University of the Built Environment
EST. 1919

Patron: His Majesty King Charles III

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BSc (Hons) Architectural Design Technology

Programme Specification 2026-2027

Version: 6.00

Status: Final

Date: 08/05/2026

Summary Programme Details

Final Award

Award: BSc (Hons)
Title of (final) Programme: Architectural Design Technology
Credit points: 360
Level of award: 6

Intermediate award(s)*

Intermediate award 1: BSc Architectural Design Technology (Pass Degree)
Credit points: 300
Level of award: 6

Intermediate award 2: Diploma of Higher Education Architectural Design Technology
Credit points: 240
Level of award: 6

Intermediate award 3: Certificate of Higher Education Built Environment Studies
Credit points: 120
Level of award: 4

*Intermediate awards will be granted to students that exit the programme part way through if they have achieved sufficient credits in line with the Academic and Programme Regulations (opens new window).

Validation

Validating institution: University of the Built Environment
Date of last validation: February 2024
Date of next periodic review: February 2029
Date of commencement of first delivery: September 2024
Duration: 4.5 years (part-time)
Maximum period of registration: In accordance with the Academic and Programme Regulations (opens new window).
UCAS Code/ HECoS Code: K130
Programming Code: RBSC
Other coding as required: ADS

Professional accreditation / recognition

Accrediting/recognising body: **The Chartered Institute of Building (CIOB)**
Details of the accreditation/recognition: BSc (Hons) accredited (subject to conditions)

Date of last programme accreditation/recognition: January 2026
Date of next periodic review: January 2031

Accrediting/recognising body: **The Chartered Institute of Architectural Technologists (CIAT)***
Details of the accreditation/recognition: *not accredited - Application for Accreditation in Principle being pursued in 2026)
Date of last programme accreditation/recognition: TBC
Date of next periodic review: TBC

QAA Guidance

UK Quality Code for Higher Education (opens new window)

QAA Credit Framework for England (opens a new window)

Quality Assurance Agency (QAA) Subject Benchmark Statement: Architectural Technology 2022 (opens new window)

OfS Standards

Office for Students (OfS) Sector Recognised Standards (opens a new window)

Programme Overview

Rationale

This programme provides students with a rigorous understanding of the principles and practice involved in architectural design and technology, up to Bachelor's degree standard.

The programme provides the academic underpinning necessary to prepare students for a career as an architectural technologist, or professional in design-related work within the construction industry. The course will be assessed by the Chartered Institute of Architectural Technologists (CIAT) for accreditation in principle in the current academic year.

This programme is primarily designed for people with an interest in the built environment, particularly the detail of building design, both exterior and interior, and the factors that affect types of structures.

The learning suits those who wish to further their career with a degree, and the content is designed to align with standards of accrediting organisations. Many students often already work in, or are associated with, the property and building sectors. Such employment is not mandatory but is desirable.

The programme can:

- Further the student's career in the construction industry and built environment professions;
- Satisfy the academic requirements for chartered membership of CIAT (TBC by the accrediting organisations);
- Provide learning from the largest provider of qualified built environment professionals to the industry, with an outstanding reputation;
- Strengthen the student's skills in architectural design technology.

Entry Requirements

Students are required to be 18 years or over at the start of their programme. Entrants to this programme are normally required to have:

- obtained 96 UCAS tariff points or an equivalent level of attainment through recognised qualifications not included in the UCAS tariff; *

Or

- completed an Advanced Apprenticeship in Surveying** or an Advanced Apprenticeship in Construction Technical** through which a Construction and Built Environment Diploma with a minimum DD profile was obtained or through which a Construction and Built Environment Extended Diploma with a minimum MMM profile was obtained, or an equivalent qualification;

Or

- a current Royal Institution of Chartered Surveyors (RICS) Associate qualification (AssocRICS) and be in relevant employment; ***

Or

- successfully completed the University of the Built Environment BSc Access module programme;

And

- GCSE Grade 4 (or C) or above in English and Mathematics or an equivalent Level 2 qualification in English and Mathematics as defined by the Regulated Qualifications Framework (RQF) in England. ****

* Recognised qualifications having an equivalent level of attainment as those recognised by UCAS include: Higher National Certificate (HNC), Higher National Diploma (HND), professional qualifications from recognised institutions, certain armed forces qualifications and partially completed degrees. There are also a wide range of international qualifications that are deemed to have UCAS point equivalent values. For more information on equivalent qualifications please contact: admissions@ube.ac.uk.

** Completion of this apprenticeship will need to be evidenced through a verified copy of the apprenticeship completion certificate as issued by the apprenticeship certification body.

*** Relevant employment is employment in a job role that will support the applicant in developing the required skills, knowledge, and behaviours.

The academic level of international qualifications that are not listed on the UCAS tariff will be assessed using UK ENIC.

Students can also submit an electronic portfolio to further illustrate their credentials in both a technical and design capacity. Previous work from school, college or university will be considered alongside qualifications.

If an applicant does not meet the standard entry requirements the University will consider the application on an individual basis. In these cases, the application will be assessed by the Programme Leader or for students in Hong Kong by the Dean (Academic Portfolio and International), who will give careful consideration to any professional and life experiences as well as any academic or vocational qualifications the applicant may hold. The applicant may be asked to provide a detailed personal statement and/or a reference or letter of support from an employer or mentor to support the application.

Applications are assessed in accordance with the University of the Built Environment Admissions and Recognition of Prior Learning Policy (opens new window).

English language requirements

All University of the Built Environment programmes are taught and assessed in English. In addition to the programme entry requirements listed above, all applicants will therefore be required to demonstrate adequate proficiency in the language before being admitted to a programme. Therefore, applicants must possess one of the following:

- GCSE Grade 4 (or C) or above in English Language or English Literature, or an equivalent qualification. For further information on equivalent qualifications please contact: admissions@ube.ac.uk.
- Grade 5.5 or above, with at least 5.5 in the reading and writing modules in the International English Language Testing System (IELTS) academic test administered by the British Council.
- 79 or above in the internet option, 213 or above in the computer-based option or 550 or above in the paper-based option, of the Teaching of English as a Foreign Language (TOEFL) test.
- Grade 4 (or C) or above in English (Language or Literature) at A/S Level.

- Holders of a cognate sub-degree (Level 5) qualification taught and assessed in English from the University of Hong Kong or City University of Hong Kong.
- HKDSE (Hong Kong Diploma of Secondary Education) Grade 3, or HKALE (Hong Kong Advanced Level Examination – Advanced Level & Advanced Supplementary Level) Grade E, or HKCEE (Hong Kong Certificate of Education Examination) Grade 3-5 or Grade A-D (Syllabus B only).

Applicants with a bachelor's degree that has been taught and examined in the English medium can be considered for entry in the absence of the qualifications detailed above if applying for a non-apprenticeship programme.

Technical Requirements

The specific hardware, graphics card, and operating system requirements for an Architectural Design Technology course can vary based on the software and tools used in the curriculum which themselves can vary. Here are general recommendations:

Hardware

Processor (CPU):

A multicore processor (e.g., Intel i-Series, Xeon, AMD Ryzen, Ryzen Threadripper PRO. 2.5GHz or Higher) for efficient handling of design and modelling tasks.

Memory (RAM):

8 –16 GB or higher for smooth multitasking and handling large design files. 16GB is recommended

Storage:

Solid State Drive (SSD) with sufficient capacity for storing software, project files, and additional data. Please note you will be provided with access to Microsoft 365 which will provide you with access to OneDrive.

Display:

A high-resolution display with good colour accuracy for detailed design work.

Graphics Card (GPU):

Dedicated GPU:

A dedicated graphics card is crucial for 3D modelling and rendering tasks.

NVIDIA GeForce or AMD Radeon series cards are often recommended.

Workstation-grade GPUs like NVIDIA Quadro or AMD Radeon Pro may be preferred for professional applications. Similarly, a DirectX 11 capable graphics card with

Shader Model 5 and a minimum of 4GB of video memory will facilitate a more advanced level of graphics.

VRAM:

4 GB or higher Video RAM for handling complex 3D models.

Operating System:

Windows:

Most architectural design software is compatible with Windows operating systems (64-bit Windows 10 or 11 recommended). Generally, Windows is the preferred operating system for architectural projects.

macOS:

For users on Mac systems, compatibility between macOS and programmes such as Autodesk Revit can be a challenge and will require you to either partition your desktop or purchase a license for a Virtual Desktop such as Parallels.

Linux (Rare):

Some software may have limited support for Linux; however, it's less common in architectural design.

Additional Considerations:

Mobile Devices:

Tablets like iPad Pro with stylus support may enhance digital sketching capabilities.

Internet Connection:

A high-speed internet connection for software updates, online collaboration, and research.

Whilst costs attributed to computer specifications may be prohibitive to some students, University of the Built Environment are committed to ensuring that no student is digitally excluded. The University acknowledge that initially student profiles will predominantly have employed status, as such will be enrolled on the premise that they have access to a suitable specification of workstation as outlined above.

However, with programme growth and full/part-time students in mind from 2025/26, University of the Built Environment seek to invest in a virtual desk top solution that will allow students who are unable to access a suitable spec of machine, access to all software from even the most basic level of workstation. The software intensity and collaborative practices within the ADT programme will be more concentrated at Level 5 and Level 6 and University of the Built Environment are currently active in the tendering of this virtual desktop solution to provide a

platform that will ensure digital inclusion remains at forefront of providing an online learning experience that is accessible to all.

Recognition of prior learning (RPL) or recognition of prior experiential learning (RPEL) routes into the programme

University of the Built Environment policy and procedures for Recognition of Prior Experiential Learning (RPEL) and Recognition of Prior Learning (RPL) are set out in the University of the Built Environment Admissions and Recognition of Prior Learning Policy (opens new window). This policy statement takes precedence in any such decision.

University of the Built Environment also recognises credit awarded by higher education degree awarding bodies in accordance with the relevant higher education qualifications framework and allows that credit to count towards module exemption from the programme.

Normally the maximum credit for prior learning that can be counted towards the programme is 66% (two thirds). RPL does not enable the transfer of credit/exemption from classification modules.

Programme Progression

For details of progression arrangements, please view the Academic and Programme Regulations (opens new window).

Successful completion of the BSc (Hons) may enable the student to progress onto the University of the Built Environment's Master of Business Administration and other suitable postgraduate programmes.

Award Regulations

For details of award arrangements, please view the Academic and Programme Regulations (opens new window).

Career Prospects

Subject to University of the Built Environment attaining Accreditation in Principle and subsequent Full Accreditation, a BSc Architectural Design Technology graduate would be eligible to apply for Associate (ACIAT) status with CIAT which is the first step in the professional CIAT process to becoming a Chartered Architectural Technologist (MCIAT). As such, they may assist a Chartered Architectural Technologist or indeed work in a broader design or construction team with other allied Built Environment Professionals.

Chartered Architectural Technologists are qualified to offer design services and manage projects from inception to completion. They lead the technological design of a project; forming the link between concept, innovation and realisation.

They:

- **specialise in design**, underpinned by building science, engineering and technology applied to architecture within projects, playing a pivotal role in project and design management;
- **design and manage all project types** from small scale to large commercial, industrial, residential and public projects; they range from being sole practitioners to working in multinational and multidisciplinary practices;
- **work collaboratively** with other professionals such as architects and engineers and are recognised on a par with all Chartered professionals in the built environment sector; and
- **hold a valued, respected and regulated professional qualification and protected designation**, which is transferable and recognised across borders and can only be awarded by the Chartered Institute of Architectural Technologists, whilst abiding by a set of professional ethics in the Institute's Code of Professional Conduct.

Chartered Architectural Technologists are involved in a range of processes in a project lifecycle such as:

Project inception:

Chartered Architectural Technologists are recognised as being qualified to negotiate and manage the development of a construction project, and to develop project briefs and design programmes for clients.

Project Planning:

Chartered Architectural Technologists are often involved in developing design and project briefs. This includes advising clients on methods of contract and procurement whilst managing Health and Safety through the production of documentation to satisfy statutory approval processes.

Design process:

Chartered Architectural Technologists specialise in the application of building science and technology to architectural and construction projects. They are recognised as having specialist skills, enabling them to manage the design process, and use their technical knowledge and expertise to provide innovative solutions.

Contract management:

Chartered Architectural Technologists are recognised as being qualified to negotiate and manage all aspects of architectural and construction contracts, whether it is using traditional, partnering, or other methods. Chartered Architectural Technologists recognise the significance of the post-construction aspects of the project.

Professional practice:

Chartered Architectural Technologists (MCIAT) are architectural professionals and may practise on their own account as a partner or director and must adhere to a Code of Conduct.

Programme Aims

Programme aims

The University of the Built Environment BSc (Hons) Architectural Design Technology programme provides students with a rigorous understanding of the principles and practices of architectural design technology, up to first degree level standard. The programme reflects the academic underpinning necessary to prepare students for a career as a Chartered Architectural Technologist with CIAT, or other related international professional bodies, and provides students with a progressive development of knowledge and skills over three levels of study.

The programme is designed to ensure that graduates have a stimulating and challenging education, which prepares them well for their professional career, and to produce capable individuals with the potential to progress to professional status in an architectural design-related technology role and prepare for advancement to postgraduate level study. Students will develop a broad range of skills which are transferable across other industries.

Market and internationalisation

This programme is aimed at UK and international students. While UK law, regulatory controls and practice are at the core of the study materials, the programme aims to contextualise within an international framework. Where possible, comparative examples are used to highlight the difference in regional approaches, and thus foster further understanding of the principles and applications introduced.

Programme Structure

Module List

Code	Module	Level	Credits	Core/ Elective
INT4BE1	Introduction to the Built Environment 1	4	20	Core
INT4SUS	Introduction to Sustainability	4	20	Core
CON4TE1	Construction Technology 1	4	20	Core
PRO4BPR	Professional and Business Practice	4	20	Core
LAW4RBE	Introduction to Regulatory and Built Environment Law	4	20	Core
INT4DES	Design Development and Production Coordination	4	20	Core
DES5DES	Design and Environmental Science	5	20	Core
CON5TE2	Construction Technology 2	5	20	Core
TEC5DE1*	Technology and Design 1: Contemporary Domestic	5	20	Core
BSU5BPC	Building Pathology and Conservation Principles	5	20	Core
RET5COP	Retrofit Concept and Practice	5	20	Core

Code	Module	Level	Credits	Core/ Elective
BCU5CON	Building Control	5	20	Core
BCU6IDP	Integrated Design Project	6	20	Core
TEC6DE2*	Technology and Design 2: Data Informed Design for Commercial Buildings	6	20	Core
BUI6IMM	Modelling Information Management: Theory and Practice	6	20	Core
TEC6DE3*	Technology and Design 3: Design for Manufacture and Assembly (DfMA)	6	20	Core
BSU6PRM	Project Management in the Built Environment	6	20	Core
PRJ6DES	Architectural Design Thesis	6	20	Core

Notes

Credits are part of the Credit Accumulation and Transfer System (CATS). Two UK credits are equivalent to one European Credit Transfer System (ECTS) credit.

Students entering with exemptions may see a change to their study route. Exemptions will not be available in the first year that the course runs.

* The module diet is structured to ensure that the delivery of modules supports your learning. However individual student circumstances may mean the sequence of the planned module diet changes. It is advised that you study INT4DES Design Development and Production Coordination, TEC5DE1 Technology and Design 1: Contemporary Domestic, TEC6DE2 Technology and Design 2: Data Informed Design for Commercial Buildings and TEC6DE3 Technology and Design 3: Design for Manufacture and Assembly (DfMA) in this order.

As each Technology and Design module builds on the knowledge and skills acquired from the preceding iteration, it is additionally recommended that as

thematic design modules at Levels 5 and 6, each Technology and Design module be preceded (or delivered concurrently) by a group of specific modules where underpinning knowledge and skills will be acquired in order for these to be applied in the thematic design setting. It is suggested the module grouping sequencing of these reflect as follows:

TEC5DE1: Technology and Design 1: Contemporary Domestic

Preceded by or concurrent with:

- INT4DES: Design Development and Production Coordination
- CON5TE2: Construction Technology 2
- BSU5BPC: Building Pathology and Conservation Principles
- RET5COP: Retrofit Concept and Practice
- BCU5CON: Building Control

TEC6DE2: Technology and Design 2: Data Informed Design for Commercial Buildings

Preceded by or concurrent with:

- TEC5DE1: Technology and Design 1: Contemporary Domestic
- BUI6IMM: Modelling Information Management: Theory and Practice

TEC6DE3: Technology and Design 3: Design for Manufacture and Assembly

Preceded by or concurrent with:

- TEC5DE1: Technology and Design 1: Contemporary Domestic
- TEC6DE2: Technology and Design 2: Data Informed Design for Commercial Buildings
- BUI6IMM: Modelling Information Management: Theory and Practice

Learning Outcomes

Having successfully completed the programme, the student will have met the following learning outcomes.

Level 4

A – Knowledge and understanding

Learning Outcomes		Relevant modules
A4.1.	Recognise the basic principles that underpin the theory and practice of the property and construction industries.	CON4TE1 INT4BE1 INT4DES LAW4RBE
A4.2.	Outline the ethical, management, legal and regulatory frameworks and systems impacting on the property and construction industries.	INT4SUS LAW4RBE PRO4BPR INT4DES
A4.3.	Relate environment and sustainability issues to the property and construction industries.	CON4TE1 INT4SUS
A4.4.	Explain the basic principles of property construction and associated digital technologies.	CON4TE1 INT4BE1 INT4DES

B – Intellectual skills

Learning Outcomes		Relevant modules
B4.1.	Describe the impact of sustainability on existing and new buildings.	CON4TE1 INT4SUS INT4DES
B4.2.	Demonstrate the ability to write in a range of formats.	All
B4.3.	Develop an awareness and ability to evaluate and appraise information.	All

C – Subject practical skills

Learning Outcomes		Relevant modules
C4.1.	Recognise the uses of technology in the built environment.	CON4TE1 INT4BE1 INT4DES
C4.2.	Illustrate an understanding of the development and use of digital skills.	INT4BE1 INT4DES

C4.3.	Understand areas of legislation which affect the built environment.	INT4SUS LAW4RBE PRO4BPR INT4DES

D - Key / Transferable skills

Learning Outcomes		Relevant modules
D4.1.	Develop and plan individual learning to achieve successful outcomes.	All
D4.2.	Demonstrate the development of written, numeric and communication skills using various methods of communication.	All
D4.3.	Collect and organise ideas and information by producing material in an appropriate format with acknowledged sources	All
D4.4.	Identify and solve problems within guided scenarios.	All

Level 5

A – Knowledge and understanding

Learning Outcomes		Relevant modules
A5.1	Understand the role of Architectural Technologists in the application of architectural principles, theories, and professional services.	DES5DES CON5TE2 TEC5DE1 BSU5BPC BCU5CON
A5.2	Analyse the legal and regulatory frameworks and systems impacting on the design, construction, and occupancy of buildings.	DES5DES TEC5DE1 RET5COP BCU5CON
A5.3	Evaluate the effects of sustainable approaches upon the built environment and construction industry.	DES5DES CON5TE2 TEC5DE1 RET5COP BCU5CON

Learning Outcomes		Relevant modules
A5.4	Identify and analyse the various materials, construction techniques, and technologies used in architectural design and construction whilst appraising their application in new build and retrofit scenarios.	DES5DES CON5TE2 TEC5DE1 BSU5BPC RET5COP BCU5CON
A5.5	Appraise buildings in relation to inclusivity and relevant legislation and appreciate the wider aim of society living in dignity with equality.	TEC5DE1 BCU5CON

B – Intellectual skills

Learning Outcomes		Relevant modules
B5.1	Integrate and transfer athematic knowledge, skills and learning from level 4 to the range of subject areas covered at level 5.	DES5DES CON5TE2 TEC5DE1 BCU5CON
B5.2	Interpret legal issues and put these into the context of a range of different circumstances.	DES5DES CON5TE2 TEC5DE1 BSU5BPC RET5COP BCU5CON
B5.3	Demonstrate the ability to plan, conduct and prepare design responses to a range of scenarios.	DES5DES CON5TE2 TEC5DE1 RET5COP BCU5CON

C – Subject practical skills

Learning Outcomes		Relevant modules
C5.1	Evaluate the appropriateness of different approaches to solving a range of problems arising in a professional environment, both technical and ethical.	DES5DES CON5TE2 TEC5DE1 BSU5BPC

	RET5COP BCU5CON
C5.2 Integrate sustainable design principles into architectural projects, considering energy efficiency, environmental impact, and resource conservation.	DES5DES CON5TE2 TEC5DE1 BSU5BPC RET5COP BCU5CON
C5.3 Proficiently use computer-aided design (CAD) software for creating detailed architectural drawings and 3D models.	DES5DES CON5TE2 TEC5DE1

D - Key / Transferable skills

Learning Outcomes	Relevant modules
D5.1 Communicate and collaborate effectively using a range of media.	DES5DES CON5TE2 TEC5DE1 BSU5BPC
D5.2 Organise and manage study workflow independently and efficiently.	DES5DES CON5TE2 TEC5DE1 BSU5BPC RET5COP BCU5CON
D5.3 Solve problems and make decisions through reflective thinking and analysis.	DES5DES CON5TE2 TEC5DE1 BSU5BPC BCU5CON
D5.4 Identify where and how sustainable principles can be adopted thereby considering wider sustainable opportunities and constraints.	DES5DES CON5TE2 TEC5DE1 BSU5BPC RET5COP BCU5CON

Level 6

A – Knowledge and understanding

Learning Outcomes		Relevant modules
A6.1	Critically appraise the wider business environment including the political, economic, legal, social, technological, cultural, ethical, and global influences under which construction and client organisations operate and ability to integrate this understanding into coursework.	BCU6IDP TEC6DE2 BUI6IMM TEC6DE3 BSU6PRM PRJ6DES
A6.2	Critically assess, analyse, and apply architectural design technology skillsets through individual work to generate innovative architectural design solutions that respond effectively to contextual, cultural, and environmental considerations.	BCU6IDP TEC6DE2 BUI6IMM TEC6DE3 PRJ6DES
A6.3	Synthesise research methods and critically assess research on architectural precedents, technological advancements, and industry best practices to inform design decisions.	PRJ6DES
A6.4	Demonstrate a critical understanding of digital literacies and standards and protocols for the execution of collaborative work practices in architectural contexts.	BCU6IDP BUI6IMM TEC6DE3

B – Intellectual skills

Learning Outcomes		Relevant modules
B6.1	Critically assess a range of resources including contemporary sources, draw on evidence to reflect and evaluate competing explanations to provide appropriate conclusions.	BCU6IDP TEC6DE2 BUI6IMM TEC6DE3 BSU6PRM PRJ6DES
B6.2	Critically analyse and solve complex problems using appropriate models and methods.	BCU6IDP TEC6DE2 BUI6IMM TEC6DE3

		BSU6PRM PRJ6DES
B6.3	Critically analyse and transfer appropriate knowledge and methods from one topic to another within or between modules.	BCU6IDP TEC6DE2 BUI6IMM TEC6DE3 BSU6PRM PRJ6DES

C – Subject practical skills

Learning Outcomes		Relevant modules
C6.1	Acquire, analyse, and critically evaluate data and judge its relevance and validity to a range of design situations.	BCU6IDP TEC6DE2 BUI6IMM TEC6DE3 PRJ6DES
C6.2	Critically assess the validity and rigour of a range of published research and assess its relevance to further research.	BCU6IDP TEC6DE2 BUI6IMM TEC6DE3 BSU6PRM PRJ6DES
C6.3	Analyse and apply passive and active environmental design strategies for enhancing building performance.	BCU6IDP TEC6DE2 BUI6IMM TEC6DE3 PRJ6DES
C6.4	Critique the application of ethics and professional standards in architectural design technology.	BCU6IDP BUI6IMM BSU6PRM PRJ6DES
C6.5	Develop proficiency in building information modelling (BIM) tools for collaborative and integrated design processes.	TEC6DE2 BUI6IMM TEC6DE3

D - Key / Transferable skills

Learning Outcomes		Relevant modules
D6.1	Communicate effectively and professionally in a range of mediums to both industry and academic stakeholders.	BCU6IDP TEC6DE2 BUI6IMM TEC6DE3 BSU6PRM PRJ6DES
D6.2	Demonstrate the ability to identify, use, interrogate, interpret, and critically evaluate a range of sources of information.	BCU6IDP TEC6DE2 BUI6IMM TEC6DE3 BSU6PRM PRJ6DES
D6.3	Demonstrate competence in applying learning experience to practical architectural design scenarios.	BCU6IDP TEC6DE2 BUI6IMM TEC6DE3 PRJ6DES
D6.4	Develop the attitudes and applied skills to make informed decisions that reflect care, concern, and responsibility for themselves, for others and the environment, now and in the future.	BCU6IDP TEC6DE2 BUI6IMM TEC6DE3 BSU6PRM PRJ6DES

Delivery Structure for part-time study route

Autumn (UK) Entry

Year 1, Semester 1

Module Code	Module Name	Level
INT4BE1	Introduction to the Built Environment 1	4
INT4SUS	Introduction to Sustainability	4

Year 1, Semester 2

Module Code	Module Name	Level
PRO4BPR	Professional and Business Practice	4
CON4TE1	Construction Technology 1	4

Year 2, Semester 1

Module Code	Module Name	Level
LAW4RBE	Introduction to Regulatory and Built Environment Law	4
INT4DES	Design Development and Production Coordination	4

Year 2, Semester 2

Module Code	Module Name	Level
CON5TE2	Construction Technology 2	5
RET5COP	Retrofit Concept and Practice	5

Year 3, Semester 1

Module Code	Module Name	Level
BCU5CON	Building Control	5
BSU5BPC	Building Pathology and Conservation Principles	5

Year 3, Semester 2

Module Code	Module Name	Level
DES5DES	Design and Environmental Science	5
TEC5DE1	Technology and Design 1: Contemporary Domestic	5

Year 4, Semester 1

Module Code	Module Name	Level
BUI6IMM	Modelling Information Management: Theory and Practice	6
TEC6DE2	Technology and Design 2: Data Informed Design for Commercial Buildings	6

Year 4, Semester 2

Module Code	Module Name	Level
BCU6IDP	Integrated Design Project	6
TEC6DE3	Technology and Design 3: Design for Manufacture and Assembly (DfMA)	6

Year 5, Semester 1

Module Code	Module Name	Level
BSU6PRM	Project Management in the Built Environment	6
PRJ6DES	Architectural Design Thesis	6

Spring (UK) Entry

Year 1, Semester 1

Module Code	Module Name	Level
INT4BE1	Introduction to the Built Environment 1	4
CON4TE1	Construction Technology 1	4

Year 1, Semester 2

Module Code	Module Name	Level
LAW4RBE	Introduction to Regulatory and Built Environment Law	4
INT4DES	Design Development and Production Coordination	4

Year 2, Semester 1

Module Code	Module Name	Level
PRO4BPR	Professional and Business Practice	4
INT4SUS	Introduction to Sustainability	4

Year 2, Semester 2

Module Code	Module Name	Level
CON5TE2	Construction Technology 2	5
BSU5BPC	Building Pathology and Conservation Principles	5

Year 3, Semester 1

Module Code	Module Name	Level
DES5DES	Design and Environmental Science	5
TEC5DE1	Technology and Design 1: Contemporary Domestic	5

Year 3, Semester 2

Module Code	Module Name	Level
BCU5CON	Building Control	6
RET5COP	Retrofit Concept and Practice	6

Year 4, Semester 1

Module Code	Module Name	Level
BCU6IDP	Integrated Design Project	6
BUI6IMM	Modelling Information Management: Theory and Practice	6

Year 4, Semester 2

Module Code	Module Name	Level
BSU6PRM	Project Management in the Built Environment	6
TEC6DE2	Technology and Design 2: Data Informed Design for Commercial Buildings	6

Year 5, Semester 1

Module Code	Module Name	Level
PRJ6DES	Architectural Design Thesis	6
TEC6DE3	Technology and Design 3: Design for Manufacture and Assembly (DfMA)	6

Module Summaries

Core Modules

INT4BE1 Introduction to the Built Environment 1

This module provides an overview of the built environment sector and the role of the construction industry within the UK economy. Students will gain an appreciation of how legal, political, and social issues have shaped and continue to influence the sector. Students will gain an understanding of the project lifecycle and the development process with reference to the RIBA Plan of Work. The module introduces the key stakeholders and professions within the industry. It will enable students to identify with their chosen profession and understand that profession's key responsibilities in meeting the client objectives.

As this is the first module students will study regardless of their programme, it will provide signposting to future modules where the knowledge and skills introduced by this module will be examined in further depth. It will also introduce the opportunities for wider learning provided at University of the Built Environment, through the cross-portfolio guest lecture events and the academic skills development provision. Students will also be encouraged to enrol as student members with the appropriate professional body. The content described in this paragraph is not assessed.

INT4SUS Introduction to Sustainability

This module introduces sustainability with a particular focus on the construction and property sector. Students will be made aware of the causes of climate change and key terminology and issues related to sustainable development. The relationship between property and the environment will be examined and criteria by which sustainability is measured in relation to finished buildings is identified. As sustainability is central to the core mission of University of the Built Environment, students will also learn about the University's sustainability agenda and activities.

CON4TE1 Construction Technology 1

This module provides an introduction to building, environment and technology based on simple construction, establishing a foundation of knowledge, and understanding to be developed in later modules. It develops students' communication skills, enabling them to describe simple construction in a professional manner.

Simple building examples are included, such as traditional masonry construction and roof construction typical in buildings of up to three storeys. Perspectives such as sustainability are considered.

PRO4BPR Professional and Business Practice

This module introduces corporate organisation structures that support the services offered and the importance of client care and the recognition of diversity within the workplace. It provides an appreciation of business planning and the accounting concepts used to support decision making. As employees, the module considers data protection, professional indemnity and health and safety. It further explores the concept of 'professional' and how the professional bodies promote professional and ethical practice.

LAW4RBE Introduction to Regulatory and Built Environment Law

This module provides the students with an introduction to the legal and regulatory requirements that relate to the construction and property sector. It considers the legal environment within the context of planning, design, and occupation. It further considers Health and Safety as it relates to both design and construction activity.

INT4DES Design Development and Production Coordination

At an introductory level, this module provides students with a holistic understanding of the architectural design process by combining manual and

digital skills, against the backdrop of compliance with industry standards for effective coordination and communication

DES5DES Design and Environmental Science

This module covers key aspects of the theory and practice of design for buildings and the relation of the building to the study of the environment. It applies the building, environment and technology theories covered in previous modules to normal design situations. The module focuses on the understanding of how a building is affected by its design, environment, and its occupants, and, vice versa, what effect that building has on the environment and people living in and around it.

The relationship is a complex one, which is addressed here by using 'human comfort' as the overarching theme, and breaking that down into individual factors of heat, air, moisture, sound, and light. These factors are placed into the context of a domestic dwelling, with the many and varied conditions that can result, based on different expectations and perceptions of comfort.

CON5TE2 Construction Technology 2

This module introduces the building and environmental technology of framed construction. Topics covered include: the principles of framed structures; design and its communication; material and component selection; construction techniques; simple environmental services, as well as more complex related issues of sustainability; advanced construction techniques; technology/process innovation and development; components; civil engineering; sustainability; building regulation; contaminated land and fire safety.

Key generic skills such as producing and understanding simple drawn information are introduced.

Examples of framed buildings are included, such as steel, reinforced concrete, and timber construction applicable to buildings with different types of usage and levels of complexity for commercial, industrial, and residential.

TEC5DE1 Technology and Design 1: Contemporary Domestic

This module involves the application of thematic knowledge where the integration of both traditional and innovative forms of construction technologies are applied against the context of contemporary building design. Sustainable and environmental design strategies will be utilised to create holistic and technically designed solutions that are responsive to client and design brief requirements whilst acknowledging regulatory compliance and global sustainability issues.

Manually generated design concepts will evolve to the production of a design solution utilising CAD and/or architectural modelling software with the level of detail typically required at Stage 4 of the RIBA Plan of Work. Work will be presented using a range of media to illustrate levels of detail and visualisation of the design proposal which will be critiqued by lecturers.

BSU5BPC Building Pathology and Conservation Principles

This module is concerned with the pathology of buildings. It will develop students' ability to effectively diagnose and evaluate a range of commonly encountered building defects through a process of inspection, testing, survey, and analysis.

RET5COP Retrofit Concept and Practice

This module explores a range of retrofitting and refurbishment project types and associated issues. Retrofit is a crucial function in terms of keeping existing buildings in use and fit for purpose. Therefore, an understanding of critical retrofit options is essential. This module thus provides an opportunity to develop the knowledge, understanding and skills required to appraise and develop retrofit and refurbishment solutions within the context of stakeholder requirements and the construction industry.

BCU5CON Building Control

This module introduces students to one of the core competencies within the industry and a competency which is required for students to become members of relevant professional bodies. The module examines the requirements for site inspections of building work to ensure that the work carried out meets relevant performance standards. Students will examine legislation such as the Building Act 1984 and the Building Safety Act 2022 (or relevant equivalent in the country the student is based), together with the regulations or guidance which stem from these. Students will apply the standards and regulations to different scenarios, consider the phases of compliance and examine the mechanisms for dealing with non-compliant work.

BSU6IDP Integrated Design Project

This module enables students to consolidate their knowledge and skills gained from the previous modules, whilst working collaboratively in multi-disciplinary groups, within a project scenario.

The context of the project will consider the due diligence and client advice needed to be undertaken by students for a commercial or industrial building to provide feasibility advice to a client on the options available in terms of reconstruction or adaption of the property for a new use.

The purpose of the project is to identify procedures required for the adaption and refurbishment of the building based on a client's brief and to produce design responses for this and other associated data and documentation.

The scenario presents opportunities to demonstrate how different disciplines can contribute to different elements of a scheme design and for students to appreciate the strengths of each other's disciplines.

Critically, this module provides an opportunity for elements of collaboration and personal self-reflection.

TEC6DE2 Technology and Design 2: Data Informed Design for Commercial Buildings

This module involves the application of thematic knowledge where innovative forms of construction technologies are proposed against the context of Industrial and Commercial building types. This module will require students to utilise digital design tools to simulate energy performance analysis of design concepts, evolving to a final proposal that will incorporate environmental design strategies based on data from the simulation. Students will be required to create holistic and technically designed solutions that are predicated on data and responsive to client and design brief requirements which will undergo critical analysis prior to the adoption of digital tools. The solutions will also acknowledge regulatory compliance and global sustainability issues.

3D Computer generated design concepts will evolve to a 3D model of the final proposal that will aspire to have the level of detail required at Stage 4 of the RIBA Plan of Work. Work will be presented using a range of media to illustrate levels of detail and visualisation of the design process, culminating with the detailed, final design proposal, including passive energy simulation which will be critiqued, along with chosen design, technologies, and strategies during an oral presentation. Students may also elect to animate elements of the building to showcase proposals and relative information that can enhance overall presentation for critique purposes.

BUI6IMM Modelling Information Management: Theory and Practice

In this module, students will study both the theoretical understanding and practical application of information management standards, protocols, and responsibilities relative to how collaborative design and construction teams digitally communicate contract information.

Students will first understand legislative and regulatory requirements such as BS EN ISO19650, before developing an understanding of the role that organisations

such as NIMA and buildingSMART (UK/International) have on supporting digital transformation and developing the standards such as the UK BIM framework.

After developing an understanding of theory, students then relate theory to practice against a designated project brief, by creating and modifying a 3D information model that has legacy geometry and data. Through this, students will be editing and creating information and data sets relative to the context of the model outlined in the instrument of assessment for the module. After generating the model, students will then be required to apply information exchange protocols to share and "data drop" information requests that will be outlined in the assessment brief.

During the practical tasks, students will be required to operate in a common data environment and simulate collaborative, digital practices that are predicated on acquiring the knowledge gained from studying the theoretical standards, protocols, and associated information management literature within the module.

TEC6DE3 Technology and Design 3: Design for Manufacture and Assembly (DfMA)

In this module, students will create a design proposal and transform this to a level of detail that will prepare the concept for Manufacture and Assembly. Using thematic knowledge gained from preceding modules, students will utilise a range of 2D and 3D design tools to prepare a solution that is represented with a range of technical detail and illustrations that are appropriate for RIBA Stage 4. Upon achieving this stage, students will then prepare the solution for the level of detail anticipated for RIBA Plan of Work Stage 5. Students can choose either a building component or a volumetric element to be prepared for manufacture under the premise that it can be mass produced.

In order to further demonstrate their knowledge and skills in the design to manufacture process, students may elect to manufacture the design solution through use of small scale manufacturing hardware such as a 3D printer or alternative simulation tools. In addition to the manufacturing process, this module will allow students to model sequencing of building operations where they will synthesise knowledge of logistics, planning, and quality to the context.

BSU6PRM Project Management in the Built Environment

This module provides students with knowledge and understanding of the principles of the projects in the built environment. This can include management, programming, procurement, risk assessment, conflict avoidance and design and construction process and systems.

PRJ6DES Architectural Design Thesis

The aim of this module is to enable the student to develop independent design-based research skills so that they can demonstrate the ability to covert theoretical concepts to propose a holistic or localised design solution against the backdrop of a defined physical, cultural, social, or economic project context.

The module is student-led, with directed research undertaken in virtual studios where students will define a brief from a specific context of their own choosing. Students will be allocated a supervisor to consult with and showcase proposals as their research project evolves.

It is anticipated that the module's outcomes will directly enhance career and educational progression by equipping students with relevant analytic and design thinking skills, including techniques to execute the investigation of contemporary design issues.

University of the Built Environment Competence Standards

All undergraduate and postgraduate students are expected to meet the basic academic competencies laid out in the admissions criteria for their degree programme. Additionally, University of the Built Environment students are expected to meet the following competency standards:

1. **Competence Standard**: The ability to work independently and/or as part of a team, for the purposes of research, collective problem solving and communication of results/findings.

Justification: Professionals in the built environment are required to work with a variety of stake holders to achieve joint and individual targets. University of the Built Environment graduates should be capable in both settings

2. **Competence Standard:** The ability to exercise self-learning and use acquired theoretical and practical knowledge.

Justification: Students in higher education are required to engage in self-directed learning to achieve learning outcomes. Support is available from University of the Built Environment to acquire these skills.

3. **Competence Standard:** The ability to effectively present key facts, ideas, problem solutions, results etc. using verbal, expressive, and/or written communication.

Justification: Professionals within the built environment sector are required to present information to colleagues, clients, and other stakeholders in a variety of

formats. University of the Built Environment graduates should be able to display these skills.

4. **Competence Standard:** The ability to submit work within agreed time frames.

Justification: Working to deadlines is a key requirement of professionals in the built environment. University of the Built Environment courses have a maximum period of registration that must align with accrediting PSRBs.

5. **Competence Standard**: The ability to use digital resources as an aid to research, analysis, problem solving and presentation.

Justification: University of the Built Environment's delivery method is entirely online with no physical campus. Support is available to assist with use of digital resources.

6. **Competence Standard:** The ability of learners to express and develop ideas using digital literacy in English.

Justification: University of the Built Environment is an online institution based in the UK. Students must have the ability to communicate in English through University of the Built Environment's online platforms.

7. **Competence:** The ability to critically interpret qualitative and/or quantitative data

Justification: Built environment professionals are required to handle both qualitative and quantitative data. University of the Built Environment's assessments also require critical interpretation, support is available to develop these skills.

8. **Competence:** Knowledge of the general principles and practices of professional codes of conduct.

Justification: University of the Built Environment courses are accredited by RICS, CIOB and CABE*. Students seeking professional accreditation are also advised to consult the relevant PSRB which identifies key competencies for various levels of professional competence.

*The BSc (Hons) Architectural Design Technology programme is accredited by the CIOB only.

Learning, Teaching and Assessment

Learning and Teaching

Knowledge and understanding

The teaching, learning and assessment strategy for the programme is guided by the University-wide Learning, Teaching and Assessment Strategy (LTAS). The approach adopted is student-centred learning design, that supports the educational needs of our diverse student community. Learning has been designed with flexibility in mind to support students to adopt their own learning experience best suited to their needs.

Students are taught through online learning resources available to them, including customised text material, study papers, learning activities and interactive media. These are complemented by a variety of Lecturer-facilitated sessions and interactions, using a range of media for enhancement of the learning experience.

Students are encouraged to research beyond the material provided and undertake self-directed learning throughout their programme. This expectation increases across the levels.

Intellectual skills

Learning and teaching methods are applied to enable the development of cognitive skills. These skills are aligned to those used by Architectural Design Technologists, but also meet the needs of working in other industries. These skills are developed through interaction with multi-media learning resources, self-directed learning and via participation in student-centred learning activities. The approach to assessment is lecturer-guided and formative feedback on these skills is given appropriate emphasis.

Subject practical skills

The subject themes of the programme introduce the theoretical foundations at level 4 and develop them in an increasingly applied and specialised context through levels 5 and 6.

Level 4

Level 4 modules help set the context for Architectural Design Technology students. The Introduction to the Built Environment 1 module establishes the composition of the industry, particularly in respect of the RIBA Plan of Work which is crucial for establishing the sequence of design, construction and management procedures and responsibilities in preparation of Level 5 and 6 Modules. The Design

Development and Production Coordination module at Level 4 also provides students with a holistic understanding of the architectural design process at an introductory level. The Introduction to Regulatory and Built Environment Law module at Level 4 provides a general legal background to law which when accompanied with Professional and Business Practice module, help develop awareness of professional responsibilities and key legislative and professional standards. Crucially for supporting environmentally aware designers of the future, the Introduction to Sustainability module outlines key terminologies and drivers to enhance the application of sustainability into built environment practices, which students get to apply when undertaking Technology and Design modules at Levels 5 and 6. Finally at Level 4, the Construction Technology 1 module provides students with some underpinning knowledge of construction technologies, again, a vital module for Level 5 and 6 modules where these technologies are applied against specified contexts.

Level 5

Level 5 modules have a very technical focus in respect of a wide range of themes that are pertinent to architectural practices. Students are again supported with their knowledge of more advanced forms of building methods and technologies through the Construction Technology 2 module. Complimenting this, students will undertake modules in Building Pathology and Conservation Principles as well as Retrofit: Concept and Practice which outline detailed procedures, technologies as well as diagnostic skills in supporting the conversion of buildings to meet current and future standards. Students gain valuable experience in understanding this when they undertake the Building Control module, which as well as regulatory compliance, has an added focus in respect of the implication of the Building Safety Act 2022. Students will further develop their environmental design skills in respect of undertaking the Design and Environmental Science Module. Level 5 culminates with the first of 3 Technology and Design Modules, in this instance, a Contemporary Domestic context. This is a design module where students thematically apply their knowledge and skills from all prerequisite modules to prepare a technically design solution utilising their knowledge and skills. In addition, this module will allow students to develop their digital and presentation skills, using appropriate software to prepare solutions that will be presented to industry standards and critiqued by lecturers.

Level 6

Level 6 has a more distinctive architectural design technology focus where students further develop their skills in more design studio focussed modules. Technology and Design 2: Data Informed Design for Commercial Buildings equips students with skills in utilisation of energy simulation tools to assist passive design of commercial buildings, again, applying thematic knowledge from preceding subjects to a context where the development of digital and design management

skills start coming to the fore. This theme continues furthermore in the Modelling Information Management module where students develop their skills and knowledge of appropriate ISO standards to manage information on projects and applying them in relevant contexts. Following this module, students will develop their information management skills by using modelling to prepare a design concept for manufacture in the Technology and Design 3: Design for Manufacture and Assembly module and taking this through the RIBA Plan of Work stages to Stage 5. Complimenting these modules at Level 6 are an Integrated Design Project where students will be collaborating with peers to solve a design project against a given context as well as a Project Management in the Built Environment module that will support students understanding of the principles of Project Management in the Built Environment. The programme culminates with the Architectural Design Thesis where students select a design problem and conceptualise a proposal to solve this, using appropriate research methodologies and design intent.

Key/Transferable skills

The BE Ready Orientation sets out the importance of transferable skills. These skills are developed through the programme, utilising study, and assessment. This can be via virtual learning environment (VLE) discussion, tuition discussion, problem-solving exercises, which are conducted individually or in groups, and coursework, which provides the ideal combination to internalise these aspects though different learning methods. The Study Skills area of the VLE is a further resource for support in developing these skills.

Assessment

The assessment strategy for the programme is guided by the University of the Built Environment-wide Learning, Teaching and Assessment Strategy (LTAS). The aim of University of the Built Environment's assessments is to allow students an opportunity to demonstrate what they have learned using a range of formats and which encourage critical self-reflection linked to personal development. To support this, assessments are clearly related to module learning outcomes and the activities within the module support students in achieving these.

University of the Built Environment's practice is to require assessments to be vocationally and professionally relevant. Assessments are built that have direct application to industry standards, and that enable students to learn through real world scenarios and working practice. This involves the generation of tasks based on problems, scenarios or case studies from recent real-world situations that reflect and/or replicate the vocational requirements of the industry and the international nature of the subject matter. All elements of assessments are

discipline-specific for each programme as well as supporting the acquisition and promotion of transferable skills, including research skills development.

Formative assessment and feedback opportunities are provided throughout the programme in a variety of formats to motivate, guide and develop students through their learning. Students are required to complete various pieces of coursework in the modules which are assessed within set time frames. Detailed feedback is provided on lecturer-assessed work, which explains how the mark was derived, what was done well and what could be improved for future assessments. Objective testing is also utilised in formative (including self-assessment) and summative assessment. Individual projects in the final stage are assessed in accordance with their own guidelines and marking schemes.

All assessment contributing to award is subject to moderation policies. Moderation at University of the Built Environment is designed to reflect the quality of the student submission and the benchmark standards for the various levels of undergraduate study. Moderation of marking accords with QAA recommended best practice to ensure that marking criteria have been fairly, accurately, and consistently applied during first marking.

Assessment Diet

The types of assessments used on this programme will include coursework (such as essays, reports, reflections, problem questions or presentations), computer-based assessments (CBAs), portfolio, practical and project assessments. The exact combinations of assessment will vary from module to module; please refer to the module descriptors for more information.

Study Support

BE Ready Orientation

The purpose of BE Ready is to prepare students for online learning with the University but also to support students throughout their learning journey. Students are expected to visit BE Ready every semester for updates, welcome back week activities as well as advice specific to their level of study.

There are a variety of resources which will help students to get started. These include how to use the VLE, how to navigate a module, the University e-library and how to join a webinar. BE Ready also provides practical advice such as how to manage independent study, where to find our Study Skills resources and how to access academic or pastoral support. All this information is key to having a successful start to supported online learning with the University of the Built Environment.

Resources are available to support students with referencing and how to develop good academic practice to avoid academic misconduct. A range of study skills support materials are available to apprentices.

Student learning support

The programme is taught via the University of the Built Environment's VLE and academic facilitation and support is provided online giving student's access to the University Lecturers and other students worldwide.

The Education team will guide and support students' learning. Furthermore, all students who do not engage with initial assessment or the VLE will receive additional support from the Programme Team. Other the University administrative teams provide support for assessments and technical issues including ICT. University of the Built Environment's VLE provides the main point of contact for students for these teams throughout the duration of their programme.

Each student, wherever their location, will have access to a wealth of library and online materials to support their studies. International students are able to use their local context when writing their assessments.

The Academic Support and Enhancement (ASET) team works with departments to promote student retention, achievement and success. This work is achieved through a multi-faceted approach, which consists of:

- delivering support tutorials to students identified as academically at risk to develop the academic skills needed for success;
- developing 'self-serve' support resources to enable students to develop their academic skills;
- delivering teaching webinars and drop-in sessions on academic skills;
- working with the Education team and other support teams to identify ways in which student success can be further facilitated.

Relevant research is also carried out to inform proactive interventions, and to develop policy and practice.

Disability, neurodiversity, and wellbeing related support is provided via a dedicated Disability and Welfare team at University of the Built Environment.

English language support

For those students whose first language is not English, or those students who wish to develop their English language skills, additional support is provided through online resources on the VLE in the resource 'Developing Academic Writing'.

The resource includes topics such as sentence structure, writing essays and guidance for writing aimed at developing students' study skills.

Personal and professional development

Students are undertaking vocational programmes that are intrinsically linked to the accrediting professional bodies. Students are encouraged and supported to understand the need for the recognition of these bodies and guided as to how to meet the professional membership requirements.

More generally, the University has a dedicated Careers Advisor to ensure students have appropriate access to careers education, information, advice and guidance.

Programme specific support

Each programme has a Programme Leader, as well as Module Leaders, Module Lecturers and Academic Support Tutors to support the students throughout their time with the Programme.

The University of the Built Environment staff are accessible during normal UK working hours, during which they also monitor the 24/7 forums asynchronously and provide encouragement, assistance and necessary tutor and student feedback services.

Access to the University of the Built Environment e-Library is on a 24/7 basis and the University has a full-time librarian during normal UK working hours.

In particular, the ADT programme will provide comprehensive technical support, including access to industry-standard design software, collaborative platforms, and virtual modelling tools. Technical support, hosted by specialists in the digital construction field, and within our IT infrastructure, will provide assistance to students with software troubleshooting, and support for hardware requirements.

This will be provided both in person and utilising appropriate media, hosted on the VLE, to ensure students with a diverse range of learning styles, needs and employment status are supported, both synchronously and asynchronously in the design studio.

Students will also have access to studio tutors who will support design and skills based workshops in virtual studios by using virtual platforms.