

Liverpool John Moores University

Title: MEASUREMENT AND COSTING STUDIES 1
Status: Definitive
Code: **4513BEKL** (119111)
Version Start Date: 01-08-2014

Owning School/Faculty: Built Environment
Teaching School/Faculty: Imperia Institute of Technology

Team	Leader
Dianne Marsh	
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Academic Level: FHEQ4 **Credit Value:** 24.00 **Total Delivered Hours:** 84.00
Total Learning Hours: 240 **Private Study:** 156

Delivery Options

Course typically offered: Non Standard Year Long

Component	Contact Hours
Lecture	28.000
Tutorial	28.000
Workshop	28.000

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Test	AS1		25.0	
Test	AS2		35.0	
Report	AS3	Report includes self-awareness statement.	40.0	

Aims

To establish the principles and conventions for the quantification and costing of construction works and to consider their application by the Quantity Surveyor or the Estimator as part of their key role in the economic and financial management of the

construction process.

Learning Outcomes

After completing the module the student should be able to:

- 1 Measure the materials required for various elements of low level domestic buildings using industry standard guidelines and professional procedures.
- 2 Produce pre-tender estimates for construction projects using various information resources.
- 3 Price Bill of Quantity items from first principles.
- 4 Present project related information to a professional standard.
- 5 Use Information Technology and appropriate software packages to produce and price project documentation.
- 6 To identify and reflect upon the following aspects of personal development: strengths and weaknesses; motivations and values; ability to work with others.

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

Test 1	1		
Test 2	3	5	
Report & Presentation	2	4	6

Outline Syllabus

The delivery of material at this level will be set in the context of a low rise residential development.

Introduction to standard measurement conventions, guides and documentation.

Measurement skills, writing the dimensions, calculating simple areas and volumes.

Measurement of simple load bearing structures, excavation, brickwork, concrete work, doors and windows, finishings and simple drainage. (including the use of trigonometry).

Converting the measurements to a full Bill of Quantities traditionally and using appropriate software packages.

Introduction to factors affecting construction costs and pricing of labour, plant and materials.

Calculating net unit rates and conversion of estimate to the tender using software packages.

Introduction to software packages to facilitate measurement, documentation and costing.

Personal development, employability and self-awareness skills.

Learning Activities

Lectures, tutorials and workshops

References

Course Material	Book
Author	R. J. Wheeler & A. Clark
Publishing Year	1992
Title	Building Quantities: Worked Examples
Subtitle	
Edition	
Publisher	Butterworth Heinemann
ISBN	07050602805

Course Material	Book
Author	RICS
Publishing Year	2000
Title	Standard Method of Measurement 7 Measurement Code
Subtitle	
Edition	
Publisher	Construction Confederation
ISBN	0854063617

Course Material	Book
Author	P. Keily & P. McNamara
Publishing Year	2005
Title	SMM7 Explained and Illustrated
Subtitle	
Edition	
Publisher	RICS
ISBN	1842191381

Course Material	Book
Author	J. Davidson & P. Hambleton
Publishing Year	2006
Title	SMM7 Questions and Answers
Subtitle	
Edition	
Publisher	RICS
ISBN	9781842192280

Course Material	Book
Author	CIOB
Publishing Year	2009
Title	Code of Estimating Practice
Subtitle	
Edition	7TH
Publisher	Wiley-Blackwell

ISBN	9781405129718
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Course Material	Book
Author	B. Martin
Publishing Year	2008
Title	Estimating and Tendering for Construction Work
Subtitle	
Edition	4TH
Publisher	Butterworth Heinemann
ISBN	9780750686167

Notes

The module establishes the principles and conventions for the quantification and costing of construction works and considers their application by the Quantity Surveyor and the Estimator, as part of their key role in the economic and financial management of the construction process.