Module Definition Form (MDF)

Module code: MOD002312	**Version:** 4 **Date Amended:** 15/Jul/2021

1. Module Title
Building Inspection and Analysis

2a. Module Leader
Andrew Shepherd

2b. School
School of Engineering and the Built Environment

2c. Faculty
Faculty of Science and Engineering

3a. Level
5

3b. Module Type
Standard (fine graded)

4a. Credits
15

4b. Study Hours
150

5. Restrictions

Type	Module Code	Module Name	Condition
Exclusions:	None		
Courses to which this module is restricted:	None		

LEARNING, TEACHING AND ASSESSMENT INFORMATION

6a. Module Description

The module aims to develop skills gained in the pre-requisite modules, An Introduction to Technology and Design and Professional Surveying Practice and adapt these skills to enable the completion of a typical condition survey (RICS Home Buyer Report). Emphasis will be placed upon property inspection, recognition of defects in residential property and related matters such as non traditional construction, assessing age of buildings, asbestos awareness and damage by trees to buildings. Students will also explore current health and safety legislation and how this affects the surveying of buildings together with an examination of data protection legislation and guidelines. The module provides a good grounding in undertaking modern condition surveys and of recognising defects in low rise residential buildings. By its very nature this module will demand a mixture of teaching strategies from formal group lectures, group and individual tutorials and practical condition survey workshops. In this respect students will require various items of personal protective equipment in order to undertake the practical sessions on site. Employability skills Students will assess a range of residential buildings of traditional construction and prepare a condition survey in similar format to that required under the RICS Home Buyer Report. Supplementary information will be included that demonstrates a sound underpinning knowledge of time management, health and safety, communication and research analysis. As a result students will improve their communication skills by completing a condition survey report and analytical skills will be developed through the identification of building defects and by the rating of the defects into three conditions ratings.

6b. Outline Content

Knowledge and understanding
- Common building materials, composition and performance
- Foundations and link with ground conditions and geology
- Defects in residential property - deterioration of roof coverings and frame, structural problems to the superstructure, cracking of walls, bulging of masonry, deterioration of surfaces and mortar, deterioration of claddings, deterioration of ground floor construction, dampness, timber defects, wet and dry rot, bettle infestation, problems with services installations, defects with outbuildings, pavings and fences, foul and surface water drainage systems - common problems.
- Required repairs
- Problems with trees
- Non Traditional construction
- Assessing age of buildings
- Asbestos awareness in low rise residential buildings
- BRE guidance material
- Health and safety - legislation, personal safety, safety of colleagues, surveying safely.
- Reinstatement costs

Skills Analysis
- Communication by written report accompanied by supporting site notes and photographic evidence
- Manage own development in an efficient and effective manner
- Analysis and rating of defect condition
- Tackling and solving problems in a variety of circumstances
- Correct use of construction terminology
- Use ICT in a range of applications to support the production of reports and to store and retrieve information

6c. Key Texts/Literature

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

6d. Specialist Learning Resources
Surveying equipment- measuring tapes, torch, binoculars, damp meter, spirit level, probe, screwdriver, claw hammer, brick chisel, surveying ladders. PPE - overalls, dust mask, gloves, hard hat, safety footwear, protective goggles.

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	Record information for a condition survey using appropriate methods (written, photographic and diagrammatic) and ensure that such records are legible and complete.
2	Knowledge and Understanding	Examine potential causes and effects of building failure and deterioration.
3	Knowledge and Understanding	Identify and record information necessary to undertake a market valuation of a low rise residential property.
4	Intellectual, practical, affective and transferrable skills	Prepare a comprehensive condition survey in a similar format to the RICS Home Buyer Report.

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	18	1-3	3 hours per week over a single semester split into a 1.5 lecture and practical site inspections with tutorials to aid progression of report.
Other teacher managed learning	18	1-3	3 hours per week over a single semester split into a 1.5 lecture and practical site inspections with tutorials to aid progression of report.
Student managed learning	114	1-4	9.5 hours per week
TOTAL:	150		

9. Assessment for the above Module Occurrence

The assessment for some modules includes a presentation (see below for details on how this particular module is assessed). We recognise that presenting, especially to a large group, can cause significant anxiety or distress for some students. If this may affect you, please contact your Module Leader or the Disability and Neurodiversity Service as early as possible. We will work with you to consider appropriate reasonable adjustments. Depending on your individual needs, these might include, for example, presenting to a smaller group or presenting only to a member of academic staff.

Assessment No.	Assessment Method	Learning Outcomes	Weighting (%)	Fine Grade or Pass/Fail	Qualifying Mark (%)
010	Coursework	1-4	50 (%)	Fine Grade	30 (%)
Condition Survey Report: 1500 words					

Assessment No.	Assessment Method	Learning Outcomes	Weighting (%)	Fine Grade or Pass/Fail	Qualifying Mark (%)
011	Examination Chelmsford	2,3	50 (%)	Fine Grade	30 (%)
Exam: 1 hour 30 minutes					

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]