



UNIVERSITY OF  
CAMBRIDGE



# The Subject Matters

Post-16 subject choices

# Introduction

The Subject Matters is a series of Cambridge based events aimed at Year 10 and Year 11 students (or equivalent) who are considering university and want advice on which subjects to study at sixth form or college.

This accompanying leaflet introduces higher education, talks about university life and provides information to help students make informed post-16 subject choices.

The post-16 subject choices that students make can have a major impact on their course and university options. Selective universities such as the University of Cambridge often consider not only the individual subjects, but also the combination of subjects because they prepare students more effectively for those courses. The information in this leaflet is written by the University of Cambridge but will be relevant to other selective universities.

Please note that this is general guidance in the context of the University of Cambridge and you are encouraged to look up courses on the UCAS website or contact universities directly for more detailed, specific and up-to-date information.

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# What is higher education?

Higher education is the term used to describe courses of study at universities that are at a higher level than at school or college. These courses lead to qualifications called degrees.

Most people start higher education courses at age 18, after studying in Years 12 and 13. Some students may decide to take a year out first (a gap year) or may come back to studying later in life as a mature student.

Higher education courses are available at a wide range of universities and colleges all over the UK, and there are currently more than 50,000 courses and 395 different places to study.

**395+**

*places to study  
in the UK*

(UCAS, [www.ucas.com](http://www.ucas.com))

**50,000+**

*courses in  
the UK*

(UCAS, [www.ucas.com](http://www.ucas.com))

**2.34 million students**

*studying at UK higher education providers*

(Higher Education Statistics Agency, February 2019)

# Why go to university?

## To study a particular subject in more depth

You may already enjoy a particular subject at school/college or you may want to branch out into a new area, eg to study surveying because you like geography, or zoology because you enjoy biology.

## The career you're interested in may require a degree level qualification

For example, to become a doctor, dentist, architect, town planner, teacher, lawyer or chartered engineer, you're required to have a degree. Or you may be interested in one of the many high-level jobs that are open to people with any degree – some professions require a degree in a particular subject, but many more jobs don't specify a degree subject.

## For the university experience

Being a student at university widens your experience of the world. You meet new people from all over the UK and overseas, and from a wide variety of backgrounds and cultures. You're also offered a range of exciting opportunities for your social life, as well as your studies, and you have the opportunity to leave home if you want to. All these things make your time at university an all-round experience, as well as giving you a chance to develop a range of skills which are highly valued by employers.

*'Going to university is a great way to expand your knowledge, meet new people, and enjoy new experiences.'*

(UCAS, [www.ucas.com](http://www.ucas.com))



# University life

## Studying

University study is a much more independent experience than school or college – for a start, you'll have chosen the subject(s) that you most enjoy! You'll have a weekly timetable with a number of lectures (where large numbers of students listen to and make notes on the information given by the lecturer) and classes/seminars (which are smaller groups more similar to the class sizes you're currently used to). Some subjects include practical sessions as well, eg in laboratories or design studios.

However, the biggest difference to school/college is that you will be responsible for your own learning and, alongside lectures and classes, be expected to spend a lot of the week in private study time. This will include further reading, research and revision, and (depending on the subject) preparing for group discussions, writing essays, or working through problems.

## Social activities

Universities offer lots of social opportunities and activities. Every university has a Students' Union which provides places to meet, eat and drink, as well as organising regular entertainment such as club nights and live music. There are also a variety of university clubs and societies – ranging from sports clubs, cultural groups, community action groups, student newspapers and radio stations, to drama societies and music groups of all kinds. Anyone with an interest and enthusiasm can usually find a group to join, or start their own!



## Accommodation

Many students, even if they go to a local university, choose not to live at home in order to be more independent. Most universities make this easier by providing accommodation for many of their students, particularly in their first year.

Accommodation could be in a hall of residence/College for large numbers of students, or in a shared house or flat, normally with a small group of students. In a hall of residence/College you usually get your own study-bedroom and pay rent to the university/College.

### Accommodation at Cambridge<sup>1</sup>

**Cambridge guarantee** - most undergraduates are guaranteed College-owned accommodation for three years, and many Colleges provide for fourth-year students too.

**Shorter contracts** – Colleges offer shorter annual accommodation contracts (27-39 weeks), so you don't usually pay rent during the vacations.

**Not far to travel** – College accommodation is close to the city centre and within walking or cycling distance of departments.

<sup>1</sup> Details are correct at the time of printing (October 2019) but should be checked against the Cambridge College websites for the most up-to-date information.



## Support

Starting university is an exciting experience, but being independent, possibly for the first time in your life, doesn't mean that there's no one to turn to for help. Most students need a bit of time to get used to their new life and routine, and you are encouraged to seek advice, ask questions and raise any concerns at every stage of your university journey. There will be a variety of people you can speak to, such as your personal tutor in your department/College, the warden in your hall of residence, or a welfare officer.

# How is Cambridge different?

## Teaching

Our teaching staff includes many national and world subject leaders. In addition to lectures and seminars, at Cambridge you'll have supervisions, which are very small teaching sessions, most often for between one and three students. Supervisions are a great way of helping you to explore course material in greater depth, investigate new approaches, receive regular feedback and clarify anything you're unsure of.

## Departments and Colleges

Cambridge is structured a little bit differently from most other universities in that it's a collegiate university. This means that it's comprised of faculties and departments for academic subjects and a number of Colleges.

Teaching at Cambridge is organised into a number of faculties. Each faculty is responsible for a broad subject area, and some of the larger faculties are divided into smaller departments. It's the University (through the faculties/departments) that determines course content; organises lectures, seminars, practicals and projects; sets and marks examinations; and awards degrees.

If you apply to the University, your application is considered by one of the Colleges. Your College is also the place where you live, eat, socialise, and often receive your small group tuition (supervisions). Much more than just a hall of residence, your College can become a key part of your community and offers welfare support as well.





# Choosing post-16 subjects

For admission to their degree courses, it's common for universities to require applicants to have qualifications in particular subjects that are relevant to each degree. Therefore, the A Level subject choices you make in Year 11 (or equivalent) can have a significant effect on the universities and course options available to you.

This leaflet provides general information about key subjects that we require applicants to have for admission to degree courses at the University of Cambridge. We hope this will help you make informed decisions so that your A Level choices won't unduly limit your options here should you wish to apply to Cambridge in the future.

If you'll be studying qualifications other than A Levels (eg the International Baccalaureate, Scottish Advanced Highers and the Irish Leaving Certificate) the advice that follows is broadly the same. Guidance for a range of qualifications is available on the Undergraduate Study website ([www.cam.ac.uk/entrancerequirements](http://www.cam.ac.uk/entrancerequirements)) and if you have any queries you should contact us at as early a stage as possible.

## What are we looking for?

Everyone who applies to Cambridge is treated and assessed individually. We look for different things in different people for different courses. However, all Admissions Tutors are looking for the students who they believe:

- **have the most academic ability and potential**
- **have genuine interest in and are best suited to the course they have applied for**
- **will benefit from and flourish in the learning environment we offer**





# I know which course I want to study...

Many Cambridge courses require qualifications in certain subjects and for such subjects to be passed, normally with an A or A\* grade at A Level (or equivalent). Applicants may be required to achieve an A\* in one or more particular subjects, depending on individual circumstances.

If you've already decided on a course that you'd like to study at university, we recommend that you take a look at the information on courses and entry requirements given on our website ([www.cam.ac.uk/courses](http://www.cam.ac.uk/courses) and [www.cam.ac.uk/entrancerequirements](http://www.cam.ac.uk/entrancerequirements)) and on websites of other universities you're considering. Do this before you finalise your A Level subject choices to check that they'll be appropriate for your application.

## Arts and social sciences

If you'd like to study an arts or social sciences course at university but you're not sure which one, then English Literature<sup>1</sup>, History, languages and Mathematics are good core subjects: choosing one or more of these can provide a good foundation for your subject combination.

Other good choices to combine these subjects with include: an additional language, Ancient History, Classical Civilisation, Economics, English Language, Further Mathematics<sup>2</sup>, Geography, Politics, History of Art, Law, Music, Philosophy, Psychology, Religious Studies, sciences (Biology, Chemistry or Physics) and Sociology.



<sup>1</sup> English Language and Literature can be an acceptable alternative.

<sup>2</sup> For students in England the Further Mathematics Support Programme ([www.furthermaths.org.uk](http://www.furthermaths.org.uk)) offers the opportunity to study Further Mathematics even if it's not offered by your school/college.

## Sciences

If you think you'd like to study a science course at university but you're not sure which one, then you're advised to take at least two, and ideally three, of Biology, Chemistry, Mathematics and Physics. Some pairings of these subjects are more natural than others. The most natural pairs are Biology and Chemistry, Chemistry and Physics, and Mathematics and Physics. Another useful combination, particularly for courses where A Level Mathematics is required, is Mathematics, Further Mathematics and Physics.

If you are planning to study biological or medical sciences you should take Chemistry; for physical sciences or Engineering you should take A Level Mathematics and Physics, and ideally Further Mathematics.

Other possible subject choices – for instance Computer Science, Design and Technology, Electronics or Psychology – may be useful preparation for some of our science courses.



*'The subjects you study at sixth form or college will influence the degrees which are open to you at university and potentially your future career.'*

(Informed Choices, [www.informedchoices.ac.uk](http://www.informedchoices.ac.uk))

# I want to keep my options open...

Choosing subjects that genuinely keep your options open is trickier than you might think.

We often encounter students who have taken a mixture of arts and science subjects in the belief that it will keep their options open. While such a subject combination does provide a suitable preparation for many arts and social science courses at the University, it can make you a less competitive applicant for Cambridge's science courses (most successful applicants for our science courses typically have three or even four science or mathematics A Levels).



There are certain A Level subjects that are essential for a number of courses at Cambridge. Therefore, choosing one or more of these can help keep your options open. These subjects include: a language, Chemistry, History, Mathematics and Physics. Other subjects that also facilitate course choice at Cambridge include Biology and Further Mathematics.

## Should I take three or four A levels?

Typical offers from Cambridge are based on students taking three A Levels (or equivalent) together in Year 13, and most Cambridge applicants are studying three or four A Level subjects in Years 12 and 13.

Applicants taking four subjects won't normally be at an advantage compared with those taking three, as we'd rather applicants develop greater knowledge of the subjects most relevant to their chosen course than accumulate additional A Levels. However, competitive applicants for science courses often have Further Mathematics as a fourth subject.

In all cases, your individual circumstances will be taken into account during the admissions process.

*We aim to offer admission to students of the highest intellectual potential, irrespective of social, racial, religious and financial considerations.*

(University of Cambridge Admissions Policy, [www.cam.ac.uk/admissionspolicy](http://www.cam.ac.uk/admissionspolicy))



### **Other A Level subjects**

There are, of course, many other A Level subjects that we haven't mentioned at all in this leaflet. The fact that we haven't mentioned them doesn't mean that we think they're not individually valuable. However, they're either very specialised in focus and so not a good choice if you're looking to keep your options open, or else the way in which they're taught and assessed means that they don't prepare students well for the courses offered at the University of Cambridge. If you think you may want to apply to Cambridge, our advice is to ensure that among your A Levels you're doing no more than one of these other subjects.

Please note that A Level Key Skills and General Studies aren't required or included in our academic assessment. Critical Thinking is regarded as a worthwhile addition to your portfolio of qualifications as a fourth AS or A Level subject, but it's unlikely to be part of a conditional offer for any Cambridge course.

*Whichever degree you go for, there will be a wide variety of career options available to you. For the majority of vacancies advertised by the University of Cambridge Careers Service, employers welcome applications from any discipline.*

(Cambridge Careers Guide, 2019)

# How to apply

## How can I choose a course at university?

A good place to start is to think about the subject(s) you're interested in personally – this might be one of your school/college subjects or something you do in your spare time. A university degree is about focusing on one or two particular subjects for several years, so it's important to choose something you enjoy!

Each university produces a prospectus which gives details of its degree courses, entrance requirements and other important information such as sports and social facilities and what the town/city is like.

Reading prospectuses/websites and visiting universities and colleges on open days will help you to work out what you'd like to study and where. You'll also be able to find out what grades you'll need to get into the university of your choice. Your school or college, or the UCAS website ([www.ucas.com](http://www.ucas.com)), can also offer further help and guidance.

## When can I choose?

It's never too early to start thinking about higher education. You'll have the chance to speak to teachers and careers advisers in Years 10 or 11 to discuss what you may want to do when you leave school/college, including the option of going to university. You may find it helpful to look at a few prospectuses or university websites in Year 11, but bear in mind that courses and entry requirements do change from year to year. If you look at a prospectus or university website several years in advance, the details may well have changed by the time you come to apply, so do check again nearer the time.

It's important at this time to try out some of the things you're interested in. Talk to people who do the job(s) you'd like to do, or to students who have studied the course that interests you. This will help you to decide if it's something you'll enjoy and will be good at.

Once you're in Year 12 you'll need to do some research into courses and universities by consulting prospectuses, looking at higher education directories and guides, and going to careers fairs or university open days. Prospectuses are kept in most school/college careers libraries, but you can get your own copy by contacting any university, and most of the information you need can also be found on university websites.



## When and how can I apply?

Students usually apply during the first or second term of Year 13, in the year before they want to start their course. In the UK, students apply to universities through the Universities and Colleges Admissions Service (UCAS) – you'll complete one application, on which you can make up to five choices of institutions to apply to. You'll be able to get help and support from your school or college when you apply.

## What else do universities look for?

Many universities will be interested in extra-curricular activities, including your hobbies and interests, work experience, voluntary work and any positions of responsibility that you may have held either in school/college or elsewhere. At Cambridge, our admissions decisions are based on academic criteria (ability and potential), so we only consider extra-curricular activities that are relevant to the course you've applied for.

*The deadline for  
applying to either  
Oxford or Cambridge is*  
**15 October**

(Other application deadlines apply for some applicants. Please check our website ([www.undergraduate.study.cam.ac.uk](http://www.undergraduate.study.cam.ac.uk)) for full details)



# Find out more

Your teachers and careers advisers will be able to give you help and advice about applying to university. In addition, all universities arrange activities and events – such as masterclasses, campus tours and summer schools – to help school/college students find out more about higher education.

When you're in Year 12, you may have the opportunity to attend a higher education convention in your region where you'll be able to talk to representatives from a large number of universities, as well as pick up copies of prospectuses. Someone from a university may also visit your school/college to give a talk. If you want to visit in person to find out more, you'll find that most universities and colleges organise open days to allow you to do just that.

Visit the links below for more information about higher education:

## **Undergraduate Study website:**

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

On our Undergraduate Study website you'll find information about the courses that we offer, as well as more general information about what it's like to study at Cambridge and the application process. Each course page has information about the topics you'll cover, teaching, and assessment, so it's a great place to look to start considering if the course here would suit you. On this website you'll also find information about events for Year 12 (or equivalent) students, such as Subject Masterclasses and Cambridge Open Days.

## **Informed Choices website:**

**[www.informedchoices.ac.uk](http://www.informedchoices.ac.uk)**

Informed Choices is aimed at pupils aged 14 and upwards who are considering university and want information to help them choose the right subjects to study at sixth form or college. The guidance is written by admissions directors from the 24 Russell Group universities and provides information on why subject choice matters.

## **HE+ website:**

**[www.myheplus.com](http://www.myheplus.com)**

Once you have chosen the university course you would like to study, visit the HE Plus website. This website has a wide range of subject resources to help you get started with 'super-curricular' work. Super-curricular activities include anything you do beyond your school/college work which develops your subject interest, so it's a great way to show admissions staff which parts of your subject you find most interesting and why you want to study a specific course.

Details are correct at the time of printing (October 2019) but should be checked against the Undergraduate Study website and other university websites for the most up-to-date information.

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



