BSc (Hons) Architectural Technology

Programme Specification

1.	**Programme title**	BSc (Hons) Architectural Technology
2.	**Awarding institution**	Middlesex University
3a	**Teaching institution**	Middlesex University
3b	**Language of study**	English
4a	**Valid intake dates**	September
4b	**Mode of study**	FT / TKSW / PT
4c	**Delivery method**	☒ On-campus/Blended ☐ Distance Education
5.	**Professional/Statutory/Regulatory body**	Professional Body Accreditation – Chartered Institute of Architectural Technologists - CIAT
6.	**Apprenticeship Standard**	N/A
7.	**Final qualification(s) available**	BSc (Hons) Architectural Technology BSc Architectural Technology DipHE Architectural Technology CertHE Architectural Technology
8.	**Academic year effective from**	2024/2025

9. Criteria for admission to the programme
Admission to the BSc (Hons) Architectural Technology programme will require 112 UCAS tariff points from a flexible range of creative and technical subjects. Middlesex University's general entry requirements apply as outlined in the university regulations. Applicants whose first language is not English are required to achieve 6.0 in IELTS overall (with a minimum of 5.5 in each component) or an equivalent qualification recognised by Middlesex University. The equivalence of qualifications from outside the UK will be determined according to NARIC guidelines.

112 UCAS Tariff Points including GCSE: Grade 4/C in English and Mathematics

- A Levels – BBC
- BTEC – DMM
- Access requirements – Overall pass: must include 45 credits at level 3, of which all 45 must be at Merit or higher
- Combinations – A combination of A-level, BTEC and other accepted qualifications that total 112 UCAS Tariff points

We welcome applicants with a wide variety of educational experience including A/AS levels, BTEC National Diploma, International Baccalaureate and a large number of equivalent home and overseas qualifications. Applications from mature applicants with suitable life skills and experiences are also welcomed, highlighting our flexible admission criteria.

University policies supporting students with disabilities apply, as described in the University Regulations, 'Information for students with disabilities', ensuring an inclusive educational environment.

Direct entry to the programme will be considered on a case-by-case basis according to the Recognition of Prior Learning (RPL).

10. Aims of the programme

The programme aims to:

- **Educate and nurture graduates** with a breadth and depth of knowledge and skills to ensure they become conversant with the four core aspects of architectural technology (**Design, Technology, Management, Practice**) shaping around **innovations** in four main areas of technology:
    - **Sustainable technology** (reference to UN Sustainable Development Goals & Climate Framework)
    - **Information and digital technology** (reference to Digital Built Britain)
    - **Building technology** (reference to UK Building Regulations and Health, wellbeing & Safety)
    - **Inclusive technology** (reference to Equity Diversity, Inclusion & ethical/social responsibilities)
- **Address global societal challenges;** by embedding UN Sustainable Development Goals to the curriculum the programme provides an opportunity for students to contribute to solutions to global challenges such as climate action, sustainable cities and communities, responsible consumption, good health and well-being and more fostering understanding and reflection on the impact of our built environment and the construction industry (currently 40% of total global CO2 emissions) to our planet and people.
- **Support students to develop professional and ethical behaviour and attributes**, appropriate for the role of Architectural Technologist within the wider inter-disciplinary team that will prepare them for professional practice enhancing their career opportunities.

- **Stimulate students' interest and foresight into the changing context of the profession**, by focusing on the ultimate role of innovative technologies in creating a regenerative, sustainable, healthy and inclusive built environment to address the current societal challenges such as climate emergency in relation to the construction industry.
- **Equip and empower graduates with comprehensive and transferrable skills and mindset** to understand the changing role of architectural technologists and are prepared to be agents of change in their future career path.
- **Provide engaging learning environment and opportunities**, by using active pedagogies such as practice-based/real-case students develop skills including creativity, critical thinking, communication, and collaboration that allow them to explore their authentic interests and be change makers. This prepares graduates with a sense of purpose, responsibility and curiosity.
- **Foster an appreciation and commitment to lifelong learning;** By collaboration with industry, the programme maintains its current relevance and adapts to future change. This highlights the importance of continuous professional development and consultancy as well as research and scholarship in the practice of architectural technology.

11. Programme outcomes*

(Based on QAA Subject Benchmark and CIAT accreditation mandatory threshold standards)

A. Knowledge and understanding	**Teaching/learning methods**
On completion of this programme the successful student will have knowledge and understanding of: 1. Architectural technology and its role in relation to wider context of industry and how technological theories and innovations influence architecture. 2. Science and engineering of buildings, materials and components related to design for production and performance, tectonics, design and technical guides and material certification. 3. Principles of sustainability in the built environment, evaluating environmental performance of existing and new buildings. 4. Inclusive built environment, social well-being and ethical responsibilities that enable the diverse needs and requirements of all users and stakeholders to be recognised and included.	Students gain their knowledge and understanding of the four strands of the subject (Design, Technology, Practice and Management) through a dynamic mix of teaching, learning, and assessment strategies, centred around an active pedagogy designed to actively engage them and enhance their learning. To cater for the diverse cognitive styles of our students, the programme uses a variety of practice-based learning approaches and hands-on activities allowing students to apply their learning to their project work. These approaches and interactive sessions include: - Project-based learning - Real-case live projects such as MDX Living Pavilion - Using campus buildings as case study to enhance students' sense of belonging to the University - Laboratory-based IT classes - Industry challenges and competitions - Design workshops and creative exercises - Research-based and practice-led learning through visits and fieldwork

5. Building services engineering, environmental science and structural engineering related to design and performance throughout building life cycle. 6. Legal and regulatory frameworks for achieving inclusive, sustainable, and safe buildings using building regulations, health, wellbeing and safety requirements, quality assurance techniques and control systems. 7. Business and organisation structures, market needs, cost, safety, reliability, appearance, appropriateness of design for purpose including accessibility and inclusive design.	- Group and individual project work - Interactive guest talks delivered by industry professionals and course alumni Central to the teaching and learning approach is the ongoing engagement with the industry through guest talks, live projects, visits, staff teaching on the programme etc. This ensures programme and curriculum remain current and relevant and future-fit and has the additional benefit of supporting students in building their network. Central to the curriculum is addressing current societal challenges in relation to people and the planet such as climate emergency, EDI, health, well-being & safety and ethical practice with a particular focus on UN Sustainable Development Goals (UNSDGs). The curriculum is further informed by research and practice frameworks such as Climate Framework and Digital Built Britain. These equip and empower our students to address those challenges and be agents of change for a better more sustainable and inclusive world. Guided and independent study is highly promoted, complementing formal instruction. This self-directed exploration is supported by comprehensive resources such as key concept videos provided in advance, enhancing digital learning, and offering opportunities for students to deepen their understanding, explore topics more extensively, and adopt a global perspective. Academic advising plays a crucial role in this holistic educational approach, guiding students through their academic journey, fostering an inclusive learning environment, and highlighting opportunities for work-based learning and engagement with industry. This approach ensures that students not only gain a deep understanding of their subject but also remain well-being-focused, ready to apply their knowledge in a global context, and prepared for success in both academic and professional endeavours.

	Assessment methods Students' knowledge and understanding are assessed using a wide variety of assessment techniques, each carefully chosen to align with the specific objectives of our curriculum and to cater to the diverse learning styles and needs of our student body. This includes interactive assignments like presentations, petcha-kucha sessions, posters and debates through to recorded presentations, reports, technical drawings, models (physical, digital or virtual), and reflective blogs/videos and portfolios of work. We also use statutory reports and formal technical documentation as part of the assessment. These tasks not only assess students' understanding and ability to communicate complex ideas but also foster critical thinking and collaborative learning. Authentic assessment is part of the continual learning process and ongoing formative feedback is a key component to our assessment strategy. This includes approaches such as design reviews, peer feedback, weekly individual tutor feedback, interim submissions etc. Design Crit sessions with invited industry practitioners are used as formative and summative assessments enhancing the authenticity and ensuring students are continuously guided and supported in their learning.
B. Skills On completion of this programme the successful student will be able to: 1. Analyse the context and political, economic, environmental, social and technological aspects that inform and influence the practice of Architectural Technology nationally and internationally. 2. Evaluate and solve problems to realise the design into built form through the generation of detailed design solutions	**Teaching/learning methods** Students develop their skills within a stimulating and diverse teaching and learning framework, designed to nurture practical abilities, critical thinking, and teamwork. This dynamic setting encourages the acquisition of vital professional competencies through a blend of interactive sessions, guided learning, and academic advising. Weekly vertical studio sessions that are shared across 3 yearly cohorts, creating a diverse community of learners, and providing ample opportunities for peer learning and interaction.

that respond to familiar and unfamiliar situations. 3. Complete a sustainable and inclusive design project and conduct a research or systematic case study, informed by current topics and practices in the discipline including new and emerging digital and material technologies. 4. Demonstrate an awareness of building elements, components, systems, and methods used for different building typologies. 5. Develop an awareness of project and design management, project procurement and process, construction and contract management, knowledge and information management. 6. Identify hazards and risks and develop and maintain safe systems of work and legal and relevant legislation and regulatory frameworks for ethical practice. 7. Work independently and collaboratively as a member of a team, reflecting and identifying personal development needs and to plan to meet these needs through relevant and appropriate methods. 8. Communicate solutions effectively and analytically through a variety of methods such as in-person presentation, report writing, hand-drawing, computer-aided design, three-dimensional Modelling, Virtual and Augmented Reality.	Moreover, students learn practical and analytical skills through hands-on activities such as drawing and making physical and virtual models in workshop, studio and computer lab sessions. Weekly tutorials and interim submissions are integral to the teaching method. Practice-led curriculum is further informed by government construction strategy and statutory regulations. Using statutory documents as part of assessment and preparing a professional portfolio underpins our employability strategy. Students will also be trained and encouraged to participate in Digital Construction World Skills to increase their employment opportunities. Workshops, seminars and laboratory exercises immerse students in experiential learning, emphasising the application of knowledge to practical challenges and encouraging collaboration. This environment promotes active engagement and peer learning, deepening students' understanding of complex issues and fostering inclusive approaches to problem-solving. Projects, undertaken both individually and in groups, are key to our pedagogy. They provide a platform for students to engage with comprehensive tasks that mirror industry problems, demanding creativity, critical evaluation, and strategic thinking. These projects often incorporate global and employer perspectives, highlighting the relevance of sustainable development and the application of research-informed strategies. To prepare students for a collaborative working environment, group projects are introduced and assessed through group reports and presentations with an individual reflective short report to enhance their interpersonal and transferrable skills. With the aid of key concept videos provided in advance and a strong emphasis on digital learning, we offer a well-rounded educational

	experience. This approach not only ensures the acquisition of theoretical knowledge but also emphasizes the development of practical skills and competencies essential for success in the global marketplace. Through work-based learning opportunities and industry engagement, we prepare students for the realities of their future careers, all while maintaining a focus on health and well-being. **Assessment methods** Students' skills are assessed by employing a diverse array of practical and analytical methods tailored to measure their proficiency and application of learned competencies. To enhance communication skills, students are tasked with presenting technical material and expressing their insights through structured reports and project documentation. This practice not only refines their ability to present intricate data clearly and succinctly but also equips them for the demands of professional communication, including report writing and presentations. A cornerstone of our assessment strategy is the provision of continual formative feedback, including discursive feedback, which plays a pivotal role in students' ongoing learning and development. Students receive regular feedback during the scheduled weekly classes and tutorials, which are used to identify individual learning needs. Reflective writing as a means of self-assessment together with peer assessment methods is used to assess their teamwork and personal development. This varied feedback mechanism supports a reflective learning process, enabling students to iteratively improve their skills and understanding throughout their educational journey. The first year of the programme has a pass/fail outcome for each module using Student Observable Behaviours (SOBs). This is supported by extensive ongoing

	formative feedback and supports core skills development.

12. Programme structure (levels, modules, credits and progression requirements)

12.1 Structure of the programme

The below diagrams illustrate the programme structure in full-time and part-time modes.

All core modules run for 12 weeks, and level 4 modules are pass/fail only.

The placement module (PDE3250) can only be taken by students enrolled in the four-year sandwich degree programme and lasts for 36-48 weeks. On successful completion of the module, students are awarded a Diploma in Industrial Studies.

Programme Structure in Full-Time Mode

Year 1

- Semester 1 **–** PDE1315 Contextual Studies and Studio Practice (30 credits), PDE1316 Design Tools (30 credits)
- Semester 2 **–** PDE1811 Building Materials, Structures and Services (30 credits), PDE1817 Architectural Design and Technology (30 credits)

Exit award CertHE

Year 2

- Semester 1 **–** PDE2811 Building Science, Energy and Environment (30 credits), PDE2813 Digital Construction and Collaboration (30 credits)
- Semester 2 **–** PDE2317 Design and Engineering in Context (30 credits), PDE2817 Sustainable Design and Technology (30 credits)

Exit award DipHE

Year 3

PDE3250 Optional Thick Sandwich Placement Year (120 credits)

Year 3/4

- Semester 1 – PDE3806 Research and Innovation in Practice (30 credits), PDE3817 Regenerative and Inclusive Built Environment (30 credits)
- Semester 2 – PDE3823 Major project and Professional Practice (60 credits)

Exit award BSc (Hons)

Indicative Programme Structure in Part-Time Mode

Year 1

- Semester 1 – PDE1315 Contextual Studies and Studio Practice (30 credits)
- Semester 2 – PDE 1811 Building Materials, Structures and Services (30 credits)

Year 2

- Semester 1 – PDE1316 Design Tools (30 credits)
- Semester 2 – PDE1817 Architectural Design and Technology (30 credits)

Exit award CertHE

Year 3

- Semester 1 – PDE2813 Digital Construction and Collaboration (30 credits)
- Semester 2 - PDE2317 Design and Engineering in Context (30 credits)

Year 4

- Semester 1 – PDE2811 Building Science, Energy and Environment (30 credits)
- Semester 2 – PDE2817 Sustainable Design and Technology (30 credits)

Year 5

PDE3250 Optional Thick Sandwich Placement Year (120 credits)

***Year 5/6**

- Semester 1 – PDE3806 Research and Innovation in Practice (30 credits), PDE3817 Regenerative and Inclusive Built Environment (30 credits)
- Semester 2 – PDE3823 Major project and Professional Practice (60 credits)

Exit award BSc (Hons)

*Final year in part-time mode need to be studied in full time mode at least for the PDE3823 Major project module which is 60 credits.

12.2 Levels and Modules		
Level 4		
Compulsory	**Optional**	**Progression requirements**
Students must take all of the following: **PDE1315** [30 credits] Contextual Studies and Studio Practice **PDE1316** [30 credits] Design Tools	n/a	Students must pass at least 90 credits to progress to Level 5. This must include PDE1316 and PDE1817.

PDE1811 [30 credits] Building Materials, Structures and Services **PDE1817** [30 credits] Architectural Design and Technology		To achieve Honours, failed credit will need to be repeated. Students must pass all Level 4 modules to graduate with the named CertHE in Architectural Technology.
Level 5		
Compulsory	**Optional**	**Progression requirements**
Students must take all of the following: **PDE2813** [30 credits] Digital Construction and Collaboration **PDE2811** [30 credits] Building Science, Energy and Environment **PDE2317** [30 credits] Design and Engineering in Context **PDE2817** [30 credits] Sustainable Design and Technology	n/a	Students must pass at least 210 credits to progress to Level 6. This must include PDE2813 and PDE2817. To achieve Honours, failed credit will need to be repeated. Students must pass all level 4 and 5 modules to graduate with the named DipHE in Architectural Technology.
Level 6		
Compulsory	**Optional**	**Progression requirements**
Students must take all of the following: **PDE3806** [30 credits] Research and Innovation in Practice **PDE3817** [30 credits] Regenerative and Inclusive Built Environment **PDE3823** [60 credits] Major Project and Professional Practice	**PDE3250** [120 credits] TKSW Placement	For BSc (Hons) award, the student must pass all level 4,5,6 modules. Completion of PDE3250 leads to the award of Diploma in Industrial Studies

12.3 Non-compensatable modules	
Module level	**Module code**
6	PDE3823

13. Information about assessment regulations

This programme will run in line with general University Regulations.

Information on how the University's formal assessment regulations work, including details of how award classifications are determined, can be found in the University Regulations at

https://www.mdx.ac.uk/about-us/policies

All modules will require that your complete an amount of coursework as part of your assessment. Coursework can include written work, such as technical reports, problem-solving exercises, case studies, laboratory logbooks, projects, dissertations, portfolios of written work etc., however it can also include non-written work such as demonstrations, presentations, viva, etc.

Level 4 modules, which do not contribute to the final classification are awarded a Y grade (ungraded pass).

To pass a module, the overall module grade should be a minimum of 40% (with a minimum of 35% in each component).

For additional assessment information and how learning outcomes are assessed please refer to the individual module narratives for this programme.

14. Placement opportunities, requirements and support (if applicable)

Students in the TKSW mode take a placement (36 to 48 weeks) at the end of year 2. The university MDXworks Careers and Employability Service assists in the search for an employer and supports students to find and secure an appropriate Placement, and offers guidance before, during and after. The placement forms the basis for an assessed report and log book based on the organisation and activities undertaken. At the start of the placement, students are allocated an individual MDX supervisor who provides support and advice for the duration of the placement. Students who successfully complete the sandwich placement are awarded a Diploma in Industrial Studies.

15. Future careers/progression

The programme will prepare students for both employment and/or further postgraduate study across a variety of architectural, construction and building sectors. Accredited by the CIAT, our graduates exit the programme industry-ready with skills and mindset appropriate for contemporary architectural technology practice to address societal challenge issues such as climate emergency, decarbonisation of our built environment and UN Sustainable Development Goals.

The scope of opportunities for a BSc Architectural Technology graduate spans across the private, public and not-for-profit sectors. Graduates enter employment taking up positions

such as architectural technologist, BIM coordinator, BIM Modeler, Project Manager, Architectural Assistant, and Design Manager. They can further pursue a career as environmental designers and construction and site coordinators. Alternatively, students can set up their own businesses in architectural technology and related services. The transferable nature of the skill set (problem-solving, critical thinking, people skills etc.) means they can join other related disciplines.

The graduates can also proceed to an MSc to specialise in a related discipline for example our Building Information Modelling & Management. Previous graduates landed employment in some of the high-profile companies such as Arup, BPR, BPTW, BRE, Wates Group, and Emrys. We also have a platform to integrate with employers through our teaching team leveraging their network to create work and placement opportunities for our students.

We encourage and support our students to enter a variety of national and international competitions, such as Mayor of London Design Challenge and Digital Construction World Skills where our students won bronze and silver medals. The programme content is enriched through industrial engagement and collaboration, such as live projects with industrial partners, external competitions, industry practitioners running workshops and projects, and industrial placements. This will help reveal current opportunities and future trends in their relevant employment sector. Moreover, the programme incorporates comprehensive contextual studies and professional engagement opportunities, including guest talks from thought-leader industry professionals and academics, to deepen students' understanding of the built environment sector.

Our careers sessions with contributions from industry professionals, course alumni and the accreditation body (CIAT) provide regular support for our students in devising a strategic career plan and developing their exit portfolio, CV and online profile.

MDXworks Careers and Employability Service continues to support our students post-graduation, aiding their transition into the workforce and providing guidance for those considering further academic pursuits. This enduring commitment ensures our graduates remain at the forefront of technological innovation and leadership in the ever-evolving landscape of architectural technology.

16. Particular support for learning

The Faculty’s Teaching and Learning approach is used across the programme to promote learner autonomy and practice-based learning which are in line with the University’s general strategy.

In support of the students’ learning experience:

- Architectural Technology has a working relationship with University’s Estate which allows students to use Campus buildings as a platform for learning and research. Manifested in the creation and construction of MDX Living Pavilion - designed and developed from conception to delivery on campus by Architectural Technology students in collaboration with the University Estates team their framework consultants, Barnet Council and other industry professionals. It facilitated opportunities for student to work with students of other courses such as Photography, Graphic Design, Product Design, Design Engineering, Interior Architecture and Interior Design and more. The project was short-listed and runner up for the Guardian University Award in the category of Teaching

and Learning Excellence in 2020. Students continue to alter the structure in the next phases with the help of the University's academic, technical and professional team.

- The subject provides extensive studio, workshop and laboratory facilities on campus, where students can engage with their learning and coursework assignments in a supported and well-equipped environment. The Architectural Technology Studio is a core teaching and learning space for both timetabled classes and independent study that facilitates the development of professional practice. In addition, students have access to extensive 3D printing facilities on campus and access to industry-standard software both on campus and remotely.
- All new students go through an induction programme, and some have early diagnostic numeric and literacy testing before starting their programme. Library and Student Support (LSS) provides workshops for those students needing additional support in these areas.
- Students are allocated a personal email account and secure online storage.
- New and existing students are given module handbooks for each module they study. Copies of all module handbooks can be found on MyLearning, a web-based online learning platform where learning materials are provided to further support learning.
- Additionally, each student will receive a free core e-book for each module they study.
- Library services, including an excellent range of books, magazines and online databases (including industry standard resources such as UK Building Regulations, British and ISO Standards). The library team runs a series of workshops within the programme looking at finding information, using resources effectively, and LinkedIn Learning, and students are encouraged to use the library workspaces on campus and access the university Materials Room.
- Students can access advice and support on a wide range of issues from the UniHelp Student Information Desk, including Counselling & Mental Health, Welfare, and Financial Support.
- Middlesex Students' Union (MDXSU) helps students make the most of their time at Middlesex University through student-led groups, year-round events or free, independent advice.
- The Learning Enhancement Team are available to students to support them throughout their studies.
- Teaching staff are available for each subject offering personal academic advice and help if needed. Staff availability for this purpose is posted outside staff office doors.
- Students are also allocated Academic Advisor support and guidance throughout the entire duration of the Programme.
- Productive and informed support from technical staff is also available.
- Formative feedback is given throughout the modules at appropriate stages and on completion of coursework.
- Input from external industry expertise supports students' personal and professional development. This includes access to guest speakers, hourly paid staff in professional practice running projects and workshops, and connections to alumni from the programme.

- The MDXworks careers and employability service runs a series of timetabled sessions looking at employability skills such as developing a professional LinkedIn profile. Students are also encouraged to engage in their drop-in sessions to support CV development etc.
- Research activities of academic staff feed into the teaching programme, which can provide individual students with ad-hoc opportunities to work with academics on some aspect of research.
- We promote Equality, Diversity and Inclusion through an inclusive curriculum enabling collaborative learning experiences that promote teamwork, communication, and the exchange of ideas among students from diverse backgrounds. We assign group projects, discussions, and activities that foster collaboration, peer learning, and cultural exchange.
- Middlesex University encourages and supports students with disabilities. Some practical aspects of Science and Technology programmes may present challenges to students with particular disabilities. Students are encouraged to visit our campuses at any time to evaluate facilities and talk in confidence about their needs. If we know students' individual needs, we will be able to provide for them more easily. For further information contact the Disability Support Service (email: disability@mdx.ac.uk).

The following course-related costs are not included in the fees, and you may be required to purchase these to complete the course:

- A desktop computer or laptop with the capability to run programme-specific software (Revit/SketchUp/Enscape/Adobe Creative Cloud)
- Compulsory visits to architectural places of interest and exhibitions (travel costs only)
- Additional books/resources that you wish to purchase

17. HECos code(s)	100121 [Architectural Technology]

18. Relevant QAA subject benchmark(s)	QAA Architectural Technology subject benchmark statement (2022)

19. Reference points

- QAA UK Quality Code for Higher Education (2018)
- CIAT Accreditation Guidelines for Honours Degree Level Programmes (2021)
- CIAT Guidance for Mapping QAA Subject Benchmark Statement for Architectural Technology
- Middlesex University Policies: Academic Policy Statement APS 18: Curriculum Design
- Middlesex University Policies: Equality and Diversity Policy: Code of Practice 7: Curriculum, Pedagogy and Assessment
- Middlesex University: Inclusive Curriculum
- Middlesex University Learning Framework 2031
- Engineering Council UK Standard for Professional Engineering Competence, fourth edition

- Middlesex University Regulations
- Middlesex University Learning and Quality Enhancement Handbook (section 3)
- Education for Sustainable Development Guidance, Advance HE
- Education for Sustainable Development, A Roadmap, UNESCO
- Climate Framework
- Embedding Sustainability and Climate Literacy in Education and Professional Qualification: A Construction Industry Council Toolkit (2023)
- EPC Sustainability Toolkit (2024)
- RIBA Sustainable Development Outcome Guide
- Digital Built Britain, UK Construction Strategy
- Students, staff, external examiners, graduates and industry experts' feedback and comments

20. Other information

Please note programme specifications provide a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve if they take full advantage of the learning opportunities that are provided. More detailed information about the programme can be found in the rest of your programme handbook and the university regulations.

21. Curriculum map for BSc (Hons) Architectural Technology

This section shows the highest level at which programme outcomes are to be achieved by all graduates, and maps programme learning outcomes against the modules in which they are assessed.

Programme learning outcomes

Knowledge and understanding	
A1	Architectural technology and its role in relation to wider context of industry and how technological theories and innovations influence architecture
A2	Science and engineering of buildings, materials and components related to design for production and performance, tectonics, design and technical guides and material certification
A3	Principles of sustainability in the built environment, evaluating environmental performance of existing and new buildings
A4	Inclusive built environment, social well-being and ethical responsibilities that enable the diverse needs and requirements of all users and stakeholders to be recognised and included
A5	Building services engineering, environmental science and structural engineering related to design and performance throughout building life cycle
A6	Legal and regulatory frameworks for achieving inclusive, sustainable, and safe buildings using building regulations, health, wellbeing and safety requirements, quality assurance techniques and control systems
A7	Business and organisation structures, market needs, cost, safety, reliability, appearance, appropriateness of design for purpose including accessibility and inclusive design
Skills	
B1	Analyse the context and political, economic, environmental, social and technological aspects that inform and influence the practice of Architectural Technology nationally and internationally
B2	Evaluate and solve problems to realise the design into built form through the generation of detailed design solutions that respond to familiar and unfamiliar situations
B3	Complete a sustainable and inclusive design project and conduct a research or systematic case study, informed by current topics and practices in the discipline including new and emerging digital and material technologies
B4	Demonstrate an awareness of building elements, components, systems, and methods used for different building typologies
B5	Develop an awareness of project and design management, project procurement and process, construction and contract management, knowledge and information management
B6	Identify hazards and risks and develop and maintain safe systems of work and legal and relevant legislation and regulatory frameworks for ethical practice
B7	Work independently and collaboratively as a member of a team, reflecting and identifying personal development needs and to plan to meet these needs through relevant and appropriate methods
B8	Communicate solutions effectively and analytically through a variety of methods such as in person presentation, report writing, hand-drawing, computer-aided design, three-dimensional Modelling, Virtual and Augmented Reality

Programme outcomes														
A1	A2	A3	A4	A5	A6	A7	B1	B2	B3	B4	B5	B6	B7	B8
Highest level achieved by all graduates														
6	6	6	6	6	6	6	6	6	6	6	6	6	6	6

Module Title	Module Code by Level	A1	A2	A3	A4	A5	A6	A7	B1	B2	B3	B4	B5	B6	B7	B8
Contextual Studies and Studio Practice	PDE1315	x	x	x					x			x				
Design Tools	PDE1316					x	x					x	x			x
Building Materials, Structures and Services	PDE1811		x		x	x	x			x		x		x		
Architectural Design and Technology	PDE1817	x				x	x		x	x	x	x			x	x
Digital Construction and Collaboration	PDE2813	x					x	x					x			x
Building Science, Energy and Environment	PDE2811		x	x	x	x				x		x			x	
Design and Engineering in Context	PDE2317	x			x		x	x					x	x	x	
Sustainable Design and Technology	PDE2817	x		x	x	x	x		x	x	x	x		x	x	x

Research and Innovation in Practice	PDE3806	x	x	x	x	x		x	x	x	x	x	x		x	x
Regenerative and Inclusive Built Environment	PDE3817	x	x	x	x				x		x	x			x	
Major Project and Professional Practice	PDE3823	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x

Competency Matrix for UN Sustainable Development Goals mapping to the Architectural Technology programme modules:

Competency Matrix for UN SDGs mapped to Architectural Technology programme at Middlesex University, 2024

UN SDGs / Module	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
PDE1315	X	X		X					X			X	X		X		
PDE1316							X	X	X	X		X	X		X		
PDE1811						X	X		X			X	X	X	X		
PDE1817	X	X			X				X	X	X	X	X		X		
PDE2813								X				XX	XX		XX		X
PDE2811			X			XX	XX					XX	XX	XX	XX		
PDE2317	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
PDE2817	XX	XX	XX		XX		XX		XX	XX	XX	XX	XX		XX		
PDE3806			X		X	X	X		X		X	X	X	X	X	X	X
PDE3817	XX	XX	XXX	XX	XXX	XXX	XXX		XXX	XXX	XXX	XXX	XXX	XXX	XXX	XX	XX
PDE3823	XX	XX	XXX	XX	XXX	XXX	XXX		XX	XXX	XXX	XXX	XXX		XXX		XX

XXX	**Application & Creation**	A systemic level of understanding of UNSDGs and their interdependencies through practical application within discipline
XX	**Analysis & Evaluation**	An intermediate level of understanding through analysis and discussion of the relevant SDG
X	**Awareness & Appreciation**	An introductory / basic level of understanding of fundamental principles of the relevant SDG