

MODULE DESCRIPTOR

Module Title

Design Technology 2

Reference	SU3501	Version	1
Created	August 2023	SCQF Level	SCQF 9
Approved	January 2024	SCQF Points	30
Amended		ECTS Points	15

Aims of Module

To provide the student with the ability to recognise the factors which shape the design of a medium to complex sized buildings, existing or new, and the application of future sustainable strategies and technical resolution of key aspects of a building.

Learning Outcomes for Module

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

- 1 Demonstrate the skills to design systems, which integrate building structure and envelope while considering issues of building performance, whole life cycle and building pathology where applicable
- 2 Formulate environmental strategies for optimising levels of human comfort, building performance and materiality.
- 3 Demonstrate the skills required to submit drawings for planning approval, building warrant and production information in a professional manner.
- 4 Demonstrate the technical resolutions in the construction of a building effectively.
- 5 Make a judgement on the role of an Architectural Technologist utilising profession and communication skills required in professional practice

Indicative Module Content

The module will investigate performance based studies of innovative technologies in 20th century building design; consideration of the interaction between environmental and human factors, which can impact on component, assembly and whole building performance; ergonomics, anthropometrics, comfort, health, safety & security related issues. The need for the realisation of design products, processes and procurement and also the need to develop awareness of the management issues inherent within projects, including individual and team roles; ecology; ethics in design and project information systems. The module will develop the skills of the Architectural Technologist in the technical resolution of moderately complex buildings understanding the structure, components and material specification. The student will become aware of the development of professional practice as an Architectural Technologist in practice.

Module Delivery

This is a module predominantly involving practical work in relation to a project, which includes field and studio work and, where appropriate, site visits. In addition, student centred CAD modelling is provided in a tutorial/workshop environment with tutor support. The workshops will be supplemented by keynote lectures. Directed study to core texts and resource material. Presentations will be used to discuss work completed to staff typically in a Poster format or digitally.

Indicative Student Workload

	Full Time	Part Time
Contact Hours	110	N/A
Non-Contact Hours	190	N/A
Placement/Work-Based Learning Experience [Notional] Hours	N/A	N/A
TOTAL	300	N/A
<i>Actual Placement hours for professional, statutory or regulatory body</i>		

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:	Project based individual coursework submitted as a portfolio comprising graphic content, physical and integrated project information models, with the creation of supporting documentation, including professional practice skills, environmental strategies, specification, whole life issues and schedule.				

MODULE PERFORMANCE DESCRIPTOR

Explanatory Text

The overall module grade is based on 100% weighting (Coursework). 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	SU2501 Design Technology 1
Corequisites for module	None.
Precluded Modules	None.

ADDITIONAL NOTES

Where appropriate, mixed discipline team working will be encouraged. Where appropriate, and within the context of the studio project, students will be encouraged to be innovative, experiment and push the boundaries of their competence with these techniques and tools.

INDICATIVE BIBLIOGRAPHY

- 1 Schittich, C. (2003) In Detail: Building in Existing Fabric: Refurbishment, Extensions, New Designs
- 2 Schittich, C (2003) Solar Architecture
- 3 Herzog, etal (2008) Timber Construction Manual
- 4 Schittich, etal (2007) Glass Construction Manual
- 5 Watts, A. (2023) Modern Construction Handbook. Birkhauser, 6th Ed.