

## **SUBJECTS REQUIRED FOR DIFFERENT DEGREE COURSES**

Linking A Level subjects to your degree choice



You will see below the advanced level subjects, which are most commonly essential requirements for different degree courses. If you know you want to apply for a certain degree, you must take these essential subjects at advanced level. To maximise your chances choose one or more of the other useful subjects for the degree in question. However, you must always check directly with the universities of your choice when making this decision. This information is derived from the Russell Group advice.

| <b>Subject</b>                                   | <b>Essential Advanced Subject</b>                                 | <b>Useful Advanced Subjects</b>   |
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| <b>Accountancy/Banking<br/>Finance/Insurance</b> | Usually none although one or two require Maths                    | Maths, Business and Economics   |
| <b>Actuarial Science/Studies</b>                 | Maths   | Further Maths, Economics, Business  |
| <b>Aeronautical Engineering</b>                  | Maths and Physics   | Further Maths, Design Technology  |
| <b>American Studies</b>                          | Requirements vary but English and or History are often asked for. | Politics  |
| <b>Anthropology</b>                              | None  | A small number of courses like a Science AS level such as Biology, Sociology is also very relevant. |
| <b>Archaeology</b>                               | None  | Geography, History or Science subjects can all be useful  |

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| <b>Architecture</b>  | Some courses say they want an Arts/Science mix. Some may require Art.   | Art, Maths Design Technology and Physics. National Art and Design may also be useful. Do note that a portfolio of drawings and ideas may be asked for. |
| <b>Art and Design</b>                                      | Art/Design Technology.  | Design Technology, Art. Note that most entrants onto Art and Design degrees will have completed a one-year Art Foundation course after Year 13.        |
| <b>Biochemistry</b>  | Always Chemistry and some degrees Biology in addition. Some state Chemistry plus one from Maths/Physics, Biology. | Biology, Maths, Further Maths, Physics.  |
| <b>Biology</b>   | Biology, Chemistry  | Maths or Physics   |
| <b>Biomedical Sciences and (including Medical Science)</b> | Normally two from Biology, Chemistry, Maths and Physics. Chemistry essential for many courses.                    | Maths, Further Maths, Biology, Chemistry, Physics.   |
| <b>Business studies</b>                                    | None  | Maths, Business studies and Economics  |

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| <b>Chemical Engineering</b> | Chemistry and Maths and sometimes Physics as well.   | Physics, Biology, Further Maths.                                      |
| <b>Chemistry</b>            | Chemistry and occasionally Maths, Most courses want this or Chemistry and one other Science (Physics or Biology.                       | Maths, Further Maths, Physics and Biology.                            |
| <b>Childhood Studies</b>    | None   | CACHE, Psychology, Sociology.   |
| <b>Classical studies</b>    | For Classics courses Latin or Ancient Greek are required. For Classical studies/civilisation courses most subjects will be considered. | Modern foreign languages, English Literature, History.                |
| <b>Computing</b>            | For some courses, Mathematics  | Maths, Further Maths, Computing, Physics, Philosophy, ICT             |
| <b>Dentistry</b>            | Chemistry and Biology for most courses but some require Maths or Physics as well.  | Maths, Physics, Further Maths.  |
| <b>Dietetics</b>            | Chemistry, Biology.  | Maths   |
| <b>Drama</b>                | Some courses require English Literature and for some courses English and/or Theatre studies.   | English Literature, English Literature and Language. Theatre studies. |

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| <b>Economics</b>                         | Usually Maths  | Economics  |
| <b>Education (see teacher training)</b>  |  |  |
| <b>Electrical/Electrical Engineering</b> | Maths, Physics   | Further Maths, ICT, Design Technology.   |
| <b>Engineering (General)</b>             | Maths and Physics  | Further Maths, Design Technology   |
| <b>English</b>                           | English Literature (some courses will accept English Language)                       | History, RE, a foreign language.   |
| <b>Environmental Science/Studies</b>     | Many courses will ask for two from Biology, Chemistry, Maths, Physics and Geography. | Another facilitating subject particularly a science.                                       |
| <b>European Studies</b>                  | A modern foreign language  | Another foreign language, English Literature, History, Politics                            |
| <b>French</b>                            | French   | Another foreign language, English Literature, History, Politics                            |
| <b>Geography</b>                         | Most degrees require Geography   | Some Geography BSc (science) degrees prefer one from Biology, Chemistry, Maths or Physics. |
| <b>Geology/Earth Sciences</b>            | Usually two from Maths, Physics, Chemistry and Biology.                              | Geography, Geology   |

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| <b>German</b>   | German (a handful of universities offer the opportunity to study German from scratch, without German A level. | Another modern foreign language, English Literature, History, Politics.   |
| <b>History</b>  | Most degrees require History.   | Economics, English Literature, Philosophy, Politics, Sociology, Theology/RE, a modern or classical language.                        |
| <b>History of Art</b>   | None  | Art, English Literature, History, Theology/RE, French, German, Spanish, Italian.  |
| <b>Italian</b>  | Italian or another foreign language such as French, German or Spanish.  | Another modern language, English Literature, History, Politics.   |
| <b>Law</b>  | Usually none, although a few universities require English.  | History, other facilitating subjects. Essay report writing useful. History gives good relevant skills for Law but is not essential. |
| <b>Management Studies</b>   | Sometimes Maths.  | Maths, Economics, Business studies may be useful.   |
| <b>Materials Sciences (including Biomedical Materials Sciences)</b> | Normally two from Chemistry, Maths, Physics, Biology  | Chemistry, Design and Technology, Further Maths.  |

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| <b>Mathematics</b>                          | Maths and sometimes Further Maths.   | Further Maths, Physics.  |
| <b>Mechanical Engineering</b>               | Maths, Physics   | Further Maths, Design Technology. Mechanical Engineering departments may have a preference for Maths A2 with a strong mechanics component. |
| <b>Media Studies/Communication studies.</b> | A few courses ask for English or Media studies.  | English, Media studies, Sociology, Psychology.   |
| <b>Medicine</b>                             | Traditional medical schools may ask for Chemistry, Biology and one from Maths or Physics. More choices with Chemistry and one from Maths | Further Maths or a contrasting non-Science subject.  |
| <b>Music</b>                                | Traditional courses ask for Music and Grades.  | Some ask for one essay writing subject.  |
| <b>Nursing and Midwifery</b>                | Usually Biology or another Science.  | Biology, CACHE, Sociology, Psychology, Chemistry.  |
| <b>Occupational Therapy</b>                 | Some courses ask for Biology.  | Psychology, Physical Education, Sociology or another Science.  |
| <b>Optometry (Ophthalmic Optics)</b>        | Two from Biology, Chemistry, Maths or Physics. Some require Biology as one of the choices.   | Further Maths.   |

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| <b>Orthoptics</b>                 | Biology  | Chemistry, Maths, Physics.                                  |
| <b>Pharmacy</b>                   | Chemistry and one from Biology, Maths and Physics. Some courses ask for Chemistry, Biology and Maths. Doing Chemistry and Biology keeps most courses open. | Maths, Physics.   |
| <b>Philosophy</b>                 | None   | Maths, Classical Civilisations, Philosophy and RE/Theology. |
| <b>Physics</b>                    | Maths, Physics   | Further Maths, Chemistry.                                   |
| <b>Physiotherapy</b>              | Most courses will consider you just with Biology; however some also require a second science from Chemistry, Maths or Physics.                             | Chemistry, Maths, Physics, Psychology.                      |
| <b>Politics</b>                   | None   | Politics, History, Philosophy, Law, Sociology.              |
| <b>Psychology</b>                 | A few courses ask for one from Biology, Chemistry, Maths, and Physics.   | Biology, Maths, Psychology, Sociology.                      |
| <b>Religious Studies/Theology</b> | None   | RE/Theology, Philosophy, English Literature, History.       |
| <b>Sociology</b>                  | None   | Sociology, Psychology, Geography.                           |



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| <b>Spanish</b>                                     | Spanish (some degree will consider French, German or Italian).  | Another modern foreign language, English Literature, History, Politics.  |
| <b>Speech Therapy</b>                              | Some degrees want a science such as Biology, Chemistry or Physics. Some specify Biology but some degrees will consider candidates with none of these. | A modern foreign language (for example French, German, Spanish, Italian, English Language or Literature, Psychology).  |
| <b>Sports Science/Physical Education</b>           | Many courses want to see one from Biology/Chemistry/Maths/ Physics (some courses will treat Physical Education as a science).                         | Physical Education, Psychology.  |
| <b>Surveying</b>                                   | None  | For some types of Surveying i.e. Building Surveying, Maths and Physics could be helpful. For Estate Management (General practice surveying most A level combinations will be considered. |
| <b>Teacher Training (Primary and/or Secondary)</b> | At least one from Art, Biology, CACHE, Chemistry, Design and Technology, Drama (Theatre studies) English, French, Geography, German, History,         | Another of the subjects listed.  |

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|                           | ICT, Italian, Maths, Music, Physics, Physical Education, RE, Theology, Spanish. CACHE meets the entry requirements for early years Primary Teaching and a large number of Primary Education Teacher Training Degrees. |                |
| <b>Veterinary Science</b> | You should do Chemistry and Biology and one from Maths/Physics so that you have all universities open to you.   | Further Maths. |

**Further information on subjects and degrees:**

<http://www.russellgroup.ac.uk/about/our-universities/>

**For information on post 16 courses:**

<http://www.ucasprogress.com/>

**For information on open days at universities:**

[www.opendays.com](http://www.opendays.com)

**For information on careers:**

<https://targetcareers.co.uk/>

<https://www.studentladder.co.uk/>

<https://www.allaboutschoolleavers.co.uk/>

<http://www.careercompanion.co.uk/>

**For information on comparing HE courses**

[www.unistats.com](http://www.unistats.com)

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| Biochemistry        | King's College London<br>AAA including Biology and Chemistry  | University of Lincoln<br>BBB including Biology or Chemistry                         | University of Wolverhampton<br>CDD including Biology and Chemistry             |
| Business Management | University of Bristol<br>A*AB-AAB no specific subjects required   | Birmingham City University<br>BBB no specific subjects required                     | Bath Spa University<br>CCC no specific subjects required                       |
| Economics           | London School of Economics<br>A*AA including A* in Maths, Further Maths only as 4 <sup>th</sup> A Level | Nottingham Trent University<br>BBB no specific subjects required                    | London Metropolitan<br>CCC no specific subjects required                       |
| Engineering         | Imperial College<br>A*A*A/A*AA including A* in Maths and Physics  | Brunel University<br>BBB including Maths and Physics                                | University of Bolton<br>CCC including one from Maths, Technology or Science    |
| English Literature  | University of Durham<br>A*AA including English Lit  | University of Kent<br>BBB including English Lit                                     | York St John University<br>CCC no specific subjects required                   |
| History             | University of York<br>A*AB/AAA including A in History   | Aberystwyth University<br>BBB no specific subjects required                         | University of Derby<br>CCC including History or Politics                       |
| Law                 | University College London<br>A*AA no specific subjects required plus LNAT                               | University of Greenwich<br>BBB no specific subjects required                        | University of Brighton<br>CCC no specific subjects required                    |
| Media studies       | Newcastle University<br>AAB-ABB no specific subjects required   | Kingston University<br>BBB no specific subjects required                            | University of Westminster<br>CCC no specific subjects required                 |
| Medicine            | University of Oxford<br>A*AA including Biology and Chemistry and one from Physics or Maths plus BMAT    | St. George's University of London<br>AAA including Biology and Chemistry plus UKCAT | Aston University, Birmingham<br>AAB including Biology and Chemistry plus UKCAT |
| Politics            | University of Warwick<br>AAA no specific subjects required  | Keele University<br>BBB no specific subjects required                               | University of East London<br>CCC no specific subjects required                 |
| Psychology          | University of Cardiff<br>AAA to include at least one science (Biol, Chem, Physics, Maths, Geo or Psych) | University of Plymouth<br>BBB no specific subjects required                         | University of Wolverhampton<br>CCD no specific subjects required               |

For predicted grades below CCC/CCD, majority of courses on offer will include a Foundation Year.  
Search for courses on <http://www.UCAS.com> or [www.WhatUni.com](http://www.WhatUni.com)