



Module Definition Form (MDF)

Module code: MOD006603	Version: 4 Date Amended: 16/Dec/2021
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1. Module Title
Structural Adaptation and Re-use of Buildings

2a. Module Leader
Federica Pascale

2b. School
School of Engineering and the Built Environment

2c. Faculty
Faculty of Science and Engineering

3a. Level
7

3b. Module Type
Standard (fine graded)

4a. Credits
15

4b. Study Hours
150

5. Restrictions			
Type	Module Code	Module Name	Condition
Pre-requisites:	None		
Co-requisites:	None		
Exclusions:	None		
Courses to which this module is restricted:	MSc Construction and Civil Engineering Management		

LEARNING, TEACHING AND ASSESSMENT INFORMATION

6a. Module Description

This module will give you an opportunity to develop your understanding of building adaptation, the construction aspects of building adaptation and re-use, and allow you to consider the benefits this can deliver in terms of reductions in energy and resource consumption. The module focuses on the economic, project planning and construction material aspects of projects which extend, adapt and alter existing buildings in order to extend the life of the existing building. The project aspects to be considered will include:

- Assessment of existing buildings including construction and demolition constraints.
- Durability, degradation and testing of construction materials.
- Physical building adaptations and modifications.

The module will make use of relevant case study projects to enable you to demonstrate your ability to:

- Assess a proposed adaptation project.
- Assess the practical and economic viability of adaptation proposals.

6b. Outline Content

Students should gain a knowledge and understanding of:

- The construction management aspects of change of use and building adaptation projects.
- How additional structural elements and modern methods and materials can be used to strengthen and extend the economic use of existing structures.
- How careful sequencing of temporary and permanent works are often essential aspects of a building adaptation project.

Students will be introduced to the planning, programming and financial aspects of adaptation projects and how each of these impact on the overall viability of such projects

6c. Key Texts/Literature

The reading list to support this module is available at: <https://readinglists.aru.ac.uk/>

6d. Specialist Learning Resources

None (it is assumed that students will have access to Microsoft Office software).

7. Learning Outcomes (threshold standards)		
No.	Type	On successful completion of this module the student will be expected to be able to:
1	Knowledge and Understanding	Demonstrate a critical awareness and understanding of the constraints and complexities of an adaptation project and the effects that these have on: economic viability; technical viability; project management.
2	Knowledge and Understanding	Use precedent studies to understand, select and propose adaptation solutions and appropriate construction techniques.
3	Intellectual, practical, affective and transferrable skills	Deliver a clear and concise presentation covering the development and assessment of a range of project options.
4	Intellectual, practical, affective and transferrable skills	Deliver a clear and concise report outlining the findings of a viability appraisal.

8a. Module Occurrence to which this MDF Refers				
Year	Occurrence	Period	Location	Mode of Delivery
2025/6	ZZF	Template For Face To Face Learning Delivery		Face to Face

8b. Learning Activities for the above Module Occurrence			
Learning Activities	Hours	Learning Outcomes	Details of Duration, frequency and other comments
Lectures	24	1-4	2 hours lecture per week
Other teacher managed learning	12	1-4	1 hour structured tutorial per week
Student managed learning	114	1-4	9.5 hours per week over 12 weeks
TOTAL:	150		

9. Assessment for the above Module Occurrence					
Assessment No.	Assessment Method	Learning Outcomes	Weighting (%)	Fine Grade or Pass/Fail	Qualifying Mark (%)
010	Practical	1-3	30 (%)	Fine Grade	40 (%)
Presentation (1000 words equivalent)					
Assessment No.	Assessment Method	Learning Outcomes	Weighting (%)	Fine Grade or Pass/Fail	Qualifying Mark (%)
011	Coursework	1,2,4	70 (%)	Fine Grade	40 (%)
Coursework (2000 words)					

In order to pass this module, students are required to achieve an overall mark of 40% (for modules at levels 3, 4, 5 and 6) or 50% (for modules at level 7*).

In addition, students are required to:

- (a) achieve the qualifying mark for each element of fine graded assessment as specified above
- (b) pass any pass/fail elements

[* the pass mark of 50% applies for all module occurrences from the academic year 2024/25 – see Section 3a of this MDF to check the level of the module and Section 8a of this MDF to check the academic year]