

PROGRAMME SPECIFICATION

PROGRAMME SPECIFICATION Part 1: Basic Data				
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Awarding Institution	University of the West of England			
Teaching Institution	University of the West of England			
Delivery Location	Frenchay Campus SHAPE, Hong Kong			
Faculty responsible for programme	Environment & Technology			
Department responsible for programme	Planning & Architecture			
Modular Scheme Title				
Professional Statutory or Regulatory Body Links	Chartered Institute of Architectural Technologists (UWE delivery) Chartered Institute of Building (UWE delivery)			
Highest Award Title	BSc(Hons) Architectural Technology and Design			
Default Award Title				
Interim Award Titles	BSc Architectural Technology and Design DipHE Architectural Technology and Design CertHE Architectural Technology and Design			
UWE Progression Route				
Mode(s) of Delivery	Full time, part time, sandwic	:h		
Codes	UCAS: K236 JACS: K236			
	ISIS2: K130	HESA:		
Relevant QAA Subject Benchmark Statements	Architecture and Architectural Technology			
Approval Date	30 January 2020			
Valid From	Sep 2020			
Version	6			

Part 2: Educational Aims of the Programme

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.

The programme aims to:

- Present architectural technology as the study of the complete anatomy and physiology buildings in relation to technical performance and applied design and construction processes.
- ii. Provide an extensive skill set that enables students to make an immediate and positive contribution in a variety of different technical roles within the built-environment workplace.
- iii. Provide students with an appreciation of the objectives, activities and concerns of all participants in the development and refurbishment of the built environment, including a broader understanding of the environmental, economic, political, technological and social factors that influence its evolution and development.
- iv. Develop skills and knowledge related the application of the technology of buildings and construction, but also emerging technologies related to contemporary design processes and building evaluation.
- v. Develop the students' analytical and problem solving skills and to encourage selfassessment leading to the development of independent judgement, effective decisionmaking and an ability to adapt to change.
- vi. Develop students' inter-personal skills required to be a successful member of an interdisciplinary project team.
- vii. Incorporate a variety of delivery and assessment methods within a number of different educational spaces (classrooms, labs, studios), in order to appropriately measure student learning against distinct programme / module learning outcomes.
- viii. Develop within students, an attitude towards intellectual enquiry and investigative learning which will encourage the student to consider the award as only the first stage of a life-long educational process.

The award route provides opportunities for students to develop and demonstrate knowledge and understanding, qualities, skills and other attributes in the following areas:

Cognitive Skills

- the ability to demonstrate knowledge and understanding of essential facts, concepts, principals and theories relating to the subject area
- the ability to develop and design creative and innovative solutions
- an awareness of the provisional nature of knowledge
- the ability to make informed judgements based on evidence
- the ability to apply such knowledge and understanding to the solution of qualitative and quantitative problems of a familiar and unfamiliar nature
- being able to question current theories and practice
- the ability to recognise and analyse problems and plan novel strategies for their solution
- skills in the analysis, synthesis and evaluation of technological information and data, and the ability to recognise and implement good practice.

Practical Skills

- the ability to use information technology (IT) independently to support previously identified cognitive abilities and skills
- the skills in presenting architectural technology information and arguments clearly and correctly, in writing, drawing, and verbally, to a range of audiences
- the ability to produce quality architectural presentations through various media, including paper/computer aided design drawings and sketches, schedules, calculations, photography, electronic visualisations, and models.

Generic Skills

- develop a strategy for using the relevant key skill over an extended period of time, and plan how this will be achieved
- monitor progress, critically reflect on their performance in using the relevant skill, and adapt their strategy, as necessary, to achieve the quality of outcomes required
- evaluate their overall strategy and present the outcomes from their work, including ways
 of further improving their skills.

Learning Outcomes	Teaching, Learning and Assessment Strategies
A Knowledge and	d Understanding
A Knowledge and understanding of	Teaching/learning methods and strategies:
 To demonstrate an understanding of the essential facts, concepts and theories relating to architectural design and its relationship to technology. To understand the principles of building structure and construction including the properties of materials. To be aware of the nature of building fabric and systems as modifiers of the physical environment in providing a sustainable environment. 	primarily through lectures and supporting learning materials including reading and webbased resources. Candidates will consolidate their knowledge base through a variety of techniques including tutorials, studio work, laboratories, field visits, and a variety of IT applications. Their learning will also be enhanced by completion of formative

- 4. To analyse the performance of a building from Assessment:
- a technical and functional perspective and

recognise their inter-relationship. Testing of the knowledge base is through

- 5. To understand the relevant statutory assessed design studios (1), coursework (1-6), frameworks and other constraints and gain anthrough oral presentations (1-6), through appreciation of the legal principles of practice experimental work undertaken in a laboratory or pertaining to construction contracts.

 real-life situation (1,2 & amp; 4) and through
- 6. To understand the role of the parties to the tasks undertaken under examination conditions building development process and to gain an(1-6).

 appreciation of other professional perspectives.

B Intellectual Skills

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Teaching/learning methods and strategies:

By the end of the programme, the student should intellectual skills are developed through a variety be able:

of methods. These include tutorial sessions and

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

of methods. These include tutorial sessions and subsequent discussion periods. Design skills are developed and analysed through traditional architectural review sessions. Analysis numerical data is encouraged through laboratory and through techniques experiments of computer Research analysis. skills are developed through specifically targeted coursework associated with the Level 2 Interprofessional development project and design projects, culminating in the Level 3 design module.

During each academic year the student has the benefit of the results of formative assessment from written comments and verbal feedback from academic tutors, studio-based consultations, tutorial sessions and concurrent feedback during laboratory investigative procedures.

Assessment:

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.

C Subject, Professional and Practical Skills

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Teaching/learning methods and strategies:

By the end of the programme, the student should A number of practical skills can be learnt by the be able:

- materials and environmental performance in building design.
- 2. To apply the principles of good practice to design and the design process, including use of CAD and design systems.
- 3. 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.
- 4. To appreciate the health and safety responsibilities associated with specific aspects of the built environment.
- To be able to apply experimental method, including laboratory investigations, to the analysis of technical problems.
- 6. To be able to observe, describe and record information about building design and condition accurately.
- 7. To interpret plans and three dimensional diagrams accurately.

study of syllabus topic materials and the 1. To apply knowledge of structure, construction, completion of formative activities supported by feedback from staff. These include the effective use and manipulation of computer based design systems, interpretation of plans and drawing of three dimensional objects, the requirements needed for work in a professional environment, and the production and evaluation of viable design solutions to technological problems. Some of the design modules will use the Atelier system of teaching to provide an holistic approach to teaching aspects of architectural design, together with peer group review and group learning from other students. (Skills 2,3)

Assessment:

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 & 3).

The other skills are assessed through essays, examinations under controlled conditions, field exercises and oral presentations.

D Transferable Skills and other attributes

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Teaching/learning methods and strategies:

By the end of the programme, the student shouldStudents' communication skills are assessed be able:

construction industry.

conventions of architectural drawing.

and building technology and design.

processing of physical quantities and numerical5). data.

5. To demonstrate an appreciation of the importance of inter-professional and collaborative

through the Design Studio experiences and

1. To be able to communicate design solutions presentations (skills 1, 2, 3, 5 & mp; 6). The through a variety of media and with a variety ofacquisition of skills relating to the use and stakeholders in the development process and processing of physical quantities and numerical data is achieved through tutorial calculations,

To demonstrate an understanding of the application of IT skills to defined scenarios (skills 3 and 4)through working with a range of design

3. To appreciate the limitations and use of related software as well as technical exercises. computers and apply IT to the context of learning Acquisition of inter-professional collaboration

working is undertaken through group projects, in 4. To have acquired skills in the use and particular within Inter-professional modules(skill

Assessment:

working, and develop respect for other people's A variety of methods are employed to assess perspective. transferable skills. Assessment of

6. To develop the skill of independent learning.

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

Part 4: Programme Structure

The first structure diagram (top) demonstrates the student journey from Entry through to Graduation for a **full time student**, including: level and credit requirements;interim award requirements;module diet, including compulsory and optional modules. The optional modules listed are the approved optional modules for the programme. The full range may not run every year. The definitive list will be made available on the UWE module choice system at the appropriate time of year.

The second structure diagram (bottom) demonstrates the students journey from Entry through

to Graduation for a part time student

ENTRY		Compulsory Modules: UBLLYC-60-1	Optional Modules:	Interim Awards:
	Year 1	Design Studio 1 UBLMYS-30-1 Construction Technology and Services	N/A	CertHE Architectural Technology and Design (120 credits of which not less than 100 are at level 1 or above)
		UBLMSS-30-1 Environmental Physics and Materials		

	Compulsory Modules:	Optional Modules:	Interim Awards:
	UBLMTV-15-2	N/A	
	Design Representation		DipHE Architectural
			Technology and
	UBLMTE-15-2		Design
	History of Architecture		(240 credits of which
			not less than 100 are at
	UBLMGG-30-2		level 2 or above and
2	Technology and Design		120 are at level 1 or
Year	Studio 2		above)
>	Studio 2		,
	UBLMUS-30-2		
	Commercial		
	Development		
	UBLMRT-30-2		
	Procurement and		
	Contract Practice		

Year Out:

Students will be encouraged to seek a work placement year out to qualify for a sandwich degree following the completion of a minimum of 200 credits at Levels 1/2. Although this is optional it is strongly recommended. Students must fulfill a minimum of 24 weeks on placement and complete the assessment requirements in communication with the University Programme Team.

The Placement module UBLMG4-15-3 Workbased Research Project will be awarded on successful completion of the placement. The placement can be taken in the UK and Europe. Thus the Collaborative Practice Module will not be undertaken in the final year for students on the sandwich degree.

Technology and Design Studio 3 UBLMN5-30-3 Collaborative Practice or UBLMG4-15-3 Workbased Research Project or UBLMQL-15-3 Information Information Management & Procurement and Contract Law	BSc Architectural Technology and Design (300 credits of which at least 60 credits are at level 3, a further 100 credits at level 2 or above and a further 140 credits at level 1 or above)

GRADUATION

NB: For part time mode of delivery provide a diagram to demonstrate the student journey from entry to graduation for a typical part time student

-	ii eiiti	y to graduation for a typi		
ENTRY		Compulsory Modules:	Optional Modules N/A	Interim Awards:
	Year 1.1	UBLMYS-30-1 Construction Technology and Services UBLMSS-30-1 Environmental Physics	IV/A	
		and Materials	Ontional Madulas	Interior Accorde:
*	Year 1.2	Compulsory Modules: UBLMPC-30-1 Law Economics and Management UBLLWV-30-1 Principles of Sustainable Design	Optional Modules N/A	Interim Awards: CertHE Architectural Technology and Design (120 credits of which not less than 100 are at level 1 or above)
	Year 2.1	Compulsory Modules: UBLMTV-15-2 Design Representation UBLMGG-30-2 Technology and Design Studio 2 UBLMQS-15-2 Analysis of Building Defects UBLMQT-15-2 Procedures and Practice (WBL)	Optional Modules N/A	Interim Awards:
	Year 2.2	Compulsory Modules: UBLMXB-15-3 Conserving Buildings and Places UBLMUS-30-2 Commercial Development UBLMRC-15-2 Procurement and Contract Law	Optional Modules UBLMG4-15-3 Workbased Research Project (WBL) Or, UBLMNE-15-3 Collaborative Practice	Interim Awards: DipHE Architectural Technology and Design (240 credits of which not less than 100 are at level 2 or above and 120 are at level 1 or above)

STUDENT AND ACADEMIC SERVICES

	Compulsory Modules:	Optional Modules	Interim Awards:
Year 3.1	UBLMJM-45-3 Technology and Design Studio 3 UBLMN5-30-3 Collaborative Practices in Building Information Management & Modelling UBLMHQ-15-3 Professionalism (WBL)	N/A	(300 credits of which at least 60 credits are at level 3, a further 100 credits at level 2 or above and a further 140 credits at level 1 or above)

GRADUATION

Part 6: Programme Structure

This structure diagram demonstrates the student journey from entry to level 3 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 year 3, 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.

	Compulsory Modules	Optional Modules	Awards
Year 3	UBLMN5-30-3 Collaborative Practices in Building Information Management & Modelling UBLMGP-15-3 Energy Management and Performance Evaluation UBLMFQ-30-3 Technological Innovation and Life Cycles	Optional Modules	Awards

Part 6: Programme Structure

This structure diagram demonstrates the student journey from entry to level 3 of BSc(Hons) Architectural Technology and Design through to Graduation. Such a journey would be typical of a part-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 year 3, 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.

	Compulsory Modules	Optional Modules	Awards
Semester 1	UBLMN5-30-3 Collaborative Practices in Building Information Management & Modelling		
Semester 2	UBLMFQ-30-3 Technological Innovation and Life Cycles		
Semester 3	UBLMJM-45-3 Technology and Design Studio 3		
ster 4	Contuned: UBLMJM-45-3 Technology and Design Studio 3		
Semester 4	UBLMGP-15-3 Energy Management and Performance Evaluation		

GRADUATION

Part 5: Entry Requirements

The University's Standard Entry Requirements apply with the following additions/exceptions*:

- Applicants must all have achieved a GCSE pass at Grade C or above (or equivalent) in English and Maths
- an ability to communicate through an appropriate standard of English both in written and spoken form and a capacity to master technical vocabulary
- an ability to work with numerical data and manipulate, as appropriate, physical quantities
- Students with a relevant HNC may be admitted on the basis of credit recognition for the Level 1 modules
- Level 3: in addition to the University's Standard Entry requirements, students should hold a qualification which can be recognised as equivalent to the learning outcomes of levels 1 and 2 of the UWE BSc(Hons) Architectural Technology and Design, and which meets any pre-requisite requirements entry directly into Level 3.

See also standards and entry requirements.

Tariff points as appropriate for the year of entry - up to date requirements are available through the <u>courses database</u>.

Part 6: Assessment

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

Part 7: Student Learning

Teaching, learning and assessment strategies to enable learning outcomes to be achieved and demonstrated

Contact time encompasses a range of face to face activities as described below. In addition a range of other learning activities will be embedded within the programme which, together with the contact time, will enable learning outcomes to be achieved and demonstrated.

On the BSc(Hons) Architectural Technology and Design programme teaching is a mix of scheduled and independent learning.

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

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.

Description of Distinctive Features and Support

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.

Part 7: Student Learning

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.

Part 8: 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