Product Design
Undergraduate Degree 2018
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Product design touches every aspect of modern life, and there is growing demand from industry for students who are both creative and technically literate.

This multidisciplinary course bridges the gap between arts and engineering-led courses. It offers an even balance of art and technology, allowing you to explore the links between the two. You’ll gain the broad base of skills to work with designers from both arts and engineering backgrounds. This will allow you to see a product development process through a product development process through from initial concept to detail and production development.

You’ll study at a university with an international reputation for design and innovation across many disciplines. All our staff are experienced product designers or active researchers in related fields, which means that you’ll benefit from cutting-edge learning and teaching – and our strong links with industry ensure that course materials meet the needs of the sector.

OUR REPUTATION

Our Product Design course is part of the School of Mechanical Engineering, which is ranked first in the UK in the Guardian university league tables and fourth in the Complete University Guide 2018.

Our Product Design course received 93% student satisfaction in the latest National Student Survey (NSS).

The School is also ranked second in the UK for the quality of its research according to the Research Excellence Framework (REF) 2014.

In recognition of our strong and continued commitment to gender equality, we have received a prestigious Athena SWAN Silver Award.

This is awarded by the Equality Challenge Unit, the national body that promotes equality in the higher education sector.

“ Our aim is to develop outstanding graduates who are both technically literate and creative. Working with both design and engineering problems, our students realise their ideas from initial concept through to detailed production development. Our programme allows students to develop their own innovative approach while mastering key skills in demand by employers such as solving complex problems, managing multiple deadlines, teamwork, and project management.”

Dr Dan Trowsdale,
Senior Teaching Fellow
Programme Leader

As a design course based in the School of Mechanical Engineering, our students have access to the School’s computing and prototyping facilities, as well as the technical expertise of its staff. This is invaluable when it comes to making and testing prototypes to inform the design process.
Learning and teaching

This course combines design theory and technology with practical design work. As a result, you’ll benefit from a range of teaching and learning methods including lectures, design studio work, tutorials and interactive lectures that mix teaching with practical work.

DESIGN STUDIO
While our teaching is delivered across a range of lectures, labs and workshops, our design studio provides a dedicated space for the hands-on teaching required. It is used for sessions that involve computer-aided design (CAD) software, such as SolidWorks, Photoshop or InDesign, and also offers a space for you to carry out your design work and to socialise.

DESIGN ETHICS
As a fundamental part of modern life, product design has the potential for great benefit and great harm. Good designers reflect on the ethical implications of their decisions to ensure that they are designing in a way that is socially beneficial. Many of the ethical responsibilities of engineers (honesty and integrity, the public good and responsible leadership) apply equally to the designers who help shape the technologies around us. Leeds has significant expertise in this area, demonstrated by the fact that we have been asked by the Royal Academy of Engineering to produce their ethics guide. As a product designer at Leeds, you will study design ethics as part of your design studio modules and will be taught using real-life case studies, with input from specialist ethicists as well as your tutors and lecturers. This ethics teaching will enhance your reasoning and decision-making skills so crucial to employers. It will also help you identify and respond to the ethical dilemmas you may encounter in your professional life as a designer, addressing issues such as sustainability, inclusivity and intellectual property.

ASSESSMENT AND FEEDBACK
You will be assessed by a combination of examinations and coursework such as design portfolio work and exhibitions. Our guiding philosophy is to give you a clear and constructive idea of your individual progress and, where necessary, to work with you to identify areas that merit particular attention, allowing you to maximise your potential.

SPECIALIST FACILITIES
Our facilities include our product design studio, with PCs running a number of design packages, as well as model-making facilities including forming, laser cutting, foam model sculpting and CNC routing.

- You will have access to a 3D printing system to convert your concepts and ideas into physical prototypes to test for form, fit and function. These are crucial to the experienced design practitioner and allow greater freedom in design and product customisation.

- The design studio provides space for group work and allows you to interact with students from other years of the course.

- You’ll enjoy excellent teaching facilities and well-equipped lecture theatres and laboratories.

STUDENT SUPPORT
Our personal tutorial system will provide academic and pastoral support. You will have a designated personal tutor throughout your studies at Leeds. He or she will be an academic member of staff; you will have weekly academic tutorials with your tutor throughout your first and...
second years in your small tutor group, as well as one-to-one meetings twice per semester.

In addition, our excellent Student Support team is based close to where you’ll work and study to help with anything from academic advice to timetabling and project submission enquiries.

The web-based student portal will enable you to access the University’s student services and information, while our Virtual Learning Environment (VLE) will allow you access to your personal timetables, course materials, academic and social groups, and much more.

TOUR DE FRANCE
Product Design students were given the opportunity to be involved in the construction of an impressive countdown clock to mark the start of the Tour de France that famously came to Yorkshire in July 2014.

Students assisted with technical plans and build of the design as well as the electronics used for the light-based countdown.

INTEGRATED MASTERS
This degree is an Integrated Masters (MDes, BSc), providing you with great breadth and depth of study. The MDes incorporates additional opportunities to specialise in areas of design related to research conducted at the University and involves a multidisciplinary team design project, where you will jointly develop software systems and enhance skills relevant to the IT profession. Our Integrated Masters will also help you develop practical, transferable skills such as teamwork, decision-making, delegation, identifying and solving problems, and communication. Alternatively, you may decide at any point until the middle of the third year to graduate after three years with a BSc.

However, if you are sure from the start that you only want to study for three years, for example if you are an international student, it is also possible to apply for the BSc version of this course. The BSc course is identical to the first three years of the MDes course and has the same entry requirements.
Projects

The project work and design studio modules you’ll carry out throughout your course will take you one step closer to becoming a confident and self-motivated graduate.

Our close links with industry means that you’ll benefit from industrial input into your design projects at a variety of levels, from setting project briefs through to more direct involvement in discussions, consultancy and arranging industrial visits.

In years one and two you’ll complete a number of design projects which will provide a framework for the development of design-specific skills and knowledge such as:
- concept development
- CAD
- rapid prototyping.

By taking part in ‘live’ projects set by industry you’ll hone your commercial awareness and presentation techniques.

In the third year, individual projects will give you the opportunity to apply skills and knowledge learnt throughout the course. They’ll also allow you to develop design definitions in response to market need through design generation and evaluation of working prototype.

Year four (MEng) projects involve challenges and opportunities designed to stretch and develop your capabilities and skills. You’ll work collaboratively in teams of product designers, engineers or mechatronic students while developing real-world solutions for ‘live’ industry or research briefs.

DESIGN SHOWCASE AND NEW DESIGNERS

At the end of your third and fourth years, you’ll be given the opportunity to exhibit your work at our annual degree showcase. You’ll present your work to your peers, University staff and a variety of guests and industrial partners. Awards for design excellence such as best projects, prototypes, stands and communications are presented at the annual degree showcase.

Selected students from years three and four will have the opportunity to exhibit at the national annual degree showcase, New Designers in London. The show attracts over 3,000 of the most talented, new graduate designers from the UK’s leading universities who come together to present their work in one venue – the Business Design Centre.

We have industrial links with companies including:
- Minky Homecare
- Nokia
- Reckitt Benkiser
- Texecom
- Marks & Spencer.

engineering.leeds.ac.uk/product-design
Sketch & Render Development.
Mechanical System - Vice.
The Product Design course at the University of Leeds appealed to me because it bridged the gap between design and engineering. As I did physics, maths and art at A-level, it felt like the perfect combination for the course.

Some of the most exciting projects I was involved with took place on my study abroad year in Singapore. The projects were futuristic and pushed you out of your comfort zone to think in a completely different way. One project I feel proud of is when I designed a light as part of a studio project that looked at collaborative and individual workspaces. I enjoyed the whole cycle, from creative exploration to finishing the final product.”

PHILIP BRIDGE
MDes Product Design (International)

My Leeds experience helped me acquire the critical soft skills required for a career in the dynamic industry of global design. With a focus on user-centred design, my degree equipped me with the problem-solving and analytical skills required for tackling real-life design projects through coursework and taught sessions, which included team projects, case studies and problem-based learning.

I currently work as a lead industrial designer at the Nigerian Headquarters of Chinese telecommunications giant, Techno-Mobile. As a member of Techno’s emerging markets (Africa, Asia, and the Middle East) Phone and Accessory Design team, I design affordable smart phones and accessories suited to the local market.”

NIFEMI MARCUS-BELLO
MDes Product Design
Lead Industrial Designer, Techno-Mobile (Nigeria)
GatorDuct primarily work with ductwork systems. They are the first and only providers of sustainable ductwork worldwide due to their innovative use of cardboard ducting. My role within the company is to work in the Innovation team to bring forward alternative uses for its unique material. I am pleasantly surprised by the fact that my work greatly depends on problem-solving and creativity, which are important skills to have in the product design sector.

Carrying out a placement year meant I had the opportunity to expand my skillset and test my potential in the design industry. What I enjoy most about my placement is the diversity in the work that I do. I feel that I am given the opportunity to work in every part of the design and manufacturing industry.

HAREKLEA MARKIDES
MDes Product Design
Industrial placement year at GatorDuct
Careers and employability

Career prospects in the field of product design are excellent and range from employment in manufacturers’ in-house design departments to design consultancies. Our graduates are earning on average a salary of £24,000 within six months of graduating.

REWARDING CAREERS
100% of our recent graduates have successfully secured a professional or managerial role within six months of graduating (DLHE).

Employers will be interested in skills and abilities developed throughout the course, such as communication skills and the ability to critically analyse and produce creative solutions to problems. Graduates will therefore also be well placed to pursue and develop careers in marketing, advertising and management consultancy.

To gain employment in the design industry, it is important that you are able to present your work in the form of a portfolio. You will therefore take a purpose-built career development module where you will put together and critically appraise what is likely to be your first professional portfolio and CV.

STRONG INDUSTRIAL LINKS
Our close working relationships with a large number of key companies means that throughout your degree you’ll be exposed to industry and prepared for a career in a professional environment.

I did my placement at Disney Interactive, where I was a creative intern.

The role was very diverse and required a wide range of different design-related skills and approaches. Typically my day was spent creating promotional graphics and sustaining content for the website across the 23 markets we operate in.

The placement year helped me gain an insight into design industry and to recognise more specifically where I want to align myself as a designer. I also gained contacts in the art world and immersed myself in both the professional and social culture of London.”

SIMON WAGSTAFF
MDes Product Design (Industrial)
Industrial placement year at Disney Interactive

SIMON WAGSTAFF

CAREERS SUPPORT
Throughout your time with us, our award-winning faculty Employability team is here to support, guide and advise you. In addition to specialist face-to-face meetings, you’ll benefit from:

• timetabled employability sessions
• ongoing support to find internships and placements
• presentations and workshops delivered by employers.

Our Employability team also organises an annual Careers Fair, which will give you the opportunity to meet over 100 graduate recruiters to gain an insight into graduate jobs and to explore work experience and internship opportunities. Recruiters at last year’s event included, among others, DCA Design, P&G, Amazon, L’Oreal, Unilever, and Imagination Technology.

engineering.leeds.ac.uk/product-design
I did my placement at United Biscuits, an international food manufacturer, its most iconic brands being McVities, Carrs, Jacobs and Verkade. I worked in the Procurement function in the co-manufacturing team. I primarily worked with our UK-based co-packers and buying packing services. My favourite part was working on the new product development projects. I also loved visiting the different factories and seeing how the process of making biscuits has been converted to such a huge industrial scale. I found the machinery used fascinating. I received a massive amount of responsibility from day one, meaning I learnt a huge amount very quickly. I also got to meet many great friends and make a lot of business connections.”

SUSANNA LEMON
MDes Product Design (Industrial)
Industrial placement year at United Biscuits

INDUSTRIAL PLACEMENT YEAR
An industrial placement year is a great way to help you decide what kind of career you might like when you graduate. As well as giving you the opportunity to develop your own skills, you’ll gain a real insight into working life in a particular company or sector.

All our degrees allow you to undertake a placement year alongside your degree (either in the third year of the BSc or the third or fourth year of the MDes).

If you decide to undertake a placement year, this will extend your degree by 12 months. On successfully completing your placement year, you will be awarded the ‘industrial’ variant in your degree title to demonstrate your unique expertise to future employers.

STUDY ABROAD
You have the opportunity to apply to spend time abroad, usually as an extra academic year. The University has partnerships with more than 400 universities worldwide and popular destinations for our students include Europe, the USA, Canada, Australia, New Zealand, Singapore, Hong Kong, South Africa and Latin America.

Visit our website to find out more about these and other opportunities.
engineering.leeds.ac.uk/product-design/employability
Course structure

During the first and second years, the programme is divided into three broad subject areas.

**DESIGN STUDIO MODULES**
These will help you develop important design and communication skills through design project work.

**DESIGN TECHNOLOGY MODULES**
These provide you with the technological understanding to create and deliver efficient and effective designs, covering the basics of mechanical, electronic and materials engineering.

**DESIGN AWARENESS MODULES**
These modules include design context, history, psychology, creativity and innovation, design information, computer-aided design systems, and business and marketing.

Approximately half of years three and four is dedicated to major design projects, which fall into thematic areas such as intelligent homes, medical devices and packaging. These are supported by a range of modules on topics such as manufacturing processes and user-centred design.
I teach the visual communication and portfolio development aspects on the course. I have 20 years’ experience as a product designer and design manager, taking products through from early concepts to commercial production. This is particularly valuable when it comes to helping students present themselves for interview and think through the practical and commercial aspects of their designs.”

DAN TROWSDALE
Senior Teaching Fellow
Programme Leader

MODULES

Year 1
- Visualisation Techniques
- Materials Technology
- Contextual Studies and Ergonomics
- Engineering Analysis for Product Designers
- Basic Electronics for Product Design
- Design Studio 1

Year 2
- Economics and Management
- Design Studio 2
- Creativity, Innovation and Shape Systems
- Advanced Electronics for Product Design

Year 3
- Additive Manufacturing
- Design Project
- Mechanical Systems
- Professional, Portfolio and Industry Awareness
- Discovery Module

Year 4 (MDes)
- Systems Thinking and Consulting Practice
- Team Project
- Design Research
- Design Communication
- User-Centred Design

Design Studio 1 and 2, Design Project and the Team project account for around 50% of the credits in each year. This unique aspect of our Product Design course delivers the balance between the creative and technical modules.

These are typical modules/components studied and may change from time to time.
Entry requirements and how to apply

<table>
<thead>
<tr>
<th>Degree title</th>
<th>UCAS code</th>
<th>Duration (years)</th>
<th>A-level</th>
<th>BTEC</th>
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</thead>
<tbody>
<tr>
<td>MDes, BSc Product Design</td>
<td>H790</td>
<td>3/4</td>
<td>AAA, preferably including an art and design-related A-level such as Design, Design Technology or Art and Design, and excluding General Studies or Critical Thinking.</td>
<td>D*DD, preferably including an art and design-related subject.</td>
</tr>
<tr>
<td>BSc Product Design</td>
<td>H795</td>
<td>3</td>
<td>Minimum grade B in Mathematics and Science at GCSE.</td>
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* Where an A-level science subject is taken, we require a pass in the practical science element, alongside the achievement of the A-level at the stated grade.

Extended Project Qualification: while we recognise the value, effort and enthusiasm applicants make in the Extended Project, we do not currently include this as part of our offer-making. We do however encourage you to provide further information on your project in your personal statement and, if invited, at interview.

EQUIVALENT QUALIFICATIONS
We welcome students with a range of qualifications and these are listed on our website.
engineering.leeds.ac.uk/mechanical/ug-equivalents

ENGLISH LANGUAGE REQUIREMENTS
GCSE English Language grade C (or above) or an equivalent recognised English language qualification, eg IELTS 6.0 overall with no less than 5.5. in each section.

IF YOU CHOOSE TO UNDERTAKE A PLACEMENT OR STUDY ABROAD YEAR THIS WILL EXTEND YOUR STUDIES BY 12 MONTHS
ACCESS TO LEEDS
The University of Leeds has a policy of welcoming applicants from non-traditional academic backgrounds. If you do not meet our entry criteria, you may be eligible via the Access to Leeds scheme.
www.leeds.ac.uk/a2l

LANGUAGE CENTRE
Our Language Centre provides the Academic English for Undergraduate Studies pre-sessional course, which is designed to help international students develop the necessary language and academic study skills for undergraduate study.
www.leeds.ac.uk/languages

HOW TO APPLY
All undergraduate applications should be made through the Universities and Colleges Admissions Service (UCAS). Full instructions on how to apply are available at www.ucas.com

OFFER PROCESS
Suitable applicants will be invited to an applicant day, for which we strongly encourage attendance, as this gives you the opportunity to meet our students, academic and admissions staff, and find out more about your course. You’ll take part in a practical engineering activity, working in teams in our design office to solve a fun engineering problem. This is followed by a feedback session and prize-giving.

The tour of the School’s facilities includes interactive demonstrations of student activities and recent project work.

An interview with an academic on either a one-to-one or group basis will normally form part of this process. This will give you the chance to discuss your application in more detail, check that it’s the right course for you and your career plans, have your questions answered and find out more about studying at Leeds.

SCHOLARSHIPS
We offer a number of scholarships within the School. Please visit our website for further details.
engineering.leeds.ac.uk/scholarships

CONTACT US
If you require any further information prior to making a formal application, please contact our Undergraduate Admissions team.

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