



# Engineering

Full details about the course are available from

<http://www.eng.cam.ac.uk/>

and

[www.undergraduate.study.cam.ac.uk/courses/engineering](http://www.undergraduate.study.cam.ac.uk/courses/engineering)

## The subject at Selwyn

The Teaching Fellows have a broad range of specialisations and so do most of the supervision teaching in the first two years of the course. They also do the individual direction of studies and organisation of supervisions. Supervisions are generally undertaken in pairs and on average each student has two or three College supervisions a week. We also have a small number of other supervisors who have long associations with Selwyn. A feature of Selwyn is that you will be assigned a Director of Studies (DoS) when you arrive and that DoS will continue with you for at least the first three years, thus providing time to get to know and understand you as an individual.

An important aspect of College life is that there is a good community of Engineers in the years above who can help with all aspects of the course, ranging from assistance with particular exercises to the selection of third- and fourth-year modules. There is also an active Selwyn Engineering Association that organises social events.

## The Engineering Fellows

The Teaching Fellows and Directors of Study in Engineering at Selwyn are:

*Professor Stewart Cant*, Professor of Computational Engineering: he supervises Thermodynamics, Fluid Mechanics and Mathematics. *Professor Daping Chu*, Director of Centre for Photonic Devices and Sensors in the Engineering Department and Director of CAPE (Centre for Advanced Photonics and Electronics): he supervises Electrical Engineering. *Professor John Dennis*, Professor in Chemical Reaction Engineering. *Mr James Matheson*, School of Technology IT Relationship Manager in the Engineering Department: he supervises Electrical and Information Engineering. *Dr James Moultrie*, University Senior Lecturer in Engineering Design: he is also Director of Studies for the Manufacturing Engineering Tripos and supervises Mechanics and Manufacturing Engineering.

Other supervisors with long-term links with Selwyn are: Mrs Caroline Matheson, who supervises Mathematics; Dr Peter Wilkinson, who supervises Structures, and Dr Carol Armitage, who supervises Materials.

## Subject requirements

The Cambridge Engineering Tripos demands a high standard in Mathematics and a sound knowledge of Physics so both these subjects are essential. Further Mathematics is very helpful so we like to see candidates offering it where possible. Common choices of a fourth A-level subject include Chemistry and Design and Technology. Economics or a modern language are other quite popular possibilities. Applicants who are taking other post-16 qualifications should have similar coverage of mathematics and science to that described for A-Levels.

## Pre-interview assessment

As at other Colleges, applicants will be asked to take the pre-interview written assessment for Engineering, which will take place in schools and other assessment centres on **30 October 2019**. You must be registered in advance (separately to your UCAS application) to take the assessment. The registration deadline is **15 October 2019**. Your assessment centre must register you for the pre-interview assessment (you cannot register yourself).

## Interviews

You will typically have two subject interviews lasting up to about 30 minutes. Each interview will usually be given by a different pair of Engineering Fellows. The interviews will aim to test your ability to reason logically and your mathematical ability and scientific understanding in an engineering context. We realise that it is a challenge to have to 'think through' problems under pressure so we do our best to make you feel as much at ease as possible – and provide hints if you run into difficulties, very much as we would for students in supervisions.

You will also have a shorter general interview with an Admissions Tutor. This interview is aimed at learning about your interests and activities outside Engineering and your motivation to study Engineering.

Before the interviews we suggest you find out as much as you can about engineering as a course of study and as a career. This not only helps confirm your choice of course in your own mind, it helps convince us of your motivation to study the subject and that you will enjoy and make the best use of the course here. Take every opportunity to go on work placements, enter project competitions, attend open days, and undertake courses, such as Headstart.

## View on gap years

We welcome applications equally from those opting for direct entry and those wishing to take a gap year.

A gap year can have many advantages for you. A University requirement for successful completion of the Engineering Tripos is that four weeks of industrial experience must be obtained before the end of the second year and a further four weeks before the end of the third year. It is possible to gain all or part of this experience before starting the course, either through summer placements or during a gap year. You can gain industrial experience and training through direct sponsorship or through the *Year in Industry* scheme, see <http://www.etrust.org.uk/the-year-in-industry>

You can combine this with travel and possibly learning a foreign language. Further information about gap years can be found on the departmental web site, see

<http://www.admissions.eng.cam.ac.uk/information/gap-year>

## Finding out more and Open Days

The College and Engineering Department will be participating in the Cambridge Open Days on 4 and 5 July 2019. Full details are available on our website.