

# MSc Construction Management

Programme Specification 2021-2022

Version: 23.00 Status: Final

Date: 14/05/2021

# **Summary Programme Details**

#### Final Award

Award: MSc

Title of (final) Programme: Construction Management

Credit points: 180

Level of award (QAA FHEQ): 7

#### Intermediate award(s)

Intermediate award 1: Postgraduate Diploma Construction Management

Credit points: 120

Level of award (QAA FHEQ): 7

Intermediate award 2: Postgraduate Certificate Building and Property Studies

Credit points: 60

Level of award (QAA FHEQ): 7

#### Validation

Validating institution: University College of Estate Management (UCEM)

Date of last validation: February 2020

Date of next periodic review: February 2025

Date of commencement of first delivery: September 2014

Duration: 2 years or 2 years plus external end point assessment, if taken as part of an

apprenticeship programme

Maximum period of registration: In accordance with the Academic and Programme

Regulations (opens new window).

UCAS Code/ HECoS Code: N/A/ 100151

**Programming Code**: PMSC

Other coding as required: CMS

#### Professional accreditation / recognition

Accrediting/recognising body: Royal Institution of Chartered Surveyors (RICS)

Details of the accreditation/recognition: MSc accredited. RICS is also the End Point

Assessment Organisation for the apprenticeship programme.

Date of last programme accreditation/recognition: November 2015

Date of next periodic review: 2021

Accrediting/recognising body: Chartered Institute of Building (CIOB)

Details of the accreditation/recognition: MSc accredited

Date of last programme accreditation/recognition: December 2020

Date of next periodic review: 2025

Accrediting/recognising body: Chartered Association of Building Engineers (CABE)

Details of the accreditation/recognition: MSc accredited

Date of last programme accreditation/recognition: June 2020

Date of next periodic review: 2025

#### QAA benchmark statement

UK Quality Code for Higher Education (opens new window)

The Frameworks for Higher Education Qualifications of UK Degree-Awarding Bodies (opens new window)

<u>Quality Assurance Agency (QAA) Subject Benchmark Statement: Land, Construction, Real Estate and Surveying October 2016 (opens new window)</u>

# **Programme Overview**

### Rationale

Construction management is the essential link between the expression of a client's wishes and the occupation of a completed building project. This supported online learning programme will help develop the skills required for a smooth transfer from design to completion and occupation of a building. Providing advanced knowledge and management skills required to become a leader in construction management, this programme is well respected internationally.

This is one of a suite of MSc conversion programmes that enable graduates from disciplines unrelated to real estate and construction to obtain a RICS, CIOB and CABE accredited degree, giving access to professional membership.

### **Entry Requirements**

Entrants to this programme normally are required to have attained one of the following:

- a Bachelor's Degree with honours at lower second standard (2:2), or equivalent;
   Or
- a Bachelor's Degree, or equivalent, plus experience in a relevant field;
   Or
- a Level 5 qualification as defined by Framework for Higher Education Qualifications for England, Wales and Northern Ireland (FHEQ) plus 5 years' relevant experience;
   Or
- a professional qualification plus 5 years' relevant experience;
   Or
- successfully completed the UCEM Postgraduate Access programme at the first attempt.

If an applicant does not meet the standard entry requirements 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 applicant may hold. The applicant 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 <u>Code of Practice: Admissions and Recognition of Prior Learning (opens new window).</u>

### **English language requirements**

All UCEM programmes are taught and assessed in English. The applicant will therefore be required to demonstrate adequate proficiency in the language before being admitted to a course\*:

• GCSE Grade 4 (or C) or above in English Language or English Literature, or an equivalent qualification. For further information on equivalent qualifications please contact: <a href="mailto:admissions@ucem.ac.uk">admissions@ucem.ac.uk</a>.

- Grade 6.0 or above, with at least 6.0 in the reading and writing modules, in the International English Language Testing System (IELTS) academic test administered by the British Council.
- 88 or above in the Internet option, 230 or above in the computer-based option or 570 or above in the paper-based option, of the Teaching of English as a Foreign Language (TOEFL) test.
- Grade 4 (or C) or above in English (Language or Literature) at A/S Level.
- HKDSE (Hong Kong Diploma of Secondary Education) Grade 3, or HKALE (Hong Kong Advanced Level Examination – Advanced Level & Advanced Supplementary Level) Grade E, or HKCEE (Hong Kong Certificate of Education Examination) Grade 3-5\* or Grade A-D (Syllabus B only).
- \* Applicants with a Bachelor's degree that has been taught and examined in the English medium can be considered for entry in the absence of the qualifications detailed above.

### **Apprenticeship programme**

Applicants to the apprenticeship programme must also:

- Have the right to work in England, meet Education and Skills Funding Agency residency status requirements, spend at least 50% of their working hours in England and be directly employed in a job role that will enable the requirements of the apprenticeship to be achieved.
- Have GCSE Grade 4 (or C) or above in Mathematics, or an equivalent qualification.
   For further information on equivalent qualifications please contact
   <u>admissions@ucem.ac.uk</u>. Applicants for the apprenticeship programme that do not
   have accepted current or prior equivalent Level 2 maths and English qualifications on
   entry will be required to achieve these as part of the apprenticeship.

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

UCEM policy and procedures for Recognition of Prior Experiential Learning (RPEL) and Recognition of Prior Learning (RPL) are set out in the UCEM Code of Practice: Admissions and Recognition of Prior Learning. This policy statement takes precedence in any such decision.

RPEL may be used to support an application for entry onto the programme in accordance with the entry requirements stated in the section above. However, RPEL and RPL do not normally enable transfer of credit into a level 7 programme nor enable exemption from any component on these programmes.

### **Programme Progression**

For details of progression arrangements, please view the <u>Academic and Programme</u> Regulations (opens new window).

Successful completion of the MSc will enable the student to apply to the relevant professional body for membership, or to apply for a PhD/MPhil, or to conduct further research.

### **Award Regulations**

For details of award arrangements, please view the <u>Academic and Programme Regulations</u> (opens new window).

### **Career Prospects**

This programme will provide a route for both non-cognate and semi-cognate graduates, into careers associated to membership of the Chartered Institute of Building (CIOB), the Chartered Association of Building Engineers (CABE) and the Royal Institution of Chartered Surveyors (RICS).

This programme equips students with the essential subject knowledge and postgraduate skills and expertise to enable them to enter and work within the construction and project management areas of practice within the construction industry. The opportunities available are fairly extensive and include the following areas of professional practice:

- · Property management;
- · Construction management;
- · Project management;
- Maintenance and refurbishment sector;
- · Property development.

# **Programme Aims**

### **Programme aims**

The programme is designed for holders of a Bachelor's degree or equivalent to study a Master's award that is focused on the core disciplines associated with construction and project management. It develops students' ability to integrate interdisciplinary theory and practice and, to research and evaluate data in order to solve complex problems. The programme also aims to provide students with a foundation for further professional development and extension of their knowledge in preparation for further academic study at PhD level.

#### Market and internationalisation

This programme is aimed at a UK and broad international audience. However, it has as its basis UK law and regulatory controls.

The programme aims to utilise international case studies to further understanding and, where possible, international case studies are considered along with international codes and conventions.

# **Learning Outcomes**

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

### A - Knowledge and understanding

Learni	ng Outcome	Relevant modules
A7.1	Critically appraise the wider business context and the integration of the role of construction management within it.	CON7CMC
A7.2	Demonstrate a critical awareness and systematic	CON7CMC
	understanding of issues in the construction management	CON7SDC
	sector as informed by research and practice.	MAN7MMA
		MAN7MLP
		INT7CON
		PRJ7PRA/
		PRJ7PRS
A7.3	Critically evaluate and select theories and techniques	CON7CMC
	appropriate to construction management.	MAN7MLP

#### **B** - Intellectual skills

Learn	ng Outcome	Relevant modules
B7.1	Critically synthesise a range of information and solve	CON7CMC
	complex problems involving the creative application of	LAW7LFS
	construction management knowledge together with further research and enquiry.  MAN7N	MAN7MMA
	,	QSP7CAP
		QSP7SPT
		PRJ7PRA/
		PRJ7PRS
B7.2	Evaluate the rigour and validity of published research and	CON7CMC
	its relevance to construction management issues.	CON7SDC
		MAN7MLP
		INT7CON
		PRJ7PRA/
		PRJ7PRS

## C - Subject practical skills

Learn	ng Outcome	Relevant modules
C7.1	Acquire, analyse and evaluate data, and judge its	CON7CMC
	relevance and validity to a range of construction	QSP7CAP
	management situations.	QSP7SPT
		PRJ7PRA/
		PRJ7PRS
C7.2	Demonstrate an international perspective regarding the	CON7CMC
	impact and responsibility of construction management and construction managers on business, societies and the	CON7SDC
	environment.	QSP7CAP
		MAN7MLP
		INT7CON
C7.3	Consistently apply subject-specific knowledge and	CON7CMC
	integrate theory and practice, making informed decisions to deal with complex construction management situations.	CON7SDC
	to deal with complex construction management situations.	LAW7LFS
		MAN7MLP
		INT7CON
		PRJ7PRA/
		PRJ7PRS

### D - Key / Transferable skills

Learni	ng Outcome	Relevant modules	
D7.1	Demonstrate professional communication appropriate for relevant stakeholders.	All modules	
D7.2	Evaluate and apply subject-specific knowledge and integrate theory and practice to make informed decisions to deal with complex problems.	All modules	
D7.3	Demonstrate proactivity and originality in problem-solving, and the ability to act autonomously in planning and implementing tasks at a professional level.	All modules	
D7.4	Demonstrate independent, self-directed learning, as required for continuing professional development.	All modules	
D7.5	Critically evaluate data and develop solutions that reflect a	CON7CMC	
	holistic approach to sustainability and the opportunities and constraints this presents.	CON7SDC	
	and constraints this presents.	MAN7MMA	

# **Programme Structure**

### **Module List**

Code	Module	Level	Credits	Core/ Elective
CON7SDC	Sustainable and Innovative Construction	7	20	Core
LAW7LFS	Law for Surveyors	7	20	Core
QSP7CAP	Contract Administration and Practice	7	20	Core
QSP7SPT	Procurement and Tendering	7	20	Core
MAN7MMA	Maintenance Management	7	20	Core
CON7CMC	Management of Construction	7	20	Core
MAN7MLP	Leading and Managing People	7	20	Elective
INT7CON	International Construction	7	20	Elective
PRJ7PRA/ PRJ7PRS	Postgraduate Project	7	40	Core

#### Notes

Credits are part of the Credit Accumulation and Transfer System (CATS). Two UK credits are equivalent to one European Credit Transfer System (ECTS) credit.

# **Delivery Structure**

### **Autumn (UK) Entry**

### Year 1, Semester 1

Module Code	Module Name	Credits
CON7SDC	Sustainable and Innovative Construction	20
QSP7CAP	Contract Administration and Practice	20

#### Year 1, Semester 2

Module Code	Module Name	Credits
LAW7LFS	Law for Surveyors	20
QSP7SPT	Procurement and Tendering	20

### Year 2, Semester 1

Module Code	Module Name	Credits
MAN7MLP	Leading and Managing People or	20
INT7CON	International Construction	
CON7CMC	Management of Construction	20

Module Code	Module Name	Credits	
PRJ7PRA/PRJ7PRS	Postgraduate Project	40	

### Year 2, Semester 2

Module Code	Module Name	Credits
MAN7MMA	Maintenance Management	20
PRJ7PRA/PRJ7PRS	Postgraduate Project	40

### **Spring (UK) Entry**

### Year 1, Semester 1

Module Code	Module Name	Credits
CON7SDC	Sustainable and Innovative Construction	20
QSP7SPT	Procurement and Tendering	20

### Year 1, Semester 2

Module Code	Module Name	Credits
LAW7LFS	Law for Surveyors	20
QSP7CAP	Contract Administration and Practice	20

### Year 2, Semester 1

Module Code	Module Name	Credits
MAN7MMA	Maintenance Management	20
CON7CMC	Management of Construction	20
PRJ7PRA/PRJ7PRS	Postgraduate Project	40

### Year 2, Semester 2

Module Code	Module Name	Credits
MAN7MLP	Leading and Managing People or	20
INT7CON	International Construction	
PRJ7PRA/PRJ7PRS	Postgraduate Project	40

#### **Module Summaries**

#### **Core Modules**

#### **CON7SDC Sustainable and Innovative Construction**

his module develops the principles of construction technology, including modern, innovative and traditional construction. Within the framework of a sustainable built environment, assessment methods and relevant codes and regulations are explored in providing for a sustainable agenda.

#### **LAW7LFS Law for Surveyors**

This module introduces an overview of English law, the legal system and the law-making process. Students are introduced to the law of contracts, from their formation, acceptance and validity, through to termination and remedies for breach and the enforceability of exclusion clauses. Students are then introduced to the law of tort which deals with 'civil wrong' (tort being the French for 'wrong') that causes harm or loss to one or more parties. In tort we will explore the concept of duty and standard of care, vicarious liability, and remedies and specific classes of tort.

#### **QSP7CAP Contract Administration and Practice**

This module examines Joint Contracts Tribunal (JCT), New Engineering Contract (NEC) and International Federation of Consulting Engineers (FIDIC) Standard Forms of construction contracts to enable students to interpret and analyse the key provisions for effective control and management of a contract. The module also examines the interactions of stakeholders and addresses impartiality and lack of bias within construction contracts.

#### **QSP7CAP Procurement and Tendering**

This module examines the principles and applications of project procurement. It also develops understanding of the effects of risk allocation on procurement choice and the impact this has on subsequent phases of the project cycle.

#### **MAN7MMA Maintenance Management**

This module aims to develop a critical understanding of, and practice in, the skills associated with managing, planning and controlling the maintenance of buildings. It focuses on the skills required by the construction manager who is involved in buildings maintenance on a day to day basis. It will allow students to develop their understanding of the theory of both management and building technology and to apply these theories to practical situations.

#### **CON7CMC Management of Construction**

This module develops both the personnel and organisational issues of construction management, with a focus on the managers of construction projects. Comprehensive understanding and practice of skills in managing, planning and controlling the safe production of a construction project are investigated.

#### PRJ7PRA/PRJ7PRS Postgraduate Project

This module requires students to develop their research skills within the context of the built environment and is a key part of their wider professional development. It provides them with an opportunity to conduct a self-directed research project that reflects the culmination of their studies in the relevant programme. The topics selected are expected to reflect the current and critical issues that concern the built environment. For many students the development of case study research, often emanating within their own workplace or arising from their

professional activity, will be an appropriate approach to demonstrate research and expertise in a specific area.

#### **Elective Modules**

#### **MAN7MLP Leading and Managing People**

This module seeks to develop understanding and insight into what a manager is, and what they do; and to distinguish leadership from management. It requires students to interrogate issues and contexts relating to managing people, and how to get the best out of people, in an environment of constant change.

#### **INT7CON International Construction**

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

# Learning, Teaching and Assessment

### **Learning & Teaching**

### Knowledge and understanding

The teaching, learning and assessment strategy for the programme is guided by the UCEM-wide Learning, Teaching and Assessment Strategy (LTAS 2020-2025). This ensures all programmes promote a logical learning journey for students. The approach adopted is student centred learning design that supports the educational needs of our diverse student community. Learning has been designed with flexibility in mind to support students to adopt their own learning experience best suited to their needs.

Students are taught through online learning resources available to them, including customised text material, study papers, learning activities and interactive media. These are complemented by a variety of Tutor-facilitated sessions and interactions, using a range of media for enhancement of the learning experience.

Module delivery follows a standard format, incorporating a range of subject appropriate resources suitable for the online learner. This may include, but is not limited to, audio-visual presentations, interactive case studies and online journals.

Students are encouraged to research beyond the material provided and undertake self-directed learning throughout their programme. In the Postgraduate Project module, self-directed learning and problem solving further enhances knowledge and understanding, focusing on students' own chosen research topic.

#### Intellectual skills

Learning and teaching methods are applied to enable the development of cognitive skills. These skills are aligned to those used by Construction Managers, 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.

Students are encouraged to develop and apply their knowledge and understanding through a range of online activities and exercises. These require students to apply research and analysis to industry issues.

#### Subject practical skills

The MSc Construction Management programme introduces and develops several specialist theoretical and practical subject themes required for the successful planning, execution and operation of construction projects in the built environment at level 7. The construction manager must have a broad understanding of all the phases of construction according to the RIBA plan of works (2013) and the different modules on this programme develops these competencies.

The Procurement and Tendering, Contract Administration and Practice and Law for Surveyors modules provide a broad understanding of the pre-construction activities, the different parties in a typical construction project and the contractual relationships between them. They also engage students with contemporary knowledge on the theories and tested practices that occur during the initial phases of construction that ensure that the construction phase progresses smoothly. These include effective ways of selecting the most suitable contractor at the best price and the responsibilities and liabilities of each party to a construction project.

The Sustainable and Innovative Construction Module covers modern construction techniques and methods which conform to contemporary standards of sustainability, ethics and health and safety. It also highlights the role of innovation as a means of improving the sustainability and efficiency of the built environment. The Management of Construction module develops the project management competences of students by focusing on the cradle to cradle responsibilities and decision-making required of the project manager in the project lifecycle. The Leading and Managing People module recognises that construction is human-resource intensive and focusses on the skills required to effectively manage a wide range of parties and stakeholders in the industry.

The Maintenance Management module is concerned with the 'In-Use' phase of the building and develops the competencies to be able to proactively and reactively respond to maintenance issues while ensuring that the built environment continues to function efficiently. It is also important to understand how construction industries vary from country to country and the International Construction module covers content on these. Overall, these modules ensure that students get a rounded experience of the practical and theoretical skills and knowledge required to excel in a construction project management role.

### **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. The Study Skills area of the VLE is a further resource for support in developing these skills.

The learning activities require students to undertake research, evaluate their findings and develop solutions. The teaching of module topics requires students' engagement with a range of online activities that develop research and evaluation skills and cultivate a systematic approach to problem solving. Engagement with the UCEM learning community develops communication and collaboration skills. The transferrable soft skills will be taught via the joint programme webinars delivered to the student throughout the year. The transferable soft skills will be tested though the summative and formative module assessments.

#### Assessment

The assessment strategy for the programme is guided by the UCEM-wide Learning, Teaching and Assessment Strategy (LTAS 2020-2025). 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 linked to personal development. To support this, assessments are clearly related to module 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. Assessments are built that have direct application to industry standards, and that enable students to learn through real world scenarios and working practice. 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. All elements of assessments are discipline-specific for each programme as well as supporting the acquisition and promotion of transferable skills, including research skills development.

Formative assessment and feedback opportunities are provided throughout the programme in a variety of formats to motivate, guide and develop students through their learning. Students are required to complete various pieces of coursework in the modules which are assessed within set time frames. Detailed feedback is provided on tutor-assessed work, which explains how the mark was derived, what was done well and what could be improved for future assessments. Objective testing is also utilised in formative (including self-assessment) and summative assessment. Individual projects in the final stage are assessed in accordance with their own guidelines and marking schemes.

All assessment contributing to award is subject to moderation policies. Moderation at UCEM is designed to reflect the quality of the student submission and the benchmark standards for the various levels of undergraduate study. Moderation of marking accords with QAA recommended best practice to ensure that marking criteria have been fairly, accurately, and consistently applied during first marking.

#### **Assessment Diet**

The types of assessments used on this programme will include coursework (such as essays, reports, portfolios, reflections, problem or short questions or video presentations), computer-based assessments, and computer marked assessments (CMAs). The exact combinations of assessment will vary from module to module. However generally each module has 2 assessments, both coursework (except for PRJ7PRA/S Postgraduate Project which has 2 assessments: a research proposal and the final project submission).

# **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 are a variety of resources which will help the student to get started. These include tutorials regarding how to use the VLE, the UCEM e-Library and information regarding how to join a webinar. All this information is key to having a successful start to supported online learning with UCEM.

There is a 'Writing in Your Own Words' e-learning resource and associated quiz. This resource aims to provide the student with relevant examples of referencing, and a clear understanding of what plagiarism is and how to avoid it. Additionally, the 'Readiness for Learning' questionnaire prompts the student to consider the practicalities surrounding their studies. This element of the Induction Module is 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 taught via UCEM's VLE and academic facilitation and support is provided online giving students access to UCEM Tutors and other students worldwide.

The Learning and Teaching 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. UCEM's 'Student Central' portal provides the main point of contact for students for these teams throughout the duration of their programme

Each student, wherever their location, will have access to a wealth of library and online materials to support their studies. International students are able to use their local context when writing their assessments

The Learning and Teaching Enhancement Team works with departments to promote student retention, achievement and success. This work is achieved through a multi-faceted approach, which consists of:

- supporting learning on modules by responding to non-subject specific queries and assisting with synchronous learning delivery and making proactive contact with nonengaged students;
- identifying students who are at risk of interrupting their studies and/or withdrawing 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.

Additional Needs support is provided via a dedicated Disability and Wellbeing team at UCEM.

### **English language 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 for writing at Master's level aimed at developing students study skills.

### Personal and professional development

Students are undertaking vocational programmes that are intrinsically linked to the accrediting professional bodies. Students are encouraged and supported to understand the need for the recognition of these bodies and guided as to how to meet the professional membership requirements.

More generally, UCEM has a dedicated careers advisor to ensure students have appropriate access to careers education, information, advice and guidance.

### **Programme specific support**

Each programme has a Programme Leader, as well as Module Leaders, Module Tutors and Academic Support Tutors to support the students throughout their time with the programme.

The UCEM staff are accessible during normal UK working hours, during which they also monitor the 24/7 forums asynchronously and provide encouragement, assistance and necessary tutor and student feedback services.

Access to the UCEM e-Library is on a 24/7 basis and UCEM has a full-time e-Librarian during normal UK working hours.