# **Liverpool** John Moores University

Title: BUILDING QUANTIFICATION AND COSTING

Status: Definitive

Code: **4017BEUG** (102739)

Version Start Date: 01-08-2011

Owning School/Faculty: Built Environment Teaching School/Faculty: Built Environment

Team	Leader
Dianne Marsh	Υ

Academic Credit Total

Level: FHEQ4 Value: 12.00 Delivered 48.00

**Hours:** 

Total Private

Learning 120 Study: 72

**Hours:** 

## **Delivery Options**

Course typically offered: Standard Year Long

Component	Contact Hours
Lecture	24.000
Workshop	24.000

**Grading Basis:** 40 %

## **Assessment Details**

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	Assignment 1	50.0	
Report	AS2	Assignment 2	50.0	

#### 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 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 Develop the skills of quantification of simple construction processes
- 2 Distinguish between the types of cost documentation used in construction projects
- 3 Determine the correct source of cost information used in practice for a given project.
- 4 Describe the overall structure used for cost control in the design and construction stages of projects.
- 5 Build up prices for construction work for tendering purposes.

## **Learning Outcomes of Assessments**

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

REPORT 1 2 3

REPORT 4 5

# **Outline Syllabus**

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

Introduction to the construction industry and the QS role within the industry.

Forms of procurement and procurement assessment criteria.

Price determination in construction projects, lump sum or cost plus.

Pricing documents, including Bills of Quantities and Schedule of Rates.

Cost Control during the design stage

Cost Control during the construction stage.

How costs are generated, including pricing of labour, plant and materials.

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

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

Measurement of simple drainage systems, including use of schedules, measured items and technical checks.

Measurement of simple loadbearing structures, brickwork, concrete work and roofing (including use of trigonometry).

Converting the measurements to a full Bill of Quantities. Simple tendering strategy.

#### **Learning Activities**

Lectures and workshops.

#### References

Course Material	Book
Author	Wheeler and Clarke
Publishing Year	0
Title	Building Quantities Explained

Subtitle	
Edition	
Publisher	Newnes
ISBN	

Course Material	Book
Author	SMM7
Publishing Year	1998
Title	Standard Method of Measurement
Subtitle	
Edition	seventh
Publisher	RICS Books
ISBN	

Course Material	Book
Author	Patrick Keily and Patrick McNamara
Publishing Year	2005
Title	SMM7 Explained and Illustrated
Subtitle	
Edition	
Publisher	RICS
ISBN	1-84219-138-1

Course Material	Book
Author	CIOB
Publishing Year	1997
Title	Code of Estimating Practice
Subtitle	
Edition	6th
Publisher	Longman
ISBN	0-582-30279-X

## **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 estimator, as part of their key role in the economic and financial management of the construction process.