

MODULE DESCRIPTOR

Module Title

Pre-Contract Cost and Carbon Management

Reference	SU2046	Version	1
Created	February 2024	SCQF Level	SCQF 8
Approved	July 2024	SCQF Points	30
Amended		ECTS Points	15

Aims of Module

To provide students with the ability to understand the concept of pre-contract quantification of construction work and the skills required for the preparation of Bills of Quantities together with pre-contract estimating and cost/carbon control in a built environment context.

Learning Outcomes for Module

On completion of this module, students are expected to be able to:

- 1 Compare the relationship between building design, cost and value.
- 2 Measure construction drawings in accordance with principles and methods defined in the current RICS New Rules of Measurement.
- 3 Convert recorded measurements from given construction drawings into a Bill of Quantities to an industry approved format
- 4 Use appropriate traditional pre-contract cost and carbon estimating and control techniques in a built environment context to make recommendations.

Indicative Module Content

This module will facilitate investigation of the use of Bills of Quantities (BQs) and their formats including an introduction to and application of the current method of measurement for building works. Students will be exposed to mensuration techniques and conventional methods of booking and recording dimensions. The building economics of design, traditional pre-construction estimating techniques (single and multi-rate) cost planning and the processes of cost control and carbon assessment will be studied.

Module Delivery

This module is delivered by lectures, workshops, practical exercises and directed reading.

Indicative Student Workload

	Full Time	Part Time
Contact Hours	60	N/A
Non-Contact Hours	240	N/A
Placement/Work-Based Learning Experience [Notional] Hours	N/A	N/A
TOTAL	300	N/A
<i>Actual Placement hours for professional, statutory or regulatory body</i>		

ASSESSMENT PLAN

If a major/minor model is used and box is ticked, % weightings below are indicative only.

Component 1

Type: Coursework Weighting: 100% Outcomes Assessed: 1, 2, 3, 4

Description: An individual coursework incorporating the preparation of a Bill of Quantities and a Cost and Carbon Estimate/Plan.

MODULE PERFORMANCE DESCRIPTOR**Explanatory Text**

The overall module grade is based on 100% weighting of Component 1 (Coursework). An overall minimum grade D is required to pass the module. Non-submission will result in an NS grade.

Module Grade	Minimum Requirements to achieve Module Grade:
A	A
B	B
C	C
D	D
E	E
F	F
NS	Non-submission of work by published deadline or non-attendance for examination

Module Requirements

Prerequisites for Module	None.
Corequisites for module	None.
Precluded Modules	None.

INDICATIVE BIBLIOGRAPHY

- 1 ASHWORTH, A PERERA S., 2015 Cost Studies of Buildings, 6th ed. Routledge.
- 2 PACKER, A.D 2016 Building Measurement. Harlow: Longman
- 3 RICS 2021, New Rules of Measurement, 2nd Edition, Coventry, RICS
- 4 SMITH, J. JAGGAR,D. M. AND LOVE, P. 2016. Building Cost Planning for the Design Team. 3rd ed. Routledge.
- 5 RICS, 2016. Fluctuations, 1st edition.
- 6 RICS, 2023. Whole life carbon assessment for the built environment, 2nd edition.
- 7 RAHMAN, A AND MONCASTER, A. 2024. The Routledge Handbook of Embodied Carbon in the Built Environment.