

Choosing the right A Levels



#BelongatBath



Why is this important?

Although in Year 11 university can seem a long way off, the decisions made about A Levels now can affect options down the line.

Some degrees will have required A Levels that mean you can't/shouldn't apply for it if you haven't chosen it. **Degree requirements can differ between universities**, but some will be fairly common.

When choosing BTECs, universities may require specific modules in that BTEC so it is important to check this.

You don't want to close off all your options before you have had a chance to really explore what you want to do in the future.



STEM or Humanities

Even if a student doesn't know exactly what they want to do, they will probably be able to pick either STEM or Humanities which will help guide their thinking. This can help guide A Level choice as there will be some patterns in subject choice.

Requirements of subjects that aren't offered at A Level can shock students like Architecture usually needing the same A Levels as Engineering subjects rather than a completely creative selection.



STEM	Humanities
Straight Science (Chemistry, Biology, Physics)	English
Pharmacy and Pharmacology	History
Computer Science	Law
Natural Sciences/Biosciences etc	Geography
Engineering (Mechanical/Electrical/Civil/Chemical)	Politics
Architecture	Sociology
Psychology	Criminology
Medicine/Vet Med	Economics
Sports Science	Business and Management
	Languages

The category a degree falls into, and its required subjects can differ from uni to uni. For example, Psychology and Economics might be seen as social sciences and so need a mix of essay and numerical A Levels.

Some universities will class Architecture closer to engineering and be more focused on maths whereas other will want more creative subjects.



Humanities Subjects

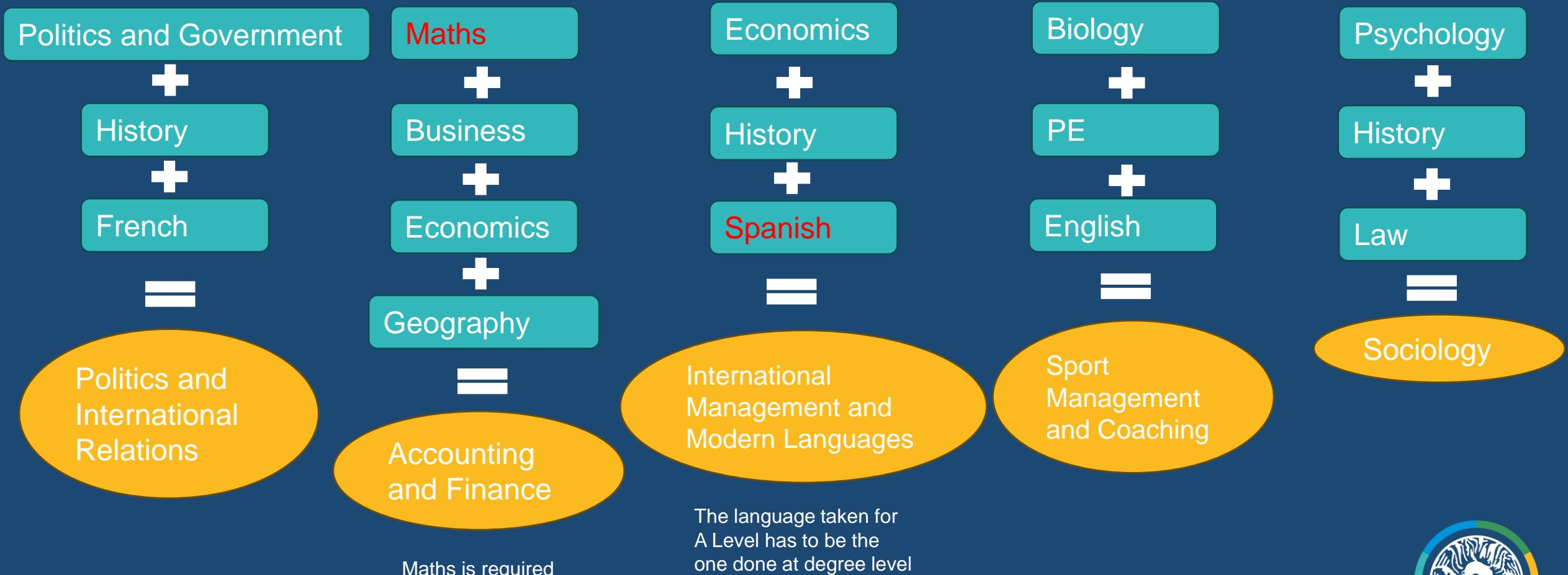
In general Humanities subjects can be applied to with a wide range of A Levels and don't often require specific subjects. Most universities will require 1-2 essay-based subjects to show writing and analytical skills.

Many humanities degrees are subjects that aren't offered widely as an A Level so for example, doing Law A Level is not required for a Law degree. This is an instance where a student will need to show their interest in the subject through extracurricular activities and their personal statement.

Obvious exceptions include subjects like languages where you are building on A Level knowledge and so will need at least one language that is carried on to degree level.



Humanities Examples



Required subjects in these scenarios are in red

These use the required subjects for University of Bath but may be similar to other universities

STEM Subjects

STEM subjects often have more requirements as there is prior knowledge necessary that is built on at university rather than starting from scratch like Humanities subjects.

The key things to remember:

- Science-based degrees will usually require at least 2 science/maths-based A Levels
- Engineering degrees will usually require Maths A Level and sometimes a science
- Maths degrees will usually require you to have both Maths and Further Maths

Subjects like Engineering aren't often available to students at A Level so encourage them to have a look at a couple of university options and the requirements they have so that students can be prepared.



STEM Examples

Biology

+

Maths

+

History

=

Biology

A second science or
maths subject is
required

Maths

+

Physics

+

Chemistry

+

Further Maths

=

Mechanical
Engineering

Further Maths is preferred as
well as traditional subjects

Maths

+

Computer Science

+

Physics

=

Computer
Science

Notice the required
subject is Maths not
Computer Science

Design Technology

+

Physics

+

Geography

=

Architecture

Maths or Physics is a
requirement with a
strong preferential for
Art/Design as well

Psychology

+

History

+

Biology

=

Psychology

No required subjects
but an expectation
of a mix between
essay and numerical



Predicted Grades

When a university has listed a required subject, they will usually state a required grade the student must achieve in that subject as well. A student needs to consider this if the required subjects aren't their strongest.

Aerospace
Engineering
BEng

A level - Typical offer

A*A*A

A*A*A in three A levels including A* in Mathematics and A in Physics

A university may also ask for minimum GCSE grades as well so remind students to check these when applying.

For example, at Bath you must have a 7 in Maths GCSE to do Psychology but there are no required A Level subjects.



Examples to beware of...

Economics



Business



Geography



Economics

You can see the student's thought process, but Maths is required due to the numerical nature of the degree. This combination might be accepted at other universities.

Art & Design



History



Religious Studies



Art History



Architecture

Although there are creativity and design skills needed for this degree, the technical elements often require students to also have a subject like Maths or Physics.

Psychology



BTEC L3 Applied Science



Pharmacy

While this BTEC is accepted for this degree, A Level Chemistry is still a required subject whether the student takes all A Levels or a mix with BTECs.



Top Tips



Double check the requirements for chosen universities. Required subjects can change usually until around the April before applications open (ex. April 2025 for September 2026 entry).



If a student is really not sure, encourage them to take a mix of STEM and humanities to cover their bases. But only if they enjoy all these subjects.



Preferred subjects are not essential. But if the university has competitive entry rates, you may be less likely to receive an offer without them.



Consider whether to take 3 or 4 A Levels. Not all universities reward 4 and will just accept the top 3 grades.



The most common limitation we see is a lack of A Level Maths. This usually affects Architecture, Computer Science, Economics and Accounting and Finance.



Useful Links

[UCAS PDF Guide on Choosing A Levels](#)

[Complete University Guide - Choosing A Levels](#)

[The Uni Guide - 6 things to know about A Level choices](#)

