

MODULE DESCRIPTOR

Module Title

Construction: Technologies, Methods and Implications

Reference	SU2051	Version	3
Created	April 2023	SCQF Level	SCQF 8
Approved	July 2018	SCQF Points	30
Amended	June 2023	ECTS Points	15

Aims of Module

To provide the student with the ability to recognise and propose alternative sustainable construction solutions and assess their impact on operations, maintenance, and lifecycle costs.

Learning Outcomes for Module

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

- 1 Distinguish alternative construction details in relation to functional elements of the design.
- 2 Practice the design of systems that integrate building structure and envelope while considering issues of whole lifecycle and practicing computer learning (CAD, Revit).
- 3 Report reasoned advice on the policy, law, and best practice of sustainability in their area of practice.
- 4 Conclude environmental strategies for optimising levels of human comfort and building performance.
- 5 Undertake critical reflection on the core contents of the module and relate to their application within the work place.

Indicative Module Content

Alternative sustainable design solutions and construction processes and their impact on cost, maintenance, and lifecycle cost and social value using computer application where applicable (CAD, Revit)

Module Delivery

The module is delivered in Blended Learning mode using structured online learning materials/activities and directed study, facilitated by regular online tutor support. Workplace Mentor support and work-based learning activities will allow students to contextualise this learning to their own workplace. Face-to-face engagement occurs through annual induction sessions, employer work-site visits, and modular on-campus workshops.

Indicative Student Workload

	Full Time	Part Time
Contact Hours	30	N/A
Non-Contact Hours	30	N/A
Placement/Work-Based Learning Experience [Notional] Hours	240	N/A
TOTAL	300	N/A
<i>Actual Placement hours for professional, statutory or regulatory body</i>	240	

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, 5
Description:	An integrated assignment consisting of illustrated written work to demonstrate understanding and application of the module learning outcomes and reflecting on the learning development throughout the module weeks that involves theory and practice.				

MODULE PERFORMANCE DESCRIPTOR**Explanatory Text**

The overall module grade is based on 100% weighting of Component 1 (assignment). An overall minimum grade D is required to pass the module. Non-submission will result in an NS grade

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.

INDICATIVE BIBLIOGRAPHY

- 1 FOSTER, J., GREENO, R. and HARINGTON, R., 2007. Structure and Fabric Part 2. 7th ed. Oxon: Routledge.
- 2 McMullan, R., (2012). Environmental Science in Building, 7th Edition.
- 3 PHILP, D. et al, 2015. Building Information Modelling for Dummies. John Wiley.
- 4 SCHITTICH, C., 2003. In Detail: Building in Existing Fabric: Refurbishment, Extensions, New Designs. Germany: Birkhauser.
- 5 SASSI, P., 2006. Strategies for Sustainable Architecture. Oxon: Routledge.
- 6 Kubba, Sam, (2017). Handbook of green building design and construction : LEED, BREEAM, and Green Globes. Butterworth-Heinemann
- 7 KeepingvM. & Shiers D. (2018). Sustainable building design : principles and practice. John Wiley & Sons, Incorporated