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| **Module Title**<br>**Design Technology 1 - Architectural Technology**<br><br>**Keywords**<br>Design, Philosophy, Technology, Contemporary, Modelling, Visualisation | Reference SU2030<br>SCQF Level SCQF 8<br>SCQF Points 30<br>ECTS Points 15<br>Created August 2002<br>Approved August 2009<br>Amended July 2011<br>Version No. 2 |

## This Version is No Longer Current

The latest version of this module is available here

### Prerequisites for Module

None in addition to SCQF8 entry requirements.

### Corequisite Modules

None.

### Precluded Modules

None.

### Aims of Module

To provide the student with the critical ability to appreciate the technical design of contemporary factors which shape and control the built environment.
To provide the student with the

### Mode of 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.
Supplementary CAD modelling to industry wide standard will be provided in a workshop environment with Tutor support.
The workshops will be supplemented by keynote lectures.
Directed study to core texts and resource material.

### Assessment Plan

| | Learning Outcomes Assessed |
|---|---|
| Component 1 | 1,2,3,4 |

knowledge of design and technology in such a way to visualise these factors by applying 3d CAD concepts and skills.

## Learning Outcomes for Module

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

1. Evaluate the application of design technology in a contemporary context through a creation of a 3D model of a low/medium rise contemporary building for visualisation and the production of industry standard orthographic drawn data.
2. Apply decision making processes to problem solving in contemporary building design.
3. Address human factors, materiality and technological development within modern design.
4. Use a range of media including physical and computer based techniques to illustrate design solutions.

## Indicative Module Content

The module will focus on thematic studies of innovative technologies in contemporary building design. Contemporary

Learning Outcomes 1, is assessed by coursework in the form of an investigative report based on a directed precedent study. Learning Outcomes 2-4 are assessed by a built environment design project involving individual and group work.

## Indicative Bibliography


1. Weston, R., 2008. Materials, Form and Architecture. Laurence King.
2. Wienand, N.,2008. Materials, specification and detailing: foundations of building design. Taylor & Francis.
3. Emmitt, S., 2012. Architectural Technology [electronic resource]. Wiley-Blackwell.
4. Krygiel, E., 2010. Mastering Autodesk Revit architecture 2011 [electronic resource]: Autodesk official training guide. Wiley.
5. Edwards, B., 2010. Rough guide to sustainability : a design primer:RIBA.
6. Schittich, C,.et.al,.2007. Glass Construction Manual.Birkhauser.
7. Glasner, B., 2013. Wonder wood [electronic resource] : a favorite material for design, architecture and art. Birkhauser.


## Additional Notes

Where appropriate, mixed discipline team working will be

building design philosophies and control mechanisms will be investigated to include, for example, global and local environment agendas, client/user driven imperatives, health and safety. Individual roles and team issues relating to the realisation of the design for the built environment will be examined. Physical and computer modelling will be used to develop and illustrate design solutions through the provision of media visualisation techniques, rendering, a walk through, fly a rounds, and virtual models.

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 Student Workload**

| *Contact Hours* | Full Time |
|---|---|
| Assessment | 5 |
| Lectures | 5 |
| Practical Work | 65 |
| Workshop | 15 |
| | |
| *Directed Study* | |
| Directed Study | 130 |
| | |
| *Private Study* | |
| Private Study | 80 |