Programme Specification

Architectural Technology and Design [Frenchay]

Version: 2026-27, v3.0, Validated

Contents

Section 1: Key Programme Details

Part A: Programme Information

Programme title: Architectural Technology and Design [Frenchay]

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

Teaching institutions: UWE Bristol

Study abroad: Yes

Year abroad: No

Sandwich year: Yes

Credit recognition: No

School responsible for the programme: CATE School of Architecture and Environment, College of Arts, Technology and Environment

Professional, statutory or regulatory bodies:

Chartered Institute of Architectural Technologists (CIAT)

Chartered Institute of Building

Modes of delivery: Full-time, Part-time, Sandwich

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

For implementation from: 01 September 2026

Programme code: K13000

Section 2: Programme Overview, Aims and Learning Outcomes

Part A: Programme Overview, Aims and Learning Outcomes

Overview: The BSc (Hons) Architectural Technology and Design at the UWE Bristol School of Architecture and Environment is a professionally oriented programme that prepares students for careers in the design and delivery of high-performance buildings. Rooted in the science and practice of architectural technology, the course equips graduates with the technical, environmental, regulatory, and digital skills essential to contemporary construction and design practice.

Combining creative problem-solving with a deep understanding of materials, structures, and sustainability, the programme emphasises the integration of design, production, and procurement processes. Students develop the ability to analyse and address technical design challenges, delivering functional, buildable, and environmentally responsive solutions within the regulatory frameworks of the UK and global construction industries.

The course fosters independent, critical thinking alongside collaborative practice. Students work through studio-based projects, technical workshops, and real-world simulations that reflect the complex, interdisciplinary nature of professional environments. Core skills include digital design and modelling, construction detailing, specification writing, contract administration, fire and life safety, and sustainable design integration.

Opportunities for industry engagement are embedded in the programme. Students may apply for an 12-month Placement after Year 2, gaining new professional perspectives by studying architectural technology abroad. The course is also connected to industry through part-time tutors, guest lectures, site visits, and live projects, building a strong foundation for graduate employment.

Students can (subject to the option being available in any given year) apply to spend a year abroad after between there penultimate and final years of study. In such a

case students would take a compulsory 15 credit module when abroad (and be required to fund it) before then undertaking their final year of study. The 15-credit module would be taken in addition to the compulsory 360 credits required for the award of the degree and would need to be passed in order for it to be recorded as a successful year of study. This option (should it be available in any given year) is subject to the making of a successful application which is assessed through a competitive process as the number of places available is limited. Only students who have passed all level 4 and 5 modules and are successful in their application are eligible to study abroad. There is therefore no guarantee that any student who so desires can automatically undertake a year of study abroad.

Graduates of the programme are well-prepared for technical design roles in architectural practice, consultancy, construction firms, and product development. The course supports progression to CIAT Chartered Membership (MCIAT) and offers a solid platform for lifelong learning and career development in the built environment sector.

Features of the programme: Professional Alignment: The course is accredited by both the Chartered Institute of Architectural Technologists (CIAT) and the Chartered Institute of Building (CIOB), ensuring it meets the educational standards expected for progression to chartered status. The curriculum is designed to support graduates in gaining the professional competencies required for technical design and project delivery roles across the built environment sector.

Design and Technical Integration: The programme places architectural technology at the core of the design process. Students work through studio-based projects that develop their ability to take designs from concept to detailed technical resolution, gaining skills in material specification, environmental performance, and construction detailing.

Teaching Resources: Students benefit from dedicated studio spaces, digital fabrication facilities, and construction laboratories based in UWE Bristol’s R-block and Z-block buildings. These purpose-built learning environments support hands-on exploration of materials, technologies, and sustainable construction practices.

Digital Literacy: Students are equipped with industry-relevant digital skills including 2D/3D CAD, BIM, visualisation, and performance simulation. The integration of digital tools throughout the design process supports advanced technical analysis and communication across multidisciplinary teams.

Interdisciplinary Collaboration: As part of the wider built environment cluster at UWE Bristol, students learn alongside peers from architecture, planning, engineering, surveying, and construction management. The programme encourages collaboration through shared modules, live projects, and cross-disciplinary design activities.

Global and Local Perspectives: Students are encouraged to tackle design challenges rooted in both local communities and global contexts. A competitive international academic placement opportunity after Year 2 allows successful applicants to study architectural technology abroad, broadening their cultural and professional horizons.

Industry Engagement: The course maintains strong connections with industry through part-time tutors, guest lectures, live briefs, and site visits. These partnerships provide insight into current practice and offer pathways to internships, mentorship, and graduate employment.

Educational Aims: Aim 1 – To develop graduates who possess the knowledge, skills, and behaviours required to practise as professional architectural technologists, capable of delivering robust, buildable, and sustainable design solutions from concept to construction.

Aim 2 – To develop graduates who are collaborative and inclusive in their approach, able to work effectively within multidisciplinary teams, and aware of their responsibilities in promoting ethical, diverse, and equitable working environments.

Aim 3 – To develop graduates who are reflective in their thinking and communication, committed to lifelong learning and the continuous development of their professional skills and judgement.

Aim 4 – To develop graduates who are technically innovative and sustainability-focused, able to integrate the latest materials, methods, and digital technologies to address climate and performance challenges in the built environment.

Aim 5 – To develop graduates with strong transferable skills including critical thinking, digital literacy, problem-solving, and communication—skills that enable them to thrive across a wide range of roles within the construction and design industries.

Aim 6 – To develop graduates who are curious, research-aware, and intellectually engaged, capable of applying evidence-based thinking to support technical innovation and design excellence in architectural technology.

Programme Learning Outcomes:

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

Programme Learning Outcomes

PO1. Demonstrate the knowledge, skills, and behaviours of contemporary architectural technology practice, applying independent problem-solving in national and international contexts, including complex projects with incomplete client information. [keyword: Professional Practice]

PO2. Work effectively in teams, communicating across stakeholder perspectives, contributing to collaborative project programmes, and critically reflecting on personal approaches to teamwork and professional development. [keyword: Collaborative Practice]

PO3. Apply ethical frameworks in building development, recognising issues of equality, diversity, and inclusion, identifying unethical behaviours, and critically evaluating mechanisms for conflict resolution. [keyword: Ethics]

PO4. Demonstrate knowledge of management and procurement in building development, applying economic skills in tendering and contract administration, and critically evaluating project risks through value engineering. [keyword: Economic]

PO5. Apply technical design knowledge of materials, structures, and environments to case study projects, and critically assess opportunities and challenges of emerging building technologies. [keyword: Technical]

PO6. Demonstrate knowledge of health, safety, and legal frameworks affecting building design, applying fire and life safety design techniques, and critically analysing developments in construction law and risk management. [keyword: Legal]

PO7. Demonstrate detailed awareness of the environmental, political, social, and technological contexts of architectural technology, evaluating designs against sustainability indicators, and formulation potential solutions to addressing the performance gap. [keyword: Sustainability]

PO8. Apply digital measurement and modelling techniques to represent buildings, use industry-standard CAD and analysis tools, and critically reflect on the evolving role of digital technologies in design, construction, and handover. [keyword: Digital]

Assessment strategy: This programme employs a rigorous and industry-informed assessment strategy that reflects the interdisciplinary and practice-oriented nature of architectural technology. Emphasising real-world relevance, technical precision, and design integration, the assessment approach ensures students develop the knowledge, behaviours, and transferable skills needed to thrive in contemporary practice.

Integrated Assessment Components

1. Design Portfolios and Digital Submissions- Portfolios document students' progression in technical design, construction detailing, and environmental performance across all levels of study.
Assessments require the use of industry-standard digital tools (e.g., CAD, BIM, environmental analysis software) to produce comprehensive and professional documentation.

2. Technical and Design Integration Projects - Students complete projects that simulate real-world design and construction processes, combining specification writing, procurement strategies, and technical design.
Submissions include detailed technical drawings, environmental strategies, and critical appraisals of buildability and performance.

3. Laboratory and Workshop-Based Reports - Practical investigations assess

students' understanding of material properties, construction methods, and building performance systems.
Reports focus on the ability to analyse data, test hypotheses, and communicate findings relevant to construction science and sustainability.

4. Oral Presentations, Vivas, and Technical Reviews - Design reviews and technical vivas are used throughout the programme to assess students' ability to communicate ideas clearly and justify design decisions.
These sessions develop confidence, clarity, and professional presentation skills while testing individual critical reasoning.

5. Computer-Based Assessments - digital tests assess foundational knowledge in construction technology, fire safety, legal frameworks, and environmental systems.
These are used particularly at earlier levels to establish core technical and regulatory competencies.

6. Live Projects and Real-World Case Studies - Students engage with real or simulated briefs involving external stakeholders or community needs.
Deliverables include feasibility studies, stakeholder reports, and technical design proposals grounded in regulatory and economic contexts.

7. Collaborative and Group-Based Assessments - Group work is embedded within inter-professional and design studio modules to simulate the collaborative nature of industry.
Assessments focus on both individual contributions and collective outcomes, promoting teamwork, communication, and shared responsibility.

8. Final Design Studio Project - In the final year, students undertake a capstone design project that synthesises learning across the programme.
Outputs include a detailed technical portfolio, digital models, construction specifications, and a final review presentation assessed by staff and industry professionals.

Transferable Skills and Professional Attributes

The assessment strategy fosters key graduate attributes including:

Communication – through written reports, technical drawings, and oral presentations.

Collaboration – via group projects and peer critique activities.

Critical Thinking – through reflective components in design portfolios and case-based assignments.

Digital Literacy – by embedding CAD, BIM, and analytical software throughout assessment tasks.

Time Management – supported by carefully scheduled deadlines that avoid assessment clustering and promote steady progression.

Inclusivity and Feedback Literacy

1. Formative Feedback Opportunities - Formative feedback is embedded in studio tutorials, interim reviews, and draft submissions, supporting iterative improvement and confidence building.

2. Diverse Assessment Formats - A balanced mix of design submissions, technical reports, oral presentations, and examinations ensures accessibility and inclusivity for diverse learning styles.

3. Feedback Integration Support - Students receive guidance on how to interpret and act on feedback, with clear links between formative and summative assessments to support ongoing development.

Alignment with Professional Standards

This assessment strategy is aligned with the expectations of the Chartered Institute of Architectural Technologists (CIAT) and the Chartered Institute of Building (CIOB).

It ensures that students are equipped to meet professional competency standards relating to technical design, sustainability, construction knowledge, and digital integration. By embedding interdisciplinary practice and authentic assessment, the programme prepares graduates for a wide range of roles across design consultancy, construction, and product development within the built environment.

Student support: The BSc (Hons) Architectural Technology and Design programme at UWE Bristol is committed to supporting students throughout their academic journey, ensuring they are equipped to succeed both personally and professionally. A comprehensive range of support structures underpins the learning experience, fostering student wellbeing, academic development, and professional readiness.

Academic Personal Tutors (APTs)
Each student is assigned an Academic Personal Tutor (APT), providing consistent academic guidance in line with the NUS Charter on Personal Tutors. APTs support students in navigating the demands of their studies, monitoring progress, and helping them reflect on their personal and professional goals. Regular one-to-one meetings encourage dialogue around academic performance, career aspirations, and wellbeing.

Wellbeing and Inclusive Learning
The programme fosters an inclusive and supportive learning environment. Students have access to a broad range of services including counselling, mental health support, success coaches, and peer mentoring schemes. Inclusive teaching strategies are embedded across modules, ensuring that learning materials, teaching methods, and assessments are accessible to students from diverse backgrounds and with varying abilities.

Content is designed to accommodate different learning styles and prior educational experiences, with explicit guidance provided for tasks such as group work, design reviews, and public presentations. The programme champions cultural representation, scaffolds skill development, and addresses issues such as microaggressions and unconscious bias through a respectful and responsive

learning culture. This ensures that every student feels welcomed, heard, and supported in achieving their potential.

Skills Development and Digital Competence
To prepare students for the demands of professional practice, regular workshops and drop-in sessions are offered to develop core competencies in digital design, technical drawing, and software platforms such as AutoCAD, Revit, and BIM authoring tools. Students gain confidence in navigating digital workflows, producing professional-grade outputs, and integrating these tools into their design process.

Feedback and Reflective Learning
The programme places strong emphasis on feedback literacy. Feedback is offered through studio tutorials, interim reviews, and summative assessments, helping students identify strengths and areas for improvement. Students are encouraged to reflect on their progress through self-evaluation and portfolio development, cultivating habits of reflective practice essential for lifelong learning.

Technology-Enhanced Learning
Digital platforms such as Blackboard, MS Teams, and cloud-based design tools are used to support flexible and inclusive learning. These systems provide access to learning materials, recorded lectures, submission portals, and collaborative workspaces. This approach ensures students can manage their learning effectively, whether on campus, in studio, or remotely.

Part B: Programme Structure

Year 1
Full-time and Sandwich students must take 120 credits from the modules in Year 1.

Part-time students must take 60 credits from the modules in Year 1.

Year 1 Compulsory Modules (Full-time and Sandwich)
Full-time and Sandwich students must take 120 credits from the modules in Compulsory Modules (Full-time and Sandwich).

Module Code	Module Title	Credit
UBLL4S-30-1	Studio 1.1 - Form and Context 2026-27	30
UBLL4Y-30-1	Studio 1.2 - People and Environment 2026-27	30
UBLL6V-30-1	Materials and Environmental Physics 2026-27	30
UBLLDD-30-1	Construction Technology and Building Services 1 2026-27	30

Year 1 Compulsory Modules (Part-time)
Part-time students must take 60 credits from the modules in Compulsory Modules (Part-time).

Module Code	Module Title	Credit
UBLL6V-30-1	Materials and Environmental Physics 2026-27	30
UBLLDD-30-1	Construction Technology and Building Services 1 2026-27	30

Year 2
Full-time and Sandwich students must take 120 credits from the modules in Year 2.

Part-time students must take 60 credits from the modules in Year 2.

Year 2 Compulsory Modules (Full-time and Sandwich)
Full-time and Sandwich students must take 120 credits from the modules in Compulsory Modules (Full-time and Sandwich).

Module Code	Module Title	Credit
UBLL8R-30-2	ATD Studio 2 2027-28	30
UBLL8H-30-2	Digital Applications for Architectural Technologists 2027-28	30

UBLLDF-30-2	Construction Technology and Building Services 2 2027-28	30
UBLMRT-30-2	Procurement and Contract Practice 2027-28	30

Year 2 Compulsory Modules (Part-time)
Part-time students must take 60 credits from the modules in Compulsory Modules (Part-time).

Module Code	Module Title	Credit
UBLMPC-30-1	Law, Economics and Management 2027-28	30
UBLLWV-30-1	Principles of Sustainable Design 2027-28	30

Year 3
Full-time students must take 120 credits from the modules in Year 3.

Part-time students must take 75 credits from the modules in Year 3.

Sandwich students must take 15 credits from the modules in Year 3 either as a placement year or international year abroad, studying Workbased Research Project or International Academic Year (Architecture).

Students on the Sandwich route complete a minimum of 200 credits at Levels 4/5.

Students must fulfil 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 Interdisciplinary Professional Practice module will not be undertaken in the final year for students on the sandwich degree.

Year 3 Compulsory Modules (Full-time)
Full-time students must take 90 credits from the modules in Compulsory Modules (Full-time).

Module Code	Module Title	Credit
UBLL8S-45-3	ATD Studio 3 2028-29	45

UBLL8J-30-3	Digital Innovations for Architectural Technologists 2028-29	30
UBLLDC-15-3	Interdisciplinary Professional Practice 2028-29	15

Year 3 Optional Modules (Full-time)
Full-time students must take 30 credits from the modules in Optional Modules (Full-time)

Module Code	Module Title	Credit
UBLL7N-30-3	Zero Carbon Buildings 2028-29	30
UBLMFQ-30-3	Technological Innovation and Life Cycles 2028-29	30
UBLMXB-15-3	Conserving Buildings and Places 2028-29	15
UBLL7U-15-3	Energy Performance and Retrofit 2028-29	15

Year 3 Optional Modules (Sandwich)
Students on the Sandwich delivery must take 15 credits from the modules in Optional Modules (Sandwich)

Module Code	Module Title	Credit
UBLLQ1-15-3	International Academic Year (Architecture) 2028-29	15
UBLMG4-15-3	Work-Based Research Project 2028-29	15

Year 3 Compulsory Modules (Part-time)
Part-time students must take 75 credits from the modules in Compulsory Modules (Part-time).

Module Code	Module Title	Credit
UBLL8R-30-2	ATD Studio 2 2028-29	30
UBLMG4-15-3	Work-Based Research Project 2028-29	15

UBLLDF-30-2	Construction Technology and Building Services 2 2028-29	30

Year 4
Part-time students must take 90 credits from the modules in Year 4.

Sandwich students must take 105 credits from the modules in Year 4.

Year 4 Compulsory Modules (Sandwich)
Sandwich students must take 75 credits from the modules in Compulsory Modules (Sandwich).

Module Code	Module Title	Credit
UBLL8S-45-3	ATD Studio 3 2029-30	45
UBLL8J-30-3	Digital Innovations for Architectural Technologists 2029-30	30

Year 4 Optional Modules (Sandwich)
Sandwich students must take 30 credits in modules from Optional Modules (Sandwich).

Module Code	Module Title	Credit
UBLL7N-30-3	Zero Carbon Buildings 2029-30	30
UBLMFQ-30-3	Technological Innovation and Life Cycles 2029-30	30
UBLMXB-15-3	Conserving Buildings and Places 2029-30	15
UBLL7U-15-3	Energy Performance and Retrofit 2029-30	15

Year 4 Compulsory Modules (Part-time)
Part-time students must take 90 credits from the modules in Compulsory Modules (Part-time).

Module Code	Module Title	Credit
UBLL8H-30-2	Digital Applications for Architectural Technologists 2029-30	30

UBLMRT-30-2	Procurement and Contract Practice 2029-30	30
UBLMFQ-30-3	Technological Innovation and Life Cycles 2029-30	30

Year 5
Part-time students must take 75 credits from the modules in Year 5.

Year 5 Compulsory Modules (Part-time)
Part-time students must take 75 credits from the modules in Compulsory Modules (Part-time).

Module Code	Module Title	Credit
UBLL8J-30-3	Digital Innovations for Architectural Technologists 2030-31	30
UBLL8S-45-3	ATD Studio 3 2030-31	45

Part C: Higher Education Achievement Record (HEAR) Synopsis

This three-year undergraduate programme meets the professional requirements of the Chartered Institute of Architectural Technologists (CIAT) and the Chartered Institute of Building (CIOB). It prepares students to approach the built environment's design and development ethically and responsibly, addressing societal, client, user, and environmental needs.

Rooted in the inter-professional ethos of UWE's School of Architecture and Environment, the course emphasises people, technology, and sustainability. Its design-led curriculum integrates construction technology, design and digital skills.

Part D: External Reference Points and Benchmarks

The programme is aligned with the Chartered Institute of Architectural Technologists (CIAT) Educational Standards, which define the core competencies required for professional practice as an Architectural Technologist. These include design process management, construction technology, technical design integration, procurement knowledge, and regulatory compliance. CIAT's standards have shaped the programme's learning outcomes, curriculum design, and assessment strategies,

ensuring relevance to industry and eligibility for Chartered Membership (MCIAT).

The curriculum reflects the QAA Subject Benchmark Statement for Architectural Technology (2022), which defines the academic expectations for honours degree programmes in this discipline. This includes an emphasis on sustainability, technical problem-solving, the integration of digital tools, and understanding the whole-life performance of buildings. The benchmark recognises architectural technology as an applied design discipline situated at the interface between architecture, engineering, and construction.

The programme aligns with the UWE Bristol Employability Strategy, embedding core graduate attributes such as communication, collaboration, and critical thinking. Students gain real-world experience through live projects, industry engagement, and skills development aligned with professional expectations in the built environment.

In line with the QAA Code of Practice: Section 8 (Career Education, Information, Advice and Guidance), the programme provides students with structured opportunities to reflect on their career goals, engage with employers, and prepare for a variety of career paths in architectural technology, design consultancy, and the construction industry.

The programme supports the aims of the UWE Widening Participation Strategy and the UWE Teaching and Learning Strategy, ensuring inclusive, accessible, and student-centred learning across all levels. Scaffolding, formative feedback, diverse assessment types, and reflective practice are all built into the delivery model to enable all students to thrive.

Sustainability is a central theme across the programme and is guided by the UWE Sustainability Strategy, the UN Sustainable Development Goals (UNSDGs), and AdvanceHE's Education for Sustainable Development (ESD) competencies. Students are encouraged to adopt ecological thinking in their projects, explore circular design approaches, and critically engage with the environmental impact of their design and technical decisions.

Together, these reference points guide the structure, content, and pedagogical approach of the programme—ensuring alignment with academic standards, professional expectations, and global challenges. The curriculum promotes progression from foundational to advanced knowledge, and embeds sustainability, inclusivity, and ethical practice throughout, preparing students for meaningful careers in architectural technology and the wider built environment.

Part E: Regulations

Approved to University Regulations and Procedures.