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If you have any questions about courses, applications or student life at Bristol, please contact the Enquiries Team.

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University of BRISTOL

Engineering Design

Undergraduate study

Courses

Single Honours

MEng Engineering Design with Study in Industry
five years H150

This leaflet contains information for students planning to start university in autumn 2020. We have made every effort to ensure all details are correct at the time of going to press (May 2019). However, since this information is subject to change, you are advised to check the University's website, **bristol.ac.uk/ug-study**, for the latest updates.

Why study engineering design at Bristol?

If you have broad engineering interests, are ambitious, and would like to work on large engineering projects vital to modern society in areas such as renewable energy, sustainable cities and transport, then engineering design could be for you.

The engineering design course at Bristol has been specifically developed to educate and train students for future leadership roles in industry. This unique, accredited, interdisciplinary degree was created with the Royal Academy of Engineering and is supported by an industrial partnership of leading companies in a wide range of multidisciplinary engineering sectors, such as energy, the built environment, transport, manufacturing and product design. These companies help select our students, guide the curriculum and provide placements and projects. As a result, graduates of the course are highly valued by our partner companies and have a head start in their careers.

This flexible degree teaches you the broad fundamentals of all the main engineering disciplines (mechanical, civil and aerospace); you can then specialise to develop expertise in a particular field. The placements in industry will help you understand the sort of engineering you would like to do and provide valuable real-world work experience. Large-scale engineering projects involve teams of engineers, and this degree is aimed at developing engineering leaders. You will learn team working skills, how to deliver effective presentations, and how to understand the impact of socio-economic, environmental and legal constraints on engineering projects.

Our continuing investment in facilities forms part of the exceptional student experience at Bristol. The Engineering Growth Project is a recent £14 million investment that has expanded our facilities with state-of-the-art equipment and large, flexible teaching, design, study and workshop spaces, enabling interactive teaching and learning for our students.

100 per cent overall student satisfaction

National Student Survey, 2016, 2017 and 2018

Ranked 2nd in the UK for General Engineering

Complete University Guide 2020

What will you study?

The multidisciplinary MEng Engineering Design with Study in Industry provides a common core of engineering units in materials, structures, dynamics, fluids, electronics, mathematics and computing, taken alongside other engineering undergraduates.

In the first year there is also dedicated teaching in design concepts and using computer-aided design software. During your second year, these skills are enhanced through detailed group design projects, and you will choose one of three pathways aligned with aerospace, civil or mechanical engineering.

The third year is usually a paid placement in industry, which forms an assessed part of the course and is closely monitored by the University, allowing you to start working towards becoming a Chartered Engineer. You would be given similar levels of responsibility as graduate entrants, with opportunities to manage your own projects. We will support you in applying for a placement; however, if you are not able to secure one, you can transfer onto our MEng or BEng Engineering Design programmes. Returning to the University in your fourth year, you will have a clearer idea about what type of engineer you want to become, and you will be able to tailor your studies by selecting from a wide range of optional units.

This allows you to benefit from some of the faculty's outstanding research strengths and develop expertise in areas such as:

- advanced composite materials
- fluids and aerodynamics
- earthquake and geotechnical engineering
- robotics and control systems
- smart cities and urban infrastructure
- renewable energy
- water and environmental engineering
- engineering systems and design.

To develop teamwork skills, you will be involved in group design projects working on real engineering problems, starting in your second year. After working within professional engineering teams during your third-year industrial placement, you will conduct major group research and design projects during the fourth and fifth year. These projects address genuine business interests provided by our industrial partners and are conducted in collaboration with engineers from these companies. Recent examples have included an electric vehicle system for Bristol, a long-range airship for transporting freight, an automated assembly facility for aircraft components, and a tidal lagoon energy system for the Severn Estuary.

Teaching and assessment

You will be assigned a personal tutor to support you throughout your degree. Tutor groups meet together every week during your first year. Each year group also has a year tutor to monitor and assist the group's progress.

You will also have a 'parent' or mentor (a student further along on the course), who will help you with study skills and in getting the most out of university life. While on industrial placements, your industrial supervisor and university staff will make sure you have a valuable set of experiences. You will be expected to manage and develop your own studies and frequently make presentations to other students and staff. Much of your work will be done in teams, working on design projects and case studies. The relatively small cohort on each year of the course promotes a strong support network among the students and with staff. The course is also diverse; thirty-four per cent of last year's first-year cohort were female.

As well as the usual range of assessments, such as technical reports, in-class tests, computer-based tests and examination papers, we will assess your skills in multidisciplinary design processes and project management. Group design projects are assessed through presentations, written reports and practical work.

Students from the course have had outstanding success in launching their own start-up companies and winning a range of national awards. Read more about student projects and startup stories at: **bristol.ac.uk/engineering-design**.

'My course is tailored very much to my personal interests and is flexible. Engineering design develops both sound theoretical understanding and also thinking outside the box.'

Patrick (MEng Engineering Design)

bristol.ac.uk/ug-study

Careers and graduate destinations

The highest proportion of our graduates progress directly into professional engineering roles. Some go on to further study or set up their own business; others join management consultancies or companies in a variety of sectors.

This course will provide you with a wide range of engineering, management and entrepreneurial skills, and the knowledge that you will need to be successful in the world of engineering. Many employers want the skill set developed in this degree, which includes: numeracy and mathematical modelling, spoken and written communication skills, and a broad understanding of how the engineered world works.

The combination of your placements and your work on projects supported by industrial partners means that you will develop, through first-hand insight, a good understanding of the sort of job you want and the skills that your ideal employer seeks. Many of our students are offered jobs as a result of the close links and unique opportunities that the course has with its industrial partners, with some receiving company sponsorship for the final years of their degree.

Industrial Liaison Office
The Industrial Liaison Office (ILO) manages the Faculty of Engineering's links with a diverse set of world-class engineering and technology companies and works to ensure that our students engage with industry from the very start of their studies.

As an engineering student at Bristol, you will benefit from an outstanding range of activities designed to enhance your employability. These include regular careers seminars, where industry insiders offer first-hand insight into the engineering industry. Our Industrial Mentoring and internship schemes provide opportunities to gain valuable experience and make important connections, and our regular newsletter highlights further opportunities and industry events. See our website for more information: **bristol.ac.uk/engineering/ilo**.

Graduate employers
Tonik Energy
Arup
Williams Martini Racing
Rolls-Royce
Manufacturing Technology Centre

Career destinations
Structural Engineer
Manufacturing Engineer
Aerodynamicist
Product Designer
Strategy Consultant

Source: Find out more at **bristol.ac.uk/careers/be-inspired**.

Making your application

Visit **bristol.ac.uk/ug20-engdesign** for more information about our course.

Typical offer for MEng Engineering Design with Study in Industry

A-levels A*AA (contextual AAB) including A*A (contextual AA) in Mathematics and either Physics, Chemistry, Computer Science or Further Mathematics (in any order).

IB Diploma 38 points overall with 18 at Higher Level, including 7, 6 (in any order) at Higher Level in Mathematics and a science-related subject (contextual 34 points overall with 17 at Higher Level, including 6, 6 at Higher Level in Mathematics and a science-related subject).

Our contextual offer is a grade reduction of up to two grades below the standard entry requirements, made to applicants from under-represented groups. Find out more at **bristol.ac.uk/contextual-offers**.

GCSEs No specific subjects required.

Selection process UCAS.

For other accepted qualifications, and for our English language requirements, visit **bristol.ac.uk/ug20-engdesign**.

Application advice for engineering design courses
This course develops engineers who need to have strong leadership and technical skills and also be good at working with other people and managing projects. They have wide-ranging interests in the engineered world, how things work and the impact of financial, environmental and legal factors.

We select our students by looking at their application for evidence of problem solving and engineering awareness, organisational skills and teamwork, as well as commitment and self-motivation. We recognise that students come from different backgrounds and have had different opportunities, so we are looking first and foremost for a genuine passion for engineering and problem solving.

Further information
Find out more about engineering design at Bristol: **bristol.ac.uk/engineering-design**

For graduate profiles and further insight into what it's like studying engineering design at Bristol: **bristol.ac.uk/engineering-design/graduate-profiles**.

This information is correct at the time of printing (May 2019), but we recommend you check the University website for the latest information: **bristol.ac.uk/ug20-engdesign**.

Read more about how we support you when you are here:

bristol.ac.uk/students