Module Specification

Product Design Technology Studio 2

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Contents

Part 1: Information

Module title: Product Design Technology Studio 2

Module code: UBLLYA-60-2

Level: Level 5

For implementation from: 2023-24

UWE credit rating: 60

ECTS credit rating: 30

College: Faculty of Environment & Technology

School: FET Dept of Architecture & Built Environ

Partner institutions: None

Field: Architecture and the Built Environment

Module type: Module

Pre-requisites: Product Design Studio 1 2023-24

Excluded combinations: None

Co-requisites: None

Continuing professional development: No

Professional, statutory or regulatory body requirements: None

Part 2: Description

Overview: Not applicable

Features: Not applicable

Educational aims: See Learning Outcomes

Outline syllabus: In this module, students will create a portfolio of work, and develop an understanding of the design process though the practice of design.

The module will have 4 major projects, which may be supplemented by additional short projects. These 4 main projects will each be approximately 6 weeks long and historically have been arranged as follows:

Form Development and Ideation Sketching:
Aesthetic and semantic form, focusing on ideation sketching aesthetics, materials, colour and texture.

User centred Design, Research and Problem Formulation:
Primary research/end user observations and insights, combined with secondary research leading to problem formulation and the development of a brief, product design specification (PDS), and resolved concept solution.

Live Project:
The live project is completed in association with an external company or organisation, focusing on professional development: creating a design brief, group work, project management, visual, verbal and written design communication.

Design for Manufacture:
Detail design for manufacture as per the design brief, focusing on materials and process choice considerations relative to performance and cost, eco-evaluation, product design specification (PDS), 2D/3D and CAD techniques to full design intent and detail.

Supporting Skills and Knowledge:
Workshop and modelling methods in 2D and 3D; working prototypes, Sketch models, bench level experiments, 2D models.

The module includes the application of skills acquired in other modules as well as potential additional skills and technical knowledge to support the needs of the specific projects and students.

The nature and duration of the projects is subject to change, in order to balance the live project, to address the academic needs of the cohort, and to provide a

designated window to introduced innovation to the curriculum.

Note: all elements are not weighted equally in study or assessment time.

Part 3: Teaching and learning methods

Teaching and learning methods: As a 60 credit module, students are expected to study for a total of 600 hours across the year. This time requirement is allocated as follows:

203 hours contact time that includes lecture based sessions, small-group design seminars (providing tutorial support for on-going project work), feedback sessions, skills workshops and demonstrations, and one-to-one sessions as appropriate.

397 hours self-directed learning, including sessions within a timetabled design studio space, in which students are expected to prepare for, develop and resolve design projects, as well as respond to feedback and prepare final presentation material and portfolio content.

Teaching and Learning Strategy for this module is studio project based learning in which a topic lecture will introduce the students to the assigned or coming up contextual information, skills or general information which supports and frames their acquisition of topic specific knowledge, skills and supports their project work.

The exercises and projects are designed to facilitate competency acquisition through the didactic and applied learning, building knowledge through the introduction of new subject matter and reinvestment of gained knowledge and skills. The tutorial portion of the studio time is designed for the learner to have access to tutorial support, work in the close proximity of classmates and to self-assess his/her progress through the exercises and/or projects.

Exercise and Project work outside of scheduled hours is an essential component to the successful completion of the assigned work with an average time investment of

10+ hours per week. Students will be expected to come prepared for the module sessions with in-process or completed work and supplies.

At times though the run, students are required to pre-read on topics and selected materials, research and orally present on the topic.

Projects and course work is assessed through viva (oral presentations) "pin-up" and project demonstrations in front of the students peers and tutors.

Feedback will be in the form of direct verbal and/or written. Marking criteria and assessment format will be clearly indicated on the Project Brief made accessible to the students at the beginning of each project.

Knowledge and Skills reinvestment from parallel running modules are formative and essential for progression through the curriculum.

Additional tutorial support is offered through individual appointments with the module tutors and through PAL.

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

MO1 Apply creative and logical thinking processes as well as design methodologies to the creation of design solutions

MO2 Awareness of social and environmental impact and the application of sustainable design principles

MO3 Integrate principles of Design Thinking into one's own work

MO4 Constructively work in teams or groups

MO5 Research, select, evaluate, manipulate and manage information relevant to the analysis and synthesis of product design solutions

MO6 Apply analytical skills in relation to designed objects including the ability to undertake visual analysis and to analyse designed objects in relation to their context

MO7 Ability to recognise product design cost drivers for both recurring and non-recurring costs and to appreciate the cost implications of differing production volumes

MO8 Apply a systematic approach to problem solving using appropriate design tools and techniques

Hours to be allocated: 600

Contact hours:

Independent study/self-guided study = 397 hours

Face-to-face learning = 203 hours

Total = 600

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/ubllya-60-2.html

Part 4: Assessment

Assessment strategy: The assessment strategy in this module is based upon evaluations of the process and the outcomes of the completed projects and presentations (controlled conditions viva).

To best mimic professional practice the following assessment strategy has been adopted.

Summative Assessment: Projects are evaluated on subject specific criteria clearly stated on each project brief at the outset of each project:

Projects are evaluated in both peer critiques (controlled condition evaluations) and direct submissions. These presentation critiques are held during term time and during the examination period. Typical presentations are 15 to 20 minutes in duration including the formal presentation and feedback from peers and tutors.

Graphic/Written document, which represent and support the verbal presentation and 3D work, consist of student generated and cited graphic images and written content. In a typical submission the written content ranges from 500-2000 words.

Submission of a process book that demonstrates the depth and breadth of research and synthesis in to the iterative process of developing a design concept.

Group/Team work is based on an overall group score. A differential marking scheme is also applied to ensure fairness of marking where the contribution of different members of the group is not equal.

An overall mark percentage of professionalism is allotted to assess aspects of participation and engagement.

Formative Assessment: Regular "in-process" critiques and one-to-one tutoring is given throughout the development process of the projects.

Feedback: Peer and tutor feedback is provided during the development process of the projects, during the project critiques.

Resit: The students should resubmit their Individual Project Portfolio focusing on improving their weakest projects. Students are not expected to rework projects for which they obtained reasonable marks.

Students who did not engage or failed to reach the minimum standard on the group project will be asked to submit an additional short written report as part of the project re-submission. The report should be a reflection on the importance of group work and the potential benefits that could have been achieved through better engagement in the group project.

Assessment tasks:

Portfolio (First Sit)

Description: Individual project portfolio

Weighting: 75 %

Final assessment: Yes

Group work: No

Learning outcomes tested: MO1, MO2, MO3, MO5, MO6, MO7, MO8

Project (First Sit)

Description: Group project

Weighting: 25 %

Final assessment: No

Group work: Yes

Learning outcomes tested: MO1, MO4, MO5, MO8

Portfolio (Resit)

Description: Individual project portfolio resubmission

Weighting: 75 %

Final assessment: Yes

Group work: No

Learning outcomes tested: MO1, MO2, MO3, MO5, MO6, MO7

Project (Resit)

Description: Group Project

Weighting: 25 %

Final assessment: No

Group work: No

Learning outcomes tested: MO1, MO4, MO5, MO8

Part 5: Contributes towards

This module contributes towards the following programmes of study:

Product Design Technology [Frenchay] BSc (Hons) 2022-23

Product Design Technology {Foundation} [Sep][FT][Frenchay][4yrs] BSc (Hons) 2021-22

Product Design Technology {Foundation} [Sep][SW][Frenchay][5yrs] BSc (Hons) 2021-22