

**This table indicates the modules included in this programme and the structure which they follow.**

Should you require further information about the modules, please contact [admissions@ucem.ac.uk](mailto:admissions@ucem.ac.uk)

4 years (standard route).

Duration is 57 months within an Apprenticeship Programme (including 48 months for the BSc (Hons) degree).\*

**Please note:**

Students can either start in September or March. For the September module information sheet, please see our website.

*Where considered necessary to do so at any stage, UCEM may seek to make variations to programme content, entry requirements and methods of delivery, and to discontinue, merge or combine programmes. This is subject to consultation with relevant students and other stakeholders, setting out the reasons for the proposed amendment(s), and compliance with the requirements of the UCEM Code of Practice on Programme Monitoring, Amendment, Review and Discontinuation. Should such an eventuality occur during the admissions and registration process, applicants will be informed immediately of any change and the alternative arrangements that have been put in place.*

*\*The actual duration is determined by when the employer and UCEM deem the apprentice to be ready to undertake the RICS Assessment of Professional Competence (APC) end-point assessment.*

Yr	March Semester	September Semester
1	Financial & Resource Management (20 Credits) Building, Environment, Technology & Simple Construction (20 Credits)	Introduction to the Built Environment (20 Credits) Digital Technologies (20 Credits)
2	Economics for Construction (20 credits) Construction Technology 2 (20 credits)	Measurement & Estimating of Construction Works 1 (20 credits) Law for the Built Environment (20 credits)
3	Management for the Built Environment (20 credits) Design Economics & Cost Planning (20 credits)	Contract Administration & Practice (20 credits) Measurement & Estimating of Construction Works 2 (20 credits)
4	International Construction (20 credits) Development Appraisal And Briefing (20 credits)	Professional Quantity Surveying Practice (20 credits) Commercial Management in Construction (20 credits)
Project (40 Credits)		

 **Core Modules** Standard Route (part-time)

## Year 1

### Financial & Resource Management (core)

#### Aims

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

#### Assessment

	Weighting
Assessment 1: Coursework	40%
Assessment 2: Coursework	60%
Pass mark: 40%	

## Building, Environment, Technology & Simple Construction (core)

### Aims

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.

### Assessment

	Weighting
Assessment 1: Coursework	40%
Assessment 2: Coursework	60%
	Pass mark: 40%

The assessment methods for the following modules, which will be delivered from October 2020, are currently in design and will be confirmed closer to the time. The assessments will consist of a variety of methods including:

- assessed coursework (such as essays, reports, portfolios, reflections, problem or short questions or video presentations)
- computer marked assessments
- project submissions

## Introduction to the Built Environment (core)

### Aims

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 (core)

### Aims

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.

## Year 2

### Economics for Construction (core)

#### Aims

This module introduces a range of ideas and techniques relating to the practice of economics as it applies to the construction industry. In economics, a distinction is made between micro and macro. In its simplest form, micro-economics is concerned with choice and decision making by the individual and the firm in the marketplace, and the operation of markets; macro-economics is the study of the economy at national or international level. Irrespective of the subsector worked in within the construction industry, a familiarity with and knowledge of how to apply economic ideas and principles will enhance professional skills. The intention of the module is to introduce a range of economics ideas, and then to explore how they can be applied to the construction industry by industry professionals to improve decision making and understanding.

### Construction Technology 2 (core)

#### Aims

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?

### Measurement & Estimating of Constructions Works 1 (core)

#### Aims

This module provides an understanding of the need for measurement and estimating. It develops the core skills for the preparation of quantities and unit rates for costing of construction work. It will develop students' understanding of cost influences and implications of their decision making.

### Law for the Built Environment (core)

#### Aims

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.

## Year 3

### Management for the Built Environment (core)

#### Aims

This module explains how managers within organisations in the construction and built environment sectors achieve organisational aims by using financial and other resources. People management does feature in this module, but the spotlight is on how managers may use non-human resources in the pursuit of corporate goals. The module covers the role of leadership and management throughout the organisation as a central theme, especially in the sense of setting organisational objectives. Internal financial control and external financial reporting are distinguished from each other, and the essentials of capital investment appraisal and financial decision-making are explored.

## Design Economics & Cost Planning (core)

### Aims

This module aims to provide students with an appreciation of construction costs and their control, from inception to completion of a project. It considers what affects the cost of a building, and how the costs of the development can be controlled, both at the pre-contract and the post contract stages. The application of the Royal Institution of Chartered Surveyors (RICS) New Rules of Measurement (NRM) is considered when undertaking pre-contract cost control activities. Building Information Management (BIM) is introduced to allow an appreciation of how this can be used to create cost plans and help control costs. The importance of lifecycle costs and the maintenance management of a building are also considered.

## Contract Administration & Practice (core)

### Aims

This module develops the knowledge gained from contract and tort law to focus on the specific aspects of construction projects where it is common to find standard forms of building contracts. The purpose of the module is to develop a broader understanding of law and to apply it to common eventualities on construction and building services projects. This module aims to provide students with the contractual knowledge required to deal on behalf of all parties associated with construction contracts from inception to completion.

## Measurement & Estimating of Construction Works 2 (core)

### Aims

This module develops an understanding of the measurement and estimating during the pre-tender process. It particularly focuses on the preparation of pricing and tendering documentation using specialist software, and how this can be costed by a contractor to create the tender price. It will develop key practical skills in quantifying and costing different elements of construction work from complex drawings, and using various standard methods of measurement.

## Year 4

## International Construction (core)

### Aims

This module focuses on the global construction arena. It aims to bring together some subjects covered previously and reconsider them in a global environment. 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.

## Development Appraisal & Briefing (core)

### Aims

This module examines the process of developing land, and the factors that determine what can be developed. These factors are then reflected in the valuation of the development land through the key valuation methods: residual appraisal, period-by-period cash flow and discounted cash flow. The risk of the development appraisal is assessed through the use of sensitivity analysis and other methods, and the ways in which the whole process can be funded are examined.

## Professional Quantity Surveying Practice (core)

### Aims

This module explores a range of issues and challenges within the quantity surveying profession in the UK and other parts of the world. The significant changes experienced in the construction industry globally over the past decade have required quantity surveyors to adapt their traditional practices and embrace new philosophies, in order to contribute effectively to construction projects. This module therefore provides the student with an opportunity to develop the knowledge, understanding and skills required to operate in a dynamic and contemporary construction environment.

## Commercial Management in Construction (core)

### Aims

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

## Project (core)

### Aims

This module aims to:

- recognise the knowledge and skills developed throughout the programme through a self-directed investigation into a chosen project;
- develop self-reflection;
- develop and apply research techniques to the detailed examination of an issue or activity within a project in either the workplace or the public domain.