

MODULE DESCRIPTOR

Module Title

Design Technology 2 - Architectural Technology

Reference	SU3040	Version	5
Created	July 2021	SCQF Level	SCQF 9
Approved	August 2009	SCQF Points	30
Amended	September 2021	ECTS Points	15

Aims of Module

To provide the student with the ability to recognise the factors which shape the design of simple low-rise, domestic scale buildings.

Learning Outcomes for Module

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

- 1 Evaluate aspects of building performance in historical and/or contemporary contexts.
- 2 Design systems, which integrate building structure and envelope while considering issues of whole life cycle and building pathology where applicable.
- 3 Formulate environmental strategies for optimising levels of human comfort, building performance and materiality.
- 4 To develop the knowledge skills required to submit drawings for planning approval, building warrant and production information in a communicative professional manner.

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.

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.

Indicative Student Workload	Full Time	Part Time
Contact Hours	90	N/A
Non-Contact Hours	210	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:	Project based individual coursework submitted as a portfolio comprising graphic content, physical and integrated project information models, with the creation of supporting documentation, including environmental strategies, specification, whole life issues and schedule.				

MODULE PERFORMANCE DESCRIPTOR

Explanatory Text

The overall module grade is based on 100% weighting of Component 1 (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	SU2030 Design Technology 1 - Architectural Technology
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 | Roaf, S. (2007) Ecohouse |
| 2 | Sassi, P. (2006) Strategies for Sustainable Architecture |
| 3 | Schittich, C. (2003) In Detail: Building in Existing Fabric: Refurbishment, Extensions, New Designs |
| 4 | Sulbaran, T. & Shiratuddin, M. (2009) Building Information Modelling for Construction using Archicad |
| 5 | Mcleod, V. (2005) Detail in Contemporary Timber Architecture |
| 6 | Schittich, C (2003) Solar Architecture |
| 7 | Herzog, etal (2008) Timber Construction Manual |
| 8 | Schittich, etal (2007) Glass Construction Manual |