

Summary Information

Module Code	6503ICBTQS
Formal Module Title	Engineering Measurement
Owning School	Civil Engineering and Built Environment
Career	Undergraduate
Credits	20
Academic level	FHEQ Level 6
Grading Schema	40

Module Contacts

Module Leader

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

Module Team Member

Contact Name	Applies to all offerings	Offerings
--------------	--------------------------	-----------

Partner Module Team

Contact Name	Applies to all offerings	Offerings
--------------	--------------------------	-----------

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)

Offering Code	Location	Start Month	Duration
APR-PAR	PAR	April	12 Weeks
SEP-PAR	PAR	September	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.
-------------	---

Learning Outcomes

After completing the module the student should be able to:

Code	Description
MLO1	Appraise and apply the rules of the standard method of measurement to prepare project documentation related to complex construction and civil engineering projects.
MLO2	Evaluate emerging practices of the Quantity Surveyor in relation to sustainable design, and environmental and performance considerations.
MLO3	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
Large scale and high rise construction projects
measurement.
Civil engineering measurement
Tender documentation for a variety of different procurement options.
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)	Learning Outcome Mapping
Report	MEASUREMENT REPORT	50	0	MLO3, MLO1
Report	TECHNICAL REPORT	50	0	MLO3, MLO2