

Module code: MOD002343	Version: 4 Date Amended: 14/Jun/2024
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1. Module Title
Design Economics

2a. Module Leader
Nadeeshani Wanigarathna

2b. School
School of Engineering and the Built Environment

2c. Faculty
Faculty of Science and Engineering

3a. Level
6

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:	None		

LEARNING, TEACHING AND ASSESSMENT INFORMATION

6a. Module Description

This module is designed to provide a working knowledge of the factors that affect the economics of building design and the cost of buildings. It will provide the background necessary for offering advice to clients or the design team on matters concerning economy, cost or price at the various stages of the design process. The range of possible scenarios will be envisaged and a 'tool kit' of principles, concepts and technologies will be provided to allow a range of scenarios to be managed. The sources of data to assist the surveyor will be explored. Students will develop cost models from these. The module is relevant for a practitioner in a private practice or in construction as increasing amounts of design work is carried out by construction firms. This is largely a practical module and there will be opportunities to develop appropriate skills and techniques.

6b. Outline Content

Knowledge - Economic Concepts and Development Economics - Development Appraisal and Budgeting - Design Variables and Cost Data - Cost Modelling and Cost Planning - Life Cycle Costing - Economic operation of construction and property
Skills - Interpretation of cost data and its application and prediction - Evaluation and use of discounting techniques. - Development of effective cost control and prediction techniques

6c. Key Texts/Literature

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

6d. Specialist Learning Resources

BCIS on line, RICS

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	Evaluate conceptual economic principles and relate these to the practical requirements for the design and development of buildings.
2	Knowledge and Understanding	Apply appropriate techniques and data at various stages of the development and design process in order to analyse design and development problems and offer appropriate advice.
3	Intellectual, practical, affective and transferrable skills	Demonstrate a range of skills in relating techniques and data to resolve practical development problems and produce appropriate calculations and reports in response.
4	Intellectual, practical, affective and transferrable skills	Identify and evaluate alternative development opportunities for Quantity Surveying skills.

8a. Module Occurrence to which this MDF Refers				
Year	Occurrence	Period	Location	Mode of Delivery
2026/7	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	12	1-4	1 hour per week
Other teacher managed learning	24	1-4	2 hours per week
Student managed learning	114	1-4	9.5 Hours Per Week over 1 Semester
TOTAL:	150		

9. Assessment for the above Module Occurrence					
Assessment No.	Assessment Method	Learning Outcomes	Weighting (%)	Fine Grade or Pass/Fail	Qualifying Mark (%)
010	Coursework	1-3	80 (%)	Fine Grade	30 (%)
Individual report maximum 2000 words					
Assessment No.	Assessment Method	Learning Outcomes	Weighting (%)	Fine Grade or Pass/Fail	Qualifying Mark (%)
011	Practical	4	20 (%)	Fine Grade	30 (%)
Group presentation consisting of a 10 minute presentation and Q&A session per group of students equivalent to 500 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]