

# Subject Matters

## Post-16 Subject Choices

### Introduction

The AS and A Level subject choices you make when in Year 11 (or equivalent) can have a significant impact on the course options available to you at university.

When assessing applicants at the University of Cambridge, we consider not only the individual A Level subjects taken but also the combination of these. We generally prefer applicants to have taken certain subjects, or combinations of subjects, because we believe that they are more likely to provide an effective preparation for study at the University.

If you are in Year 11 (or equivalent) and are having to choose your AS/A Level options, this leaflet provides useful advice to ensure that the decisions you make will not unduly limit the opportunities available to you should you decide to apply to Cambridge in the future.

If you will be studying qualifications other than A Levels the advice about subjects and subject combinations that follows is essentially still true. 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 the admissions office of the College you are considering applying to as early as possible.

### Do you know the course you want to study?

Many Cambridge courses require prior knowledge of certain subjects and Colleges will expect such subjects to be passed, normally with an A or A\* grade at A Level or equivalent. Applicants may be required to achieve the A\* in a particular subject, depending on individual circumstances.

If you have already decided on a course that you would 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/](http://www.cam.ac.uk/entrancerequirements/)) before you finalise your A Level subject choices to check that they will be appropriate for a Cambridge application. You might also wish to do this for the same course – or similar courses – at other universities.

### Do you want to keep your options open?

Choosing subject combinations that genuinely keep your options open is trickier than you might think. We often encounter students who have chosen to take two arts and two science subjects at AS Level because they believe 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 broad-based science courses.

There are certain A Level subjects that are considered either essential or desirable for a number of courses at Cambridge. Therefore, choosing one or more of these will help keep your higher education options open. These subjects include: a **language**, **Chemistry**, **English Literature**,<sup>1</sup> **History**, **Mathematics** and **Physics**. Other subjects that also facilitate course choice at Cambridge include **Further Mathematics**<sup>2</sup> and **Biology**.

If you want to keep your options open but you think you are likely to want to study an arts/social science or science-based course at university please read our further advice overleaf (information about the courses offered at Cambridge can be found on the Undergraduate Study website at: [www.cam.ac.uk/choosingacourse/](http://www.cam.ac.uk/choosingacourse/)).

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<sup>1</sup> English Language & 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 is not offered by your school/college.

## Are you inclined towards the arts or social sciences?

If you think you would like to study an arts or social sciences course at university but you are not sure which one, then **English Literature**,<sup>1</sup> **History**, **languages** and **Mathematics** are good 'keystone' subjects: choosing one or more of these will 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**,<sup>2</sup> **Geography**, **Philosophy**, **Religious Studies** and **sciences (Biology, Chemistry or Physics)**.

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

The arts and social sciences courses offered at the University of Cambridge are: *Anglo-Saxon, Norse, and Celtic; Asian and Middle Eastern Studies; Classics; Economics; Education; English; History; History of Art; Human, Social, and Political Sciences; Land Economy; Law; Linguistics; Modern and Medieval Languages; Music; Philosophy; Theology and Religious Studies.*

## Are you inclined towards the sciences?

If you think you would like to study a science course at university but you are not sure which one, then you are 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 applicants for science courses at Cambridge take at least three of these subjects. Another useful combination is Mathematics, **Further Mathematics**<sup>2</sup> 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 Mathematics and Physics and ideally Further Mathematics.

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

The science courses offered at the University of Cambridge are: *Chemical Engineering, Computer Science, Engineering, Mathematics, Medicine, Natural Sciences, Psychological and Behavioural Sciences, Veterinary Medicine.*

## Other Cambridge courses

We also offer courses in *Architecture* and *Geography*. These have not been listed in the sections above because they are difficult to allocate to one of the two groups. Advice about suitable subject combinations for these courses can be found on our website ([www.cam.ac.uk/entrancerequirements/](http://www.cam.ac.uk/entrancerequirements/)).

## Other A Level subjects

There are, of course, many other A Level subjects we have not mentioned at all in this leaflet. The fact that we have not mentioned them does not mean that we think they are not individually worth taking. However, they are either rather specialised in focus and so not a good choice if you are looking to keep your options open, or else the way in which they are taught and assessed means that they do not provide a good preparation for the courses offered at the University of Cambridge. If you are thinking of applying to Cambridge our advice is to ensure that among your three or four A Levels you are doing no more than one of these other subjects.

Please note that A Level Key Skills and General Studies are not required or included in academic assessment. Critical Thinking is worthwhile but not acceptable as a third A Level subject for any Cambridge course, although it may occasionally form part of a conditional offer as a fourth A Level.