
CLIENTS			
L5/6 Evaluate the importance of sustainability with regards to Clients' Corporate Social Responsibility, vision, image and Key Performance Indicators.	Integrated Project 1 & 2	Assignments, video submission and CMA	

The Construction Environment

LEARNING OUTCOMES	CROSS REFERENCE TO PROGRAMME MODULES	METHOD OF ASSESSMENT	FURTHER COMMENTS/NOTES
THE CONSTRUCTION INDUSTRY			
L4 In relation to the national and international construction industry, understand and appreciate its: • historical development • scale, structure and output • future opportunities	Introduction to the Built Environment	Coursework	
L5 Identify the appropriate stakeholders involved in the construction process and their relevant roles and responsibilities Recognise the collaborative linkages and interdisciplinary relationships between the functions of construction and the other disciplines of the built environment	Integrated Project 1 and 2 Design and Structures Building Control	Assignments, video submission and CMA Assignment and CMA Assignment and CMA	
L6 Review threats and opportunities for the future development of the construction industry.	Not met at level 6		
SOCIAL AND ECONOMIC IMPACT			
L4 Describe the role of the construction industry in the economic and social wellbeing of a country and the provision of an inclusive society.	Introduction to the Built Environment Construction Technology 1	Coursework Assignment and CMA	

L5 Understand and appreciate the social, inclusive and political issues which impact on planning, design and development of the built environment.	Building Control	Assignment and CMA	
L6 Appraise and evaluate the influence of current issues including, Sustainability, Health & Safety internationalisation and inclusion on the social and economic aspects of construction activity worldwide.	Fire Safety Public Safety in Buildings	Assignment and CMA Assignment and CMA	
LEGAL ENVIRONMENT			
L4 Understand and describe the principles of • the legal system related to construction activity • the law of contract and tort • statutory control of construction activity including planning regulations • insurance	Law for the Built Environment Introduction to Regulatory Frameworks	Assignment and CMA Assignment and CMA	
L5 Describe and characterise the legal obligations and procedures in relation to the design, construction and operation stages associated with: • contracts and their administration • planning • employment • environment • design	Integrated Project 1 and 2	Assignments, video submission and CMA	
L6 Analyse the impact that legal obligations have on the construction management process. Appraise and evaluate alternative dispute resolution processes.	Fire Safety Public Safety in Buildings	Assignment and CMA	

ECONOMIC PRINCIPLES AND FINANCIAL MANAGEMENT			
L4 Understand and describe the principles of: • macro and micro economics • supply and demand • market structure and operation • finance for construction organisation and activities • cash flow	Economics Introduction to the Built Environment	Assignments Coursework	In part
L5 Compare, appraise and select different procurement processes for construction activity. Apply financial information as it relates to the management of construction projects: • cash flow, cost and finance from inception to demolition • tender evaluation • value management /engineering • decision making	Integrated Project 1 & 2	Assignments, video submission and CMA	In part
L6 Implement procedures and practices associated with the settlement of final accounts, claims and dispute resolution. Appraise and evaluate the financial management of corporate enterprises and professional practices.	Sustainable Management of Property	Assignment & CMA	In part

DESIGN AND CONSTRUCTION PROCESS			
L4 In relation to the development process, understand and appreciate: • stages in the process • role of construction professionals within the process • responsibility for ensuring designs are inclusive use of digital technologies and information management	Introduction to the Built Environment Digital Technologies Construction Technology 1	Coursework Assignment and CMA Assignment and CMA	
L5 Compare, appraise and select different construction materials, products and processes from both an initial cost and whole life cost perspective. Compare and appraise the use of digital technologies and information management.	Digital Technologies Environmental Science Design and Structures	Assignment and CMA Assignment and CMA Assignment and CMA	Level 4 module which covers a range of digital tools, BIM and 'digital Darwinism'.
L6 Demonstrate an appreciation of property and infrastructure development in relation to financial and legal aspects including development viability and appraisal. Evaluate the importance and challenges of working in a collaborative environment and the integration of design, costing and scheduling.	Public Safety in Buildings	Assignment and CMA	
MEASUREMENT AND ESTIMATING			
L4 Undertake the measurement of land and construction work both on plan, through the use of digital information modelling or on-site Understand the principles of price and cost estimation for construction activities.	Introduction to the Built Environment Digital Technologies	Coursework Assignment and CMA	

L5 Produce examples of price and cost estimation for construction activities from feasibility through to final accounts. Produce detailed measurement using a range of standard methods of measurement.	Not met at level 5		
L6 Critical appraisal of electronic measurement and estimating systems	Not met at level 6		

Construction Technology

LEARNING OUTCOMES	CROSS REFERENCE TO PROGRAMME MODULES	METHOD OF ASSESSMENT	FURTHER COMMENTS/NOTES
BUILDING PERFORMANCE AND TECHNOLOGY			
L4 Describe and illustrate the functional and performance requirements of simple buildings. Understand, describe, select and illustrate alternative options available for the construction of primary and secondary building elements of simple buildings and the necessary site set-up	Construction Technology 1 Construction Technology 1 Design and Structures	Assignment and CMA Assignment and CMA Assignment and CMA	
L5 Describe and illustrate the functional and performance requirements of framed and complex buildings. Understand, describe, select and illustrate alternative options available for the construction of primary and secondary building elements of framed and complex buildings including those with basements. Undertake design option appraisal to ensure adherence to current building legislation including the conservation of energy, carbon emissions, inclusion, accessibility, security and structural performance control.	Construction Technology 1 and Construction Technology 2 Environmental Science Design and Structures Integrated Project 1 and 2 Building Control	Assignments and CMAs Assignment and CMA Assignment and CMA Assignments, video submission and CMA Assignment and CMA	
L6 Examine the potential and use of sustainable technologies applied to case-study buildings.	Integrated Project 1 and 2	Assignments, video submission and CMA	

Evaluate and challenge the use of proposed technologies against the need for contemporary and innovative solutions to achieve integration, buildability, speed, cost, health and safety, inclusion and quality criteria applied to case study buildings.	Sustainable Management of Property Public Safety in Buildings	Assignment and CMA Assignment and CMA	
BUILDING SERVICES DESIGN			
L4 Understand and appreciate the function and design of building services for a simple building to ensure human comfort.	Construction Technology 1	Assignment and CMA	
L5 Recognise and appreciate the function and design of complex building services.	Construction Technology 2 Environmental Science	Assignment and CMA Assignment and CMA	
L6 Examine and select suitable solutions, including renewable technologies for building services in the context of a development project.	Integrated Project 1 and 2	Assignments, video submission and CMA	
PROBLEMS AND DEFECTS			
L4 Demonstrate a knowledge of common defects and refurbishment technologies to restore a building for contemporary use	Building Pathology Sustainable Management of Property Integrated Project 1 and 2 Design and Structures	Assignment and CMA Assignment and CMA Assignments, video submission and CMA Assignment and CMA	

L5 Discuss the refurbishment and adaptation options applicable to the upgrading of or changing the use of a building	Integrated Project 1 and 2	Assignments, video submission and CMA	
L6 Investigate and propose methods to future proof buildings	Sustainable Management of Property	Assignment and CMA	
SITE INVESTIGATION			
L4 Understand site investigation techniques. Awareness of issues surrounding contaminated land and brownfield sites. Explain the basic principles of land surveying.	Construction Technology 1 Building Control	Assignment and CMA Assignment and CMA	
L5 Apply principles of site investigation to assess the suitability of sites for construction projects. Demonstrate competence in geomatics.	Construction Technology 2 Not met at Level 5	Assignment and CMA	
L6 Analyse the effectiveness of site investigation techniques in preventing unforeseen problems in the construction phase of a project.	Construction Technology 1 and Construction Technology 2	Assignments and CMAs	
MATERIALS			
L4 Describe the properties of building materials and understand their performance characteristics with regard to the natural environment and their impact upon it, including hazardous materials	Construction Technology 1	Assignment and CMA	
L5 Analyse the performance of materials in use, based upon their scientific properties and the environment and conditions in which they are used.	Construction Technology 2 Environmental Science Building Pathology	Assignment and CMA Assignment and CMA Assignment and CMA	

L6 Evaluate the viability of ethically sourcing construction materials and possible effects this may have on the construction process	Construction Technology 2 Integrated Project 1 and 2	Assignment and CMA Assignments, video submission and CMA	To level 5 only
BUILDING PERFORMANCE AND MAINTENANCE			
L4 Demonstrate knowledge of performance maintenance technology and maintenance management, e.g. BMS	Building Pathology Sustainable Management of Property	Assignment and CMA Assignment and CMA	
L5 Apply and evaluate various maintenance technologies and maintenance management systems as appropriate to various building types, for example; domestic, commercial, industrial, public.	Building Pathology Sustainable Management of Property	Assignment and CMA Assignment and CMA	

Dissertation/Design/Research Project

LEARNING OUTCOME	CROSS REFERENCE TO PROGRAMME MODULES	METHOD OF ASSESSMENT	FURTHER COMMENTS/NOTES
RESEARCH			
L6 Research a contemporary construction built environment issue.	Project/ Case Study Project	Assignment and Dissertation/ Presentation	
Demonstrate an ability to select and apply appropriate ethical research methods.	Project/ Case Study Project	Assignment and Dissertation/ Presentation	
Analyse, synthesise and evaluate a key issue affecting the built environment.	Project/ Case Study Project	Assignment and Dissertation/ Presentation	

Work-Based Learning

Degree courses accredited by the CIOB are by their nature vocationally focussed therefore, the CIOB expects to see a range of work-based learning (WBL) elements within accredited awards. WBL can take many forms, ranging from apprenticeships, through year-long industrial placements and shorter placement periods, to the inclusion of field trips, site visits, industrial/professional guest lectures as well as live and historic case studies and assignments based on real projects. Although the CIOB does not require that all accredited programmes include a year-long placement it does strongly advocate the inclusion of such an opportunity. The CIOB does expect that all accredited programmes include suitable WBL elements and opportunities and programmes seeking accreditation are therefore required to identify the WBL elements on the award.

The following learning outcomes have been extracted from our Professional Development Programme and institutions are encouraged to use these to support and provide further guidance to students on sandwich programmes, employed part-time students, or apprentices, although it is not expected that students will meet all the outcomes. Students are also able to gather their evidence by completing the associated Work Placement Portfolio, to request a copy please contact the Accreditation Officer via educationadmin@ciob.org.uk. Alternatively, for a fee students are able to register on the full PDP, which upon successful completion and following graduation are awarded Chartered Membership. Please contact the PDP Officer via educationadmin@ciob.org.uk for more information.

LEARNING OUTCOME	CROSS REFERENCE TO PROGRAMME MODULES	METHOD OF ASSESSMENT	FURTHER COMMENTS/NOTES
Developing Transferable And Management Skills			
COMMUNICATION			
Present information effectively to various audiences	Introduction to the Built Environment	Coursework	
Demonstrate effective meeting skills	Project / Case Study Project	Assignment/ Presentation	
Demonstrate effective interpersonal skills and informal communication	Project / Case Study Project	Assignment/ Presentation	

DECISION-MAKING			
Identify and determine solutions to problems Investigate problems, causes and effects within the job role	Environmental Science Project / Case Study Project	Assignment and CMA Assignment/ Presentation	
MANAGING INFORMATION			
Identify and gather all necessary information required to carry out tasks within the job role Process information effectively to meet work objectives Identify actions to remedy incorrect or insufficient information	Digital Technologies Introduction to the Built Environment	Assignment and CMA Assignment	

LEADERSHIP AND STRATEGIC/ FINANCIAL MANAGEMENT			
Identify the various procurement procedures within your organisation Demonstrate the ability to identify and manage risk Demonstrate effective budget control and identify budget constraints Demonstrate effective time management	Building Control Introduction to the Built Environment	Assignment and CMA Coursework	
EFFECTIVENESS AT WORK			

Demonstrate effective team working	Integrated Project 1 and 2	Assignments, video submission and CMA	
Demonstrate the ability to deal with conflict in teams	Project / Building Control End Point Assessment	Assignment	
Developing Occupational Skills			
PLANNING AND ORGANISING WORK			
Set and review work objectives	Project / Building Control End Point Assessment	Assignment	
Plan activities and work methods	Project / Building Control End Point Assessment	Assignment	
Monitor and control work activities	Project / Building Control End Point Assessment	Assignment	
MANAGING HEALTH AND SAFETY			
Identify job responsibilities and practices under health, safety and welfare legislation	Introduction to Regulatory Frameworks	Coursework	
Identify and describe the implementation of risk control measures	Building Control	Assignment and CMA	
MANAGING QUALITY			
Investigate the quality of a product, service or process	Project / Case Study Project		
Undertake an investigation for the organisation			
IMPLEMENTING SUSTAINABLE CONSTRUCTION AND DEVELOPMENT			

Identify and evaluate the company's policies and practices in sustainable building	Introduction to the Built Environment	Coursework	
Identify ways of protecting the workplace and surrounding environments	Construction Technology 1	Assignment and CMA	
	Introduction to the Built Environment	Coursework	

KNOWLEDGE OF COMMERCIAL, CONTRACTUAL AND LEGAL ISSUES			
Identify the impact/consequences of making decisions	Public Safety in Buildings and Fire Safety	Assignment and CMA	
Demonstrate an understanding of construction and relevant civil law	Public Safety in Buildings and Fire Safety	Assignment and CMA	

Building Control Surveyor Apprenticeship Standard Mapping

Applicable to apprenticeship students only

Knowledge	What is required - In the context of building control:	Relevant module codes
1. Legislation	Demonstrate a robust knowledge of the requirements contained within the Building Act, Statutory Framework and other associated legislation related to Building Regulations.	LAW4LST 4REGFMK 4LAWBEV 5ENVSCI 5CONTEC 5BUICON 5PLACON 5INTPR1 5INTPR2 6FIRSAF 6SUMAPR 6PUBSAF 6CASPRJ
2. Data Management	In-depth knowledge of accurate application of Regulatory processes within the constraints of timescale, data management and confidentiality, in-line with data protection laws.	LAW4LST 5INTPR1
3. Building regulations approval	Interpret the Building Regulations in relation to all types of building work covering areas such as structural design, means of escape, active and passive fire protection, ventilation, thermal efficiency and access provisions.	4DIGTEC 4DESSTR 5ENVSCI 5CONTEC 5BUICON 5PLACON 5INTPR1 5INTPR2 6FIRSAF 5SUMAPR 6PUBSAF 6CASPRJ

4. Health and safety	Describe the principles and responsibilities imposed by Health and Safety law, codes of practice and other regulations in fulfilling the building control function.	4REGFMK 5ENVSCI 5BUICON 6SUMAPR
5. Sustainability and Accessibility	Understand how the Building Regulations places a requirement in relation to sustainability and accessibility to achieve environmental and social objectives.	TEC4BSC 4REGFMK 4DESSTR 5CONTEC 5PLACON 5INTPR1 5INTPR2 6SUMAPR 6CASPRJ
6. Construction Technology	Knowledge of building pathology and construction technology used in buildings including the performance criteria of materials.	TEC4BSC 4DESSTR 5CONTEC 5INTPR1 5INTPR2 6BUIPAT 6FIRSAF 6SUMAPR 6PUBSAF 6CASPRJ
7. Finance	Knowledge of the Charges Regulations and its relevance to service delivery.	5BUHICON 5INTPR1 5INTPR2 6CASPRJ
8. Enforcement	Knowledge of the enforcement framework and powers within the Building Act to achieve compliance with the Building Regulations.	4REGFMK 5BUICON 5INTPR1 5INTPR2

		6CASPRJ
9. Non-Statutory duties	Knowledge of non-statutory duties carried out by Local Authority Building Control teams as a delegated function of their Authority e.g. dangerous structures, demolitions.	5CONTEC 5INTPR1 6CASPRJ
10. People management	Knowledge of the dynamics of the design team to be able to offer support and guidance where required.	5INTPR1 5INTPR2 6CASPRJ
11. Specialist functions	Knowledge of specialist functions of building control e.g. Fire Engineering, Access Officer, Acoustic Engineer, Thermal Engineer.	4BLTENV 5INTPR1 5INTPR2 6FIRSAF 6PUBSAF 6CASPRJ
12. Consultation	Knowledge of why consultation is required with other local authority functions and external statutory bodies and organisations.	5BUICON 5INTPR1 5INTPR2 6PUBSAF 6CASPRJ
13. Marketing	Awareness of how to promote the building control service through effective marketing.	5INTPR1 5INTPR2

Skills	What is required - In the context of building control:	Relevant module codes
1. Legislation	Apply the principles contained within the Building Act, Statutory Framework and other associated legislation related to Building Regulations.	LAW4LST 4REGFMK 4LAWBEV 5BUICON 5PLACON 5INTPR1 5INTPR2 6FIRSAF 6SUMAPR 6PUBSAF 6CASPRJ
2. Data management	Undertake the administrative process of a Building Regulation application and use the data to ensure performance standards are met in compliance with relevant quality assurance standards.	ECO4ECO 5INTPR2
3. Building regulations approval	Utilise the Building Regulations to evaluate plans, drawings, specifications and other documents submitted for building regulation approval for all types of building work to ensure appropriate decisions are issued on applications.	TEC4BSC 4DESSTR 5CONTEC 5PLACON 5INTPR1 5INTPR2 6FIRSAF 6CASPRJ
4. Health and safety	Identify and manage risks of health, safety and welfare in-line with legislation, hazards and safe systems of work.	4REGFMK 5BUICON 5INTPR1 5INTPR2 6SUMAPR 6CASPRJ
5. Sustainability and Accessibility	Advise on the Building Regulation requirement in relation to sustainability and accessibility to achieve environmental and social objectives.	4REGFMK TEC4BSC

		4DESSTR 5CONTEC 5BUICON 5PLACON 5INTPR1 5INTPR2 6SUMAPR 6CASPRJ
6. Construction technology	Utilise knowledge of construction technology to provide advice and guidance in connection with the design or construction of building projects.	TEC4BSC 4DESSTR 5ENVSCI 5CONTEC 5BUICON 5INTPR1 5INTPR2 6BUIPAT 6FIRSAF 6PUBSAF 6CASPRJ
7. Finance	Calculate charges for the building control function.	5INTPR1 5INTPR2
8. Information Technology Skills	Utilise proficient Information Technology (IT) skills and have a good knowledge of relevant technologies, including Building information modelling (BIM).	ECO4ECO4DIGTEC TEC4BSC 5INTPR1 6BUIPAT 6CASPRJ
9. Site Inspections	Inspect building work in progress as may be necessary to ensure compliance with the Building Regulations.	5CONTEC 5BUICON 5INTPR1

10. Building Control Best Practice	Uphold high technical standards and best practice in building control in all aspects of building regulation compliance and its application to construction types and methods.	4REGFMK 4DIGTEC 4DESSTR 5ENVSCI 5INTPR1 5INTPR2 6FIRSAF 6SUMAPR 6PUBSAF 6CASPRJ
11. Communication skills	Communicate effectively and appropriately - both verbally and in writing - with people at all levels to achieve a compliant outcome.	MAN4POM ECO4ECO TEC4BSC 4BLTENV 4DIGTEC 5CONTEC 5BUICON 5INTPR1 5INTPR2 6SUMAPR 6PUBSAF 6CASPRJ
12. Personal and Professional effectiveness	Manage own time and tasks, communicate and negotiate effectively within a commercial environment.	MAN4POM 4BLTENV 5BUICON 5INTPR1 5INTPR2 6SUMAPR 6CASPRJ
13. Diplomacy	Applies diplomacy, tact and persuasive skills when dealing with difficult situations while remaining impartial.	MAN4POM 5BUICON 5INTPR2 6SUMAPR

		6PUBSAF 6CASPRJ

Behaviours	What is required - In the context of building control:	Relevant module codes
1. Provide a high standard of service	Always ensure your client, or others to whom you have a professional responsibility, receive the best possible advice, support or performance of the terms of engagement you have agreed to and ensure you always give attention to detail.	LAW4LST 4DIGTEC TEC4BSC 4DESSTR 5ENVSCI 5CONTEC 5PLACON 5INTPR1 5INTPR2 6FIRSAF 6SUMAPR 6PUBSAF 6CASPRJ
2. Act in a way that promotes trust in the profession	Demonstrate a personal commitment to professional and ethical standards, recognising one's obligations to society and the profession.	LAW4LST ECO4ECO4REGFMK TEC4BSC 4DIGTEC 4DESSTR 4LAWBEV 5ENVSCI 5CONTEC 5PLACON 5INTPR1 5INTPR2 6FIRSAF 6CASPRJ
3. Act with integrity	Always be trustworthy, open, transparent and challenge where necessary. Respect confidential information of your clients or potential clients and do not allow bias, conflict of interest or the undue influence of others to override your professional or business judgments or obligations. Always act consistently in the public interest when making decisions or providing advice.	ECO4ECO 4BLTENV 4DESSTR 4LAWBEV 5BUICON 5PLACON 5INTPR1

		5INTPR2 6BUIPAT 6FIRSAF 6SUMAPR 6PUBSAF 6CASPRJ
4. Treat others with respect	Treat everyone with courtesy, politeness and respect.	LAW4LST MAN4POM 4BLTENV 4DIGTEC 5BUICON 5INTPR1 5INTPR2 6SUMAPR 6PUBSAF 6CASPRJ
5. Take responsibility	Always act with skill, care and diligence and deal with any complaint in an appropriate professional manner.	ECO4ECOMAN4POM TEC4BSC 4REGFMK 4LAWBEV 5BUICON 5INTPR1 5INTPR2 6BUIPAT 6SUMAPR 6CASPRJ
6. Adaptability and Resilience	Be open to the changing environment of the workplace and regulatory framework.	4BLTENV MAN4POM TEC4BSC 4REGFMK ECO4ECO 5CONTEC 5INTPR1

		5INTPR2 6BUIPAT 6FIRSAF 6CASPRJ