



Programme Specification

Architectural Technology and Design {Top-Up}

[Aug][FT][SHAPE][1yr]

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Section 1: Key Programme Details

Part A: Programme Information

Programme title: Architectural Technology and Design {Top-Up}
[Aug][FT][SHAPE][1yr]

Highest award: BSc (Hons) Architectural Technology and Design

Interim award: BSc Architectural Technnology and Design

Awarding institution: UWE Bristol

Teaching institutions: School for Higher and Professional Education

Study abroad: No

Year abroad: No

Sandwich year: No

Credit recognition: No

School responsible for the programme: FET Dept of Architecture & Built Environ,
Faculty of Environment & Technology

Professional, statutory or regulatory bodies: Not applicable

Modes of delivery: Full-time

Entry requirements: For the current entry requirements see the UWE public website.

For implementation from: 01 August 2018

Programme code: K13B13-AUG-FT-SC-K130

Section 2: Programme Overview, Aims and Learning Outcomes

Part A: Programme Overview, Aims and Learning Outcomes

Overview: The programme is designed to produce graduates who will be able to analyse, synthesise and evaluate design factors thus enabling them to produce design solutions that will satisfy performance, production and procurement criteria for the construction industry. Each student will have a strategic awareness of the parameters that underline the processes necessary to achieve good quality functional buildings.

At the end of the period of study the architectural technologist can expect to find employment within design consultancy organisations, contractors, or product manufacturers.

Features of the programme: The Faculty of Environment and Technology has a strong commitment to interdisciplinary professional education, as is evident in the design of all its undergraduate programmes.

The programme aims to educate practitioners and researchers who are equipped for careers in architecture and other associated specialisms within the built environment who possess a unique appreciation of buildings and their performance from initial design through to construction.

The programme has a strong emphasis on design. This is taught in a design studio environment where students are required to fulfill a complex brief taking their schemes through from concept to detail design. With a focus on the science of building, material specification and construction detail, the programme allows the students to understand their role in the professional world of construction and building, equipping them with the necessary skills to converse with all practitioners who shape the modern built environment. The course is supported and accredited by CIAT and the CIOB.

Educational Aims: The programme aims:

To instil in each student an understanding and enthusiasm for Architectural Technology and Design;

To provide an intellectually stimulating environment for learning and understanding;

To integrate the conceptual understanding of technology and design realisation;

To reflect upon, evaluate and discuss aspects of technological design;

To identify and encourage the essential features of good integrated design and practice (including the use of computers in the design, production and management processes), through observed current good practice and historical precedents and practice.

To use knowledge of scientific principles and materials properties to develop and design productive solutions to technological problems within defined constraints;

To consider the 'buildability', sustainability and performance of building design solutions within legal, ecological, economic and technological constraints;

To provide an environment for personal and skills development, the development of teamworking skills for the construction industry and multidisciplinary ethos;

To motivate and equip graduates to meet the challenges of change in the industry, for example, resulting from globalisation, the emphasis on sustainability, rising client expectations and changing organisational strategies;

To develop each student's analytical and creative skills and encourage the development of mature and independent judgement, leading to effective decision making and synthesising skills;

To identify and evaluate research and innovation needs in buildings.

Programme Learning Outcomes:

On successful completion of this programme graduates will achieve the following learning outcomes.

Knowledge and Understanding

- A1. To demonstrate an understanding of the essential facts, concepts and theories relating to architectural design and its relationship to technology
- A2. To understand the principles of building structure and construction including the properties of materials
- A3. To be aware of the nature of building fabric and systems as modifiers of the physical environment in providing a sustainable environment.
- A4. To analyse the performance of a building from a technical and functional perspective and recognise their inter-relationship
- A5. To understand the relevant statutory frameworks and other constraints and gain an appreciation of the legal principles of practice pertaining to construction contracts.
- A6. To understand the role of the parties to the building development process and to gain an appreciation of other professional perspectives.

Intellectual Skills

- B1. To analyse a problem and evaluate critically, evidence and alternative points of view.
- B2. To interpret, analyse and communicate qualitative and quantitative data.
- B3. To synthesise ideas and information from a variety of sources in reaching judgements about issues, problems and solutions.
- B4. To demonstrate the ability to question and evaluate current theories and practice.
- B5. To initiate and execute research and subsequently analyse and exploit the findings.

Subject/Professional Practice Skills

- C1. To apply knowledge of structure, construction, materials and environmental performance in building design
- C2. To apply the principles of good practice to design and the design process, including use of CAD and design systems.

- C3. To create appropriate design solutions in a variety of contexts which are also technically competent and viable building design solutions of quality which meet client's requirements.
- C4. To appreciate the health and safety responsibilities associated with specific aspects of the built environment.
- C5. To be able to apply experimental method, including laboratory investigations, to the analysis of technical problems.
- C6. To be able to observe, describe and record information about building design and condition accurately.
- C7. To interpret plans and three dimensional diagrams accurately.

Transferable Skills and other attributes

- D1. To be able to communicate design solutions through a variety of media and with a variety of stakeholders in the development process and construction industry.
- D2. To demonstrate an understanding of the conventions of architectural drawing.
- D3. To appreciate the limitations and use of computers and apply IT to the context of learning and building technology and design.
- D4. To have acquired skills in the use and processing of physical quantities and numerical data
- D5. To demonstrate an appreciation of the importance of inter-professional and collaborative working, and develop respect for other people's perspective.
- D6. To develop the skill of independent learning.

Assessment strategy: The programme will be assessed using the current version of the University's Academic Regulations and Procedures.

Knowledge and Understanding:

Testing of the knowledge base is through assessed design studios (1), coursework (1-6), through oral presentations (1-6), through experimental work undertaken in a laboratory or real-life situation (1, 2 and 4) and through tasks undertaken under

examination conditions (1-6).

Intellectual Skills:

A variety of assessment methods are employed to test intellectual skills. Assessment of the ability to apply and evaluate research findings and to bring make judgements based on a wide range of inputs will be though assessment of the student's design portfolio and their response under 'viva' conditions. Intellectual skills will be also be assessed through summative assessment in other subjects, for example, coursework, 'traditional' examination procedures, and also through computer-based assessments.

Subject, Professional and Practical Skills:

The assessment of the structure, construction, environmental and materials performance in building design (skill 1) is undertaken through laboratory experimental reports, essays and 'unseen' written examinations.

Other practical skills are assessed through coursework, studio reviews and viva presentations (skill 2 and 3). The other skills are assessed through essays, examinations under controlled conditions, field exercises and oral presentations.

Transferable Skills and other attributes:

A variety of methods are employed to assess transferable skills. Assessment of communication skills is undertaken through essay writing, architectural reviews (skills 1, 2, 5 and 6), presentations (skills 5 and 6) through oral presentations, experimental procedures (skills 4, 5 and 6) and computer based learning (skills 3 and 5) through laboratory exercises and design work and analysis using a range of software. Team working is also assessed through the inter-professional modules and the ability to work independently is assessed through the design projects.

Student support:

Part B: Programme Structure

Year 1

This structure diagram demonstrates the student journey from entry to level 6 of BSc(Hons) Architectural Technology and Design through to Graduation. Such a journey would be typical of a full-time student at School for Higher and Professional Education (SHAPE) in Hong Kong, including: level and credit requirements, interim award requirements, module diet, including compulsory and optional modules.

For any direct entry into level 6, all the core learning outcomes for year 1 and year 2 must first be achieved. A formal mapping of feeder programmes shows this in detail, such as those prepared for the Higher Diplomas in IVE Hong Kong. For non-feeder programmes proof of having met the learning outcomes shall be assessed on a case-by-case basis.

Year 1 Compulsory Modules

The student must take 120 credits from the modules in Compulsory Modules.

Module Code	Module Title	Credit
UBLMN5-30-3	Collaborative Practices in Building Information Management and Modelling 2021-22	30
UBLMXB-15-3	Conserving Buildings and Places 2021-22	15
UBLMGP-15-3	Energy Management and Performance Evaluation 2021-22	15
UBLMQL-15-3	Procurement and Contract Law 2021-22	15
UBLMJM-45-3	Technology and Design Studio 3 2021-22	45

Part C: Higher Education Achievement Record (HEAR) Synopsis

Part D: External Reference Points and Benchmarks

Description of how the following reference points and benchmarks have been used in the design of the programme:

The curriculum, learning methods, aims and learning outcomes of this award respond to the guidelines and requirements of the EU, the Chartered Institute of Architectural Technologists (CIAT) and the QAA benchmark statement for Architectural Technology.

QAA publications subject benchmark statements:

QAA Architecture Technology benchmark statement; ISBN 978 1 84482 655 1

We also have looked at:

UWE Employability Strategy

QAA code of practice: section 8 Career Education, information, advice and guidance

UWE Widening Participation Strategy

UWE Sustainability Strategy

UWE Teaching and Learning Strategy

Part E: Regulations

Approved to University Regulations and Procedures.