

Commercial Building Pathology and Practice

Module Descriptor

Module Code:	BSU5CBP
Version:	1.00
Status:	Final
Date:	28/02/2024

Summary Module Details

Module details

Module Title: Commercial Building Pathology and Practice

Module Leader: Nicola Allen

Module Mode: Supported online learning

Semester: Spring (UK)

Level: 5

Credits: 20

Learning Hours: 200

Contact & Study Hours

Directed Study Time: 90 hrs (45%)

Self-directed Study Time: 50 hrs (25%)

Assessment Study Time: 60 hrs (30%)

Assessment Type

Coursework: 50% Computer Based Assessment: 0% Portfolio: 0% Presentation: 0% Project: 0% Practical: 50% Self-directed Research: 0%

Module Summary

This module is concerned with commercial building pathology and surveying technologies. The module will allow students to identify, analyse and provide technical solutions to key defects in commercial buildings. Along with using appropriate technology and data within the built environment and understand the role technology plays in their particular profession.

Taken on which Programmes

BSc (Hons) Building Control (C)

BSc (Hons) Building Surveying (C)

Core (C) or Elective (E)

Module Aims

This module aims to:

- Expand on prior building pathology knowledge in context to commercial buildings.
- Develop skills in the assessment and analysis of building materials, systems, and components, with an emphasis on identifying common defects, their causes, and potential remedies to ensure the longevity and safety of built environments.
- Develop students understanding in utilising digital technology to conduct building surveys, assess condition.
- Develop the students to the key principles of digital technology in building surveying, in the use of digital tools and software application/platforms for data collection, analysis and reporting in the built environment.

Module Learning Outcomes

- LO1. Appraise and evaluate defects in commercial and industrial buildings and consider key concepts, theories, and principles, using technical information, legislation, and standards.
- LO2. Recognise and analyse building defects and pathology in commercial and industrial buildings and propose professional remedial action.
- LO3. Outline the benefits and drawbacks of various technologies in the built environment.
- LO4. Apply digital technology to assess, analyse and document the condition of a building, effectively identifying defects, maintenance, requirements.

Indicative Module Content

Module topics

Commercial Building Pathology

An understanding of the various pathology associated with industrial and commercials buildings such as cut edge corrosion, delamination, concrete defects, cladding defects (Composite panels, curtain walling etc.) profile metal sheeting.

• Modelling and Data environments

Introduction to the topic of data collaboration, environments, and use of current modelling such as of Building Information Modelling and Management; the process and analysis of such environments, their relevance, strengths, and weaknesses.

• Digital Tools

An overview of current software applications and technology-dependent hardware used in surveying. Survey/measurement/valuation applications, virtual reality (VR) software, project management tools, hardware items, including laser measures, and use of thermal imaging cameras, 360° cameras, drones.

This content will be reviewed and updated regularly to reflect the legal, ethical, and financial changes in professional standards and practice.

Overview of Summative Assessment

Module learning outcomes	Assessment	Word count or equivalent	Weighting
LO1, LO2	Assessment 1	2,000	50%
	Coursework		
LO3, LO4	Assessment 2	2,000	50%
	Case Study		

Module Pass Mark (as a weighted average of all assessments): 40%

Key Module Learning Resources

Core Sources and Texts

The core reading resources within each module will be provided via the specific Virtual Learning Environment (VLE) module pages and within the e-Library. Additional reference material and supplementary resources to support your studies are available through the UCEM e-Library.

Module tools

Students will have access to study materials, dedicated academic support, student forums, and learning activities via an online learning platform (VLE).

The module page on the VLE is broken down into structured study weeks to help students plan their time, with each week containing a mixture of reading, case studies, videos/recordings, and interactive activities to go through. Online webinars/seminars led by the Module Leader can be attended in real time and provide opportunities to consolidate knowledge, ask questions, discuss topics and work through learning activities together. These sessions are recorded to support students who cannot attend and to enable students to recap the session and work through it at their own pace. Module forums on the VLE provide further opportunities to discuss topics with other students, complete collaborative work and get extra help from the module team.

Professional online resources

The e-Library provides access to trusted, quality online resources, selected by subject specialists, to support students' study. This includes journals, industry publications, magazines, academic books, and a dissertation/work-based library. For a list of the key industry specific and education resources available please visit <u>the VLE e-Library</u>.

Other relevant resources

Access is also provided to further information sources that include the British Library and Open University UK catalogues, as well as providing a monthly current awareness service entitled, *Knowledge Foundations* - a compendium of news, research and resources relating to the educational sector and the Built Environment.

The module resource list is available on the module VLE page and is updated regularly to ensure materials are relevant and current.