

Module Descriptor

Module Code: INT4DES

Version: 2.00 Status: Final

Date: 07/11/2024

Summary Module Details

Module details

Module Title: Design Development and Production Coordination

Module Leader: Marc Fleming

Module Mode: Supported online learning

Semester: Autumn (UK)

Level: 4 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

At an introductory level, this module provides students with a holistic understanding of the architectural design process by combining manual and digital skills, against the backdrop of compliance with industry standards for effective coordination and communication.

Taken on which Programmes

BSc (Hons) Architectural Design Technology (C)

Certificate of Higher Education (CertHE) Construction and Built Environment ((C) for CDB pathway)

Core (C) or Elective (E)

Module Aims

This module aims to:

- Develop students' skills in interpreting client, functional and context specific requirements from a design brief.
- Allow students to evolve design concepts through the development of manual drafting techniques to convey design intentions.
- Develop students' skills in the use of software to convert manual sketches to 2D CAD drafted solutions.
- Develop students graphical and written communication skills through the production of drawings, schedules and specifications using appropriate forms of media and information technology.
- Introduce students to appropriate drawing convention standards such as relevant BS and ISO standards.
- Allow students to manage information through the co-ordination of design information in both electronic and paper form.

Module Learning Outcomes

- LO1. Interpret a client brief and survey information to develop a series of manually drafted design concepts.
- LO2. Develop a 2D computer aided technical design proposal in response to client requirements using appropriate construction technologies.
- LO3. Develop skills in the use of appropriate software applications to apply professional construction drawing and communication standards.
- LO4. Describe how to co-ordinate design information.

Indicative Module Content

Module topics

- Introduction to Design Briefs and Site Surveys:
 - Understanding client requirements and analysing site survey information.
 - o Interpreting design briefs to identify key project parameters.
 - o Developing conceptual sketches to visualise design ideas.
 - o Understand basic design principles of new build and retrofit projects.

Manual Drafting Techniques:

- o Introduction to manual drafting tools and techniques.
- Developing hand-drawn plans, elevations, and sections.
- Iterative refinement of manual sketches based on feedback.

• 2D CAD:

- o Introduction to Computer-Aided Design (CAD) tools.
- Converting manual sketches into 2D CAD drawings.
- o Exploring the functionalities of CAD software for architectural design.
- Appreciation of articulation between 2D CAD and 3D Modelling
- Detailed Design and Specification:

- Developing detailed architectural drawings.
- Specifying materials, dimensions, and construction details.
- Understanding the importance of accuracy in design documentation.
- Understand typology of UK building stock

Application of British Standards:

- Introductory overview of relevant British and ISO Standards for architectural design.
- o Integration of British and ISO Standards into design documentation.
- Ensuring compliance with health and safety, accessibility, and other standards.

• Coordination of Design Information:

- Understanding the importance of coordination in architectural projects.
- Coordinating architectural drawings with structural, MEP, and other disciplines.
- Addressing potential conflicts, clash detection and discrepancies in design information.

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

Overview of Summative Assessment

Module learning outcomes	Assessment	Word count or equivalent	Weighting
LO1	Assessment 1:	600	20%
	Portfolio		
LO2, LO3, LO4	Assessment 2:	2,400	80%
	Portfolio		

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 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.