The Subject Matters

Post-16 subject choices
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. 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 37,000 courses and 300 different places to study.
Why go to university?

To study a particular subject in more depth

You may already enjoy a particular subject at school or you may want to branch out into a new area, e.g., 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

To become a doctor, dentist, architect, town planner, teacher, lawyer or chartered engineer, for example, 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.

The majority of top jobs DON’T specify a degree subject – they ask for a good degree (first or 2.1) from a good university, in ANY subject.

1 UCAS.com
University life

Studying

University study is a much more independent experience to school – 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 is that students are responsible for their own learning and, alongside lectures and classes, are 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 huge 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 for large numbers of students, or in a shared house or flat, normally with a small group of other students. You usually get your own study-bedroom and pay rent to the university.

Cambridge guarantees most undergraduates College-owned accommodation for three years, and many Colleges provide for fourth-year students too. This means that you don’t have to find private accommodation after your first year.

*Top 10 for good accommodation (Times Higher Education Student Experience Survey 2016).*

*Shorter contracts* – Colleges offer shorter annual accommodation contracts (27-39 weeks), so you don’t pay rent during the vacations unless you choose to stay in Cambridge.

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

Support

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 - if you want or need some advice there’ll be a variety of people you can speak to, such as your personal tutor in your department, 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 groups and a great way of making sure that you’ve digested and understood what you’re studying.

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 (though not always) receive your small group tuition (supervisions). Your College becomes your community, and offers all welfare and support as well.
What we are 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 applied for
- will benefit from and flourish in the learning environment we offer

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 AS and A Level subject choices you make in Year 11 (or equivalent) can have a significant impact 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 AS/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 Advance Highers, 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) and if you have any queries you should contact us as early as possible.
I know what 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 course requirements given on our website (www.cam.ac.uk/entrancerequirements) and on the 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 an 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\(^2\), History, languages and Mathematics are good ‘keystone’ 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, Further Mathematics\(^3\), Geography, Philosophy, Religious Studies and sciences (Biology, Chemistry or Physics).

Other possible subject choices - for instance Archaeology, English Language, Environmental Science, Government and Politics, History of Art, Law, Music, Psychology or Sociology - can be useful preparation for some of our arts and social sciences courses.

\(2\)English Language and Literature can be an acceptable alternative.

\(3\)For students in England the Further Mathematics Support Programme (www.furthermaths.org.uk) offers the opportunity to study Further Mathematics even if it’s not offered by your school/college.
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've have taken two arts and two science subjects believing it'll keep their options open. While such a subject combination does provide a suitable preparation for some 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 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.

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.

In practice, the vast majority of successful applicants for science courses at Cambridge take at least three of these subjects. Another useful combination is Mathematics, Further Mathematics and Physics. Many students take four of Biology, Chemistry, 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.
We aim to offer admission to students of the highest intellectual potential, irrespective of social, racial, religious and financial considerations.  

37,000+ courses in the UK

Other A Level subjects

There are, of course, many other A Level subjects 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 rather 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 provide a good preparation 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 three or four 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 academic assessment. Critical Thinking is regarded as a worthwhile addition to your portfolio of qualifications as a fourth AS or A Level subject, it’s unlikely to be part of a conditional offer for any Cambridge course.

91% of Cambridge graduates employed or in further study sixth months after graduating

1 University of Cambridge Admissions Policy (www.cam.ac.uk/admissionspolicy)  
2ucas.com  
3 Destinations of UK/EU Cambridge students who graduates in 2015
How to apply

How will 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 subjects or something you do outside of school. 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. This information is also available on the university website.

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) can also offer further help and guidance.
When will I choose?

It's never too early to start thinking about higher education. You'll have the chance to speak to careers teachers and advisors in Years 10 or 11 to discuss what you may want to do when you leave school, including the option of going to university. You may find it helpful to look at a few prospectuses in Year 11, but bear in mind that courses and entry requirements do change from year to year. If you look at a prospectus 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 visiting university open days or careers fairs. Prospectuses are kept in most school careers libraries, but you can get your own copy by contacting any university, and most of the information you need can be found on the university website.

When and how will I apply?

Students usually apply during the first or second term of Year 13, during the year before they want to start the 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 state up to five choices of course/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 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 applied for.
Finding 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 to help school students find out more about higher education, such as masterclasses, campus tours and summer schools.

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 to give a talk. If you want to visit universities in person to find out more, you’ll find that most universities and colleges organise open days to enable you to do just that.

If you want to find out more about higher education have a look at some of the useful websites listed below.

www.cam.ac.uk
www.myheplus.com
www.plotr.co.uk
www.prospects.ac.uk
www.thestudentroom.com
www.ucas.com