PROGRAMME SPECIFICATION

This Programme Specification is correct as of the date indicated; however, minor amendments may be made throughout the year and will be incorporated in the annual updating process.

SECTION A: DETAILS OF THE COURSE AND AWARD

Programme Title	**BSc(Hons) Product Design** **BSc(Hons) Product Design with Foundation Year** **BSc (Hons) Product Design (Top-Up)**
Awarding Body	**Buckinghamshire New University**
Teaching Institution/ Location	**Buckinghamshire New University, High Wycombe**
Name of Final Award	**Bachelor of Science with Honours, BSc(Hons)**
NQF/FHEQ Level of Qualification	**Level 6: Bachelor's Degree with Honours**
QAA Benchmark Statement	**Art and Design (2017)**
UCAS Code	**HW72**
Course Code	**BD3PRS1** **BD3PRS4 (with Foundation Year)** **BD6PRS1 (Top-Up)**
Mode of Delivery	**Full Time**
Length of Study	**3 years** **4 years with Foundation Year** **1 year Top-Up**
Number of Intakes	**1: September**
Regime of Delivery	**Campus Based**
Language of Study	**English**
Details of Accreditation	**Institution of Engineering Designers at RProdDes level**
Publication Date	**01 January 2018 / August 2019 / July 2020 / August 2021**

Programme Introduction

This degree course offers students the opportunity to study Product Design so that they are in a position to follow career ambitions within the profession or progress to postgraduate studies upon graduation. It enables students to successfully design innovative and functional products that include a successful interface between products and users. The aim of the course is to create designers with advanced design knowledge and skills who are able to consider, incorporate and communicate their knowledge and apply their skills in the professional development of products. By working through a sequence of challenging projects, students acquire a wide range of creative and technical skills, which enable them to complete design projects from the stages of client consultation through to final product presentation. By studying on this course students develop as multi-disciplinary designers who also focus on a particular area of Product Design by the time of their final major project in the third year. A BSC Product Design student will tend towards a technologically innovative approach, backed up with a sound understanding of cultural insight and user behaviour.

Distinguishing Features and Key Characteristics of the Programme

This award will provide students with a varied and exciting educational experience that prepares them to pursue various career options upon graduation. The programme is designed so that students gain

all of the necessary creative and technical, research, design and presentation skills needed to work within product design practice. The course is situated within the Faculty of Design, Media and Management giving students access to resources including CAD suites, CAD/CAM, libraries and production facilities, laboratories and a wide range of workshops. In addition, students benefit from studying Critical and Historical studies modules AD402, AD502, AD602 in mixed-discipline groups with students from courses across the School of Art & Design, to enlarge their engagement with historical and theoretical contexts in the wider fields of art and design. While on the course, students will benefit from working on live, client-led projects that will introduce them to professional practice. The course offers annual study tours to New York and Europe to provide an international context.

Distinguishing Features

- Accreditation through the Institution of Engineering Designers (IED) at RProdDes (Registered Product Designer) level, with free student membership of the IED
- Access to a wide range of workshops, materials and facilities across the School of Art & Design and the wider Faculty of Design, Media & Management
- Live project briefs from a wide range of industrial partners and collaborators
- Dedicated studio spaces for the development of a creative and supportive design culture amongst the students and to help foster a learning community
- Dedicated design studio and workshop staff for each design course and workshop area

Admission Requirements

For BSc(Hons) Product Design (3 year):

- **Entry qualifications** Students will be expected to hold a minimum of five GCSEs, including mathematics and English language at C or above, together with three A levels including an art and design subject. Entry may be direct from school or with a Foundation Art and Design Diploma qualification or an equivalent BTEC qualification, or Tech levels and Applied General Qualifications (AGQs) in relevant disciplines.
- **Non-academic entry requirements** All students will be interviewed for entry and the interview will be based around their art and design work.
- **UCAS points** A standard points offer of 80-96 points will be made to those students who have attended an interview and met the required standard. Those students who have shown exceptional previous work or otherwise performed exceptionally at interview may be eligible for an unconditional offer.
- **IELTS** International students will be expected to have a language ability to IELTS level 6 or above. Interviews may be conducted via Skype or electronically for students unable to attend interview.
- **Knowledge and Skills** All students will be required to demonstrate a practiced creative ability with skills in practical application of design skills such as drawing, use of digital tools, 3D manipulation of materials, and analytical ability.
- **Recognition of Prior Learning** Entry with advanced standing will be available at Levels 5 and 6 of the undergraduate provision to students who have developed appropriate skills from a variety of areas such as a Foundation Degree, mature students with prior experience and experiential learning, or transfers from other courses of study. The University's APL Policy will apply. Selection will be by interview with a portfolio, or other evidence of ability to succeed in the subject. All students will be required to demonstrate a practiced creative ability with skills in practical application of design skills such as drawing, use of digital tools, 3D manipulation of materials, and analytical ability.

For BSc(Hons) Product Design with Foundation Year:

Applicants who do not meet the minimum requirements for the 3-year programme, or those who do not feel fully prepared for a Level 4 course, will be considered for the 4-year programme including a Foundation Year. This could also be an option for a student who may be making a significant change in terms of the subject they would like to study. The 4-year programme provides a student with a solid grounding into University life, developing key study and employability skills as well as core subject knowledge to support progression onto their next three years of study.

It is expected that applicants to the 4-year programme will likely possess a lower UCAS Tariff score than that required to join Level 4 of the 3-year BA (Hons) Degree programme, but will normally have achieved 90 credits from a Level 3 qualification. Mature Students with no recent or advanced level qualifications, will be assessed for entry based on their work experience and may be subject to interview. International students should hold an IELTS of 5.5 (minimum of 5.5 in all areas). And international students with IELTS 6 or below will have to undertake an enhanced curriculum in addition to the advertised programme. Applicants will normally be interviewed, particularly where reassurance is required with regards to their motivations, ambitions and abilities, and in order to establish their potential to be a successful student at this level.

For BSc (Hons) Product Design (1 Year Top-Up)
This Level 6 programme is also offered as a Top Up qualification for students who have completed a HND, FdA or other equivalent qualification in a relevant Art and Design subject and who wish to progress further to achieve an Honours degree. The major project and dissertation are seen as a culmination of studio practice and theoretical development. They provide the framework for students to undertake a sustained independent investigation in specialist areas of focus within their subject. Additionally, the course supports students in their professional development, preparing them for future careers in the creative industries.

Employability Statement/Career Prospects

Graduates of this programme will be eligible to become members of the Institution of Engineering Designers and Registered Product Designers (RProdDes). They will also have partially completed the academic requirements for becoming a Chartered Product Designer (CTPD) and be eligible for entry into a master's programme in Product Design in order complete the educational requirements. Upon graduation, students may gain employment within the following areas:

- Product and Industrial Designer
- Automotive designer
- Model maker
- Design Engineer
- Exhibition, Display and Event Designer
- Furniture and Kitchen Designer
- CAD Visualiser and Technician
- Production and Set Designer
- Prop Designer and Maker, Art Director

Graduates may become self-employed or be employed in practices that may range in size from large companies to SMEs and small partnerships. For students wishing to extend their studies we offer an MA Art and Design Practice with a pathway in Product Design. Students may also study PGCE courses upon completion of this award. The students receive access to the university Careers Service throughout their studies, with focused sessions on applications, career searches, online presence and promotion of creative outcomes. Employment opportunities of relevance to students are placed on the website and highlighted to teaching staff. This support continues for two years after graduation.

Professional Statutory and Regulatory Body Accreditation
This programme is accredited with the Institution of Engineering Designers (IED) at RProdDes level. Founded in 1945, Chartered in 2012, the IED is the premier membership body representing engineering and product designers. They aim to support and inspire members to achieve their career goals and professional aspirations. Students receive free membership of the IED and access to a database of practised designers offering placement and employment opportunities. Students also have access to a range of events such as the annual Engineering & Product Design Education (E&PDE) Conference, industrial visits, lectures and exhibitions.

SECTION B: PROGRAMME AIMS, OUTCOMES, LEARNING, TEACHING AND ASSESSMENT METHODS

Programme Aims

The main educational aims of the programme are to:

- Provide students with a stimulating learning programme that will give them a broad and varied educational experience within product design.
- Introduce students to the wide range of skills, techniques, strategies and methods that will allow them to realise and communicate their full creative potential.
- Allow students to develop a sound basis for research and review that will enable them to gain specific skills and transferable knowledge applicable to academic work and to future roles.
- Encourage students to plan personal development, and improve their capacity to understand and apply what they are taught and help to review, plan and manage their learning.
- Provide students with the confidence to undertake further study and prepare them for the lifelong learning and continuous professional development through subsequent careers
- Ensure that by the end of the course students are aware of their particular ambitions, abilities and potential, so that they can enter the area of product design or related professional areas
- appropriate to their ambitions.
- Provide students with the ability to critique, interpret, evaluate and apply social and cultural meaning, and professional context, and synthesise these into the creative development and commercialisation of new products
- Equip students with the skills and knowledge to efficiently present to professional clients with a clear understanding of market, costing, pricing, manufacturing/technology implications of batch/mass production, protection and exploitation of intellectual property rights

Table 1: Programme Learning Outcomes and Mapping to Modules

On successful completion of Level 6 BSc(Hons) Product Design, a graduate will be able to:

Programme Learning Outcomes				
		Core Module Level 4	**Core Module Level 5**	**Core Module Level 6**
K	**Knowledge and Understanding**			
K1	Apply knowledge of Product Design concepts and theories to practical work	PD406 PD407	PD506 PD508	PD605 PD606 PD608
K2	Demonstrate a detailed and sophisticated knowledge of the historical and contemporary context of the subject area		AD502	AD602
K3	Apply research and analysis to the design process so that creative, innovative and commercial solutions may be developed, protected and exploited	PD406 PD407	PD506 PD508	PD605 PD606 PD608
K4	Communicate effectively as a design thinker and practitioner with an informed, critical insight into their own work within the context of the broader field of art and design		PD508 AD502	PD605 PD606 PD608 AD602
K5	Respond to different design challenges and devise programmes of work which will result in successful and timely resolution	PD406 PD407	PD506 PD508	PD605 PD606 PD608

Programme Learning Outcomes				
		Core Module Level 4	**Core Module Level 5**	**Core Module Level 6**
C	**Intellectual / Cognitive Skills**			
C1	Produce written interpretations of design briefs and be able to illustrate these with appropriate references	PD407 AD402	PD508 AD502	PD605 PD608 AD602
C2	Explore initial ideas intuitively and conceptually using different 2D and 3D media	PD405 PD406 PD407	PD505 PD506 PD508	PD605 PD606 PD608
C3	Employ design methodologies and be able to present a range of design solutions to a particular challenge			PD605 PD608 PD608
C4	Have the ability to be positively self-analytical and to solve design problems in practical and conceptual ways	PD406 PD407	PD506 PD508	PD605 PD606 PD608
C5	Apply literacy, numeracy and analysis to design processes		PD505 PD506 PD508	PD605 PD606 PD608
C6*	Create a sustained piece of analytical, contextual, creative and visually literate work			AD602
P	**Practical Skills**			
P1	Demonstrate working proficiency in a range of materials and manufacturing processes	PD406 PD407	PD506 PD508	PD605 PD606 PD608
P2	Communicate development stages of design projects through accurate drawings, realistic visualisations, models and working prototypes		PD505 PD506 PD508	PD605 PD606 PD608
P3	Effectively apply a range of ICT and TCT technologies to a wide range of design tasks			PD605 PD608
P4	Specify materials, processes, components, and products to meet complex requirements	PD406 PD407	PD506 PD508	PD605 PD606 PD608
P5	Analyse existing products and components using a range of design methods, suggest improvements, and evaluate their success		PD508	PD605 PD608
T	**Key/Transferable Skills**			
T1	Devise schedules for design projects, work independently, ethically, meet deadlines and costs		PD506 PD508	PD605 PD606 PD608
T2	Respond to feedback and work as part of a multidisciplinary team through collective and creative engagement and collaboration			PD605 PD606 PD608

Programme Learning Outcomes				
		Core Module Level 4	**Core Module Level 5**	**Core Module Level 6**
T3	Effectively communicate and present complex work in a variety of situations and methods		PD505 PD506 PD508	PD605 PD606 PD608 AD602
T4	Employ a wide range of information and communication technologies effectively	PD405 PD407 AD402	PD505 PD508 AD502	PD605 PD606 PD608
T5	Use design research to develop creative, useful and useable solutions, realised through a range of creative and technical 2D and 3D skills		PD506 PD508	PD605 PD606 PD608
T6*	Understand how your emerging art or design practice relates to wider cultural, social, political, critical, technical or commercial contexts			AD602

Outcomes specifically linked only to the (Hons) requirement (dissertation) are indicated with a *
On successful completion of a Level 6 Ordinary degree,
Graduates will have achieved the majority of the learning outcomes specified above for the full Honours award with the exception of those marked with a *.

The above learning outcomes will be demonstrated by the achievement of a combined total of 300 credits comprising 120 credits at Level 4, 120 credits at Level 5 and 60 credits at Level 6 from the following modules (excluding the dissertation or equivalent):

Level 4: PD405, PD406, PD407, AD402

Level 5: PD505, PD506, PD508, AD502

Level 6: PD605, PD606, PD608

On successful completion of Level 5 DipHE, a graduate will be able to demonstrate achievement of the following learning outcomes:

- Apply knowledge of Product Design concepts and theories to practical work
- Demonstrate a detailed and sophisticated knowledge of the historical and contemporary context of the subject area
- Apply research and analysis to the design process so that creative, innovative and commercial solutions may be developed, protected and exploited
- Communicate effectively as a design thinker and practitioner with an informed, critical insight into their own work within the context of the broader field of art and design
- Respond to different design challenges and devise programmes of work which will result in successful and timely resolution
- Produce written interpretations of design briefs and be able to illustrate these with appropriate references
- Explore initial ideas intuitively and conceptually using different 2D and 3D media
- Have the ability to be positively self-analytical and to solve design problems in practical and conceptual ways
- Apply literacy, numeracy and analysis to design processes
- Demonstrate working proficiency in a range of materials and manufacturing processes
- Communicate development stages of design projects through accurate drawings, realistic visualisations, models and working prototypes
- Specify materials, processes, components, and products to meet complex requirements

- Analyse existing products and components using a range of design methods, suggest improvements, and evaluate their success
- Devise schedules for design projects, work independently, ethically, meet deadlines and costs
- Effectively communicate and present complex work in a variety of situations and methods
- Employ a wide range of information and communication technologies effectively
- Use design research to develop creative, useful and useable solutions, realised through a range of creative and technical 2D and 3D skills

The above learning outcomes will be demonstrated by the achievement of a combined total of 240 credits comprising 120 credits at Level 4 and 120 credits at level 5 for this programme.

On successful completion Level 4 Cert HE, a graduate will be able to demonstrate achievement of the following learning outcomes:

- Apply knowledge of Product Design concepts and theories to practical work
- Apply research and analysis to the design process so that creative, innovative and commercial solutions may be developed, protected and exploited
- Respond to different design challenges and devise programmes of work which will result in successful and timely resolution
- Produce written interpretations of design briefs and be able to illustrate these with appropriate references
- Explore initial ideas intuitively and conceptually using different 2D and 3D media
- Have the ability to be positively self-analytical and to solve design problems in practical and conceptual ways
- Demonstrate working proficiency in a range of materials and manufacturing processes
- Specify materials, processes, components, and products to meet complex requirements
- Employ a wide range of information and communication technologies effectively

The above learning outcomes will be demonstrated by the achievement of 120 credits listed at Level 4 for this programme.

Learning, Teaching and Assessment Methods to achieve the Programme Learning Outcomes

How will students learn

Studio Projects
Product Design students learn through sequences of projects which enable them to gain skills and knowledge. Projects are designed to present new challenges to students as they progress through the course and involve working with varied sites, clients and requirements. All projects commence with an oral introduction to a written brief, which guides students through the subsequent stages of research and analysis, design development and final presentation. Students record their work and keep a portfolio from the first year onwards.

Lectures
Students receive lectures that are specific to their Product Design projects and these take place within the designated studio for the course. In addition, students benefit from a rich and varied programme of Critical and Historical Studies lectures, looking at the history and theory of art and design in ways which are both useful and stimulating. All lectures are designed to inspire and inform students in a cross disciplinary environment and to instigate discussions.

Tutorials
Students may have tutorials which are individual or in small groups and these help students to focus on evaluating their studio and written work and in identifying directions for study and research. Tutors will question and advise students, presenting alternatives and questioning decisions, in order to help students to realise their full potential and to develop critical and evaluative skills.

Seminars
Seminars enable open discussion between students and their tutors. Students are encouraged to question, test their knowledge and to listen to other's points of view, thus enabling their critical abilities to develop. The seminar ranges from large group formal sessions to informal small discussion groups and is usually directed by a studio tutor. Critical and Historical Studies mixed-discipline seminars encourage students to make conceptual connections with other areas of art and design practice.

Group Critiques
The formal critique (crit) when students are required to display their work to a panel of tutors and their peers is considered central to the student learning experience. The process encourages students to become increasingly articulate and confident when discussing their work and prepares students for client presentations when they enter practice. The crit is seen as an important forum not only for critical appraisal but also for debate and discussion among the panel, and as an opportunity for students to question the opinions of their tutors.

Self-directed study
Students have to engage in independent working and develop project management and time management skills in connection with both studio and classroom activities. Self-directed study is essential to successfully managing and achieving programme learning outcomes.

Personal Development Planning
Students across all three levels of the course are required to record their work as they progress through sequences of projects. 2D and 3D artefacts in different media are photographed and documented so that an ongoing digital portfolio is kept. Aspects of design practice such as site visits and collaborations with clients or colleagues on other courses are also documented. PDP Portfolios encourage students to employ self-evaluation skills and critically reflect upon the learning outcomes for projects and the connections between studio and written work.

The Studio
Although Product Design students learn within CAD suites, workshops, libraries and lecture theatres across the campus, they are based in the designated studio for the course. It is in the studio that learning and teaching activities for design projects take place. External clients who work with students on live projects will visit the studio for reviews of work as well as students from other courses who are collaborating on projects with students. The studio encourages professional learning as it mirrors practices in the profession and enables peer learning.

CAD
Computer aided design is an essential skill for Product Design students to acquire and apply to project work. Students learn a range of 2D and 3D programmes and related TCT technologies through structured lessons in CAD suites within the Gateway Building of the campus. There are computers within the designated studio for the course and students have access to CAD support sessions outside the times of their timetabled lessons.

Workshops
Students receive inductions so that they are able to use the extensive range of workshops on the campus including wood, silver metal, plastic, engineering metal, ceramics, print, fashion and textiles, to make presentation pieces for projects. We have CAD/CAM machines, rapid prototyping and laser cutting facilities, and photographic, film and video facilities, with technicians who will assist students to use them.

Virtual Learning Environment (Blackboard)
The course will use the VLE throughout the teaching of modules. Project briefs, lecture notes, and supporting information including videos or recordings of lectures, Power Point presentations and study skills guides are made available and students will be encouraged to research information across year groups.

Study Visits and Tours
The Course Team arranges visits to galleries, museums and lectures as well as visits to sites of historical and contemporary interest. Many of these study visits are to London where members of the Course Team are engaged in practice and introduce students to their clients, contacts and project

sites. The course offers an annual study tour to New York. This tour is primarily for Level 5 students, although some students make subsequent return visits to conduct further research, particularly for Final Major Projects. Should any Level 5 student not wish to travel to New York, then alternative activities are available which deliver the same learning outcomes.

Student Support
The Learning Development Unit is available to support students wishing to enhance their study skills and students with learning difficulties such as dyslexia are supported by the Disabilities Unit. Students also receive support through the Student Experience Directorate which offers career and financial advice, as well as counselling.

Institution of Engineering Designers
The course has been designed to meet the accreditation requirements for RProdDes membership of the Institution of Engineering Designers (IED). The IED provide professional support and advice for students and graduates of accredited courses, as well as organising regular visits, conferences, student prizes and other activities to encourage and motivate students, and to help develop their subsequent careers in Product Design.

How will students be assessed

A wide variety of assessments will be used to assess taught material which takes account of the different assessment preferences among students (i.e. some students prefer essays to exams) and will carry appropriate assessment weighting. These assessments will include essays, laboratory or field reports, presentations, practical exams, time-constrained assessments (TCAs), short-answer and essay type exams, portfolios, lab manuals, lab and case study reports and reflective written assignments.

Formative Assessment
Across all three levels of the course, students receive oral and written formative feedback at informal and formal stages. This feedback is intended to direct students towards achieving results at summative stages which will have been successfully evolved and resolved. Formative feedback is delivered to students during personal one-to-one tutorials, group tutorials, seminars and group critiques. Students contribute informal peer assessment during group tutorials and seminars and discuss each other's work in a constructive manner, as they would do in practice. Formative assessment includes suggestions as to how design projects might best progress and students will be given references that they should investigate further.

Summative Assessments
At summative assessment stage in the studio, students receive oral feedback from at least two of their tutors, and usually during a group critique for a project. Students engage in informal peer feedback during group critiques as well as self-evaluation. Following a group critique, students receive a mark and a written report. Should students require any further discussions about aspects of their summative assessment, then these will take place with the relevant tutors. Summative assessment marks relate to the assessment criteria for the course and students receive briefings about all aspects of assessment at the onset of each academic year. Summative assessment in some modules will consist of a written examination. The examination will assess students' knowledge of the material covered in the module and questions will require short or multiple choice answers. Some laboratory based modules will assess using a practical examination method where an experiment will be conducted over a short set time frame.

In the third year, the summative assessment for the research dissertation will be the preparation and submission of a dissertation on an approved subject related to product design in a standard dissertation format of 6-8000 words, or an alternative format dissertation that is the direct equivalent in terms of academic rigour.

Work-Based / Placement Learning

N/A

SECTION C: PROGRAMME STRUCTURE AND MATRIX MAPPING

Table 1: Programme Structure Table

Course Title	BSc(Hons) Product Design			
Course Code	BD3PRS1 / BD3PRS4 (with Foundation Year) / BD6PRS1 (Top-Up)			
Mode of Study	Full Time Attendance			
Credit Value	**UK**	360	**ECTS**	180

Module Code	Module Title	QCF/FHEQ Level	Course Stage / Year	Status in Award	Credit Value	Assessment Regime			Semester Taught
						Written Exam %	Coursework %	Practical %	
FY026	Preparing for Success Knowledge and Creativity	0	1	C	n/a		100		1/2
FY027	Preparing for Success Self-development and Responsibility	0	1	C	n/a		60	40	1/2
FY028	Inquiry Based Learning	0	1	C	n/a		100		1/2
FY041	Introduction to Design and Development	0	1	C	n/a		100		1/2
PD405	Design Communication	4	1	C	30		100		SB
PD406	Materials & Processes	4	1	C	30		100		SB
PD407	Design Projects 1	4	1	C	30		100		SB
AD402	Historical & Critical Thinking	4	1	C	30		60	40	SB
PD505	Design Visualisation	5	2	C	30		100		SB
PD506	Applied Production & Manufacture	5	2	C	30		100		SB
PD508	Professional Studies in Product Design	5	2	C	30		100		SB
AD502	Design Research & Theory	5	2	C	30		100		SB
PD605	Design Projects 3	6	3	C	30		100		1
PD606	Design for Manufacture	6	3	C	30		100		2
PD608	Major Project	6	3	C	30		100		2
AD602	Dissertation	6	3	C	30		100		1

Foundation year modules only apply to the “with Foundation Year” version of this programme. Top-Up students will study Level 6 modules only.

Table 3: Breakdown of Contact Hours

	Scheduled Learning and Teaching Activities	Guided Independent Study	Placement / Study Abroad	Total
Year One	421	779		**1200**
Year Two	390	810		**1200**
Year Three	306	894		**1200**
Total	**1117**	**2483**		**3600**

SECTION D: ASSESSMENT REGULATIONS

This programme conforms with the approved University regulations, University Academic Framework and Assessment Regulations and procedures as detailed on the University website.

- The classification of degrees will be decided by the weighted average of Level 6 modules only (120 credits). There will be no marks carried forward from Levels Four or Five although students must receive academic credit for these modules consistent with normal regulations.
- Level Six students must pass both AD602 Dissertation as well as modules PD605 Design Projects 3 and PD608 Major Project. These modules may not be condoned.

The following modules may not be condoned:
- PD605, PD608 and AD602

The following coursework assessments may not be condoned:
- PD508 CW2 must be passed at 40% or above for L6 entry and may be used to inform course transfer decisions between BA and BSc routes on Product Design.

This programme will be covered by the following University regulations: University Academic Framework and Assessment Regulations

Referral Opportunities

Students will have viable resit opportunities available during the University's standard referral period. Where referral work requires the use of specialist resources such as workshops or laboratories then these will be made available to students during the referral period.

Exit Awards Available

Exit Award Type	Award Title	Credits Achieved
Certificate of Higher Education	Product Design	120 Credits
Diploma of Higher Education	Product Design	240 Credits
Ordinary Degree	Product Design	300 Credits

SECTION E: FURTHER INFORMATION

Reference Points

The following reference points were used when designing the programme:

- University Strategy 2016-2021
- Buckinghamshire New University Approval of Academic Provision policy and procedure
- FHEQ (Framework of Higher Education Qualifications) Art & Design Subject Benchmark Statement (2017)
- QAA Framework for Higher Education Qualifications (2014)
- PSRB documents – Institution of Engineering Designers (IED) accreditation requirements for RProdDes (level 6) qualifications
- Equality & Diversity Teaching & Learning Toolkit
- QAA Education for Sustainable Development
- Work-based and Placement Learning Policy
- University Academic Qualifications Framework

Ethics

The following ethics sub-committee will be responsible for ensuring good research practice and student awareness of ethical concerns and risks.

Ethics sub-committee for Art & Design

Annual Review and Monitoring

This programme will be monitored annually through the University's Annual Monitoring Process, which is a continual cycle of review and enhancement. This process is supported by both the periodic review of departments and the periodic re-approval process for individual programmes. All processes are completed in consultation with students via the Students' Union or student representatives.

The re-approval of this programme is scheduled for academic year 2020/21.

SKILLS MATRIX - ASSESSMENT

Module Code	Information Acquisition	Critical thinking, analysis and synthesis	Self-reflection and Criticality	Communication Skills: Oral	Communication Skills: Written	Information & Communications Technology (ICT)	Numeracy & Quantitative Skills	Problem Solving & Decision Making	Independent & Self-managed Learning	Working with Others
FY001	☒	☒	☒	☒	☒	☒	☐	☐	☒	☐
FY002	☒	☒	☐	☒	☒	☒	☒	☒	☐	☒
FY003	☒	☒	☐	☒	☒	☒	☒	☒	☐	☐
FY020	☒	☒	☒	☒	☒	☒	☐	☒	☐	☐
PD407	☒	☒	☐	☒	☒	☒	☒	☒	☐	☒
AD402	☒	☒	☐	☒	☒	☐	☐	☐	☐	☒
PD505	☒	☒	☒	☒	☒	☒	☐	☒	☒	☐
PD506	☒	☒	☐	☒	☒	☐	☐	☒	☒	☐
PD508	☒	☒	☐	☒	☒	☒	☒	☒	☒	☐
AD502	☒	☒	☒	☒	☒	☒	☐	☐	☒	☐
PD605	☒	☒	☐	☒	☒	☒	☒	☒	☒	☐
PD606	☒	☒	☐	☐	☒	☒	☒	☒	☐	☐
PD608	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
AD602	☒	☒	☒	☒	☒	☒	☐	☒	☒	☐

SUBJECT BENCHMARK MAPPING

QAA Subject Benchmark Standard	Programme Outcomes	Module Codes		
		Level 4	Level 5	Level 6
Subject knowledge, understanding and abilities				
Present evidence that demonstrates some ability to generate ideas independently and/or collaboratively in response to set briefs and/or as self-initiated activity	K1, K2, K2, C3, C4, P2, P3, P5, T1, T4, T5	PD405 PD406 PD407	PD525 PD506 PD508	PD605 PD606 PD608
Demonstrate proficiency in observation, investigation, enquiry, visualisation and/or making	K1, K2, K3, K4, C1, C2, C3, P1, P2, P4, T3, T6	PD405 PD406 PD407	PD505 PD506 PD508	PD606 PD608
Develop ideas through to outcomes that confirm the student's ability to select and use materials, processes and environments	K1, K2, C2, C4, P1, P2, P4, T3, T6	PD405 PD406 PD407	PD505 PD506 PD508	PD608
Make connections between intention, process, outcome, context, and methods of dissemination	K1, K2, K3, C1, C4, P2, P4, P5, T2, T6	PD406 PD407	PD506 PD508	PD608 AD602
Subject-specific skills				
The broad critical and contextual dimensions of the student's discipline	K1, K2, K3, C1, P5, T1, T4	PD407 AD402	PD508 AD502	PD605 PD606 AD602
The issues which arise from the artist's or designer's relationship with audiences, clients, markets, users, consumers, and/or participants	K2, K2, C1, C3, C5, P4, P5, T1, T6	PD405 PD407	PD505 PD508 AD502	PD605 PD606 AD602
Major developments in current and emerging technologies in their discipline	K1, K2, C1, C4, P3, P5, T4, T6	PD407	PD508 AD502	PD605 PD606
The significance of the work of other practitioners in their discipline	K1, K2 C4, C5, P5, T4, T6	PD407 AD402	PD508 AD502	PD605 PD606 AD602
Generic and graduate skills				
Exercise self-management skills in managing their workloads and meeting deadlines	K2, K5, C2, C4, P1, P3, T1, T3	PD405 PD406 PD407	PD505 PD506 PD508	PD605 PD606 PD608
Accommodate change and uncertainty	K1, K2, K5, C3, C4, P2, P5, T1, T6	PD406 PD407	PD506 PD508	PD605 PD608
Analyse information and experiences, and formulate reasoned arguments	K1, K2, K3, K5, C3, C4, P2, P4, P5, T1, T3, T4, T6	PD405 PD406 PD407 AD402	PD505 PD506 PD508 AD502	PD605 PD606 PD608 AD602
Benefit from the critical judgements of others and recognise their personal strengths and needs	K3, K5, C3, C4, P2, P4, T2, T3	PD405 PD406 PD407	PD505 PD506 PD508	PD605 PD606 PD608

EMPLOYABILITY MAPPING

	CD Career Development Learning			**E** Experience			**DS** Degree Subject Knowledge Understanding & Skills			**GS** General Skills			**EI** Emotional Intelligence			**RE** Reflection & Evaluation			**S** Self-esteem, Self-confidence & Self-efficacy		
Module Code	Taught	Practised	Assessed	Taught	Practised	Assessed	Taught	Practised	Assessed	Taught	Practised	Assessed	Taught	Practised	Assessed	Taught	Practised	Assessed	Taught	Practised	Assessed
PD405	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☐	☐	☐	☒	☒	☒	☐	☐	☐
PD406	☐	☐	☐	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
PD407	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
AD402	☐	☐	☐	☐	☐	☐	☒	☒	☒	☒	☒	☒	☐	☐	☐	☒	☒	☒	☐	☐	☐
PD505	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☐	☐	☐	☒	☒	☒	☐	☐	☐
PD506	☐	☐	☐	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
PD508	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
AD502	☐	☐	☐	☐	☐	☐	☒	☒	☒	☒	☒	☒	☐	☐	☐	☒	☒	☒	☐	☐	☐
PD605	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
PD606	☐	☐	☐	☒	☒	☒	☒	☒	☒	☒	☒	☒	☐	☐	☐	☒	☒	☒	☐	☐	☐
PD608	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
AD602	☐	☐	☐	☐	☐	☐	☒	☒	☒	☒	☒	☒	☐	☐	☐	☒	☒	☒	☐	☐	☐

ACCREDITATION MAPPING - Output Standards Matrix for IED

SLO	Year 1 - Level 4	Year 2 - Level 5	Year 3 - Level 6
Underpinning Science and Mathematics (US)			
US1R	PD406, PD407	PD506, PD508	PD605, PD606, PD608
Design Analysis (E)			
E1R	PD406, PD407	PD506, PD508	PD605, PD606, PD608
E2R	PD406, PD407, AD402	PD506, PD508, AD502	PD605, AD602, PD608
E3R	PD405, PD407	PD505, PD508	PD605, PD606, PD608
Design (D)			
D1R	PD406, PD407	PD506, PD508	PD605, PD606, PD608
D2R	PD407	PD508	PD605, PD606, PD608
D3R	PD406, PD407	PD506, PD508	PD605, PD606, PD608
D4R	PD406, PD407	PD506, PD508	PD605, PD608
D5R	PD406	PD506	PD606, PD608
D6R	PD406, PD407	PD506, PD508	PD605, PD606, PD608
D7R	PD405, PD407	PD505, PD508	PD605, PD606, PD608
D8R	PD405, PD406, PD407	PD505, PD506, PD508	PD605, PD606, PD608
D9R	PD406, PD407	PD506, PD508	PD606, PD608
D10R	PD407	PD508	PD605, PD608
D11R	PD406, PD407	PD506, PD508	PD605, PD608
Economic, social and environmental context (S)			
S1R	PD406, PD407	PD506, PD508	PD605, PD608
S2R	PD406, PD407	PD506, PD508	PD605, PD606
S3R	PD406, PD407	PD506, PD508	PD606, PD608
S4R	PD407	PD508	PD605, PD606, PD608
S5R	PD406, PD407	PD506, PD508	PD605, PD606, PD608
S6R	PD406, PD407	PD506, PD508	PD605, PD606, PD608
Design Practice (P)			
P1R	PD406, PD407	PD506, PD508	PD605, PD608
P2R	PD405, PD406, PD407	PD505, PD506, PD508	PD605, PD606, PD608
P3R	PD407	PD508	PD605, PD608
P4R	PD407	PD508	PD605, PD606, PD608
P5R	PD407	PD508	PD605, PD608
P6R	PD406, PD407	PD506, PD508	PD605, PD606, PD608
P7R	PD406	PD506, PD508	PD605, PD608
P8R	PD406, PD407	PD506, PD508, AD502	PD606
P9R	PD405, PD406, PD407, AD402	PD505, PD506, PD508, AD502	PD605, AD602, PD608
P10R	PD406, PD407	PD506, PD508	PD605, PD606, PD608
P11R	PD406, PD407	PD506, PD508	PD605, PD608

Specific Learning Outcomes (SLOs) for IED accredited programmes (RProdDes level)
Graduates from IED accredited degree programmes must achieve the following learning outcomes incorporating the key skills of knowledge and understanding, intellectual abilities, practical skills, and general transferable skills. The learning outcomes are expressed in terms of design, economic and social context, design practice, underpinning science and mathematics, and design anlysis. The weighting given to these different broad areas of learning will vary according to the nature and aims of the particular degree programme. The following are the requirements for RProdDes level which this programme has been mapped against to ensure that it will meet the IED membership level standard:

Underpinning Science and Mathematics (US)
US1R Ability to consider and apply the appropriate mathematical and engineering principles to a particular product design problem

Design Analysis (E)
E1R Ability to research, select, evaluate, manipulate and manage information relevant to the analysis and synthesis of product design solutions
E2R Ability to apply analytical skills in relation to designed objects including the ability to undertake visual analysis and to analyse designed objects in relation to their context

E3R Ability to apply a systematic approach to problem solving using appropriate design tools and techniques

Design (D)

D1R Ability to evaluate design solutions against relevant constraints and criteria

D2R Ability to address human needs through the use of research, anthropometric data and ergonomic principles and provide design solutions according to customer and user requirements. Ability to generate a product design specification (PDS) by defining requirements as separate criteria including other factors such technical aspects and legislative demands.

D3R Ability to recognise product design cost drivers for both recurring and non-recurring costs and to appreciate the cost implications of differing production volumes

D4R Ability to generate a wide range of design ideas, concepts and proposals independently and in teams in response to set or self generated design briefs

D5R Ability to select, test and exploit materials and manufacturing processes in the synthesis of product design solutions

D6R Ability to apply creative and logical thinking processes as well as design methodologies to the creation of design solutions

D7R Ability to select and use the appropriate manual drawing / construction / CAD, communication and technological media in the realisation of design ideas

D8R Ability to demonstrate visual literacy and drawing ability appropriate to the practice of product design

D9R Ability to develop concepts sufficiently to provide manufacturing instructions and specifications

D10R Ability to employ materials, media, techniques, methods, technologies and tools associated with product design through drawing, modelling and computer visualisation using skill and imagination

D11R Ability to integrate Industrial Design aspects including form, texture and colour

Economic and Social Context (S)

S1R Understanding that positive ethical and professional conduct underpins design practice

S2R Knowledge and understanding of risk issues, including health and safety, environmental and commercial risk, and of risk assessment and risk management techniques

S3R Awareness of legal requirements governing design activities, including personnel, health and safety, product liability and safety

S4R Knowledge and understanding of the management of the design process

S5R An awareness of financial, economic, social legislative and environmental factors of relevance to product design

S6R Awareness of the social and environmental impact and the application of sustainable design principles

Design Practice (P)

P1R Ability to create new processes or products through synthesis of ideas from a wide range of sources using a broad knowledge of material and material selection principles

P2R Ability to practise collaborative and independent work to realise a range of practical, creative and theoretical projects

P3R Ability to meet deadlines, liaise with industrial collaborators, make presentations, research and collate information, produce reports and evaluate the design and research work of self

P4R Ability to analyse problems of a creative nature and to provide appropriate solutions

P5R Understanding and application of intellectual property rights (IPR) including patent search and principles of copyright and design registration.

P6R Understanding of specific design codes of practice and industry standards, with some knowledge of design factors and requirements for safe operation

P7R Awareness of management and quality assurance issues in product design

P8R Working effectively as part of a group with respect for the dignity, rights and needs of others.

P9R To develop skills associated with professional practice; time management, project management, professional level communication, self promotion, interview techniques, information gathering and use of information and communication technology as appropriate

P10R Ability to evaluate technical risks and address risk in design methodology

P11R Ability to write a PDS, design reports and present design ideas in a rational and coherent manner