# 2016-2017 

# A Guide to... 



Making sensible


# A LEVEL 

BROOKFIELD COMMUNITY SCHOOL

## INTRODUCTION

Choosing your subjects can be a really difficult decision for many students. In this booklet we have tried to pick out some of the most helpful information from the 'Admissions to Higher Education: Advisers' Directory'.

You will be studying each subject for 5 hours per week, plus at least a further 5 hours of personal study, so it needs to be a subject you enjoy.

We usually recommend, if you're not sure of choices, that you think first in terms of choosing a linked pair of subjects, plus one other, This is particularly important for certain university courses. (For more specific details see pages 5-10).

## THREE SUBJECTS OR FOUR?

All students study a minimum of 3 subjects plus General Studies at AS Level. However:
$\Rightarrow \quad$ If you are wishing to apply for the most competitive universities (Russell group universitiessee glossary) or for medicine, vet science etc then you need to be choosing 4 subjects at AS Level.
$\Rightarrow$ If you are estimated mostly A's and A*s at GCSE then you should be choosing 4 subjects and aiming high.
$\Rightarrow \quad$ If you wish to do Further Maths you must be choosing 4 subjects.
$\Rightarrow$ We usually recommend that you have a GCSE profile of mainly As/A*s with maybe a few Bs if you wish to study 4 subjects. So if you have mostly Bs and Cs we would advise you to choose 3 subjects not 4. This doesn't mean we wouldn't allow you to take 4, but we would need to talk through the potential difficulties with you.
$\Rightarrow \quad$ Taking 4 subjects gives you a heavy workload. You need considerable commitment to be successful so you need to think carefully and perhaps seek advice whether you will be able to cope with the pressure of 4 .

## How do I choose which subjects to take?

## There are a number of reasons why you might choose a subject:

1. Because you were good at the subject at GCSE.

That's a fair reason but you need to enjoy the subject and be sure that you fully understand what the subject requires at A Level. Often the content at A Level is much more challenging. Check it out in the prospectus and talk to relevant teachers.
2. Because you need it for a particular course.

If you already have a particular course or career in mind you need to research now whether there are any particular subjects required for entry to a course (see pages 5-10 for some ideas)
3. Choosing a new subject because you think it will be interesting. If you have not studied the subject at GCSE your teachers will be looking for evidence that you have a genuine interest in the subject and not just picking it because it is different. You will need to ensure that you understand fully what the course content consists of and ask yourself "Could I talk for a minute on what this subject is about?" So again, you need to research the subject. Look carefully however, at the advice below from the selective universities.

## LINKING A LEVEL CHOICES TO UNIVERSITY COURSES

## ADVICE FROM MORE SELECTIVE UNIVERSITIES

$\Rightarrow \quad$ You should choose 3 traditional or 'core' subjects out of your 4. These are usually subjects that relate to the National Curriculum e.g. Biology, Chemistry, Physics, Languages, English, Geography, History or Maths-not vocational or talent based subjects (see glossary).
$\Rightarrow \quad$ You should not choose more than one 'new' subject at A Level (e.g. Sociology, Psychology) OR more than one subject from Art/Business/Dance, Design Technology/Theatre Studies/ ICT/PE.

## SCIENCES

A student who is good at Science may choose Chemistry, Biology, Maths and Physics. This will keep open all the science and maths options at university.

However, there are two directions within the science field at university:

## Life Sciences

Degrees based on Chemistry and Biology. These include degrees leading to a definite career path such as Medicine, Dentistry, Vet Science, Pharmacy, Dietetics and degrees based on research e.g. Biochemistry, Biomedical materials Science or Pharmacology.

You may decide to combine all 3 Sciences with Maths or replace Maths/Physics with an Arts/Social Science/Creative or Humanities subject.

## Engineering

This is the practical application of Maths and Physics. With these 2 A Levels, a huge range of degrees are available, such as Engineering (Mechanical, Electronic/Electrical and Civil), Physics and Materials Science. Students who are very good at Maths may well do Further Maths.

If you are a talented Scientist or Mathematician you should choose 3 out of the 4-Biology, Chemistry, Physics and Maths. If you know you are inclined to the life science you should choose Chemistry and Biology. If you know you are on the engineering side you should choose Maths (+ possibly Further Maths) and Physics.

## How do I choose which subjects to take?

## ESSAY SUBJECTS

Many students choose a mixture of arts/humanities and social sciences (with perhaps one creative or talent-based subject). A large range of university degrees in the arts/humanities, social sciences and business fields will then be open to you, but not normally degrees in the Maths or Sciences field.

For example, a mixture of subjects such as English Literature, History, Sociology would give you the opportunity to:-
$\Rightarrow \quad$ Continue any of these subjects to degree level
$\Rightarrow \quad$ Study for a degree in another arts/humanities subject e.g. Philosophy, Media Studies
$\Rightarrow \quad$ Study for a degree in another social science e.g. Psychology
$\Rightarrow \quad$ Study for a vocational degree such as Law, Management Science etc

## THE LINGUIST

If you wish to study languages at university then obviously you will need to have studied the relevant language at A Level. Some new languages like Italian, Dutch, Russian etc can be picked up as an additional language at university, but for French, Spanish and German you will need the A Level. A language is also a good option for a 4th AS Level for some of the more selective universities. However, remember you will need to have a high level of competency at GCSE in your chosen language.

## THE CREATIVE

$\Rightarrow$ If you have a talent in Music and wish to study this subject at university, it is important that you take music A Level (along with performance grades).
$\Rightarrow \quad$ If you have a talent in Art and wish to pursue this at university you will need to study an A Level in either Art, Art Textiles or Design and Technology. Either of these should provide you with the basis for the portfolio you will need to gain entry to an Art Foundation course.
$\Rightarrow \quad$ For a Drama and Dance course, university entry does not depend on possession of the relevant A Level. Entry to these fields is largely dependent on performance in audition. Relevant experience can be gained from extra curricular activities both in and out of school.

However, if your particular interest lies in the performing arts you may choose to further develop these skills by combining performance subjects, or combining these with arts/humanities or social science subjects e.g. Music, Dance and English or Theatre Studies, English and Sociology etc.

## THE VOCATIONAL

Subjects like business studies and ICT might lead successfully to vocational degrees such as management or computing. If you are wanting to study this sort of course at a highly competitive university then A Level Maths would be a useful addition.

## CHOOSING CREATIVE/TALENT BASED SUBJECTS

$\Rightarrow \quad$ These are fine at competitive universities as a 4th subject alongside 3 traditional subjects
$\Rightarrow \quad$ Or if you are not likely to be applying to the most prestigious universities
$\Rightarrow \quad$ Or if your preferred route is to further one or more of these particular subjects.

## TEACHING

For teaching courses you require a national curriculum subject. Practical or communication based subjects are useful such as theatre studies, art, PE, design, music, dance, ICT.

## A Level Requirements for Degrees



> Some popular degrees are often open to the student with a wide range of A Levels: Accountancy, Anthropology, Archaeology, Business Studies, History of Art, Law, Management Studies, Media Studies, Philosophy, Politics, Psychology, Religious Studies, Sociology, Surveying and Teacher Training.

The information below is a general guideline. You should always check university prospectuses to be completely sure.

## ACCOUNTANCY (ALSO BANKING/FINANCE/INSURANCE)

Essential A Levels: None
Useful A Levels: Possibly Maths and Economics
Note: High grades are normally more important than subject for a student who wants to gain an accountancy training contract.

ACTUARIAL SCIENCE/STUDIES
Essential A Levels: Maths
Useful A Levels: Further Maths, Economics
AERONAUTICAL ENGINEERING
Essential A Levels: Maths, Physics
Useful A Levels: DT, Further Maths
AMERICAN STUDIES
Essential A Levels: Requirements vary but English and History are often asked for
Useful A Levels: Politics
ANTHROPOLOGY
Essential A Levels: None
Useful A Levels: A small number of courses like a science AS Level such as
Biology and sometimes Sociology

## ARCHAEOLOGY

Essential A Levels: None
Useful A Levels: Archaeology, History, Chemistry

## ARCHITECTURAL TECHNOLOGY

Essential A Levels: None (a small number want Maths, DT or ICT)
Useful A Levels: Maths, Physics, DT, ICT

## ARCHITECTURE

Essential A Levels: for a small number of degree courses Maths and/or Physics and Art (some say an Arts/Science mix)
Useful A Levels: Art, DT, Maths, Physics

## ART AND DESIGN

Essential A Levels: Art or Design (to produce the portfolio to get on to an Art Foundation course)
Note: Most entrants who go on to Art and Design degrees will have done a one year Art Foundation course after their A Levels


## BIOCHEMISTRY

Essential A Levels: always Chemistry, and some degrees say the student must have
Biology as well, while some say Chemistry plus one from Maths/Physics/Biology. Doing Chemistry, Biology and Maths or Physics will keep all biochemistry courses open to the student

## BIOLOGY

Essential A Levels: Biology, Chemistry
Useful A Levels: Maths or Physics

## BUILDING (BUILDING SERVICES ENGINEERING, BUILDING SURVEYING, CONSTRUCTION MANAGEMENT)

Essential A Levels: for quite a few courses you need Maths and/or Physics

## BUSINESS STUDIES

Essential A Levels: None
Useful A Levels: possibly Maths and Economics, also Business Studies or A Level can confirm your interest
Note: Many Business Studies courses require you to have GCSE Maths and English Language at C grade

CHEMICAL ENGINEERING
Essential A Levels: Chemistry and usually Maths and sometimes Physics as well

## CHEMISTRY

Essential A Levels: Chemistry and usually Maths or Physics. Some courses like Chemistry, Maths and Physics, while some like Chemistry, Maths or Biology

## CHILDHOOD STUDIES AND EDUCATION (NOT TEACHER TRAINING)

Essential A Levels: None
Useful A Levels: Sociology, Psychology, Health and Social Care AGCE

## CLASSICAL STUDIES

Essential A Levels: for classical courses Latin or classical Greek, while Classical Studies and Classical Civilisations consider most subjects
Useful A Levels: Modern Foreign Language, English Literature, History

## DENTISTRY

Essential A Levels: Chemistry and Biology would be acceptable for most courses, but a few still like Chemistry, Biology and Maths or Physics

## DIETETICS

Essential A Levels: Chemistry, Biology

## A Level Requirements for Degrees (contd)

## DRAMA

Essential A Levels: some courses require English Literature and for a few courses
English and Theatre Studies
Useful A Levels: English Literature, English Literature and Language, Theatre Studies

## ECONOMICS

Essential A Levels: some courses require Maths
Useful A Levels: Maths, Economics

## EDUCATION (SEE TEACHER TRAINING)

## ELECTRICAL/ELECTRONIC ENGINEERING

Essential A Levels: Maths, Physics
Useful A Levels: Further Maths, ICT

## ENGINEERING (GENERAL)

Essential A Levels: Maths, Physics
Useful A Levels: Further Maths, DT, ICT

## ENGLISH

Essential A Levels: English Literature or English Literature and Language
Useful A Levels: History, Religious Studies, Modern Foreign Language
Note: Some very selective courses can sometimes have an issue with English Literature and Language A Level

## ENVIRONMENTAL SCIENCE/STUDIES

Essential A Levels: Many courses will ask for two from Biology, Chemistry, Physics and
Geography

## EUROPEAN STUDIES

Essential A Levels: A Modern Foreign Language

## FRENCH

Essential A Levels: French
Useful A Levels: another Modern Foreign Language, English Literature, History

## GEOGRAPHY

Essential A Levels: most degrees require Geography
Useful A Levels: some BSc degrees prefer one from Biology, Chemistry or Physics

## GEOLOGY/EARTH SCIENCES

Essential A Levels: Usually two from Maths, Physics, Chemistry and
Biology
Useful A Levels: Geography, Geology

# A Level Requirements for Degrees (contd) 

## GERMAN

Essential A Levels: German
Useful A Levels: another Modern Foreign Language, English Literature, History

## HISTORY

Essential A Levels: most degrees require History
Useful A Levels: Economics, English Literature, Philosophy, Politics, Sociology, Theology/
Religious Studies

## HISTORY OF ART

Essential A Levels: None
Useful A Levels: Art, English Literature, History, Theology/Religious Studies, French, German, Spanish, Italian

ITALIAN
Essential A Levels: Italian or another language such as French, German or Spanish

## LAW

Essential A Levels: None
Useful A Levels: Critical Thinking (this will help with the Law National Admissions Test)
Note: there really are no essential A Levels for Law. Most courses will treat Law A Level neutrally. Maybe one choice should involve essay or report writing, but you do need to be achieving high grades

MANAGEMENT STUDIES
Essential A Levels: None (LSE want Maths)
Useful A Levels: possibly Maths and Economics
MATERIALS SCIENCE (including Biomedical Materials Science)
Essential A Levels: normally two from Chemistry, Maths, Physics and Biology

## MATHEMATICS

Essential A Levels: Maths and sometimes Further Maths
Useful A Levels: Physics

## MECHANICAL ENGINEERING

Essential A Levels: Maths, Physics
Useful A Levels: DT, Further Maths, ICT
MEDIA STUDIES (including Communication Studies)
Essential A Levels: a few courses ask for English or Media Studies
Useful A Levels: English, Media Studies, Sociology, Psychology
Note: a large proportion of people who work in the media industries have degrees in a wide range of other subjects

## A Level Requirements for Degrees (contd)



## MEDICINE

Essential A Levels: if you choose Chemistry, Biology and one from Maths or Physics you will keep all the medical school open to them. If you do Chemistry and Biology you will keep open the vast majority. If you choose Chemistry and one from Biology, Maths and Physics you will limit your range of choices much more
Useful A Levels: Critical Thinking (will help with Section 3 of the Bio-Medical Admissions Test). Students do not have to do Maths.

## MUSIC

Essential A Levels: for most traditional courses, Music and Grade VII/VIII

## NURSING AND MIDWIFERY

Essential A Levels: Some courses ask for Biology or another Science

## OCCUPATIONAL THERAPY

Essential A Levels: some courses ask for Biology, some will also consider Psychology, Physical Education, Sociology or another Science

## OPTOMETRY (OPTHALMIC OPTICS)

Essential A Levels: two from Biology, Chemistry, Maths or Physics (some courses prefer Biology as one of the choices)

## PHARMACY

Essential A Levels: Chemistry and two from Biology, Maths and Physics keep the vast majority of courses open to students. Some courses prefer Chemistry, Biology and Maths. Doing Chemistry and Biology keeps most courses open

## PHILOSOPHY

Essential A Levels: None
Useful A Levels: Maths, Classical Civilisations, Philosophy, Religious Education/Theology

## PHYSICS

Essential A Levels: Maths, Physics
Useful A Levels: Further Maths, Chemistry

## PHYSIOTHERAPY

Essential A Levels: most courses will consider a student with just Biology, however some ask for a second science from Chemistry, Maths or Physics

## POLITICS

Essential A Levels: None
Useful A Levels: Politics, Sociology, Economics, History, Philosophy, Law

## PSYCHOLOGY

Essential A Levels: a few courses ask for one from Biology, Chemistry, Maths or Physics
Useful A Levels: Biology, Maths

# A Level Requirements for <br> Degrees (contd) 



## SOCIOLOGY

Essential A Levels: None
Useful A Levels: Sociology, Psychology, Geography and Media Studies

## SPANISH

Essential A Levels: Spanish (some degrees will also consider French, German or Italian)

## SPEECH THERAPY

Essential A Levels: some degrees want a science such as Biology, Chemistry or Physics. Some specify Biology but some degrees will consider candidates with none of these
Useful A Levels: a Modern Foreign Language (i.e. French, German, Spanish, Italian), English Language (and Literature), Psychology

## SPORTS SCIENCE/PHYSICAL EDUCATION

Essential A Levels: quite a few courses want to see one from Biology, Chemistry, Maths or Physics
Useful A Levels: Business Studies, Physical Education, Psychology

## SURVEYING

Essential A Levels: None
Useful A Levels: For some types of Surveying, such as Building Surveying, Maths and Physics could be helpful. For Estate Management (general practice surveying) most A Level combinations will be considered

## TEACHER TRAINING (PRIMARY AND/OR SECONDARY)

Essential A Levels: at least 1 from Art, Biology, Chemistry, Design, Theatre Studies, English, French, Geography, German, History, ICT, Maths, Music, Physics, PE, Spanish
Note: Don't forget to check whether they have GCSE requirements (e.g. in English, Maths and Science)

## VETERINARY SCIENCE

Essential A Levels: students should do Chemistry and Biology and one from Maths/Physics so that they can apply to all seven courses

## A Level Requirements for Degrees (contd)



## FINAL ADVICE

Talk to relevant teachers to find out more about A Level courses. Ask them if they think you would cope. Talk to current 6th form students to find out how they have found the courses and examine the prospectus entries to check the content and how the course is assessed.

## GLOSSARY <br> Russell Group Universities includes:

Birmingham, Bristol, Cambridge, Cardiff, Edinburgh, Glasgow, Imperial College London Kings College London, Leeds, Liverpool, LSE, Manchester, Newcastle, Nottingham, Queens Belfast, Oxford, Sheffield, Southampton, London, Warwick

The 1994 Group-another high grade-seeking group of universities
Bath, Birkbeck-London, Durham, East Anglia, Essex, Exeter, Goldsmiths-London, Royal Holloway-London, Lancaster, Leicester, Queen Mary-London, Reading, St Andrews, Surrey, Sussex, Warwick, York

Vocational Subjects include:
Business Studies, ICT, Computing, Health \& Social Care
Talent based subjects include:
Art, Music, Theatre Studies, PE

## Creative subjects include:

Art, Art Textiles, Music, Theatre Studies, Dance

## Social Sciences include:

Psychology, Sociology

