

# 2018/19 entry

BSc (Hons) Quantity Surveying Module information - standard route (4-41/2 years)

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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

4-41/2 years (standard route).

A 3 year accelerated route is also available. Duration is 4 years within an Apprenticeship Programme

#### Please note:

Students can either start in October or April

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.

\* A project module is compulsory for all students, with the difference that only Apprenticeship Scheme students study the 'Work Based Learning Project' module and only nonapprenticeship students study the 'Project' module.

| Yr   | October Semester  | April Semester   |
|------|---|--|
| 1    | Legal Studies (20 Credits)<br>People & Organisational Management<br>(20 Credits)  | Economics (20 Credits) Building, Environment, Technology & Simple Construction (20 Credits)  |
| 2    | Financial & Resource Management<br>(20 Credits)<br>Measurement & Quantification of<br>Construction Work (20 Credits)  | Building, Environment, Technology & Framed Structures (20 Credits) Economics of Property & Construction (20 Credits)   |
| 3    | Contract Procedures (20 Credits) Estimating & Tendering of Construction Projects (20 Credits)   | Building, Environment, Technology &<br>Complex Projects (20 Credits)<br>Building Economics (20 Credits)  |
| 3/4  | Work Based Learning Project* (40 Credits)  This module is for apprenticeship students only. It spans years 3 & 4 and can be started in either April or October semester   |  |
|      |   | only. It spans years 3 & 4 and can be started  |
| 4    |   | only. It spans years 3 & 4 and can be started  Contemporary QS Practice (20 Credits)   |
| 4    | in either April or October semester   | Contemporary QS Practice (20 Credits)  Elective modules (choose one from): (20 Credits)  International Construction  Maintenance Management                                  |
|      | in either April or October semester  Construction Law (20 Credits)  Elective modules (choose one from): (20 Credits)  Commercial Management in Construction Commercial Property Management  | Contemporary QS Practice (20 Credits)  Elective modules (choose one from): (20 Credits)  International Construction  |
| 41/2 | in either April or October semester  Construction Law (20 Credits)  Elective modules (choose one from): (20 Credits)  Commercial Management in Construction   | Contemporary QS Practice (20 Credits)  Elective modules (choose one from): (20 Credits)  International Construction  Maintenance Management  Construction Project Management |
|      | in either April or October semester  Construction Law (20 Credits)  Elective modules (choose one from): (20 Credits)  Commercial Management in Construction  Commercial Property Management  Project* (40 Credits)  This module is for non-apprenticeship stude | Contemporary QS Practice (20 Credits)  Elective modules (choose one from): (20 Credits)  International Construction  Maintenance Management  Construction Project Management |

# Year 1

# Legal Studies (core)

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:

- 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.

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

## People and Organisational Management (core)

#### Aims

This module seeks to:

- → explain the role and function of management within organisations in the construction, land and estate management industries, both public and private sectors;
- → explore the question "what is management?" and to distinguish it from leadership;
- → consider 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 businesses;
- → consider contemporary organisational behaviour as applied to the relevant sectors of industry.

#### Assessment

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

### **Economics** (core)

#### Aims

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.

### Assessment

|  | Weighting      |
|--|----------------|
| Assessment 1: Coursework                 | 60%            |
| Assessment 2: Computer Marked Assessment | 40%            |
|  | Pass mark: 40% |

# Building, Environment, Technology and 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.

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

### Year 2

## Financial and Resource Management (core)

### **Aims**

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

#### Assessment

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

### Measurement and Quantification of Construction Works (core)

#### Aims

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

### Assessment

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

## Building, Environment, Technology and Framed Structures (core)

### Aims

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

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

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

# **Economics of Property and Construction (core)**

#### Aims

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

#### Assessment

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

### Year 3

### Contract Procedures (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 the broader understanding of law and to apply it to common eventualities on construction and building services projects.

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

### Assessment

|                           | Weighting      |
|---------------------------|----------------|
| Assessment 1: Coursework  | 40%            |
| Assessment 2: Examination | 60%            |
|                           | Pass mark: 40% |

### Estimating and Tendering of Construction Projects (core)

### Aims

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

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

|                           | Weighting      |
|---------------------------|----------------|
| Assessment 1: Coursework  | 40%            |
| Assessment 2: Examination | 60%            |
|                           | Pass mark: 40% |

# Building, Environment, Technology and Complex Projects (core)

### Aims

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

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

### Assessment

|                           | Weighting      |
|---------------------------|----------------|
| Assessment 1: Coursework  | 40%            |
| Assessment 2: Examination | 60%            |
|                           | Pass mark: 40% |

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

### **Assessment**

|                           | Weighting      |
|---------------------------|----------------|
| Assessment 1: Coursework  | 40%            |
| Assessment 2: Examination | 60%            |
|                           | Pass mark: 40% |

### Year 4

### Construction Law (core)

### **Aims**

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

|                          | Weighting      |
|--------------------------|----------------|
| Assessment 1: Coursework | 50%            |
| Assessment 2: Coursework | 50%            |
|                          | Pass mark: 40% |

## Contemporary QS Practice (core)

#### Aims

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

The significant changes experienced in the construction industry globally over the past decade meant that quantity surveyors have had to adapt their traditional practices and embrace new philosophies in order to contribute effectively in construction projects. This module therefore provides an opportunity to develop the knowledge, understanding and skills required to operate in a dynamic and contemporary construction environment.

#### Assessment

|                           | Weighting      |
|---------------------------|----------------|
| Assessment 1: Coursework  | 40%            |
| Assessment 2: Examination | 60%            |
|                           | Pass mark: 40% |

### Commercial Management in Construction (elective)

### 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/bidding for work and seeking to sustain their turnover and profit margin whilst enhancing stakeholder value. This module therefore provides an opportunity to develop the knowledge, understanding and skills required to operate in a competitive commercial environment.

### **Assessment**

|                           | Weighting      |
|---------------------------|----------------|
| Assessment 1: Coursework  | 40%            |
| Assessment 2: Examination | 60%            |
|                           | Pass mark: 40% |

### **Commercial Property Management (elective)**

#### Aims

The aims of this module are:

- → to examine the role that commercial property plays for both an investor and an occupier;
- → to examine the management strategies of property owners and how the commercial property manager helps develop and implement these strategies;
- → to examine the breadth of responsibilities of the professional commercial property manager at both a strategic and a fundamental level;
- → to examine the various functions involved in managing property assets and demonstrate the application of legislation on property managers' roles and responsibilities.

|                           | Weighting      |
|---------------------------|----------------|
| Assessment 1: Coursework  | 40%            |
| Assessment 2: Examination | 60%            |
|                           | Pass mark: 40% |

### **International Construction** (elective)

### Aims

This module aims to:

- → provide an overview of the global construction market and the different ways in which construction professionals deal with building in particular regions of the world;
- → explore the issues related to the management of international joint ventures, including potential problem areas for project managers;
- investigate the international players, companies and clients, covering those areas which international construction managers find themselves involved in on a day to day basis;
- → provide an introduction to the design construction and resource management of the international construction manager
- integrate theoretical knowledge and understanding with best industrial practice, including health and safety and environmental sustainability.

#### Assessment

|                           | Weighting      |
|---------------------------|----------------|
| Assessment 1: Coursework  | 40%            |
| Assessment 2: Examination | 60%            |
|                           | Pass mark: 40% |

# Maintenance Management (elective)

### Aims

This module aims to:

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

### **Assessment**

|                           | Weighting      |
|---------------------------|----------------|
| Assessment 1: Coursework  | 40%            |
| Assessment 2: Examination | 60%            |
|                           | Pass mark: 40% |

### **Construction Project Management (elective)**

### Aims

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

### **Assessment**

|                           | Weighting      |
|---------------------------|----------------|
| Assessment 1: Coursework  | 40%            |
| Assessment 2: Examination | 60%            |
|                           | Pass mark: 40% |

# **Year 41/2**

### Project (core for non-apprenticeship students)

#### Aims

This module is for non-apprenticeship students only. The aim of this 40 credit module is to enable the student to develop specific research skills and techniques so that they can interrogate issues and situations and resolve problems related to their area of interest. The module gives students an opportunity to apply their skills and knowledge to the resolution of an industry based problem during a prolonged period of independent study. It is anticipated that the module's outcomes will directly enhance career and educational progression by equipping students with relevant analytical skills and techniques to investigate organisational and industry issues.

#### Assessment

|   | Weighting      |
|---|----------------|
| Assessment 1: Coursework (assignment)     | 30%            |
| Assessment 2: Coursework (project report) | 70%            |
|   | Pass mark: 40% |

# Year 3/4

# Work Based Learning Project (Core for apprenticeship students)

### **Aims**

This module is for apprenticeship students only. This module requires students to demonstrate the relationship between relevant knowledge, skills and techniques acquired through the programme and the study of professional practice as derived from the workplace. Students need to demonstrate and communicate the details of the experience gained, together with an in depth consideration, mapping of the competency requirements and the ethical conduct needed for seeking professional body membership. Further, to build on that experience to develop specific research skills and techniques so that professional practice issues can be interrogated and independent areas of insight can be produced from combining practice and research. All students undertaking this module will be required to arrange an approved Supervisor (who will be internal or external to the workplace) and be in relevant employment whilst they are undertaking their studies

|  | Weighting      |
|--|----------------|
| Assessment 1: Coursework [portfolio of evidence] | 30%            |
| Assessment 2: Coursework [portfolio of evidence] | 30%            |
| Assessment 3: Coursework [project report]        | 40%            |
|  | Pass mark: 40% |