Module Specification

Principles of Sustainable Design

Version: 2026-27, v2.0, Approved

Contents

Part 1: Information

Module title: Principles of Sustainable Design

Module code: UBLLWV-30-1

Level: Level 4

For implementation from: 2026-27

UWE credit rating: 30

ECTS credit rating: 15

College: College of Arts, Technology and Environment

School: CATE School of Architecture and Environment

Partner institutions: None

Field: Architecture and the Built Environment

Module type: Module

Pre-requisites: None

Excluded combinations: None

Co-requisites: None

Continuing professional development: No

Professional, statutory or regulatory body requirements: None

Part 2: Description

Overview: An introduction to the process of recording, designing and specifying buildings, including development of fundamental skills such as drawing and measurement.

Features: Not applicable

Educational aims: By the end of this module students should be able to:

Undertake fundamental surveying skills and be able to describe and record elements of construction

Understand the importance and development of the client's brief

Understand fundamental design principles and be able to communicate ideas graphically and in writing.

Outline syllabus: Fundmental Principles, likely to include but not limited to:
Historic and architectural context

Design theories and aesthetics

Function, form and style

Analysis of users requirements, briefing

Functional appraisal and design

Structural appraisal and design

Environmental appraisal and design

Design methodology

Management of the design process

Design guides

Urban design

Housing design

Access for the disabled

Loading: structural layout and load paths

Sustainability issues and design principles

Professional ethics.

Application:
Drawing and sketching

Introduction to CAD and BIM

Design and detailing of simple building types

Planning applications, design and access statements.

Part 3: Teaching and learning methods

Teaching and learning methods: The first 6-8 weeks is devoted to skills development including lectures, tutorials, practical classes, workshops, site visits etc. to help students engage with what is to follow.

The remainder of the first semester covers theoretical aspects of design to prepare students for summative assessment at the end of the semester, mainly delivered by lectures and tutorials with directed learning.

Teaching in the second semester focuses on the practical application of theoretical issues covered in the first semester using a specific project as the teaching and learning vehicle, comprising a mixture of project workshops and design studios.

Scheduled learning includes lectures, seminars, tutorials, project supervision, demonstration, practical classes and workshops; fieldwork; external visits; work based learning; supervised time in studio/workshop.

Independent learning includes hours engaged with essential reading, case study preparation, assignment preparation and completion etc.

Module Learning outcomes: On successful completion of this module students will achieve the following learning outcomes.

MO1 Undertake measured and level surveys and produce drawings by hand and CAD.

MO2 Demonstrate the relationship between external influences on design and the resultant function, form and style of buildings. In addition, identify the sustainability and environmental context in which design is undertaken. Identify the links between site, structure, environment, sustainability, fabric and the user's requirements and understand how these factors influence the design brief from building users.

MO3 Describe the function of key structural elements in domestic and simple framed construction.

MO4 Undertake detailed design appraisal of selected elements of construction within the context of professional ethics and recognise the fundamental principles of BIM.

Hours to be allocated: 300

Contact hours:

Independent study/self-guided study = 75 hours

Face-to-face learning = 225 hours

Reading list: The reading list for this module can be accessed at readinglists.uwe.ac.uk via the following link https://uwe.rl.talis.com/modules/ubllwv-30-1.html

Part 4: Assessment

Assessment strategy: The assessment strategy seeks to integrate learning throughout the module and to introduce students to formal academic and report

writing. The two assessments are as follows:

Task 1: Skills Portfolio
This portfolio is based on the skills explored and examined in the first semester and comprises work which reflects the application of these skills to typical situations that are faced in practice (Word Count 2000).

This portfolio also includes a series of online exercises. These relate to development of essential surveying, measuring, recording and sketching skills.

Task 2: Design Project
This design project relates to material covered later in the module and requires students to demonstrate their response to a design brief graphically and in writing (Word Count 1500).

Formative assessment - will be based on in class critique sessions, where students will be required to communicate their design ideas and respond to criticism from staff and peers.

Resits
Resit Task 1 - a similar brief to that described above, which may include an adjusted topic choice. Includes online exercises similar to those described above, which may include an adjusted topic choices.

Resit Task 2 - a similar brief to that described above, which may include an adjusted topic choice.

Assessment tasks:

Portfolio (First Sit)
Description: Task 1: Skills portfolio (2000 words)
Weighting: 50 %
Final assessment: No
Group work: No

Learning outcomes tested: MO1, MO3

Project (First Sit)
Description: Task 2: Design project (1500 words)
Weighting: 50 %
Final assessment: Yes
Group work: No
Learning outcomes tested: MO2, MO4

Portfolio (Resit)
Description: Task 1: Skills portfolio (2000 words)
Weighting: 50 %
Final assessment: No
Group work: No
Learning outcomes tested: MO1, MO3

Portfolio (Resit)
Description: Task 2 (Resit): Design project (1500 words)
Weighting: 50 %
Final assessment: Yes
Group work: No
Learning outcomes tested: MO2, MO4

Part 5: Contributes towards

This module contributes towards the following programmes of study:

Construction Project Management {Foundation} [Frenchay] - WITHDRAWN BSc (Hons) 2025-26

Building Surveying {Foundation} [Frenchay] - WITHDRAWN BSc (Hons) 2025-26

Building Surveying [Frenchay] BSc (Hons) 2025-26

Architectural Technology and Design [Frenchay] BSc (Hons) 2025-26

Construction Project Management [Frenchay] BSc (Hons) 2025-26

Architectural Technology and Design [Frenchay] BSc (Hons) 2025-26

Building Surveying [Frenchay] BSc (Hons) 2026-27

Construction Project Management [Frenchay] BSc (Hons) 2026-27

Building Surveying [Frenchay] BSc (Hons) 2026-27

Construction Project Management [Frenchay] BSc (Hons) 2026-27