

BA (Hons) Product Design

Programme Specification

1. Programme title	BA (Hons) Product Design
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
4c Delivery method	⊠ On-campus/Blended
	☐ Distance Education
5. Professional / Statutory /	Professional Body Accreditation - Institution of
Regulatory body	Engineering Designers (IED)
6. Apprenticeship Standard	N/A
7. Final qualification(s) available	BA (Hons) Product Design
	BA Product Design
	DipHE Product Design
	CertHE Product Design
8. Academic year effective from	2024/25

9. Criteria for admission to the programme

Admission to the BA (Hons) Product Design programme will require 112 UCAS tariff points from a flexible range of creative and technical subjects.

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

A Levels	BBC
BTEC	DMM
Access Requirements	Overal 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

All home students will be required to attend an interview with a portfolio of work, either in person or online. Overseas applicants will submit a portfolio of work for tutor review.

Guidance on the portfolio and interview can be found at https://www.mdx.ac.uk/courses/undergraduate/product-design

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.

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. Application from mature applicants with suitable life skills and experiences are also welcomed, where the portfolio of work can demonstrate existing skills appropriate to the subject, and interest in the discipline.

Advanced entry to the programme will be considered on a case-by-case basis.

10. Aims of the programme

The programme aims to:

- Produce professional, creative, competent and responsible product designers capable of engaging in contemporary product design practice and responding effectively to a variety of design opportunities.
- **Support students in developing their personal design practice** through practice-based learning, in practice-based environments (studio, prototyping facilities etc.) and the development of the appropriate knowledge, skills, attitudes and attributes required to enter the profession.
- Provide a supportive, encouraging and collaborative learning environment that allows students to explore and develop their creativity, critical thinking, communication and collaboration skills
- Engage in practice and problem-based learning, driven by interpretive pedagogies and the
 ongoing codification of professional practice, that develop the key employability skills of
 ownership of the problem, tenacity, intellectual curiosity and procedural autonomy.
- Develop a student's understanding of innovation, and an evidence-based approach to design practice and product development
- Provide opportunities for students to engage with contemporary design practice through industrial engagement and collaboration; building networks and experiences evidenced through graduate portfolios and connections
- Develop an appreciation and awareness of the role of a product designer in society, the professional landscape, and the importance of ethical and sustainable design practices

11. Programme outcomes

A. Knowledge and understanding

On completion of this programme the successful student will have knowledge and understanding of:

1. **Design Methods**: Apply knowledge of Design Methods, Design Management, Product Design Specifications, User-centred and inclusive design, Standards, Design codes of Practice and

Processes to broadly-defined problems (AHEP4 R1)

- 2. **Design Judgement**: Analyse and evaluate broadly-defined problems design ideas, problem solutions and designed products reaching substantiated conclusions (AHEP4 R4).
- 3. **Design Research**: Carry out intellectual and practical inquiry to address broadly defined problems, including manipulating information and utilising user feedback (AHEP4 R5).
- 4. **Design for Function**: Apply knowledge of mathematical, scientific, and engineering principles to broadly-defined problems. Have a practical knowledge of materials, manufacturing, assembly and product quality (AHEP4 R2).
- 5. **User Experience:** Utilise aesthetic concepts, anthropometry and usability interface design and ergonomics, using them to create appropriate emotional designs (AHEP R7).
- 6. **Sustainable Design**: Apply knowledge of Sustainable Design to broadly-defined problems including disassembly, repair, recycling. Some knowledge will be informed by current developments (AHEP4 R3).
- 7. **Legal Issues**: Identify and apply knowledge of legal matters relevant to product design including intellectual property and liability (AHEP R13).
- 8. **Ethics:** Identify and analyse ethical concerns and make reasoned ethical choices informed by professional codes of conduct (AHEP R16).
- 9. **Human Resource Management**: Demonstrate knowledge of human resource management, recognising the responsibilities, benefits and importance of supporting equality, diversity and inclusion (AHEP R15).

Teaching/learning methods

Students gain their knowledge and understanding of the subject through a variety of practice-based learning approaches including:

- Interactive guest talks
- Design workshops
- Creative exercises
- Project-based learning (from directed through to self-initiated and self-directed)
- Laboratory-based IT classes
- Visits
- Group and individual project work

Central to the teaching and learning is ongoing engagement with industry (through guest talks, live projects, visits, staff teaching on the programme etc.) to ensure the programme and curriculum remains current and relevant. This has the additional benefit of supporting each student in building their personal creative network.

Assessment methods

Students' knowledge and understanding are assessed through a series of creative tasks, ranging from portfolios of work, oral or recorded presentations, completed projects, physical or digital product prototypes or models, through to more formal design documentation.

Ongoing formative feedback is central to skills development within the subject and is embedded throughout each module as a core part of our design practice. This includes approaches such as creative conversation around ongoing project work, peer feedback, individual tutor feedback, interim submissions etc.

B. Skills

On completion of this programme the successful student will be able to undertake:

- 1. **Creative and logical Thinking:** Utilise broadly-defined techniques and practices of conceptual and embodiment design in the creation of novel designs. Use broadly defined creative ideation techniques and problem-solving tools (AHEP R6).
- 2. **Design Communication:** Demonstrate effective abilities at sketching, drawing, modelling (physical and virtual), and use of CAD in the design of products. Write effective reports (AHEP R11).
- 3. **Design Practice:** Carry out prototyping, including testing and validation, displaying ability to incorporate production and manufacturing knowledge (AHEP R8).
- 4. **Project Management:** Manage product design work including carrying out a significant, individual, complete product design exercise (from conception to physical realisation), taking responsibility for planning and management including deadlines. Plan and record personal professional development and involvement (AHEP R9).
- 5. **Team Working:** Carry out a significant collaborative product design exercise, including liaison with stakeholders and knowledge of team dynamics as a team member (AHEP R10).
- 6. **Costing:** Apply and evaluate commercial, financial and economic aspects of product design (AHEP R14).
- 7. **Risk and Security:** Use risk management processes to identify, evaluate and mitigate safety and other risks associated with projects or activities. Adopt holistic and proportionate approaches to mitigation of security and cyber-security risks (AHEP R12).

Teaching/learning methods

Our practice-based approach embeds students' skills within teaching and learning methods that focus on student engagement, participation and contribution.

Practical skills (sketching, problem solving, prototyping etc.) come through hands-on exercises and skills workshops, and this skill set is them implemented into design projects and associated activities. Concept videos are provided for all core topics.

The creation of, and the development within design projects builds a core design skill set of critical thinking, reflective practice, evaluation and iteration, and individual and collaborative activity, which develops within each year of study.

The development of their professional portfolio and exit profile underpins our employability strategy and embeds their skill set within their design practice.

In L4, each student develops a core skill set that allows them to engage in product design activity, in L5 each student develops the confidence and autonomy to engage in design practice, and in L6 this transitions to professional working practices.

Assessment methods

Students' skills are assessed through a series of creative tasks, ranging from producing portfolios of work, oral or recorded presentations, completed projects, physical or digital product prototypes or models, and engaging in goal-orientated or open-ended design tasks, through to more formal design documentation. Their reflective practice is embedded within project work and separate reflective activities that relate to their developing professional practice.

Ongoing formative feedback is central to skills development within the subject and is embedded throughout each module as a core part of our design practice. This includes approaches such as creative conversation around ongoing project work, peer feedback, individual tutor feedback, interim submissions etc.

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. This supports core skills development across the year, allowing opportunities for experimentation, taking risks, making mistakes. This enables students to take a proactive role in their enculturation into the programme, and learning what it means to practice as a product designer.

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. Part-time mode is available for existing students for progression purposes only.

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

The placement module (PDE 3250) 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 exit with a Diploma of Industrial Studies.

Full Time

Year 1 (Level 4)

Semester 1

PDE1315 Contextual Studies and Studio Practice (30 Credits)

• PDE1316 Design Tools (30 Credits)

Semester 2

- PDE1317 Design Projects (30 Credits)
- PDE1318 Design & Engineering Principles & Processes (30 Credits)

Exit Award: Certificate of Higher Education (CertHE) in Product Design

Year 2 (Level 5)

Semester 1

- PDE2315 Design and Manufacturing Tools (30 Credits)
- PDE2316: Design Methods, Processes & Practice (30 Credits)

Semester 2

- PDE2317 Design & Engineering in Context (30 Credits)
- PDE2806 Technical Prototyping (30 Credits)

Exit Award: Diploma of Higher Education (DipHE) in Product Design

Year 3 - PDE3250: TKS Work Placement (120 credits)

Year 3/4 (Level 6)

Semester 1

- PDE3255 Design Manifestation (30 Credits)
- PDE3806 Research and Innovation in Practice (30 Credits)

Semester 2

PDE3823 Major Project and Professional Practice (60 Credits)

Exit Award: BA (Hons) in Product Design

Part Time

Year 1 (Level 4)

Semester 1

PDE1315 Contextual Studies and Studio Practice (30 Credits)

Semester 2

PDE1318 Design & Engineering Principles & Processes (30 Credits)

Year 2 (Level 4)

Semester 1

• PDE1317 Design Projects (30 Credits)

Semester 2

• PDE1316 Design Tools (30 Credits)

Year 3 (Level 5)

Semester 1

PDE2315 Design and Manufacturing Tools (30 Credits)

Semester 2

PDE2317 Design & Engineering in Context (30 Credits)

Year 4 (Level 5)

Semester 1

PDE2316: Design Methods, Processes & Practice (30 Credits)
 Semester 2

PDE2806 Technical Prototyping (30 Credits)

Year 4 – TKSW Placement

Year 4/5 (Level 6)

Semester 1

- PDE3255 Design Manifestation (30 Credits)
- PDE3806 Research and Innovation in Practice (30 Credits)

Year 5/6 (Level 6)

Semester 2

PDE3823 Major Project and Professional Practice (60 Credits)

12.2 Levels and modules

Level 4

Compulsory

Students must take all of the following:

- PDE 1315 [30 credits] Contextual Studies & Studio Practice
- PDE 1316 [30 credits] Design Tools
- PDE 1317 [30 credits] Design Projects
- PDE 1318 [30 credits] Design & Engineering Principles and Processes

Optional

N/A

Progression requirements

Students must pass all modules in order to progress to level 5.

Students must pass all Level 4 modules to graduate with the named CertHE

Level 5

Compulsory

Students must take all of the following:

- PDE 2315 [30 credits] Design and Manufacturing Tools
- PDE 2316 [30 credits] Design Methods, Processes & Practice
- PDE 2317 [30 credits] Design & Engineering in Context
- PDE 2806 [30 credits] Technical Prototyping

Optional

N/A

Progression requirements

Students must pass all modules in order to progress to level 6.

Students must pass all Level 5 modules to graduate with the named DipHE.

Level 6

Compulsory

Students must take all of the following:

- PDE 3255 [30 credits] Design Manifestation
- PDE 3806 [30 credits] Research & Innovation in Practice
- PDE 3823 [60 credits] Major Project and Professional Practice

Optional

PDE 3250 [120 credits] TKSW Placement

Progression requirements

For BA (Hons) award, the student must pass all level 4,5,6 modules.

Completion of PDE 3250 leads to the award of Diploma of Industrial Studies

12.3 Non-compensatable modules

Module level – Level 6 Module Code – PDE3823

13. Information about assessment regulations

This programme will run in line with general University Regulations. https://www.mdx.ac.uk/about-us/policies

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). Due to professional body requirements, module compensation can only be granted for overall module marks of a minimum of 35%.

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 service 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 logbook 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.

15. Future careers / progression

The programme will prepare students for both employment and/or further postgraduate study across a variety of design sectors.

Accredited by the IED, our graduates exit the programme with a skill set appropriate for contemporary product design practice.

As a BA (Hons) Product Design graduate potential employers exist across the private, public and not-for-profit sectors. Graduates enter employment taking up positions including Industrial Designer, Product Designer, Service Designer, Interaction Designer, UX/UI Designer, Designer/Craftsperson, Creative Technologist, and more. Alternatively, students can set up their own businesses in a creative field. The transferable nature of the skill set (communication, problem-solving, critical thinking etc.) means that the transition is possible to adjoining creative disciplines.

The programme content is enriched through industrial engagement and collaboration, such as live projects with industrial partners, external competitions, hourly paid staff in professional practice running workshops and projects, and industrial placements. Students undertake contextual studies into contemporary design practice and interact with a variety of guest speakers from across the design and engineering professions. Through these experiences, they come to understand design in a commercial context, the nature and breadth of the design industry, and this can reveal current opportunities and future trends in their relevant employment sector. Students plan for their own career entry and are

supported in developing their exit portfolio, CV and online profile. MDXworks Careers and Employability Service provides continued support to students after graduation.

16. Particular support for learning

Meeting the learning outcomes of this programme requires active engagement and participation in the subject and all practical sessions, whether online or on campus. This is supported through regular contact with academic staff, productive and informed support from technical staff, support provided by Graduate Academic Assistants (GAAs) both in and out of timetabled teaching, Student Learning Assistants (SLAs) and the use of online learning materials where appropriate. 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 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 Product Design 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 through Apps Anywhere. Student licenses are provided for installation on home computers for Solidworks and the Adobe Creative Cloud suite.

The programme benefits from excellent resources and support from university services including:

- Library services, including an excellent range of books, magazines and online databases (including industry standard resources such as Mintel and British Standards). The Faculty Library Liaison Manager 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.
- The Learning and Enhancement Team are available to students to support their studies through bookable workshops and drop-in sessions and runs a series of workshops with students that support study skills such as working effectively in groups (level 4), through to academic writing skills (level 6).
- The MDXworks careers and employability service runs a series of timetabled sessions looking at employability skills such as developing a professional LinkedIn profile. Increased integration of their workshops is planned for 23-24. Students are also encouraged to engage in their drop-in sessions to support CV development etc.

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 (Solidworks/Adobe Creative Cloud)
- Compulsory visits to museums and galleries (travel costs only)
- Additional books/resources that you wish to purchase

17. HECos code(s) - 100050 [Product Design]

18. Relevant QAA subject benchmark(s)

- QAA Art & Design subject benchmark statement (2020)
- QAA Engineering subject benchmark statement (2023)

19. Reference points

- QAA UK Quality Code for Higher Education (2023)
- Middlesex University Regulations
- Middlesex University Learning and Quality Enhancement Handbook (section 3)
- 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 (2022)
- Engineering Council UK Standard for Professional Engineering Competence, fourth edition
- IED Engineering Design Specific Learning Outcomes for EC(UK) Accredited Degree Programmes
- 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 s/he takes 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 BA Film

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:

	loage and anaerotanang.
A1	Design Methods : Apply knowledge of Design Methods, Design Management, Product Design Specifications, User-centred and inclusive design, Standards, Design codes of Practice and Processes to broadly-defined problems (AHEP4 R1)
A2	Design Judgement : Analyse and evaluate broadly-defined problems design ideas, problem solutions and designed products reaching substantiated conclusions (AHEP4 R4).
A3	Design Research : Carry out intellectual and practical inquiry to address broadly defined problems, including manipulating information and utilising user feedback (AHEP4 R5).
A4	Design for Function : Apply knowledge of mathematical, scientific, and engineering principles to broadly-defined problems. Have a practical knowledge of materials, manufacturing, assembly and product quality (AHEP4 R2).
A5	User Experience: Utilise aesthetic concepts, anthropometry and usability interface design and ergonomics, using them to create appropriate emotional designs (AHEP R7).
A6	Sustainable Design : Apply knowledge of Sustainable Design to broadly-defined problems including disassembly, repair, recycling. Some knowledge will be informed by current developments (AHEP4 R3).
A7	Legal Issues : Identify and apply knowledge of legal matters relevant to product design including intellectual property and liability (AHEP R13).
A8	Ethics: Identify and analyse ethical concerns and make reasoned ethical choices informed by professional codes of conduct (AHEP R16).
A9	Human Resource Management : Demonstrate knowledge of human resource management, recognising the responsibilities, benefits and importance of supporting equality, diversity and inclusion (AHEP R15).

Skills:

B1	Creative and logical Thinking: Utilise broadly-defined techniques and practices of conceptual and embodiment design in
	the creation of novel designs. Use broadly defined creative ideation techniques and problem-solving tools (AHEP R6).
B2	Design Communication: Demonstrate effective abilities at sketching, drawing, modelling (physical and virtual), and use of
	CAD in the design of products. Write effective reports (AHEP R11).
В3	Design Practice: Carry out prototyping, including testing and validation, displaying ability to incorporate production and
	manufacturing knowledge (AHEP R8).
B4	Project Management: Manage product design work including carrying out a significant, individual, complete product design
	exercise (from conception to physical realisation), taking responsibility for planning and management including deadlines.
	Plan and record personal professional development and involvement (AHEP R9).

B5	Team Working: Carry out a significant collaborative product design exercise, including liaison with stakeholders and
	knowledge of team dynamics as a team member (AHEP R10).
B6	Costing: Apply and evaluate commercial, financial and economic aspects of product design (AHEP R14).
B7	Risk and Security: Use risk management processes to identify, evaluate and mitigate safety and other risks associated with
	projects or activities. Adopt holistic and proportionate approaches to mitigation of security and cyber-security risks (AHEP
	R12).

Programme Outcomes:

<u>ı rogi</u>	annin	Cutt	, OIII C	' •											
A1	A2	A3	A4	A5	A6	A7	A8	A9	B1	B2	B3	B4	B5	В6	B7
Highes	st level	achiev	ed by	all grad	duates										
6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6

Module Title	Module Code	A1	A2	A3	A4	A5	A6	A7	A8	A9	B1	B2	В3	B4	B5	В6	B7
	by Level																
Contextual Studies & Studio Practice	PDE1315						Х					Х					
Design Tools	PDE1316											Х	Х				
Design Projects	PDE1317	Х	Х	Х							Х			Х			
Design & Engineering Principles & Processes	PDE1318				Х							Х	х		х	Х	
Design and Manufacturing Tools	PDE2315											Х	Х				
Design Methods, Processes & Practice	PDE2316	Х	Х	х		Х	Х				х	Х		Х			
Design & Engineering in Context	PDE2317							Х	Х	х						Х	Х
Technical Prototyping	PDE2806				Х								Х				
TKSW Placement	PDE3250	Х	Х								Х	Х					
Design Manifestation	PDE3255		Х				х		х				х		х		
Research and Innovation in Practice	PDE3806			х				х									

Major Project and Professional	PDE3823	Х	Х	Х	Х		Х	Χ	Х	Х	Χ	Χ	Х
Practice													1

UN Sustainable Development Goals mapped to the programme modules:

UN SDGs Mapping to Modules	1.No Poverty	2.Zero Hunger	3.Good Health and Well- being	4.Quality Education	5.Gender Equality	6.Clean Water and Sanitation	7.Affordable and Clean Energy	8.Decent Work and Economic Growth	9.Industry, Innovation and Infrastructure	10.Reduced Inequalities	11.Sustainable cities and communities	12.Responsible consuption and production	13.Climate Action	14.Life Below Water	15.Life on Land	16.Peace, Justice and Strong Institutions	17.Partnerships for the Goals
PDE1315	х	х	х		Х		х	Х	х			х	х		х	х	Х
PDE1316																	
PDE1317			х									х					
PDE1318									х			Х	х		х		
PDE2315												Х					
PDE2316			х		Х			Х	х			Х	х		х		
PDE2317	х	х	х	Х	Х	Х	х	Х	Х	Х	х	Х	х	х	х	х	Х
PDE2806												Х					
PDE3255			х		Х							Х	х		х		Х
PDE3806									х			х	Х			Х	Х
PDE3823			х					Х	х			х	Х		Х		