

Hi and welcome to engineering at Pembroke!

Congratulations for getting your place and meeting your offer – you’ve done amazingly well to get here and I promise all your hard work was absolutely worth it and you’re set to have an incredible time.

My name is Ross Elsby, a 2nd year engineer, and I’m your subject rep for engineering this year. What this means is that I’m your official point of contact for engineering related matters for your first year – any questions you’ve got about the course, lectures, supervisions, college life, or anything really, just grab me and ask (embarrassing photo provided). While everything being thrown at you at the moment must be quite intimidating, don’t feel you have to go it alone – other fresher’s around you will be equally apprehensive.



There are usually around 10-20 engineers in Pembroke which is a nice size – you’ll have plenty of people to talk to about starting the course and you’ll get to know each other over the year. This number of people in every year doing the course makes for a strong engineering community in the college; we’ll have a subject lunch in fresher’s week to get everyone together.

A quick introduction to the course - With engineering being essentially a “new” subject for first years (i.e. not taught specifically in schools) you might be wondering what to expect. There are 4 main topics: Unsurprisingly, maths is a core subject, especially in the first term. Mechanics pretty much builds on what you’ve done at school. Structures is a relatively new thing. The final topic is electronics; I won’t lie, having done this at A-level it is helpful, and I’m jealous, but for those of you who haven’t, don’t worry because you’re in the majority. In the 2nd and 3rd term you will be introduced to thermofluids (my favourite subject) and materials (slightly tedious at times but interesting in parts as well). Outside of lectures you’ll have compulsory labs, drawing and computing sessions which are no longer than 2 hours. Labs are similar to practicals that you may have done at school, and drawing includes both technical drawings by pencil and computer aided design (CAD) which you may have heard of. Computing (programming in C++ and Matlab) could be quite daunting for those of you, like me, who haven’t had experience in programming before, but once you get used to it you’ll be fine.

Learning for engineers at Cambridge is done in 3 stages: you attend a lecture, do an examples paper based on the content of the lecture, and then discuss the work in a supervision where you have the opportunity to ask your supervisor about anything that you found difficult. Don’t worry about the workload. Yes the questions will be harder than stuff at school and yes there will be more of them, but everyone is in the same situation, there’s always someone around to help (me included) and I promise you won’t have to spend the whole day in the library. The fact that you have been given an offer and made the grades means that you are more than capable of dealing with it. This link has a load of useful information like lecture and lab timetables, induction information, and it also has past papers and examples papers for later on in the year when you need to revise:

<http://www.eng.cam.ac.uk/teaching/index-ia.html>

I’ve said a lot about the course, but to be honest, Cambridge has a lot more to offer you than just a degree. Almost any activity that you can think of will be practised somewhere in the university if not in Pembroke. I can’t give personal accounts of things like music and acting but I know that the college has extremely good societies for both and if you’re into sport then you will not be short of things to do while you’re here. I’ll leave it to the individual college sports teams to win you over in fresher’s week but I will say out of experience that the hockey team and rugby team won’t disappoint. Also, if anyone is interested in athletics, there isn’t a college team but I’m 2nd team captain for the university so just let me know if you want to get involved (please excuse the shameless plug!)

So that’s about it. As far as pre-term preparation goes, just make sure you try the preparatory question book. Don’t panic if there’s stuff you can’t do, it’s just kind of rough background knowledge to make sure you don’t forget absolutely everything over the summer/gap year (which seems unlikely to be honest). And relax! Your college families who you meet on your first night will make you feel right at home. If you have any questions between now and then just send me an email (re287@cam.ac.uk)

You’ve actually managed (hopefully by choice and not by total fluke) to pick the best subject in the university, the best college in the university, at the best university in the world. Nice one!

See you in October,

Ross