

King's Student
Perspectives
Mathematics

Felicity, 1st year
June 2012

How did you come to apply?

I had wanted to study maths for a long time before I applied to university, and since Cambridge has such an excellent reputation for maths, it seemed like an obvious choice despite having to take STEP papers.

When applying it's hard to know what all the colleges are really like and whether it actually makes any difference which college you apply to - I chose King's mostly because of the perfect location, the size and that it looks so nice.

How did you find the transition from sixth form maths?

There is a massive difference between school and university maths. Here, it is all about thinking through problems: it can take several hours just to puzzle out one question on an example sheet, and two questions are never the same. To start with, some of

the courses don't seem to be too

much harder than some of the material covered in A-level - that is, until you see the first example sheets and need to start thinking very hard about the questions. However, as long as you keep on top of the lecture material and up-to-date with work for supervisions, it is quite manageable. The college parenting system works well, particularly when you're settling in - one of my parents is a mathmo so could give useful advice at the start, and if I ever get stuck, I can go to ask for help.

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What are the first year courses like?

First year lectures take place in the Cockcroft Lecture Theatre in the New Museums site, which is very convenient since King's is one of the closest colleges, and having a very quick walk to lectures in the morning is often a relief if you're running late. I didn't really know what to expect from the courses, as I found that even if I read the course schedule it didn't mean



Felicity

much to me and I couldn't really imagine what we would learn. The courses in first year cover a range of pure and applied maths, which is necessary in order to have a broad understanding before choosing courses later in second year. The range is also interesting.

It would be hard to say what the most interesting thing we've covered in lectures is, as there are just so many fascinating topics, and I've had so much fun from doing some of the maths! I found that the hardest thing about the course was right at the start, when there is a sudden jump from material that you're fairly comfortable with, and then a few lectures later you have no idea whatsoever what it is going on. Fortunately, this is easily overcome by a bit of work. Possibly I found the start of the first term harder to adjust to than others as I did a gap year, so coming back to doing lots of maths again was a slight shock.

What do you think of supervisions?

The supervisions are probably the most advantageous part of the course here. In first year, there are four courses a term, each with four supervisions, so it works out as two supervisions per week. We are given example sheets in lectures

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and expected to do them and hand them in a couple of days before the supervision so that they can be marked. Then, in supervisions we go through any problems in the example sheet (there are always some), or from the course in general. The supervisions are usually taken in pairs or sometimes individually, and I find that they are incredibly useful and interesting, since you often go slightly further in a supervision than is strictly necessary for the course, but with only two in a supervision, you can go at your own pace and make sure you really understand everything.

What is the workload like?

It is not like school, where teachers would chase you up if you didn't do some work - you have to motivate yourself to do all the work, keep up to speed with lectures, and do the example sheets. Supervisors generally won't waste their time trying to make you do the work if you don't want to. If you don't want to spend a lot of time doing maths there is no point coming here! But on the other hand, if you are really interested in maths then Cambridge is the perfect place to have the opportunity to study maths as much as you possibly can.

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Felicity rowing for King's W1 boat in the May Bumps: chasing the boat ahead, and chased by the boat behind. Bumps is a big event and draws a crowd to cheer the various boats on – you can just see the spectators on the riverbank.

Having said that, it is still possible to spend some time doing other things - I still had time to go running every morning, do lots of rowing and spend some precious minutes relaxing in the bar as well.

There is plenty to do at King's and in the university as a whole, for whatever you're interested in. There is so much to do that you have to make the most of it and make good use of every minute!

What are the best and worst things about studying maths at Cambridge?

Possibly the best thing about studying maths at Cambridge is the supervisions, and that you are surrounded by a lot of excellent

mathematicians. I find it hard to imagine studying maths without supervisions as they are so vital and stimulating! I can't really think of anything bad about maths here - it could possibly be intimidating to be surrounded by so many other people who are good at maths, but I find it more a relief that there are friends I can ask for help if I am stuck. The only other thing to beware of is the time spent doing maths. You need to be prepared to spend the time studying, but it is interesting and I don't find this a problem at all.

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Dressed up for Jesus College May Ball

Do you have work to do during the vacations?

The short terms are perhaps the biggest disadvantage of being here - I never want to leave, and spend most of the holidays counting down the days till I can come back! But there is a lot of work to do over the holidays, although none of it is specifically holiday work. It is more a case of making sure that you know all the material covered that term well, and then revising for exams.

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What are Cambridge maths exams like at the end of the year?

The exams themselves are awful (although most people think the same so it doesn't matter too much), and I find it impossible to come out of an exam thinking that it went well, even if it did.

I think that STEP is the only thing that can possibly give you even a vague idea of what the exams are like - it is hard to have to actually think in an exam and not just remember things. I was very worried about STEP when applying, so I spent a lot of time doing past papers for it, and this is absolutely necessary. It also trains you to think in a way that is very different to A-level. So I would advise not worrying too much about STEP: prepare for it as much as you possibly can, but try to enjoy it as well - if you don't like doing the maths it is probably an indication that you shouldn't want to come here!

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How did you find the application process?

The application process apart from STEP wasn't too bad. My interviews were all maths-based, and the interviewers do know that you'll be nervous, and seem to give you some leeway if you say something really stupid!

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You have a test in the morning before the interviews, so that even if your interview goes badly, if the test goes well they might still give you a chance.

What can you say about King's in particular?

One nice thing about King's is that you know the mathmos in the other years, and we occasionally have mathmo socials which are usually good fun. This means that if you're stuck, it is easy to find someone to help as well as the others in your year.



Using one of the King's punts



Felicity with group of friends from King's, dressed up for Jesus May Ball.

I think that King's is particularly good for accommodation - it is so close to anywhere you would want to go that anything beyond a 5 minute walk is considered a relatively long way. One of the other things I liked about King's when I applied was that the first year accommodation is almost all in college, which makes it very easy to socialise and you really feel like you belong to the college.

Now I can't wait to get back to Cambridge after the holidays for second year - for the people, the maths, the sports and that it is just such a wonderful place to study in.

It is just such a wonderful place to study in.

A note to current King's Maths students

If you would like to write about your experiences of studying Maths at King's for our prospective students to read, please email Kristy in the Admissions Office for further details: undergraduate.admissions@kings.cam.ac.uk