

Module Outline

Part 1- as validated

1.	Title	Building Construction and Conversion
2.	Level *	5
3.	Credits	20
4.	Indicative Student Study Hours	36
5.	Core (must take and pass), Compulsory (must take) or Optional	Compulsory

** Foundation Level=3 Degree Year 1 = 4 Degree Year 2 = 5 Degree Year 3 = 6*

PG (Masters) = 7

5. Brief Description of Module (purpose, principal aims and objectives)

This module is designed to extend student's knowledge of the construction of buildings. It concentrates on the construction of complex multi storey structures for residential and commercial buildings and the use of contemporary systems to create appropriate environments. Students will also investigate alteration, conversion, remediation and demolition processes. It is intended that students use their learning and prior learning from other modules to identify and investigate problems associated with a change of use in an occupied building.

6. Learning Outcomes - On successful completion of this module a student will be able to:

(Add more lines if required)

	Subject Specific Learning Outcomes
1.	Appraise the materials and construction forms for the construction of multi-storey buildings.
2.	Evaluate the concepts of sustainability and buildability and their application
3.	Compare and contrast methods used for alteration, conversion, remediation and demolition of buildings
4.	Justify design options and choices for a building conversion
	Generic Learning Outcomes
1.	Demonstrate skills in reasoning, analysis, communication and appraisal of materials and techniques.

2.	Manage tasks involving multiple activities
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7. Assessment

Pass on aggregate or Pass all components <i>(modules can only be pass all components if this is a PSRB requirement)</i>	Pass on aggregate
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Summary of Assessment Plan

	Type	% Weighting	Anonymous Yes / No	Word Count/ Exam Length	Learning Outcomes Coverage	Comments
1.	Report	30%	Yes	1500	LO 1, 2	
2.	Case study	70%	Yes	2500	LO 3, 4	

Further Details of Assessment Proposals

Give brief explanation of each assessment activity listed

Report

The students are required to analyse the materials choices made, the interfaces between components and materials, the sustainability and buildability characteristics of a recently built building. It is expected that modern methods of construction will be synthesised into the discourse provided.

Case study

A suitable scenario for the case study will be provided to allow the students to express their invention and creativity in advising a client on options and choices during the conversion of a building to another use. Students will be expected to concentrate on the external fabric of the building, insulation upgrading, replacement of internal fixtures and fittings, the installation of heating and lighting systems and associated repair and demolition to structural and non-structural elements.

8. Summary of Pre and / or Co Requisite Requirements

Construction and Materials Technology, Communication and Design Technology

9. For use on following programmes

BSc (Honours) Construction Management (Architectural Technology)

BSc (Honours) Construction Management (Quantity Surveying)

BSc (Honours) Construction Management (Site Management)

Module Specification

Part 2- to be reviewed annually

1.	Module Leader	Brenda Rich, Sean Jeffries
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2.	Indicative Content
	<p>Materials and construction forms: structural frame, external envelope, floors, roofing, material compatibility and structural form.</p> <p>Buildability: principles and effects, coordination and standardisation, specification of materials, components and assemblies, CDM regulations.</p> <p>Integrated design of buildings, intelligent buildings</p> <p>Sustainable strategies: environmental issues, energy sources and management, costs and efficiency ratings, resource management, client requirements, social and political issues</p> <p>Alteration, conversion and remediation and demolition of buildings: project appraisal, modern conversion methods, support techniques, demolition practice and procedures, legal, health and safety and CDM requirements.</p>

3. Delivery Method <i>(please tick appropriate box)</i>					
Classroom Based	Supported Open Learning	Distance Learning	E-Learning	Work Based Learning	Other (specify)
Yes					
<i>If the Delivery Method is Classroom Based please complete the following table:</i>					
	Activity (lecture, seminar, tutorial, workshop)	Activity Duration - Hrs	Comments	Learning Outcomes	
1	Lectures	36		LO 1-4	
2					
	Total Hours	36			
If delivery method is <i>not</i> classroom based state lecturer hours to support delivery					

4. Learning Resources

To include contextualised Reading List.

Highly Recommended

Chudley, R. and Greeno, R. (2016) *Building Construction Handbook 11th Edition* Oxford: Butterworth Heinemann

Riley, M. and Cotgrave, A. (2014) *Construction Technology 2: Industrial and Commercial Building 3rd Edition*, Basingtoke: Palgrave Macmillan

Riley, M. and Cotgrave, A. (2011) *Construction Technology 3: The Technology of Refurbishment and Maintenance 2nd Edition*, Basingtoke: Palgrave Macmillan

Recommended

Domone, P. and Illston, J. (2010) *Construction Materials 4th Edition*, Abingdon: Spon Press

Diven, R.J. and Shaurette, M. (2011) *Demolition: Practices, Technology, and Management (Purdue Handbooks in Building Construction)*, USA: Purdue University Press

Edwards, B. (2014) *Rough Guide to Sustainability: A Design Primer*, London: RIBA Publishing

Emmitt, S. (2018) *Barry's Advanced Construction of Buildings 4th Edition*, Oxford: Wiley Blackwell

Richardson, B. (2016) *Defects and Deterioration in Buildings: A Practical guide to the Science and Technology of Material Failure*, Abingdon: Routledge

Winkler, G. (2010) *Recycling Construction and Demolition Waste: A LEED based Toolkit*, McGraw-Hill Education Europe

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