

INFORMED CHOICES: A RUSSELL GROUP GUIDE TO MAKING DECISIONS ABOUT POST-16 EDUCATION

What Subjects Can Give Me the Most Options?

Many courses at University level build on knowledge which you will gain while still at school. Where this is the case, Universities need to make sure that all the students they admit have prepared themselves in the best way to cope with their chosen courses. For this reason, some University courses may require you to have studied a specific subject prior to entry, others may not. However, there are some subjects that are required more often than others. These subjects are sometimes referred to as **facilitating subjects**. Subjects that can be viewed as 'facilitating subjects' are:

- Maths and Further Maths
- Chemistry
- History
- Geography
- English
- Languages (Classical & Modern)
- Physics
- Biology

Subjects Required for Different Degree Courses

ATTENTION: If you know you want to apply for a certain degree, you must take these essential subjects at advanced level. To maximise your chances of gaining a place at a competitive University, you would also be wise to choose one or more of the other useful subjects for the degree in question.

Please note that the entrance requirements for individual Universities and courses will vary and this list covers only the most popular courses, not every course available at Russell Group Universities. You are therefore advised to use this guide in conjunction with more detailed information on the UCAS website and on University websites.

| SUBJECT | ESSENTIAL A LEVELS | USEFUL A LEVELS |
|---|--|--|
| Accountancy (also Banking/Finance / Insurance) | Usually none, although one or two Universities require Maths. | Maths, Business Studies and Economics |
| Actuarial Science/Studies | Maths | Further Maths, Economics, Business Studies |
| Aeronautical Engineering | Maths & Physics | Further Maths, DT |
| American Studies | Varies but English and/or History often asked for | Politics |
| Anthropology | None | Geography, History or sciences |
| Archaeology | None | Geography, History or sciences |
| Architecture | Some require arts/science mix. Some require Art. | Art, Maths, DT, Physics (a portfolio of drawings & ideas useful) |
| Art & Design | Art, DT | DT, Art & Design. Most entrants will do an Art Foundation after Yr 13. |
| Biochemistry | Chemistry & some want Biology. Some want Chemistry + one from Maths/Physics/Biology. | Biology, Maths, Further Maths, Physics |
| Biology | Biology, Chemistry | Maths , Physics |
| Biomedical Sciences (including Medical Sciences) | Normally two from Biology, Chemistry, Maths & Physics. Chemistry essential for some. | Maths, Further Maths, Biology, Chemistry, Physics |
| Business Studies | None | Maths, Business Studies, Economics |
| Chemical Engineering | Chemistry & Maths and sometimes Physics as well | Physics, Biology, Further Maths |
| Chemistry | Chemistry and sometimes Maths. Most require Chemistry and would like Maths plus one other science. | Maths, Further Maths, Physics, Biology |
| Childhood Studies | None | Psychology, Sociology, Health & Social Care |
| Classical Studies | For Classics Latin or Ancient Greek. For Classical Studies/Civilisation most subjects considered | Modern Foreign Language, English Lit, History. NB some classics courses let you start Latin or Greek from scratch. |
| Computing | For some, Maths | Maths, Further Maths, Computing, Physics, Philosophy, ICT |
| Dentistry | Chemistry & Biology for most. Some also Maths or Physics. | Maths, Further Maths, Physics |
| Dietetics | Chemistry, Biology | Maths |
| Drama | Some require English Lit and/or Theatre Studies | English Lit, Lit & Language, Theatre Studies |
| Economics | Usually Maths | Economics |

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| Education | See Teacher Training | |
| Electrical/Electronic Engineering | Maths, Physics | Further Maths, DT |
| Engineering (general) | Maths & Physics | Further Maths, DT |
| English | English Lit/Lit & Language (some will accept English Lang) | History, RE, a foreign language |
| Environmental Science/Studies | Many ask for two from Biology, Chemistry, Maths, Physics, Geography | Another facilitating subject, particularly science |
| European Studies | A modern foreign language | Another MFL, English Lit, History, Politics |
| French | French | Another modern foreign language, English Lit, History, Politics |
| Geography | Most require Geography | Some BSc (science) Geography degrees prefer one from Biology, Chemistry, Maths, Physics |
| Geology/Earth Sciences | Usually two from Maths, Physics, Chemistry & Biology | Geography, Geology |
| German | German (a few offer German from scratch) | Another modern foreign language, English Lit, History, Politics |
| History | Most require History | Economics, English Lit, Philosophy, Politics, Sociology, Theology/RE, a modern or classical language |
| History of Art | None | Art, English Lit, History, Theology/RE, modern language |
| Italian | Italian or another modern foreign language | Another modern foreign language, English Lit, History, Politics |
| Law | Usually none, but a few require English | History or other facilitating subjects |
| Management Studies | Sometimes Maths | Maths, Economics, Business Studies |
| Materials Science (including Biomedical Materials Science) | Normally two from Chemistry, Maths, Physics, Biology, sometimes DT | Chemistry, DT, Further Maths |
| Maths | Maths, Physics | Further Maths, Physics |
| Mechanical Engineering | Maths, Physics (some may prefer Maths with strong Mechanics component) | Further Maths, DT |
| Media Studies (including Communication Studies) | Few ask for English or Media Studies | English, Media Studies, Sociology, Psychology |
| Medicine | Do Chemistry, Biology and one from Maths or Physics and you will keep all med schools open to you. Chemistry & Biology keeps the vast majority. Chemistry and one from Maths & Physics will limit range of choices | Further Maths or contrasting (non-science) subject |
| Music | For most courses, Music & Grade VII/VIII | Some prefer at least one essay based subject |

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| Nursing & Midwifery | Usually Biology or another science | Biology, Sociology, Psychology, Chemistry |
| Occupational Therapy | Some ask for Biology | Psychology, PE, Sociology or another science |
| Optometry | Two from Biology, Chemistry, Maths or Physics (some courses prefer Biology as one choice) | Further maths |
| Orthoptics | Biology | Chemistry, Maths, Physics |
| Pharmacy | Chemistry and one from Biology, Maths & Physics keeps most open. Some like Chemistry, Biology & Maths. Doing Chemistry & Biology keeps most open. | Maths, Physics |
| Philosophy | None | Maths, Classical Civilisations, Philosophy, RE/Theology |
| Physics | Maths, Physics | Further Maths, Chemistry |
| Physiotherapy | Most Biology. Some also want Chemistry, Maths or Physics | Chemistry, Maths, Physics, Psychology |
| Politics | None | Politics, History, Philosophy, Law, Sociology |
| Psychology | A few ask for one from Biology, Chemistry, Maths, Physics | Biology, maths, Psychology, Sociology |
| Religious Studies/Theology | None | RE/Theology, Philosophy, English Lit, History |
| Sociology | None | Sociology, Psychology, Geography |
| Spanish | Spanish (some will consider French, German or Italian) | Another modern foreign language, English Lit, History, Politics |
| Speech Therapy | Some want a science; some specify Biology; some don't specify | A modern foreign language, English Language (& Lit), Psychology |
| Sports Science/PE | Many want one from Biology, Chemistry, Maths, Physics. Some will treat PE as a science equivalent | PE, Psychology |
| Surveying | None | For some types, eg Building, Maths & Physics are helpful. For Estate management (General Practice Surveying) most combinations considered |
| Teacher Training (Primary & Secondary) | (Those best for Primary in italics): Art, Biology, Chemistry, DT, Drama/Theatre Studies, <i>English</i> , French, <i>Geography</i> , German, <i>History</i> , ICT, Italian, <i>Maths</i> , <i>Music</i> , <i>Physics</i> , <i>PE</i> , <i>RE/Theology</i> , Spanish, (Also CACHE) | Another of the subjects listed above |
| Veterinary Science | Chemistry & Biology and one from Maths, Physics to have all open to you | Further Maths |