

Module Title Integrated Building Technology 2	Reference AC3012 SCQF Level SCQF 9 SCQF Points 15 ECTS Points 7.5 Created August 2002 Approved August 2002 Amended August 2009 Version No. 6
Keywords Design Rationale, Technological Integration, Analysis, Detailing, Assembly.	

This Version is No Longer Current

The latest version of this module is available [here](#)

Prerequisites for Module

None.

Mode of Delivery

This module is taught through a combination of lectures, and studio-based workshops.

Corequisite Modules

None.

Assessment Plan

	Learning Outcomes Assessed
Component 1	1,2,3

Component 1: The module is assessed entirely by coursework, this consisting of one design project based on the studio major project but assessed separately from it.

Precluded Modules

None.

Indicative Bibliography

- 1.Watts, A. (2016) Modern construction handbook. Fourth edition. Basel, Birkhauser.
- 2.Arup Lighting, 2007, Lighting Technical Review, RIBA.
- 3.Chartered Institution of Building Services Engineers (2018) Environmental design: CIBSE guide A. 8th ed. [Online]. London, Chartered Institution of Building Services Engineers. Available from:
https://ezproxy.rgu.ac.uk/login?url=http://www.ihsti.com/scripts/Ti_logon/Ti_logon.asp?reqcode=IPlogon.
- 4.Voss, K. & Musali, E. (2013) Net zero energy buildings: international projects of carbon neutrality in buildings. [new ed.]. Munich, Institut fur internationale Architektur-Dokumentation.
- 5.Morgan, C. (2018) Sustainable Renovation. [Online]. The Pebble Trust. Available from:
[https://s3-eu-west-1.amazonaws.com/s3.spanglefish.com/s/31974/documents/\[digitalv3\]-guide-to-domestic-retrofit-compressed.pdf](https://s3-eu-west-1.amazonaws.com/s3.spanglefish.com/s/31974/documents/[digitalv3]-guide-to-domestic-retrofit-compressed.pdf).
- 6.Edwards, B. (2014) Rough guide to sustainability a design primer. 4th ed. London?:, RIBA.
- 7.Watts, A., 2007, Facades Technical Review, RIBA.
- 8.Knaack, Klein, Bilow, Auer (2007), Principles of Construction - Facades, Birkhauser.

Aims of Module

To provide students with the ability to appraise selected technological strategies within given contexts through architectural detailing, to ensure aesthetic quality and functional performance.

Learning Outcomes for Module

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

- 1.Explain and apply the principles of integrated architectural detailing relating to advanced concepts of performance and architectural intention.
- 2.Critically appraise and apply detailing strategies with reference to constructional and structural performance and aesthetic intentions.

3.Critically appraise and apply environmental strategies for energy, lighting and acoustics.

Indicative Module Content

The module commences with a lecture introducing a method of analysis, which is applied during subsequent lectures to a series of case studies. Analysis will cover issues including structural, constructional and environmental systems, performance, relationships between skin, structure and energy consumption, acoustic quality of spaces, lighting design, advanced cladding systems, the visual effect of detailing, and sustainability.

Indicative Student Workload

<i>Contact Hours</i>	Full Time
Assessment	6
Lectures	12
Workshops	20

<i>Directed Study</i>	
Directed Study	32

<i>Private Study</i>	
Private Study	80