

## The School of Design, Engineering & Computing

MSc Product Design is a multidisciplinary design programme which will enable you to enhance your technical knowledge and to allow you to design and develop commercial products to an advanced level.

---

### Duration:

1 year with optional 1 year placement (40 weeks minimum)

During this course units are taught intensively, usually over 4.5 days, with assessment normally taking place 5-6 weeks after the delivery of the unit.

---

### Entry Requirements:

Normally, the minimum qualification for entry to this course is a second class honours degree in a design or engineering discipline and/or relevant, recent experience in associated industries confirmed by employer references.

---

### If English is not your first language:

IELTS (Academic) 6.0 or equivalent.

---

### Contact askBU:

Tel: 08456 501501  
(BU does not profit from this service)  
+44 (0)1202 961916  
(International/EU callers only)  
Email: [askBUenquiries@bournemouth.ac.uk](mailto:askBUenquiries@bournemouth.ac.uk)

---

### Open Days:

**Log on to:** [www.bournemouth.ac.uk/opendays](http://www.bournemouth.ac.uk/opendays)

---

### Course Fees

For more information about fees and funding please visit our website [www.bournemouth.ac.uk/funding](http://www.bournemouth.ac.uk/funding)

---

### For more course information:

[www.bournemouth.ac.uk/courses/MSPD](http://www.bournemouth.ac.uk/courses/MSPD)

### Overview

Upon completing this course you will be equipped with the skills to conduct product design using cutting edge analysis methods as well as employing business and commercial expertise for use in a competitive environment. You will also be able to spearhead and manage projects appropriate for the design and manufacture industries.

The units will cover a range of topics from materials technologies to sustainability issues and there will be a focus on innovation and developing competitive products.

There will be a practical element to a number of the units and to the masters project. Applicants may be recently qualified graduates or those who completed their degrees some time ago.

During this course you will use advanced course product design methods and tools available. You will investigate, select and learn to employ those appropriate to the requirements in your field of work.

You will realise design solutions using advanced computer aided design and analysis tools. You will become fully aware of the enterprise and business driven aspects of new product designs. You will effectively manage, document and communicate, project plans and results.

## Course Content

### Project Management (20 Credits)

You will master a range of techniques, and gain the ability to handle contradictions in the knowledge base. You will apply analytical and critical thinking with respect to the planning of design and development projects; as well as learn valuable leadership skills.

### Competitive Product Development (20 Credits)

You will develop a critical understanding of the business issues related to competitive product development on a domestic and on a global scale. In this unit you will gain an understanding of marketing and appropriate knowledge of modern tools and processes required for competitive product design and manufacture.

### Design for Waste Minimisation (20 Credits)

You will develop a deep knowledge of sustainable development based on a multidisciplinary approach to waste minimisation. You will also learn to identify and quantify environmental impacts during the life cycle of a product/service from raw material abstraction to end of life disposal, and implement real-world sustainable development strategies.

### Design Simulation (20 Credits)

You will develop an extensive understanding of strengths and limitations of current solid modelling applications in respect of part and assembly design. You will gain an understanding of the strengths and limitations of using simulation tools for analysing and validating industrially relevant design problems. You will develop professional competence and critical awareness in the use of modern analytical techniques and tools for the product development process.

### Business Innovation & Enterprise (20 Credits)

With an emphasis on strategic management, you will look at how to identify and exploit a company's strengths. You will evaluate external opportunities that exist, together with conceiving strategies to overcome internal weaknesses and the threats that might be imposed by the industry environment.

### Research Methods (20 Credits)

You will develop key research skills in areas such as literature reviews, critical analysis of research findings, project proposals, planning, experiment design and analysis, and dissemination. This unit will adequately prepare you for writing a project proposal and for conducting and disseminating the Masters project.

### Individual Masters Project (60 Credits)

You will develop an understanding of the characteristics and implications inherent in the solution of a complex, real-world problem by undertaking a substantial, independently-conducted piece of work.

### Industrial Placement (optional) - minimum 40 weeks.

The placement provides an excellent opportunity for you to gain first-hand industry experience. This experience is invaluable in helping to make informed decisions about future career path, as well as enhancing employment prospects upon graduation.

A dedicated Placements Office helps students to obtain placements. You will receive support throughout the placement experience. Interview techniques and advice are also provided for you to successfully gain a placement. A number of companies habitually accept students for their placement year.

Placements have taken place in a range of large companies, both in the UK and abroad. Companies that have taken our design placement students include Jaguar Cars Ltd, Xerox, Aston Martin Lagonda Ltd, Dyson Appliances Ltd and The Gillette Company. Companies that have taken our Computing students include IBM, Barclays Bank, Lockheed Martin, Sun Microsystems, United Advertising, Hewlett-Packard and British Aerospace.

### For MSc Product Design we are looking for applicants who:

- wish to gain a full awareness of advanced product design methods and tools available.
- wish to be able to investigate, select and learn to employ product design methods and tools appropriate to the requirements of industry
- wish to be able to realise design solutions using advanced computer aided design and analysis tools wish to become fully aware of the enterprise and business driven aspects of new product designs
- wish to be able to manage, document and communicate, project plans and results

Applicants for the Product Design course should wish to gain an understanding of product design using cutting edge analysis methods as well as employing business and commercial expertise for use in a competitive environment. Applicants for this course should also wish to spearhead and manage projects appropriate for the design and manufacture industries. Applicants may be recently qualified graduates or those who completed their degrees some time ago.

### Course Provision

There are individual and group-based development activities, and seminar-based discussions and role-play activities. All assessments are on an individual basis.

The emphasis throughout the delivery of the units is on the application of theory to relevant practical applications, using case studies where appropriate. Each unit is assessed either by coursework only or via a combination of coursework and an examination.

*Please note:*

*The University reserves the right to introduce changes to the information given, including the addition, withdrawal, re-location or restructuring of courses.*