

Advanced Measurement

Module Descriptor

Module Code:QSP6ADMVersion:1.00Status:FinalDate:28/02/2024

Summary Module Details

Module details

Module Title: Advanced Measurement

Module Leader: Michelle Eze

Module Mode: Supported online learning

Semester: Spring (UK)

Level: 6

Credits: 20

Learning Hours: 200

Contact & 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: 0% Portfolio: 0% Presentation: 0% Project: 0% Practical: 100% Self-directed Research: 0%

Module Summary

This module provides an introduction to more complex and innovative construction and infrastructure projects and their measurement. It develops the students understanding of the principles of measurement for the measurement of civil engineering, Mechanical and Electrical, Modern Methods of Construction (MMC) and refurbishment and retrofit projects. It further develops an understanding of appropriate cost management techniques.

Taken on which Programmes

BSc (Hons) Quantity Surveying (Chartered Surveyor Quantity Surveying and Construction Pathway apprentices) (C)

Core (C) or Elective (E)

Module Aims

This module aims to:

- Enable students to apply their understanding of cost management processes which they have currently applied to building works, developed within their programme to more complex projects, such as civil engineering, developments requiring specialist M&E Quantity Surveyors and those using Modern Methods of Construction (MMC). The module will also develop the students understanding of cost management practices related to refurbishment and retrofitting projects.
- Develop key practical skills in measuring, quantifying, and costing different elements of construction work for commercial, industrial, and infrastructure projects using standard methods of measurement.

Module Learning Outcomes

- LO1. Discuss the principles and practices relevant to successful cost management processes related to infrastructure, M&E and modern methods of construction.
- LO2. Apply industry standard principles, accurate measurement methods, rules, and conventions to civil engineering, mechanical and electrical items of works by locating and assembling information from drawings and specifications, based on research, vocational experience, and current best practice.
- LO3. Examine refurbishment and retrofitting projects and identify key influencing factors to inform effective cost decision making.

Indicative Module Content

Module topics

Within each of the four main themes of infrastructure, developments associated with the requirement for specialist M&E QSs, the use of MMC and refurbishment and retrofit projects students will gain an understanding of :

- Key client objectives that influence decision making and cost strategies.
- Construction technology reflecting the thematic project type.
- Stakeholders involved in typical projects and their relationship with the QS.
- Key industry codes of practice and industry standards and how they compare with standards already covered on the course (i.e. CESSM4 and NRM2.)
- Cost management processes associated with the thematic project types.
- Practical exercises in the measurement of items associated with each of the thematic project types.

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

Advanced Measurement

Module learning outcomes	Assessment	Word count or equivalent	Weighting
LO1, LO2, LO3	Assessment 1	5,000	100%
	Practical		

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 <u>the VLE e-Library</u>.

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 VLE page and is updated regularly to ensure materials are relevant and current.