

# **Programme Specification**

# Architectural Technology and Design {Foundation} [GCET]

Version: 2022-23, v1.0, 28 Mar 2023

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# **Section 1: Key Programme Details**

# Part A: Programme Information

**Programme title:** Architectural Technology and Design {Foundation} [GCET] **Highest award:** BSc (Hons) Architectural Technology and Design Interim award: BSc Architectural Technnology and Design Interim award: DipHE Architectural Technology and Design Interim award: CertHE Architectural Technology and Design Awarding institution: UWE Bristol Affiliated institutions: Global College of Engineering and Technology (GCET) **Teaching institutions:** Global College of Engineering and Technology (GCET) Study abroad: No Year abroad: No Sandwich year: No Credit recognition: No Department responsible for the programme: FET Dept of Architecture & Built Environ, Faculty of Environment & Technology **Contributing departments:** Not applicable Professional, statutory or regulatory bodies: Not applicable Apprenticeship: Not applicable Mode of delivery: Full-time Entry requirements: For the current entry requirements see the UWE public website.

For implementation from: 01 September 2023

Programme code: K13C0

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# 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.

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

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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.

Page 4 of 9 19 July 2023 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.

#### Part B: Programme Structure

#### Year 1

The student must take 120 credits from the modules in Year 1.

#### Year 1 Compulsory Modules

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

| Module Code | Module Title                             | Credit |
|-------------|--|--------|
| UBGMNR-15-0 | Challenges, Data and Solutions 2022-23   | 15     |
| UBGMPR-30-0 | Environment and Sustainability 2022-23   | 30     |
| UBLMWM-15-0 | Foundation Engineering 2022-23           | 15     |
| UBLMPA-30-0 | Foundation Year Project 2022-23          | 30     |
| UFCFGK-30-0 | Professional and Academic Skills 2022-23 | 30     |

# Year 2

The student must take 120 credits from the modules in Year 2.

# Year 2 Compulsory Modules

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

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| Module Code | Module Title                                    | Credit |
|-------------|---|--------|
| UBLMYS-30-1 | Construction Technology and Services 2023-24    | 30     |
| UBLMSS-30-1 | Environmental Physics and Materials 2023-<br>24 | 30     |
| UBLMPC-30-1 | Law, Economics and Management 2023-24           | 30     |
| UBLLWV-30-1 | Principles of Sustainable Design 2023-24        | 30     |

#### Year 3

The student must take 120 credits from the modules in Year 3.

# Year 3 Compulsory Modules

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

| Module Code | Module Title                                       | Credit |
|-------------|--|--------|
| UBLMUS-30-2 | Commercial Development 2024-25                     | 30     |
| UBLMTV-15-2 | Design Representation 2024-25                      | 15     |
| UBLMD1-15-2 | Histories and Theories of Architecture 2024-<br>25 | 15     |
| UBLMRT-30-2 | Procurement and Contract Practice 2024-25          | 30     |
| UBLMGG-30-2 | Technology and Design Studio 2 2024-25             | 30     |

#### Year 4

The student must take 120 credits from the modules in Year 4.

#### Year 4 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          | 30     |
|             | Information Management and Modelling 2025-26 |        |

| UFCF95-15-3 | Entrepreneurial Skills 2025-26                   | 15 |
|-------------|--|----|
| UBLMFQ-30-3 | Technological Innovation and Life Cycles 2025-26 | 30 |
| UBLMJM-45-3 | Technology and Design Studio 3 2025-26           | 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.

Page 8 of 9 19 July 2023 It is the Award Board's responsibility to determine whether the student's attainment at level 0 is sufficient to progress to level 1.