

## Engineering Measurement

### Module Information

2022.01, Approved

#### Summary Information

Module Code	6509BEQR
Formal Module Title	Engineering Measurement
Owning School	Civil Engineering and Built Environment
Career	Undergraduate
Credits	20
Academic level	FHEQ Level 6
Grading Schema	40

#### Teaching Responsibility

LJMU Schools involved in Delivery
LJMU Partner Taught

#### Partner Teaching Institution

Institution Name
Oryx Universal College WLL

#### Learning Methods

Learning Method Type	Hours
Lecture	10
Workshop	40

#### Module Offering(s)

Display Name	Location	Start Month	Duration Number Duration Unit
JAN-PAR	PAR	January	12 Weeks

## Aims and Outcomes

Aims	This module consolidates and builds upon the student's learning to date in the fields of measurement and BIM technologies and processes. Students will examine the most effective quantification techniques for complex construction and engineering projects through analysis of and comparison between available measurement protocols.
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**After completing the module the student should be able to:**

### Learning Outcomes

Code	Number	Description
MLO1	1	Appraise and apply the rules of the standard method of measurement to prepare project documentation related to complex construction, building services and civil engineering projects.
MLO2	2	Evaluate emerging practices of the Quantity Surveyor in relation to sustainable design, and environmental and performance considerations.
MLO3	3	Critically evaluate the BIM protocols, processes and software appropriate to the role of the Quantity Surveyor/Estimator working in a collaborative environment throughout the project life cycle.

## Module Content

Outline Syllabus	Design economics Cost planning Benchmarking Value engineering Building services measurement Large scale and high rise construction projects measurement. Civil engineering measurement Tender documentation for a variety of different procurement options. BIM protocols BIM Processes Application and evaluation of BIM software applicable to the role of the Quantity Surveyor/ Estimator. Development of contract practice skills in relation to pre and post contract management
Module Overview	
Additional Information	This module will provide students with an understanding of BIM as it relates to the QS and engineering measurement.

## Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Practice	MEASUREMENT REPORT	50	0	MLO1, MLO3
Test	IN-CLASS TEST	50	0	MLO2, MLO3

## Module Contacts

### Module Leader

Contact Name	Applies to all offerings	Offerings
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### Partner Module Team

Contact Name	Applies to all offerings	Offerings
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