

Product design

Essentials

What product design degrees are there?

Product Design
Product Design (with a professional placement year)

See also

Engineering (p63)

What A levels/IB scores do I need?

(For other qualifications information, refer to pages 125-129)

Typical A level offer range: ABB-BBB

A levels (or equivalent) must include Art or a science or design subject

Typical IB diploma offer range: 32-34 points including a Higher Level in Art, a science or a design subject

What else do I need?

GCSE (or equivalent) Mathematics and a relevant science subject, both grade B

Fees

Refer to pages 137-138 for information on fees

What scholarships are there?

An unlimited number of scholarships of £1,000 are available. These will be awarded on entry to students who firmly accept our offer of a place by the UCAS deadline and achieve three A grades at A level, excluding General Studies. We also award generous prizes for outstanding performance in each year of study

English language requirements

IELTS 6.0, with 6.0 in each of the four components. Internet-based TOEFL with 80 overall, including at least 22 in Speaking and 24 in Writing. For alternative English language requirements, refer to page 130

Foundation year for non-EU students

If your qualifications (including English language) do not yet meet our entry requirements for admission direct to the first year of these degree programmes, we offer an international foundation year entry route. Refer to pages 26 and 131 for details

How do I find out more?

For more information, contact:

E ug.admissions@engineering.sussex.ac.uk

T +44 (0)1273 678743

F +44 (0)1273 678399

School of Engineering and Design,
University of Sussex, Falmer, Brighton BN1 9QT, UK
www.sussex.ac.uk/engineering

When can I visit?

All UK-based students who are made an offer of a place are invited to attend one of our admissions days, which take place on various days from December to April

Our Open Day dates for 2011 are 11 June and 8 October. We also run regular campus tours.

Please book online at www.sussex.ac.uk/visitors or call 01273 876787

Why product design?

Product design is about the development of revolutionary new products and advancing our technological future. Professional product designers create inventions and arrive at effective solutions that meet human requirements and consumer needs. As a product designer, you will be able to improve the way people live, put forward-thinking businesses on the map and participate in the formulation of international policy, markets and social trends.

Why product design at Sussex?

- Rated 14th in the UK for 'General Engineering and Mineral and Mining Engineering' research in the 2008 Research Assessment Exercise (RAE), 95 per cent of our research was rated as recognised internationally or higher, and 60 per cent rated as internationally excellent or higher.
- Engineering and technology at Sussex scored 91 per cent in the student satisfaction category of the 2010 National Student Survey (NSS).
- Our programmes are accredited by the professional Institution of Engineering Designers (IED), validating their content as ideal for the design industry.
- You will be at the forefront of the next generation of ideas and can develop your practice with the help of dedicated design professionals and academics.
- You will develop your design, mathematical and engineering skills, and your awareness of society and sustainability.
- Members of our staff are graduates from the Royal College of Art (RCA) and therefore we have a mutually beneficial academic relationship with the RCA and their partner Imperial College.
- Our students can participate in Formula Student, a multidisciplinary project predominantly about the design and production of a single-seat racing car.

Sam's perspective

'The Product Design degree at Sussex has opened my eyes to a world of innovation. Everything from the engineering and design through to the marketing and branding of a product is covered by the degree programme, providing me with direct and transferable skills to take forward into industry or further study.'

'I got to spend my sandwich year in a real commercial environment that allowed me to apply the skills I had learnt on the degree, confident in the knowledge that I had grounded support from the University behind me.'

'A particular highlight has been working collaboratively on design projects. Working with fellow course mates and students from other disciplines within the School has allowed me to make some great friends while improving my leadership and team working skills.'

'My degree has encouraged me to think differently and to take opportunities such as completing a Sussex Plus scheme. Through the scheme I got a work-shadowing placement at the BBC, and started developing my own business, which I plan to launch once I've graduated.'

Sam Foreman
BSc in Product Design (with a professional placement year)



Team Sussex's prototype car at the Formula Student competition



Core courses

Courses currently include:

Year 1

Your courses provide the core foundation in general design and engineering subjects alongside elemental ergonomics and communication of ideas

Creative Design in Context
 • Digital Circuits • Materials
 • Mechanics • Sketching for Design • Visual Communication

Year 2

You will extend your design skills in team-based projects. You will consider how businesses operate and integrate design into inspiring project work

Design for Manufacture
 • Design for Society • Design for Sustainability • Design Techniques • Design for User Experience • Matlab • Prototyping • Toy and Game Design

Year 3 (professional placement year only)

In the professional placement year you will apply your knowledge and skills in project work in a commercial environment

Final year

3D Web Applications (including 3ds Max) • Design for International Industry

Major Project: in your final year, you will apply your accumulated knowledge and design skills to a more substantial project of your choice. You can pursue a chosen career direction or particular design interest of your own, provided you can demonstrate that the outcome will be of sufficient substance to represent your learning. This culminates in an exhibition at the annual Product Design degree show, which is well attended by industrial representatives and potential employers

What sort of career could I have?

The understanding of industry and the creativity you gain throughout your degree will provide you with a range of exciting employment options, for example:

- project management roles and creative engineering design positions
- designing in sectors such as the automotive industry, consumer products, the built environment, medicine, sport, transportation, communication or the service industry
- inventor or entrepreneur
- manager of a creative project team
- engaging in creative engineering for a large corporate company or a design consultancy
- developing new applications for materials or processes
- applying ergonomics to user-centred designs
- user research
- lighting designer
- sustainable design consultant for a range of companies
- toy or game designer for children using empathic design techniques



Accreditation

Both product design programmes are accredited by the professional Institution of Engineering Designers (IED).

This ensures that our programmes are updated regularly and are informed by people in industry. For more information, visit www.ied.org.uk

How will I learn?

Our Product Design programmes involve a significant level of project-based work to allow your skills to develop at a practical level, for instance using CAD and state-of-the-art equipment such as the 3D colour printer.

Interpersonal and professional skills are developed through teamwork and business and project management. Much assessment is by means of coursework, project work, posters, portfolios and creative projects, and there are some unseen exams. Interaction with fellow students and helpful tutors allows you to develop creatively and bounce ideas off others.

We place particular emphasis on the use of multimedia in learning, developing and practising design skills. This begins with the basics of computer systems and is built upon with courses including Visual Communication, Creative Design in Context, Design Integration (with pro-engineer), and Design for Sustainability. You will gain experience of the tools being developed in industry, at the same time as honing your creative and design skills.

What will I achieve?

When you graduate, you will:

- have an excellent portfolio of design projects that illustrates a broad range of your abilities
- be able to demonstrate your understanding of the user-centred design process and the techniques that are required to create well-designed solutions for human requirements
- be able to communicate ideas to a multidisciplinary team using a variety of computer-based and free-hand techniques, including 3D modelling
- have the ability to convert a conceptual product into a fully specified design
- learn to manage your career development in preparation for further study, or the world of work.



User- and role-centred design applied to an electronics communications device

Degrees

Product Design

BSc (Hons), 3 years UCAS Code: HW12

Product Design (with a professional placement year)
BSc (Hons), 4 years, S/W UCAS Code: HW1F

Our degrees include the use of inspirational processes and a well-focused balance of science, communication and creativity to innovate new and original artefacts that are usable and commercially viable. Aesthetic qualities and function are equally crucial, alongside an understanding of ergonomics, methods of manufacture and the design of sustainable objects that minimise the impact on the environment.

The programmes offer the interdisciplinary knowledge-base that is essential to designers. This provides you both with the skills to communicate effectively across the whole spectrum of design and the foundation on which training in a specialist branch of design can be built.

Professional product designers need skills in technical competence and creativity, as well as financial skills, the use of management techniques, and the ability to work with others in a multidisciplinary and fast-changing environment.

Product design addresses both form and function, and our degrees help you explore your creative skills while considering all the phases of product development and realisation. As well as making products look good, the skills-base for product design includes design conception and embodiment, manufacturing and marketing. A key characteristic of the programmes is the integration of technology into products. This recognises that designers must be equipped to exploit the remarkable advances made in new materials and manufacturing techniques and in the widespread use of miniaturised electronics embedded in products.

After the first year, an element of choice is introduced by means of extensive project work. This allows your creative skills to flourish and develop. Computer-based learning is also utilised in the acquisition of core skills. The broad base, provided by the design core courses combined with the project work, gives a secure foundation from which a flexible career structure can be developed after graduation.

Product Design (with a professional placement year) allows you to gain valuable skills while working in industry during your third year.