



UNIVERSITY COLLEGE
OF ESTATE MANAGEMENT

Sustainable Buildings and Cities

Module Descriptor

Module Code: SUS7SBC

Version: V2.00

Status: Final

Date: 15/07/2024

Summary Module Details

Module details

Module Title: Sustainable Buildings and Cities

Module Leaders: Dr Phil Coker and Dr James Ritson

Module Mode: Supported online learning

Semester: Autumn (UK)

Level: 7

Credits: 20

Learning Hours: 200

Contact & Study Hours

Scheduled learning and teaching activities: 33 hrs (16.5%)

Guided independent study: 167 hrs (83.5%)

Assessment Type

Coursework: 100%

Computer Marked Assessment: 0%

Self-directed Research Project: 0%

Portfolio: 0%

Module Summary

This module will introduce technical sustainability in terms of our current buildings and existing towns and cities influenced by national and global agendas. With much of the narrative around sustainability focussed upon new build, it is our existing buildings and the towns and cities they make up where many sustainability challenges reside. The module looks at a range of approaches to address such challenges such as retrofitting, analysis and adaption modelling, building flexibility, maintenance and BMS. Attention is also given to the scale and long-term challenges this presents and how to tackle this in a staged and inclusive manner.

Taken on which Programmes

MSc Innovation in Sustainable Built Environments (E)

Postgraduate Diploma Innovation in Sustainable Built Environments (E)

Core (C) or Elective (E)

Module Aim

This module aims to offer students a critical understanding of the relationship between technologies within existing buildings and cities and the sustainability agenda.

Module Learning Outcomes

- LO1. Critically understand the wider challenges buildings and cities face considering the evolving discourse around sustainability.
- LO2. Critically evaluate the existing information and methodologies for the options to meet the challenges current buildings and cities face considering the evolving discourse around sustainability.
- LO3. Synthesise the short, medium, and long-term options to meet the challenges current buildings, towns and cities face considering the evolving discourse around sustainability.

Indicative Module Content

Module topics

- Present building stock in terms of sustainability.
- Spectrum of options to tackle building stock in terms of sustainability.
- Retrofitting.
- Analysis and adaption modelling.
- Building flexibility.
- Maintenance and BMS.

This content will be reviewed and updated regularly to reflect the evolving discourse around built environment sustainability.

Overview of Summative Assessment

Module learning outcomes	Assessment	Word count or equivalent	Weighting	Minimum assessment threshold
LO1, LO2	Assessment 1 Comparative essay of two options	1,500 words max	30%	40%
LO2, LO3	Assessment 2 Case study comparing two sustainability projects, including reflective piece	3,500 words max	70%	40%

Module Pass Mark (as a weighted average of all assessments): 50%

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. Each week will have a key theme related to the module, drawing upon an evolving set of methods, including flipped learning with interactive workshops and discussions, online Padlet discussion activities for student unable to attend the live sessions.

Online webinars/seminars led by specific academics 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 with a degree of flexibility. 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 [the VLE e-Library](#).

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 website and is updated regularly to ensure materials are relevant and current.