

### **MODULE SPECIFICATION**

Part 1: Information						
Module Title	Techi	Technology and Design Studio 3				
Module Code	UBPMYE-60-3		Level	Level 6		
For implementation from	2019-20					
UWE Credit Rating	60		ECTS Credit Rating	30		
Faculty		ty of Environment & nology	Field	Planning and Architecture		
Department		ET Dept of Architecture & Built Environ				
Module type:	Proje	ject				
Pre-requisites		Technology & Design Studio 2 2019-20				
Excluded Combinations		None				
Co- requisites		None				
Module Entry requirements		None				

### Part 2: Description

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 and contains the major piece of work in the final year: Design Portfolio and Technical Report.

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. 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 description of the 'General Arrangement' of the building – demonstrating its organisation of structure, construction envelope, services, fire escape strategy and environmental strategies.

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.

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.

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** 

Construction Detailing

Construction Poetics

Assembly, Maintenance and Safety

Data and Research

Ethics and Value

**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.

This module will be delivered as follows:

150 hours directed contact time that includes lecture based sessions, workshop sessions, small-group design seminars offering specific tutorial support on project work, and skills workshops led by technical support staff.

420 hours are scheduled for the assimilation and development of knowledge through coursework preparation in the form of design projects, with 150 of those hours identified as self-directed learning within a timetabled Design Studio space.

A final 30 hours are scheduled for final preparation of the portfolio assessment through informal reviews.

Total 600 hours

### Part 3: Assessment

100% of the module mark is awarded for the Portfolio submitted at the formal assessment point for the module. 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.

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.

Sketchbooks and work undertaken on the field trip will be assessed as part of the portfolio.

First Sit Components	Final Assessment	Element weighting	Description
Report - Component A		20 %	Technical report
Portfolio - Component A	<b>✓</b>	80 %	Portfolio
Resit Components	Final Assessment	Element weighting	Description
Report - Component A		20 %	Technical report
Portfolio - Component A	✓	80 %	Portfolio

	Part 4: Teaching and Learning Methods	
Learning Outcomes	On successful completion of this module students will achieve the following learning of	outcomes:
	Module Learning Outcomes	Reference
	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	MO1
	Analyse proposed building sites in order to identify their specific contextual characteristics (including climactic, physical, architectural and social factors), while also discussing how these conditions will impact the programme and proposed design solutions; and explain the reasons for initial design decisions and their subsequent revision while demonstrating an understanding of how particular architectural and technical responses affected by issues related to the following; context, function, sustainable building practices, environmental strategies, choice of construction technologies, governing regulatory requirements and the needs of client/user groups.	MO2

	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 that recognises and refines the ordering principles of that design intention; and describe this general arrangement of services, structure and building envelope with accuracy and in detail.				
	Evaluate a range of construction technologies, then identify and rese technical strategy containing material, component and system choice to compose the detailing of an integrated element that are refined to declared architectural and technical intention.	s that is used	MO4		
	Demonstrate a maturing understanding of the integration of construct technologies, and sustainable building practice within a specific build project and to illustrate the development of these approaches from the proposal phase through to detailed building assembly and component the building regulation submission and construction documents phase	ing design e concept t design at	MO5		
	Demonstrate an understanding of elemental costing and the primary effecting cost of similar projects in different contextual situations.		MO6		
	Demonstrate an ability to choose and utilise the appropriate Computer Aided Design and visualisation tools for concept development and production of architectural images 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.				
	Evaluate personal investigative and research skills by means of keep 'diary' throughout the major project recording the process by which the element of their project was developed ultimately forming part of the Report	e technical	MO8		
Contact Hours	Independent Study Hours:				
	Independent study/self-guided study	45	0		
	Total Independent Study Hours:	45	50		
	Scheduled Learning and Teaching Hours:				
		Face-to-face learning 15			
	Face-to-face learning	15	60		
	Face-to-face learning  Total Scheduled Learning and Teaching Hours:	15 15			
			60		
	Total Scheduled Learning and Teaching Hours:	15	00		
Reading List	Total Scheduled Learning and Teaching Hours:  Hours to be allocated	60	00		

## Part 5: Contributes Towards

This module contributes towards the following programmes of study: