



UNIVERSITY COLLEGE
OF ESTATE MANAGEMENT

Measurement and Costing

Module Descriptor

Module Code: QSP5MAC
Version: 2.00
Status: Final
Date: 15/05/2024

Summary Module Details

Module details

Module Title: Measurement and Costing

Module Leader: Michelle Eze

Module Mode: Supported online learning

Semester: Autumn (UK)

Level: 5

Credits: 20

Learning Hours: 200

Contact and Study Hours:

Directed Study Time: 90 hrs (45%)

Self-Directed Study Time: 50 hrs (25%)

Assessment Study Time: 60 hrs (30%)

Assessment Type:

Coursework: 0%

Computer Based Assessment: 50%

Portfolio: 0%

Presentation: 0%

Project: 0%

Practical: 50%

Self-directed Research: 0%

Module Summary

This module provides knowledge and understanding of the principles that inform the skills relevant for measurement and costing of construction work for contractor's quantity surveyors. It supports the appreciation of the roles of the estimator and contractor's quantity surveyor in pricing of construction projects. Understanding the basic principles of measurement using a standard method of measurement such as NRM2 forms an integral part prior to pricing of any construction work. Students will be exposed to knowledge essential for the build-up of unit rates, builders' quantities, and the operational estimating approach when pricing construction projects.

Taken on which Programmes

BSc (Hons) Construction Management (C)

BSc (Hons) Quantity Surveying (CQS pathway apprentices) (C)

Core (C) or Elective (E)

Module Aims

This module aims to:

- Provide an understanding of the roles of the estimator and contractor's quantity surveyor with regards to tendering and the accurate estimating of construction projects.
- Develop understanding of the principles of measurement and how this links to different costing techniques used for construction projects.
- Develop competence in building up rates for various elements and trade packages.

Module Learning Outcomes

- LO1. Discuss the role of the estimator and contractor's quantity surveyor in estimating.
- LO2. Explain the principles of measurement and the relationship to the costing of construction projects.
- LO3. Quantify and value construction works by building up rates, analysing the costs of labour, materials, plant, profits, and overheads.

Indicative Module Content

Module topics

- **The estimator and contractor's QS roles with regards to estimating and tendering**

The role of estimator is fundamental for pricing of construction work and requires relevant skills and experience. A contractor's quantity surveyor's involvement in the pricing of tender documents is both important and supports in providing practical guidance on cost control.

- **Principles of measurement and costing**

The use of standard methods of measurement (SMM) such as the RICS New Rules of Measurement (NRM2). Tender documents can include bills of quantities or plans and specifications and this informs whether pricing will be based on unit rate estimating or an alternative approach such as builders' quantities.

- **Pricing unit rates**

Producing accurate unit rates is critical when pricing using bills of quantities for construction projects. Operational estimating is an alternative to pricing using unit rates, which for contractors provides a clear picture of cost relevant to whole packages rather than a series of items.

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

Overview of Summative Assessment

Module learning outcomes	Assessment	Word count or equivalent	Weighting
LO3	Assessment 1 Practical	2,000	50%
LO1, LO2, LO3	Assessment 2 Computer Based Assessment (CBA)	2,000 word equivalent	50%

Module Pass Mark (as a weighted average of all assessments): 40%

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](#).

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.

Measurement and Costing

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