

Natural Sciences



THE TIMES AND SUNDAY TIMES
GOOD UNIVERSITY GUIDE 2019
UNIVERSITY RANKED 5TH



GUARDIAN UNIVERSITY GUIDE 2020
UNIVERSITY RANKED 4TH



£17M+ INVESTMENT IN
STATE-OF-THE-ART STEM FACILITIES





Why study Natural Sciences at Loughborough?

Today Loughborough University is one of the UK's leading centres of excellence for teaching and research in Science, Technology, Engineering and Mathematics (STEM) – with a proven track record in supplying industry with high-calibre, highly motivated graduates.

The demand for STEM graduates across sectors is huge, and only expected to grow. But scientific advances are increasingly driven by people working across disciplines and applying broad-based knowledge that provides cutting edge solutions to complex problems.

Loughborough's Natural Sciences degree course is the ideal course for students looking to expand their scientific knowledge and apply it in practical and relevant areas.

Designed to give students the flexibility to tailor their studies to their passions and aspirations, the course draws on the University's expertise in bioscience, chemistry, geography, materials, mathematics and physics.

At Loughborough University, you will join an inspirational scientific community that is actively involved in research that matters, addressing major global imperatives like climate change, clean power, renewable energy, crime and security, and the prevention, detection and treatment of diseases.

Developing the powerful skills needed to work between disciplines and communicate across them, you will be taught by academic staff who are internationally renowned experts in their respective fields and active in interdisciplinary research. You will also benefit from the University's ongoing investment in state-of-the-art laboratories, teaching facilities and learning resources.



WINNER OF 7 QUEEN'S ANNIVERSARY PRIZES
ONLY OXFORD HAS MORE



TIMES HIGHER EDUCATION RANKED 6TH IN THE TABLE OF TABLES 2017



QS STARS RATED 5 STARS FOR EXCELLENCE



UNIVERSITY STUDENT BAROMETER AUTUMN WAVE 1ST IN THE UK AND GLOBALLY FOR OVERALL SATISFACTION
OUT OF 45 PARTICIPATING UNIVERSITIES GLOBALLY AND 15 UK UNIVERSITIES

Contents

Natural Sciences at Loughborough	01
Outstanding facilities	02
Natural Sciences	05
Careers and employability	06
The Loughborough Experience	08



Outstanding facilities

Loughborough University's emphasis on developing practical skills alongside knowledge ensures our students gain hands on experience in our world class laboratory facilities, across disciplines.

Continued extensive investment in student learning environments has seen the creation of new Chemistry, Materials and Physics laboratories in our exciting new STEMLab development in addition to ongoing refurbishment of existing facilities, including newly opened labs for Materials, further investment relocating and updating our Biology "wet labs", and in new resources for Mathematical Sciences.

Our computer labs offer IT, CAD, modelling, materials selection and process simulation applications. The university is well-equipped for 3D laser-printing, materials processing, testing, analysis, electron microscopy, x-ray, thermal and surface analysis. We have our own campus observatory, optics labs, and the latest technology and laboratory facilities for carrying out geographical research.

STEMLab

Your Loughborough University experience will be further enhanced by STEMLab, the University's £17 million investment in state-of-the-art facilities for our science, engineering and technology students.

The award-winning building is the cornerstone of a £25 million "Student Learning Zone" that has transformed the University's West Park. You will be among the first students to benefit from the investment in a suite of laboratories for practical learning in the physical and natural sciences. Bio-scientists will benefit from bio-labs that provide opportunities to gain applied experience with biological samples.

Everything our campus has to offer

As a Loughborough student you will enjoy round-the-clock access to computer labs and our extensive library resources, as well as the award-winning support of our Mathematics Learning Support Centre and all the other high quality support services and amenities we provide.



GUARDIAN UNIVERSITY GUIDE 2020
12TH FOR CHEMISTRY



RICS AWARD EAST MIDLANDS 2018
DESIGN THROUGH INNOVATION AWARD FOR STEMLAB



GUARDIAN UNIVERSITY GUIDE 2020
2ND FOR MATERIALS



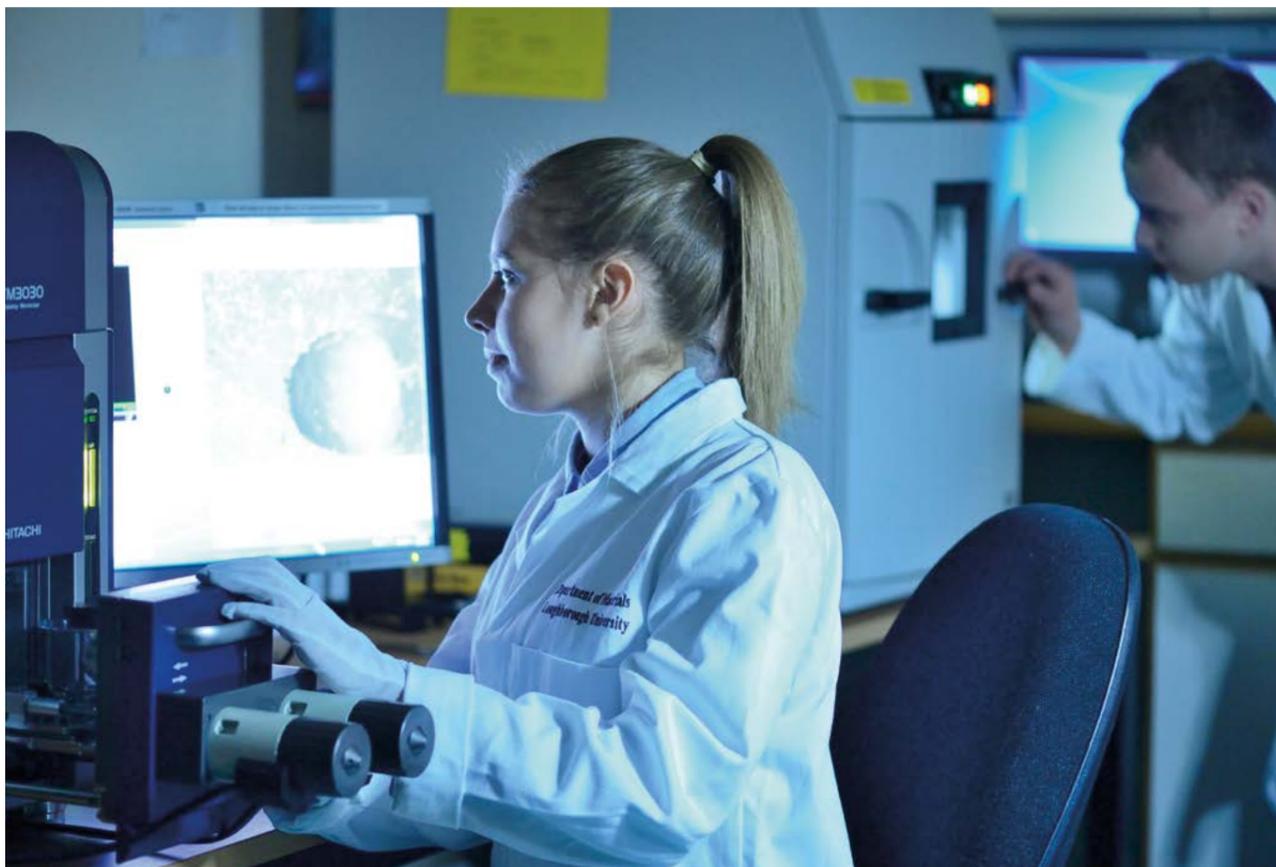
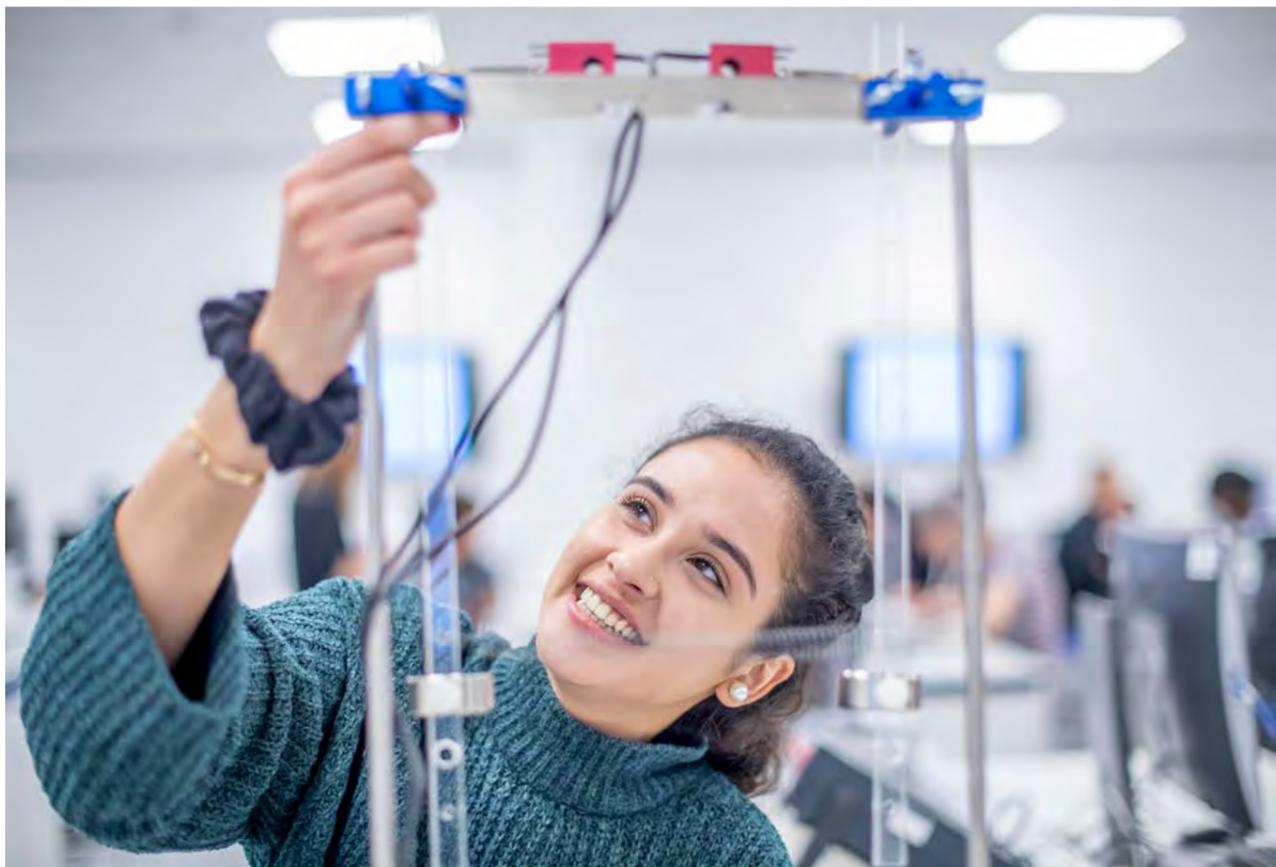
THE TIMES AND SUNDAY TIMES GOOD UNIVERSITY GUIDE 2019
11TH FOR MATHEMATICS



COMPLETE UNIVERSITY GUIDE 2020
13TH FOR GEOGRAPHY AND ENVIRONMENTAL SCIENCE



GUARDIAN UNIVERSITY GUIDE 2020
13TH FOR BIOSCIENCES



Natural Sciences

MSci (Hons) DPS/DIntS* 5 years full-time sandwich
UCAS code: FCG0

MSci (Hons) 4 years full-time
UCAS code: CGF0

BSc (Hons) DPS/DIntS* 4 years full-time sandwich
UCAS code: FCG0

BSc (Hons) 3 years full-time
UCAS code: GFC0

Typical offers

A level: AAA (MSci) / AAB (BSc) including two sciences of which one can be Mathematics dependent on the chosen pathway (see online prospectus).

IB: (MSci) 37 (6,6,6 HL) / (BSc) 35 (6,6,5 HL) with any two of Mathematics, Physics, Biology or Chemistry at HL dependent on the chosen pathway (see online prospectus).

BTEC Level 3 National Diploma in Applied Science: (MSci) D*D plus A level science or Mathematics at grade A. Dependent on the chosen pathway. (BSc) D*D plus A level science or Mathematics at grade B. Dependent on the chosen pathway.

GCSE: GCSE Mathematics grade C/4.



The complex problems we face in the modern world increasingly require scientists to adopt a multidisciplinary approach in the search for solutions.

This exciting new course offers the flexibility to study a combination of physical science disciplines including Chemistry, Biology, Mathematics, Physics, Materials and Physical Geography, with increasing specialisation across the years.**

Developing the powerful skills needed to work between disciplines and communicate across them, you will be taught by academic staff who are internationally renowned experts in their respective fields and active in interdisciplinary research. You will be mentored to work independently and across the disciplines, conducting your own laboratory-based project.

Year 1

In your first year you will undertake a core skills element which will support your development as a natural scientist working across the disciplines. Alongside this you will choose two pathways from the following: Chemistry, Bioscience, Maths, Physics, Geography and Materials. Your chosen pathways will determine which modules you will take in this year and onto the pathways you follow in later years. You are required to study 120 credits each year, with 80 credits in the first year being selected depending on your pathway options, giving you opportunity to flexibly develop your skills within your degree.

Year 2

In Year 2 you will concentrate your studies across two pathways, based on progression from year 1. One core module for all Natural Science students spans across the year, covering the need and ambition for interdisciplinary science. This will develop your communication skills and awareness of how to tackle problems from varying perspectives.

Optional placement/study abroad year

Students can choose to spend their third year on placement in an approved occupation relevant to their degree. Satisfactory completion of the placement leads to the award of the Diploma in Professional Studies, gaining valuable experience to support your future career.

If you are interested in travelling whilst you study, there are placement opportunities in other countries too, as well as options to spend from 3-12 months at an overseas university.

Year 3/4

In the third year you will conduct an interdisciplinary research project, enabling development of independence within a research environment. This will allow you to consolidate your studies and apply fundamental principles to a specific research problem.

Year 4/5 (MSci)

Your final year enables you to specialise in a discipline, carrying out a substantial interdisciplinary research project worth 60 credits and undertaking optional modules worth a further 60 credits.

For further detail regarding modules, visit the online prospectus.

Graduate destinations

Employers are increasingly looking for graduates with expertise in multiple science subjects. Our Natural Sciences graduates will be equipped with knowledge, practical laboratory experience, and professional transferable skills that prepare them for a wide variety of careers in such diverse areas as scientific research and analysis, health, medicine, and environmental analysis, as well as graduate positions in finance and management.

***DPS/DIntS:** Diploma in Professional Studies/ Diploma in International Studies.

**Some pathway combinations may not be possible. Please visit the online prospectus for additional information

The module information reflects the currently intended course structure and module details. Updates may be made on an annual basis and revised details will be published through Programme Specifications ahead of each academic year.

Careers and employability

As scientific research at the boundaries of the traditional disciplines becomes increasingly vital, so does the demand for graduates with expertise in multiple scientific disciplines. The sheer breadth of study you will undertake over the course of your Natural Sciences degree will open up a wealth of opportunities for careers and further study.

The professional and transferable skills you will acquire (such as communication, project management and problem solving) will prepare you for roles in any number of diverse organisations.

Graduates of Loughborough's wide range of science and engineering courses have gone on to pursue rewarding careers with major recruiters, including:

- Rolls-Royce
- British Glass
- BAE Systems
- GlaxoSmithKline
- Lilly Industries
- Williams Formula 1
- Deutsche Bank
- Ernst & Young
- IBM
- Total Gas and Power

The value of a placement year

Students taking the four-year course (five for MSci) spend a year on placement in a real job with real responsibilities.

Loughborough has strong industry links which help our students secure year-long and flexible work placements in the UK and internationally. These placements are an invaluable opportunity to advance your skills, and apply your knowledge to a working environment. They can help you stand out in the competitive market for graduate jobs and sometimes enable you to secure a conditional job offer ahead of your graduation.

Students across our courses have undertaken incredible placements with incredible organisations, including:

- CERN (the European Organization for Nuclear Research)
- AstraZeneca (a British-Swedish multinational pharmaceutical and biopharmaceutical company)
- BioFocus DPI (drug discovery)
- Pfizer UK (pharmaceutical company)
- Reckitt Benckiser (a multinational consumer goods company producing health and hygiene products)
- Alvotech (global biopharmaceutical company)
- Siemens AG (manufacturing and engineering)
- 3M Healthcare (pharmaceutical medicine)





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"I am part of several societies (couldn't really choose just one!) and I think it's brilliant that there is so much opportunity to get involved, find something you enjoy doing (outside of university work) and feel at home at Loughborough. Everyone finds something they're interested in and it's great that you can run with it here. I enjoy everything at the moment, the course, the societies and the place."
 —

Katrina
 MEng Materials

The Loughborough Experience

Loughborough University is renowned for offering a life-changing student experience, consistently highly ranked in the Times Higher Education Student Experience Survey.

An outstanding campus

The University is based on a superb 440 acre campus – the largest single-site green campus in the UK. Boasting pleasant open spaces, gardens and sports areas, our campus is equipped for every aspect of student life, with high quality accommodation, shops, health services, student support centres and our award-winning Students' Union. You will join a vibrant campus community of over 20,000 students and staff from over 100 countries.

Take a tour of the campus here:
www.lboro.ac.uk/virtualtour

A unique sporting experience

As a Loughborough student you can take advantage of the two state-of-the-art gyms on campus, represent your Hall of Residence in over 30 sports, join any of our sporting societies or simply enjoy recreational sport and leisure activities. Our dazzling array of sports facilities include a 50m swimming pool, five recreational parks, seven fitness studios and five full-sized floodlit synthetic pitches for ball sports.

Find out more:
loughboroughsport.com

More than sport

The student motto at Loughborough is 'work hard, play hard', and in your spare time, there is something for everyone. You can join in with our Rag charity fundraising, community Action volunteering, the Media Centre, music and arts activities, and over 100 different clubs and societies. It really is a world of opportunity.

Find out more:
www.lboro.ac.uk/about/students-union

Loughborough life

A busy market town in the East Midlands, Loughborough boasts great travel links and is situated between the three nearby cities of Leicester, Nottingham and Derby. The town has a variety of entertainment on offer, including theatre, comedy, cinema and restaurants serving up global cuisine, alongside pubs, delis, bars and coffee shops.

For more information go to:
loveloughborough.co.uk



WHATUNI STUDENT
 CHOICE AWARDS 2018
 UNIVERSITY OF
 THE YEAR



THE COMPLETE
 UNIVERSITY GUIDE 2020
 UNIVERSITY
 RANKED 8TH



TEACHING
 EXCELLENCE
 FRAMEWORK (TEF)
 AWARDED GOLD



THE TIMES AND
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UNIVERSITY GUIDE 2019

UNIVERSITY
OF THE YEAR



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This brochure was written several months in advance of the academic year to which it applies (2020). Every effort has been made to ensure that the information contained within is accurate at the time of publishing, but updates (for example to course content) are likely to occur due to the time between publication and the course start date. It is therefore important to visit our online prospectus at www.lboro.ac.uk/study before applying to check for any updates, as this will be the most up-to-date repository of information.



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