# Engineering Science Information Sheet for entry in 2020

Engineering Science encompasses a vast range of subjects, from microelectronics to offshore oil platforms, and involves the application of creative reasoning, science, mathematics (and of course experience and common sense) to real problems.

The Department of Engineering Science at Oxford has a top-level quality assessment rating for teaching and a world-class reputation for research. Because we believe that future engineering innovation will benefit from broad foundations as well as specialised knowledge, undergraduate teaching is based on a unified course in Engineering Science, which integrates study of the subject across the traditional boundaries of engineering disciplines. Links between topics in apparently diverse fields of engineering provide well-structured fundamental understanding and can be exploited to give efficient teaching.

The Engineering Science programme is a four-year course, leading to the degree of Master of Engineering. The first two years are devoted to topics which we believe all Engineering undergraduates should study. In the third and fourth years there is scope for specialisation into one of six branches of engineering: Biomedical, Chemical, Civil, Electrical, Information and Mechanical. Decisions about which of these will be your specialisation can be deferred until the third year.

The course is accredited every four years by the major engineering institutions in respect of the initial requirements for the designation of chartered engineer.

Industrial experience is an extremely important adjunct to an academic engineering education, and undergraduates are strongly encouraged to obtain it. One way to do so is by being sponsored. Further information is generally available through your careers teacher, or from the engineering institutions. If your sponsoring company wants you to spend a year with them before university, you will be asked to declare this at your interview and in your UCAS application.

## A typical week

As a guide, in an average week you will have approximately ten lectures and two college tutorials or classes. In some weeks in the first two years you will also have up to five hours of practical work. In the third year each student spends an average of one day a week on their group project work. The individual project in the fourth year takes approximately two and a half days a week.

Class and tutorial group sizes are designed to allow students to discuss the contents of specific lectures with a tutor and their peers. In the first two years tutorials are delivered in colleges, typically in groups of 2-4 students. In the third year the department organises tutorials for groups of up to 4 students. In the final year class sizes vary, but there are no more than 15 students per class.

Lectures are delivered by the academic staff of the department, who are experts in their areas of research and typically have years of teaching experience. Tutorials and classes are delivered by a tutor, who might be a member of the academic staff, a postgraduate student

– studying at doctorate level – or a postdoctoral research assistant within the department. Practical laboratory sessions are supervised by experienced academics and technical staff. To find out more about how our teaching year is structured, visit our Academic Year page.

**Course structure**

| | |
|---|---|
| **YEAR 1** | |
| **COURSES**<br>• Mathematics<br>• Electrical and information engineering<br>• Structures and mechanics<br>• Energy and the environment<br>• Engineering practical work | **ASSESSMENT**<br>First University examinations: four written papers; Assessment of Engineering practical work |
| **YEAR 2** | |
| **COURSES**<br>• Mathematics<br>• Electrical and information engineering<br>• Structures, materials and dynamics<br>• Energy systems<br>• Engineering practical work | **ASSESSMENT**<br>Final University examinations, Part A: four written papers; Assessment of Engineering practical work |
| **YEAR 3** | |
| **COURSES**<br>• Five optional Engineering courses<br>• Engineering in society<br>• Engineering computation<br>• Engineering practical work<br>• Group design project | **ASSESSMENT**<br>Final University examinations, Part B: six written papers; Assessment of Engineering practical work; Project reports (Engineering Computation and Design Project) |
| **YEAR 4** | |
| **RESEARCH**<br>A major project, plus six specialist courses chosen from within the areas of:<br>• Biomedical engineering<br>• Chemical engineering<br>• Civil engineering<br>• Electrical engineering<br>• Engineering mathematics<br>• Information engineering<br>• Mechanical engineering | **ASSESSMENT**<br>Final University examinations, Part C: six written papers; Project report |

| | |
|---|---|
| • Production engineering | |
| *The options listed above are illustrative and may change. More information about current options is available on the Engineering Department's website.* | |

The University will seek to deliver each course in accordance with the descriptions set out above. However, there may be situations in which it is desirable or necessary for the University to make changes in course provision, either before or after registration. For further information, please see the University's Terms and Conditions.

**Fees**
These annual fees are for full-time students who begin this undergraduate course here in 2020.

| Fee status | Annual Course fees |
|---|---|
| Home/EU | £9,250 |
| Islands<br>(Channel Islands & Isle of Man) | £9,250 |
| Overseas | £36,065 |

Information about how much fees and other costs may increase is set out in the University's Terms and Conditions.

Please note that the course fees you pay include your fees for both University and college services and are divided between the University (including your department or faculty) and your college on a formula basis. More information is provided in your Terms and Conditions.

**Additional Fees and Charges Information for Engineering Science**
There are no compulsory costs for this course beyond the fees shown above and your living costs.

**Living costs**

Your living costs will vary significantly dependent on your lifestyle. These are estimated to be between £1,135 and £1,650 per month in 2020-2021. Each year of an undergraduate course usually consists of three terms of eight weeks each but you may need to be in Oxford for longer. As a guide you may wish to budget over a nine-month period to ensure you also have sufficient funds during the holidays to meet essential costs.

**Living costs breakdown**

| | **Per month** | | **Total for 9 months** | |
|---|---|---|---|---|
| | Lower range | Upper range | Lower range | Upper range |
| Food | £270 | £385 | £2,430 | £3,465 |
| Accommodation (including utilities) | £630 | £760 | £5,670 | £6,840 |
| Personal items | £130 | £245 | £1,170 | £2,205 |
| Social activities | £45 | £110 | £405 | £990 |
| Study costs | £40 | £95 | £360 | £855 |
| Other | £20 | £55 | £180 | £495 |
| **Total** | **£1,135** | **£1,650** | **£10,215** | **£14,850** |

In order to provide these likely living costs, the University and the Oxford University Students' Union conducted a living costs survey to complement existing student expenditure data from a variety of sources including the UK government's Student Income and Expenditure Survey and the National Union of Students (NUS). The likely lower and upper ranges above are based on a single student with no dependants living in college accommodation (including utility bills) and are provided for information only.

When planning your finances for future years of study at Oxford beyond 2020-21, you should allow for an estimated increase in living expenses of 3% each year.