



PROGRAMME SPECIFICATION

Part 1: Basic Data	
Awarding Institution	University of the West of England
Teaching Institution	University of the West of England
Delivery Location	Frenchay Campus
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
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 and sandwich with Foundation year
Codes	UCAS: K13F (until 2018/19) JACS: UCAS: K26F (from 2018/19) ISIS2: K130F HESA: WFY codes – K13A (SW); K13A13 (FT)
Relevant QAA Subject Benchmark Statements	Architecture and Architectural Technology
Approval Date	7 March 2018
Valid From	September 2018
Valid until Date	
Version	3

Part 2: Educational Aims of the Programme

BSc (Hons) Architectural Technology and Design is a four year undergraduate sandwich programme designed to meet the requirements for validation by the Chartered Institute of Architectural Technologists (CIAT) an essential step towards becoming a registered technologist in the UK and to meet the academic requirements for membership of CIAT.

The programme is designed to produce graduates who will be able to analyse, synthesise and evaluate

Part 2: Educational Aims of the Programme

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: -

- i) to instil in each student an understanding and enthusiasm for Architectural Technology and Design;
- ii) to provide an intellectually stimulating environment for learning and understanding;
- iii) to integrate the conceptual understanding of technology and design realisation;
- iv) to reflect upon, evaluate and discuss aspects of technological design;
- v) 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.
- vi) to use knowledge of scientific principles and materials properties to develop and design productive solutions to technological problems within defined constraints;
- vii) to consider the 'buildability', sustainability and performance of building design solutions within legal, ecological, economic and technological constraints;
- viii) to provide an environment for personal and skills development, the development of team-working skills for the construction industry and a multidisciplinary ethos;
- ix) 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;
- x) 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;
- xi) to identify and evaluate research and innovation needs in buildings.

The knowledge and skills developed in the programme are conceived in the context of the general criteria and graduate attributes contained in the CIAT criteria for validation/prescription that are derived from the requirements in the QAA Benchmark Statement for Architectural Technology.

Part 3: Learning Outcomes of the Programme

The focus of the foundation year (level 0) is on the acquisition both of appropriate academic skills and relevant subject knowledge to allow students to develop and progress through levels 1, 2 and 3 in relation to knowledge and understanding, cognitive, subject specific and study skills.

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

The CIAT criteria for prescription/ validation of qualifications are based on the requirements of the Architectural Technology Benchmark Statement, they are set out below:

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
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A Knowledge and Understanding

<p>A Knowledge and understanding of</p> <p>By the end of the programme, the student should be able to:</p> <ol style="list-style-type: none"> 1. To demonstrate an understanding of the essential facts, concepts and theories relating to architectural design and its relationship to technology. 2. To understand the principles of building structure and construction including the properties of materials. 3. To be aware of the nature of building fabric and systems as modifiers of the physical environment in providing a sustainable environment. 4. To analyse the performance of a building from a 	<p>Teaching/learning methods and strategies:</p> <p>Students will be introduced to knowledge primarily through lectures and supporting learning materials including reading and web-based resources.</p> <p>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 work designed to support the programme of knowledge acquisition and to prepare students for summative assessment.</p>
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<p>technical and functional perspective and recognise their inter-relationship.</p> <p>5. To understand the relevant statutory frameworks and other constraints and gain an appreciation of the legal principles of practice pertaining to construction contracts.</p> <p>6. To understand the role of the parties to the building development process and to gain an appreciation of other professional perspectives.</p>	<p>Assessment:</p> <p>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 & 4) and through tasks undertaken under examination conditions (1-6).</p>
B Intellectual Skills	
<p>B Intellectual Skills</p> <p>By the end of the programme, the student should be able:</p> <ol style="list-style-type: none"> 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. 5. To initiate and execute research and subsequently analyse and exploit the findings. 	<p>Teaching/learning methods and strategies:</p> <p>Intellectual skills are developed through a variety of methods. These include tutorial sessions and subsequent discussion periods. Design skills are developed and analysed through traditional architectural review sessions. Analysis of numerical data is encouraged through laboratory experiments and through techniques of computer analysis. Research skills are developed through specifically targeted coursework associated with the Level 2 Inter-professional development project and design projects, culminating in the Level 3 design module.</p> <p>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.</p> <p>Assessment:</p> <p>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 through 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.</p>
C Subject, Professional and Practical Skills	
<p>C Subject, Professional and Practical Skills</p> <p>By the end of the programme, the student should be able:</p> <ol style="list-style-type: none"> 1. To apply knowledge of structure, construction, 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 	<p>Teaching/learning methods and strategies:</p> <p>A number of practical skills can be learnt by the study of syllabus topic materials and the 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</p>

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<p>design systems.</p> <p>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.</p> <p>4. To appreciate the health and safety responsibilities associated with specific aspects of the built environment.</p> <p>5. To be able to apply experimental method, including laboratory investigations, to the analysis of technical problems.</p> <p>6. To be able to observe, describe and record information about building design and condition accurately.</p> <p>7. To interpret plans and three dimensional diagrams accurately.</p>	<p>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)</p> <p>Assessment:</p> <p>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.</p> <p>Other practical skills are assessed through coursework, studio reviews and viva presentations (skill 2 & 3).</p> <p>The other skills are assessed through essays, examinations under controlled conditions, field exercises and oral presentations.</p>
D Transferable Skills and other attributes	
<p>D Transferable Skills and other attributes</p> <p>By the end of the programme, the student should be able:</p> <p>1. 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.</p> <p>2. To demonstrate an understanding of the conventions of architectural drawing.</p> <p>3. To appreciate the limitations and use of computers and apply IT to the context of learning and building technology and design.</p> <p>4. To have acquired skills in the use and processing of physical quantities and numerical data.</p> <p>5. To demonstrate an appreciation of the importance of inter-professional and collaborative working, and develop respect for other people's perspective.</p> <p>6. To develop the skill of independent learning.</p>	<p>Teaching/learning methods and strategies:</p> <p>Students' communication skills are assessed through the Design Studio experiences and presentations (skills 1, 2, 3, 5 & 6). The acquisition of skills relating to the use and processing of physical quantities and numerical data is achieved through tutorial calculations, application of IT skills to defined scenarios (skills 3 and 4) through working with a range of design related software as well as technical exercises. Acquisition of inter-professional collaboration working is undertaken through group projects, in particular within Inter-professional modules (skill 5).</p> <p>Assessment:</p> <p>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 & 6), presentations (skills 5 & 6) through oral presentations, experimental procedures (skills 4, 5 & 6) and computer-based learning (skills 3 & 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.</p>

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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

ENTRY	Year 1 (level 0)	<p>Compulsory Modules:</p> <p>UBLML7-30-0 Foundation Design Studio</p> <p>UBLMYM-30-0 Foundation Design Communication</p> <p>UBLMLR-30-0 Context of Design and Development</p> <p>UBLMY6-15-0 Foundation Project in Sustainability</p> <p>UBLMWM-15-0 Foundation Engineering for Designers</p>	<p>Optional Modules:</p> <p>None</p>	<p>Interim Awards:</p> <p>120 credits at Level 0</p> <p>Successful completion of all level 0 modules required to permit progression to level 1.</p>
	Year 2 (level 1)	<p>Compulsory Modules:</p> <p>UBLLYC-60-1 Design Studio 1</p> <p>UBLLWH-30-1 Investigating Structures</p> <p>UBLMSB-30-1 Building Physics and Services</p>	<p>Optional Modules:</p> <p>N/A</p>	<p>Interim Awards:</p> <p>CertHE Architectural Technology and Design</p> <p>Credit Requirements: 240 credits</p> <p>At least 100 credits at level 1 or above. 120 credits at level 0</p>
	Year 3 (level 2)	<p>Compulsory Modules:</p> <p>UBLMTV-15-2 IT for Designers (renamed to <u>Design Representation</u>, to implement from Sep 2019 for new students)</p> <p>UBLMTE-15-2 History of Architecture</p> <p>UBLMGG-30-2 Technology and Design Studio 2</p> <p>UBLMUS-30-2 Commercial Development</p> <p>UBLMRT-30-2 Procurement and Contract Practice</p>	<p>Optional Modules:</p> <p>N/A</p>	<p>Interim Awards:</p> <p>DipHE Architectural Technology and Design</p> <p>Credit requirements: 360 credits</p> <p>At least 100 credits at level 2 or above. At least 120 credits at level 1 or above. 120 credits at level 0.</p>

Year Out:

Students on the sandwich route complete a minimum of 200 credits at Levels 1/2. Students must fulfill a minimum of 24 weeks on placement and complete the assessment requirements in communication with the University Programme Team.

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<p>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.</p>			
Year 4 (level 3)	<p>Compulsory Modules:</p> <p>UBLMJM-45-3 Technology and Design Studio 3</p> <p>UBLMN5-30-3 Collaborative Practices in Building Information Management & Modelling</p> <p>UBLMXB-15-3 Conserving Buildings and Places</p> <p>UBLMGP-15-3 Energy Management and Performance Evaluation</p>	<p>Optional Modules:</p> <p>UBLMNE-15-3 Collaborative Practice</p> <p>or</p> <p>UBLMG4-15-3 Workbased Research Project</p> <p>Or</p> <p>UBLMQL-15-3 Procurement and Contract Law</p>	<p>Interim Awards:</p> <p>BSc Architectural Technology and Design</p> <p>Credit requirements: 420 credits</p> <p>At least 60 credits at level 3 or above. At least 100 credits at level 2 or above. At least 140 credits at level 1 or above. 120 credits at level 0.</p> <p>BSc(Hons) Architectural Technology and Design</p> <p>Credit requirements: 480 credits</p> <p>At least 100 credits at level 3 or above. At least 100 credits at level 2 or above. At least 140 credits at level 1 or above. 120 credits at level 0.</p>

GRADUATION

Part 5: Entry Requirements
<p>The University's Standard Entry Requirements apply with the following additions/exceptions*:</p> <ul style="list-style-type: none"> • 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 but normally with the exception of Design Studio (Level 1) and Technical Studio (Level 1) <p>Tariff points as appropriate for the year of entry - up to date requirements are available through the courses database</p>

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Part 6: Assessment

Approved to University Regulations and Procedures.

It is the Award Board's responsibility to determine whether the student's attainment at level 0 is sufficient to progress to level 1.

Part 7: Student Learning

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

The foundation year is common with a number of other Architecture and the Built Environment programmes which allows the flexibility for students to transfer between programmes in this subject area as is most appropriate to their emergent subject and/or their professional interests.

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.

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:

Part 8: Reference Points and Benchmarks

- 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

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First CAP Approval Date				
Revision Approval Date		Version	1	Link to RIA
	27 July 2017		2	Link to APT (ID 4455)
	7 March 2018		3	Link to RIA (ID 4610) Link to RIA (ID 4678)