

Engineering Measurement

Module Information

2022.01, Approved

Summary Information

Module Code	6538BEKL
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 IMPERIA	

Learning Methods

Learning Method Type	Hours
Lecture	28
Workshop	42

Module Offering(s)

Display Name	Location	Start Month	Duration Number Duration Unit
SEP-PAR	PAR	September	12 Weeks

Aims and Outcomes

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.	Aims	quantification techniques for complex construction and engineering projects through analysis
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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 economicsCost planningBenchmarkingValue engineeringBuilding services measurement Large scale and high rise construction projects measurement. Civil engineering measurementTender documentation for a variety of different procurement options. BIM protocolsBIM 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
Exam	Examination	50	2	MLO2, MLO3

Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings
James Hartwell	Yes	N/A

Partner Module Team

Contact Name	Applies to all offerings	Offerings
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