

# **Engineering Measurement**

# **Module Information**

**2022.01, Approved** 

## **Summary Information**

Module Code	6503ICBTQT	
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

International College of Business and Technology

# **Learning Methods**

Learning Method Type	Hours
Workshop	40

# Module Offering(s)

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

SEP_NS-PAR PAR	.R	September (Non-standard start date)	12 Weeks
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## **Aims and Outcomes**

Aims	This module consolidates and builds upon the student's learning to date in the fields of measurement and Building Information Modelling (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 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 economicsCost planningBenchmarkingValue engineeringCivil engineering measurementTender documentation for a variety of different procurement options. BIM ProcessesApplication 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 contractmanagement
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
Report	MEASUREMENT REPORT	50	0	MLO1, MLO3
Report	TECHNICAL REPORT	50	0	MLO2, MLO3

## **Module Contacts**

#### Module Leader

Contact Name	Applies to all offerings	Offerings
Mohan Siriwardena	Yes	N/A

#### Partner Module Team

Contact Name	Applies to all offerings	Offerings