MODULE DESCRIPTOR

Module Title

Civil Engineering Technology and Measurement

Reference	SU4053	Version	1
Created	February 2024	SCQF Level	SCQF 10
Approved	July 2024	SCQF Points	30
Amended		ECTS Points	15

Aims of Module

To enable the student to analyse, understand and evaluate Civil Engineering Technology and provide them with the skills necessary to undertake the quantification and presentation of Civil Engineering works for pricing.

Learning Outcomes for Module

On completion of this module, students are expected to be able to:

1	Examine Civil Engineering technology projects associated with renovation and complex foundation systems.
2	Critique superstructure construction techniques deployed on Civil Engineering projects.
3	Demonstrate the principles and methods of recording measurements from construction drawings in accordance with the current Civil Engineering Standard Method of Measurement.
4	Compose bills of quantities to industry standards by accurately quantifying civil engineering work from drawings/models using digital tools.

Indicative Module Content

This module will introduce and appraise civil and construction engineering terms, assess the Civil Engineering methods applied to foundations, renovation and superstructure projects and an introduction to the renewable energy sector. An understanding of the use of Bills of Quantities (BQs) and their formats, including preliminaries, will be provided which will include the application of the current methods of measurement. Students will be using digital tools to measure civil engineering work.

Module Delivery

This module is delivered by lectures, workshops, practical exercises and directed reading.

Module Ref:	SU4053 v1

Indicative Student Workload	Full Time	Part Time
Contact Hours	60	N/A
Non-Contact Hours	240	N/A
Placement/Work-Based Learning Experience [Notional] Hours	N/A	N/A
TOTAL	300	N/A
Actual Placement hours for professional, statutory or regulatory body		

ASSESSMENT PLAN

If a major/minor model is used and box is ticked, % weightings below are indicative only.

Component 1

Type:	Coursework	Weighting:	100%	Outcomes Assessed:	1, 2, 3, 4
Description:	The module is assessed by a portfolio submission.				

MODULE PERFORMANCE DESCRIPTOR

Explanatory Text

The overall module grade is based on 100% weighting of a single component. An overall minimum grade D is required to pass the module.

Module Grade	Minimum Requirements to achieve Module Grade:
A	A
B	B
C	C
D	D
E	E
F	F
NS	Non-submission of work by published deadline or non-attendance for examination

Module Requirements

Prerequisites for Module	None.
Corequisites for module	None.
Precluded Modules	None.

Module Ref:	SU4053 v1

INDICATIVE BIBLIOGRAPHY

1	Riley. M.,Cotgrave. A., (2013) Construction Technology 2. Industrial and Commercial Buildings 3rd edition. Palgrove Macmillan
2	Emmit., Stephen., Gorse., Christopher., (2010) 2nd edition. Barry's Advanced Construction Building. Blackwell Publishing
3	ICE (1991), CESMM3: Civil engineering standard method of measurement, Institution of Civil Engineers (Great Britain), ISBN: 0727715615
4	Seeley, I. H (2001), Civil engineering quantities, Palgrave,ISBN: 0333800745
5	Barnes, M (1992), CESMM3 handbook : a guide to the financial control of contracts using the Civil Engineering Standard Method of Measurement, Thomas Telford,ISBN: 072773346X
6	Jayasree, P.K., Balan, K And Rani, V.(2021). Practical Civil Engineering, 1st ed. Routledge.