



UNIVERSITY COLLEGE  
OF ESTATE MANAGEMENT

# **Quantification and Costing of Construction Work**

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## **Module Descriptor**

Module Code: QSP7QCC

Version: 1.00

Status: Final

Date: 27/02/2025

## Summary Module Details

### Module details

**Module Title:** Quantification and Costing of Construction Work

**Module Leader:** Priti Lodhia

**Module Mode:** Supported online learning

**Semester:** Autumn (UK)

**Level:** 7

**Credits:** 20

**Learning Hours:** 200

### Contact & Study Hours

**Directed Study Time:** 60hrs (30%)

**Self-directed Study Time:** 70hrs (35%)

**Assessment Study Time:** 70hrs (35%)

### Assessment Type

**Coursework:** 100%

**Computer Marked Assessment:** 0%

**Self-directed Research Project:** 0%

**Portfolio:** 0%

## Module summary

This module develops an understanding of the methods of quantification and costing used for tendering. It particularly focuses on the traditional measurement process and the production of a Bill of Quantities as part of the tendering process. This module will develop key practical skills in the quantifying and costing of common elements of construction work from drawings and specifications using a Standard Method of Measurement (SMM) following industry accepted conventions. A key focus of the module is to examine ethical practice in the role of the quantity surveyor in the context of measurement and costing. The module will also consider the use of IT systems and how they support the role of the quantity surveyor during quantification and costing.

## Taken on which Programmes

MSc Quantity Surveying (C)

**Core (C) or Elective (C)**

# Module Aims

This module aims to:

- Develop an understanding of ethical practice in the role of the Quantity Surveyor in the context of measurement and costing processes.
- Develop competence in quantification and costing techniques including the use and application of appropriate Standard Methods of Measurement (SMM) in the preparation of pricing and tendering documentation.
- Provide an understanding of how digital tools can support measurement and costing, with a focus on improving the efficiency and accuracy of construction project documentation.

# Module Learning Outcomes

- LO1. Critically evaluate the development of the global quantity surveying profession, including professional communication and collaboration, conduct rules and ethical practice.
- LO2. Demonstrate advanced knowledge by analysing data such as drawings and specifications and applying principles of measurement based on industry standard conventions to various scenarios.
- LO3. Demonstrate practical skills by using data provided and applying industry standard conventions to price measured work items.
- LO4. Critically discuss the use of IT systems to support quantification and costing.

# Indicative Module Content

## Module topics

- **Rules of conduct and ethical considerations**

Develops understanding of the requirement to adhere to strict rules of conduct and ethical behaviour as being fundamental for all industry professionals. The development of the role of the quantity surveying profession including the contextualisation of the rules of conduct and ethical practice relevant to quantification and costing.

- **Quantification of construction works using measurement rules**

Quantification is key for determining and controlling costs. There is a need to develop understanding of the methods of price determination and various types of pricing documentation required for tendering purposes and how these are compiled using generally accepted conventions and the use of standard methods of measurement including the RICS New Rules of Measurement (NRM).

- **Estimating of construction works**

Estimating is a fundamental part of the tendering process requiring understanding of the items that make up the cost of the project to the contractor and how these are converted to the tender price. There is a need to develop skills in pricing measured items of work including building up unit rates.

## Qualification and Costing of Construction Work

- **Use of IT systems to support quantification and costing**

It is necessary to recognise how the industry continues to develop using various IT systems that support quantification and costing and the benefits these can bring.

This content will be reviewed and updated regularly to reflect the legal, moral and financial changes in professional standards and practice.

## Overview of Summative Assessment

| Module learning outcomes | Assessment                        | Word count or equivalent | Weighting |
|--------------------------|-----------------------------------|--------------------------|-----------|
| LO2                      | <b>Assessment 1</b><br>Coursework | 2,000                    | 40%       |
| LO1, LO2, LO3, LO4       | <b>Assessment 2</b><br>Coursework | 3,000                    | 60%       |

**Module Pass Mark (as a weighted average of all assessments): 50%**

## Key Module Learning Resources

### Core sources and texts

The core reading resources within each module will be provided via the specific Virtual Learning Environment (VLE) module pages and within the e-Library. Additional reference material and supplementary resources to support your studies are available through the UCEM e-Library.

### Module tools

Students will have access to study materials, dedicated academic support, student forums, and learning activities via an online learning platform (VLE).

The module page on the VLE is broken down into structured study weeks to help students plan their time, with each week containing a mixture of reading, case studies, videos/recordings and interactive activities to go through. Online webinars/seminars led by the Module Leader can be attended in real time and provide opportunities to consolidate knowledge, ask questions, discuss topics and work through learning activities together. These sessions are recorded to support students who cannot attend and to enable students to recap the session and work through it at their own pace. Module forums on the VLE provide further opportunities to discuss topics with other students, complete collaborative work and get extra help from the module team.

### Professional online resources

The e-Library provides access to trusted, quality online resources, selected by subject specialists, to support students' study. This includes journals, industry publications, magazines, academic books and a dissertation/work-based library. For a list of the key industry specific and education resources available please visit [the VLE e-Library](#).

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## Other relevant resources

Access is also provided to further information sources that include the British Library and Open University UK catalogues, as well as providing a monthly current awareness service entitled, **Knowledge Foundations** - a compendium of news, research and resources relating to the educational sector and the Built Environment.

The module resource list is available on the module website and is updated regularly to ensure materials are relevant and current.