UNIVERSITY COLLEGE
OF ESTATE MANAGEMENT

Technology and Design 1: Contemporary Domestic

Module Descriptor

Module Code:	TEC5DE1
Version:	1.00
Status:	Final
Date:	17/04/2024

Summary Module Details

Module details

Module Title: Technology and Design 1: Contemporary Domestic

Module Leader: Marc Fleming

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: 0%

Computer Based Assessment: 0%

Portfolio: 100%

Presentation: 0%

Project: 0%

Practical: 0%

Self-directed Research: 0%

Module Summary

This module involves the application of thematic knowledge where the integration of both traditional and innovative forms of construction technologies are applied against the context of contemporary building design. Sustainable and environmental design strategies will be utilised to create holistic and technically designed solutions that are responsive to client and design brief requirements whilst acknowledging regulatory compliance and global sustainability issues.

Manually generated design concepts will evolve to the production of a design solution utilising CAD and/or architectural modelling software with the level of detail typically required at Stage 4 of the RIBA Plan of Work. Work will be presented using a range of media to illustrate levels of detail and visualisation of the design proposal which will be critiqued by tutors.

Taken on which Programmes

BSc (Hons) Architectural Design Technology (C)

Core (C) or Elective (E)

Module Aims

This module aims to:

- Develop students' design development skills through interpreting a design brief and associated parameters within.
- Provide an opportunity to interact with and understand the level of detail required for architectural documentation for each stage up to stage 4 of the RIBA Plan of Work.
- Introduce the principles of sustainable design relative to Form, Function and Mass in contemporary architecture.
- Develop an understanding of the levels of information required at stages of the RIBA plan of work.
- Develop students' abilities in selecting appropriate construction technologies for domestic building types and integrating them into a whole building solution, ensuring that functional requirements of all building elements are achieved whilst maintaining practicalities relative to interrelationships with building form.
- Utilise manual drafting techniques and CAD software to develop conceptual designs into working drawings and/or 3D Information models.
- Develop students' abilities to present, defend and justify a design solution whilst under scrutiny and technical questioning from design professionals.

Module Learning Outcomes

LO1. Evaluate and interpret a design problem against the context of a domestic building through the application of technical and conceptual design solutions.

LO2. Use CAD software to produce technical, and illustrative design solutions.

LO3. Evaluate design solutions for their sustainability, functional and regulatory compliance.

LO4. Justify methodologies that have led to a technical design solution through oral presentation and critique.

Indicative Module Content

Module topics

- RIBA Plan of Work stages.
- Studio and architectural design cultures.
- Interpreting a design brief and extracting client and functional requirements.
- Conceptual design development in architecture.
- Building design and functional requirements of elements.
- Domestic materials and construction technologies.
- Legal and regulatory design parameters for domestic buildings.
- Sustainability design guidance for domestic buildings (Future Homes Standard, BREEAM domestic refurbishment guidance etc.)
- Technical design and construction detailing.
- Use of computational tools to create and present design proposals.

- Principles and techniques for effective architectural presentation.

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** Portfolio	2,800	70%
LO3, LO4	**Assessment 2** Portfolio	1,200	30%

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.

This is a design orientated module relative to design problem. As such, this requires dedicated design studio time to allow students to navigate the design process. Studio time will also be accompanied by dedicated, Tutor supported workshops where CAD modelling and digital presentation techniques will be hosted to support the development of student work to industry standard. Workshops and Tutorials will be supplemented periodically by lectures.

Given the nature of the provision, dedicated Virtual Design Studios will be provided and supplementary vendor specific resources will be provided to allow students to work independently out with contact time with Tutors.

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 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 VLE page and is updated regularly to ensure materials are relevant and current.