# Module Specification

## Technology and Design Studio 3

Version: 2023-24, v3.0, 29 Mar 2023

**Contents**

**Module Specification** ..... **1**

**Part 1: Information** ..... **2**

**Part 2: Description** ..... **2**

**Part 3: Teaching and learning methods** ..... **4**

**Part 4: Assessment** ..... **6**

**Part 5: Contributes towards** ..... **9**

## Part 1: Information

**Module title:** Technology and Design Studio 3

**Module code:** UBLMJM-45-3

**Level:** Level 6

**For implementation from:** 2023-24

**UWE credit rating:** 45

**ECTS credit rating:** 22.5

**Faculty:** Faculty of Environment & Technology

**Department:** FET Dept of Architecture & Built Environ

**Partner institutions:** None

**Delivery locations:** Not in use for Modules

**Field:** Architecture and the Built Environment

**Module type:** Module

**Pre-requisites:** Technology & Design Studio 2 2023-24

**Excluded combinations:** None

**Co-requisites:** None

**Continuing professional development:** No

**Professional, statutory or regulatory body requirements:** None

## Part 2: Description

**Overview:** Pre-requisites UBPMXV-30-2 Technology and Design Studio 2

**Features:** Not applicable

**Educational aims:** See learning outcomes.

**Outline syllabus:** Design Studio Syllabus

The final year of Architectural Technology and Design builds on the application of skills developed in other modules throughout the award.

The content of this module is indicative and will be outlined in detail each year through the Module Guide. The general approach consists of a sequence of building design projects that explore a range of design tasks in a variety of contexts, while maintaining some aspect of commonality between each project through the use repeated design systems and/or construction technologies that each individual can then refine and adapt to suit different applications and contextual situations.

Technology Syllabus

This final year requires the students to marshal the technical knowledge they have developed over the preceding years of study and exercise design judgement in the use of this knowledge to develop a technical strategy that is integrated with their design intentions for their major project.
This will include further in-depth explanation of a student's projects technical strategies and a focussed exploration of selected detail designs demonstrating their learning of this technical syllabus.

As potential technologists students will develop a detailed integrated technology strategy for their buildings and as part of this requirement will be expected to evaluate and answer the following thematic questions:

Structural Principles and Structural Sizes

Material Choices and Properties

Environmental Comfort

Building Physics and Thermal Performance

Cultural significance and conservation

Construction Detailing

Construction Poetics

Assembly, Maintenance and Safety

Data and Research

Ethics and Values

## Part 3: Teaching and learning methods

**Teaching and learning methods:** The module will be delivered by means of a series of lectures, supporting studios and lab-based exercises. Students will work pre-dominantly as individuals; however some broader tasks and exercises will be conducted in tutorial groups.

This is a studio-based module in which each project or stage of the overall project is defined in a written brief. Tuition related to these projects will be conducted in tutorial groups in the first part of the year and through individual tutorials as the major project reaches its conclusion.

There are critical review/feedback sessions at the end of each stage of the project work in which students explain and justify their work to module staff, fellow students and visiting critics.

Students will also be required to attend a field trip that focuses on contrasting contextual situations and current building technology and architectural practices.

Scheduled learning includes studio, lectures, tutorials, workshop, site visits

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

an average time per level as indicated in the table below. Scheduled sessions may vary slightly depending on the module choices you make.

This module will be delivered as follows:

108 hours contact time that includes lecture based sessions, workshop session exploring practical design issues related to project work, small-group design seminars offering specific tutorial support on project work, and skills workshops led by technical support staff.

292 hours are scheduled for the assimilation and development of knowledge through coursework preparation in the form of design projects.

A final 50 hours are scheduled for final preparation of the portfolio assessment through informal reviews.

Total 450 hours

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

**MO1** Undertake a feasibility study for a potential project in order to identify, assess and challenge client/brief requirements and by considering economic viability, appropriate scale of development test preferences and options leading to the forming of a succinct project brief

**MO2** Analyse a proposed building site in order to identify its specific contextual characteristics (including cultural, climactic, physical, architectural and social factors), while also discussing how these conditions will impact the programme and proposed design solutions

**MO3** Establish a set of building performance criteria (including physical and regulatory items) for a specific proposed architectural project based upon assigned brief and specific contextual information and determine an appropriate technical strategy that responds to the functional requirements of a complex brief

with a well-ordered technical solution and describe this general arrangement of services, structure and building envelope with accuracy and in detail

**MO4** Demonstrate a maturing understanding of the integration of construction technologies, and sustainable building practice within a specific building design project and to illustrate the development of these approaches from the concept proposal phase through to detailed building assembly and component design at the building regulation submission and construction documents phases

**MO5** Demonstrate an understanding of elemental costing

**MO6** Demonstrate an ability to choose and utilise the appropriate Computer Aided Design and visualisation tools during phases of the design/production process and communicate architectural design ideas and construction technology drawings through the use of a variety of media, both graphically and through verbal presentation

**MO7** Evaluate personal investigative and research skills by means of keeping a written and drawn 'diary' throughout the major project recording the process by which the technical element of their project was detailed to convey the architectural and technical intention

**MO8** Evaluate the idea of cultural significance and explain how this can be effectively used to manage the practice of existing conserving buildings in terms of structure and material sciences

**Hours to be allocated:** 450

**Contact hours:**

Independent study/self-guided study = 342 hours

Face-to-face learning = 108 hours

Total = 450

**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/index.html

## Part 4: Assessment

**Assessment strategy:** Formative review and assessment occurs at the conclusion of each of the design projects taken during the year. Each project may differently emphasise an aspect of the learning outcomes identified for the module and this particular emphasis is expressed to the student as part of the project brief.

Portfolio - The Design Portfolio, is formally understood by professional validating bodies as the vehicle suitable for the assessment of an architectural technology student and, as such is the assessment vehicle identified for this module. Sketchbooks and work undertaken on the field trip will be assessed as part of the portfolio.

Report - The Technical Element of the Portfolio submission will be in the form of a Technical Report. The aims of the report at this level are to create an opportunity for students to experience the interaction of research with design practice and to develop a deeper understanding of a particular subject area. This will include further in-depth explanation of a student's projects technical strategies and a focussed exploration of selected detail designs demonstrating their learning of this technical syllabus.
This will include:
a) A description of the 'General Arrangement' of the building – demonstrating its organisation of structure, construction envelope, services, fire escape strategy and environmental strategies.
b) The design and explanation of Building Elements – in detail model and detail drawing that demonstrates how construction detailing has informed an architectural idea; and how it conforms to necessary regulations.
c) A simple costing exercise highlighting quantities of materials and embodied energy
A 4000 word technical piece of text spread over the report that supports a strategy and detail design

Resit Portfolio - a similar brief to that described above. A full resubmission of the portfolio is required even if it had been submitted in the first attempt. This may include a summary of changes, upon request from the marking tutor.

Resit Report - a similar brief to that described above, which may include some topic changes.

It is a PSRB requirement that all assessment tasks must be passed.

**Assessment components:**

**Portfolio** (First Sit)
Description: Design portfolio
Weighting: 80 %
Final assessment: Yes
Group work: No
Learning outcomes tested: MO1, MO2, MO3, MO4, MO5, MO6, MO8

**Report** (First Sit)
Description: Technical report (4000 words)
Weighting: 20 %
Final assessment: No
Group work: No
Learning outcomes tested: MO3, MO4, MO5, MO6, MO7, MO8

**Portfolio** (Resit)
Description: Design portfolio
Weighting: 80 %
Final assessment: Yes
Group work: No
Learning outcomes tested: MO1, MO2, MO3, MO4, MO5, MO6, MO8

**Report** (Resit)
Description: Technical report (4000 words)
Weighting: 20 %
Final assessment: No
Group work: No
Learning outcomes tested: MO3, MO4, MO5, MO6, MO7, MO8

## Part 5: Contributes towards

This module contributes towards the following programmes of study:

Architectural Technology and Design [Sep][FT][Frenchay][3yrs] BSc (Hons) 2021-22

Architectural Technology and Design {Foundation} [Oct][FT][GCET][4yrs] BSc (Hons) 2020-21

Architectural Technology and Design [Sep][SW][Frenchay][4yrs] BSc (Hons) 2020-21

Architectural Technology and Design {Foundation} [Sep][FT][Frenchay][4yrs] BSc (Hons) 2020-21

Architectural Technology and Design {Foundation} [Feb][FT][GCET][4yrs] BSc (Hons) 2020-21

Architectural Technology and Design {Foundation} [Sep][SW][Frenchay][5yrs] BSc (Hons) 2019-20

Architectural Technology and Design [Sep][PT][Frenchay][5yrs] BSc (Hons) 2019-20