



# Informed choices

A Russell Group guide  
to making decisions about  
post-16 education

2011

**RUSSELL**  
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GROUP

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## The Russell Group

The Russell Group represents ► **20 leading UK universities** which are committed to maintaining the very best research, an outstanding teaching and learning experience for students of all backgrounds and unrivalled links with business and the public sector.

Visit <http://www.russellgroup.ac.uk> to find out more.

## How to use this guide

To make this document easier to use, the following design elements have been adopted:

### **WARNING!**

**Text inside this large arrow is of particular importance**

### **ATTENTION!!**

**Text inside this large arrow is VERY important**

- URL links which direct you to websites appear in a different text style, as in [domain.ac.uk](http://domain.ac.uk). These are clickable.
- Links which navigate to other sections of the document appear in a different text style, as in ► **chapter name**.
- You can move forwards and backwards between pages by:
  - using the left and right arrow keys on your keyboard
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  - using the wheel on your mouse
  - using the red and yellow arrow in the top-left corner of the page
- You can go to specific sections by clicking on a link in the list of contents in the left-hand sidebar.

## Introduction

What you decide to study post-16 can have a major impact on what you can study at degree level. Whether or not you have an idea of the subject you want to study at university, having the right information now will give you more options when the time comes to make your mind up.

This guide aims to help you make an informed decision when choosing your course for post-16 education. We hope it will also be of use to parents and advisors.

The Russell Group is very grateful to the [Institute of Career Guidance](#) (the world's largest career guidance professional body), and particularly Andy Gardner, for their very valuable input.

### **ATTENTION!!**

**Although there are common themes, entry requirements (even for very similar courses) can vary from one university to another so you should only use this information as a general guide. All Russell Group universities provide more detailed information about entry requirements on their own websites or in their prospectuses. As your plans become firmer, it's essential that you check these to be sure that you are aware of the most up-to-date entry requirements for your chosen course.**

Getting your post-16 subject choices right is an important first step towards university but it won't guarantee you a place on your chosen degree course. Entry to Russell Group universities, in particular, can be highly competitive and academic background, while vitally important, is only one of several things universities will take into account when they consider your application. They will also want to select students who are clearly well-motivated and passionate about their subject. In some cases, they may even ask you to gain some work experience in a relevant field.

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# Post-16 qualifications and how they are organised

## Standard and advanced level qualifications

There are different qualification systems in place in different parts of the UK but there are a lot of similarities in the way they are organised.

You will generally study for your first qualification at around age 14–16. In this guide we refer to these qualifications as **standard level qualifications**. These standard level qualifications include:

- GCSEs and IGCSEs
- Standard and Intermediate Grades in Scotland
- The International Baccalaureate Middle Years Programme

As you progress through your studies, you are likely to focus on a narrower range of subjects for **advanced level qualifications**. These advanced level qualifications include:

- AS- and A-levels,
- Advanced Diplomas,
- Highers and Advanced Highers in Scotland
- Standard and Higher Level in the International Baccalaureate.

In terms of qualifications, entry to university is determined mainly on the basis of performance in advanced level qualifications but grades achieved in standard level qualifications may be taken into account and there are sometimes specific subject or grade requirements at this level.

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A-levels

How are they organised?

A-levels are made up of the AS-level and the A2. Each part makes up 50 per cent of the overall A-level grade.

In year 12 (or 13 in Northern Ireland), you will normally study towards four AS-levels and the following year focus on three of these subjects to work towards A2.

There are two units in each subject at AS-level and a further two, more difficult, units at A2 (although this may vary from subject to subject, for example, Maths and Science have three units at AS-level and three harder units at A2).

If I want to apply to university, what do I need to think about when making my AS and A-Level choices?

Your choice of options will be critical in determining the university courses open to you. Generally speaking, universities will expect you to be taking four AS-levels, with three out of the four subjects taken on to A2.

The guidance provided in relation to subject requirements will help you to make informed choices about your AS-level and A2 subjects.

Scottish Highers, Advanced Highers and Baccalaureates

How are they organised?

In your fifth year of secondary school (S5) you will normally study towards four or five Highers. Alternatively, you may take a combination of Highers and Intermediate Grades (at a level between Standard Grades and Highers). Highers usually consist of units of work set and marked by teachers and lecturers, and an external examination.

Depending on your performance in S5 and the range of options available in your school, it is likely that in S6 you will take Advanced Highers, additional Highers or a combination of both.

Before taking an Advanced Higher, you will normally have studied the subject at Higher level. Advanced Highers are usually made up of three units which are achieved by passing an internal assessment which may consist of coursework, tests or practical work. The final grade is determined by an external assessment which is usually an examination or project.

There are two Scottish Baccalaureates – one in Science and one in Languages. Students study Mathematics or English/Gaidhlig, two courses

from a list of eligible subjects, and undertake an interdisciplinary project. Two out of the three courses must be at Advanced Higher with the remaining course at Higher level.

If I want to apply to university, what do I need to think about when making my Scottish Higher subject choices?

How you approach your choice of Highers and/or Advanced Higher subjects may depend on whether you are thinking of studying at a Scottish university or whether you want to study in other parts of the UK.

Many universities in England, Wales and Northern Ireland accept Scottish Highers for entry to their degree programmes. However, for many courses at Russell Group universities you will also be asked for Advanced Highers so it's advisable to check on requirements at a fairly early stage.

If you are looking to progress to a Scottish university, it is likely that the entry requirements will be expressed in terms of Highers. Achievement of Advanced Highers in relevant subject areas may make direct entry to the second year of a degree programme a possibility.

When selecting your choice of study for S6 it is very important to research the entry requirements of any universities you may be interested in. Scottish universities traditionally seek breadth of study as a preparation for the first year of undergraduate study and may require you to demonstrate achievement across four subjects, or more if over two sittings.

Please see separate guidance on subject requirements for additional information to support your choices.

Welsh Baccalaureate Qualification

How is it organised?

The Welsh Baccalaureate Qualification consists of two parts:

Core consisting of four components, i.e. Key Skills; Wales, Europe and the World; Work-related Education; and Personal and Social Education.

Options which can be chosen from a range of existing programmes including AS/A-levels, VCE (Vocational A-levels), NVQ and BTEC.

Together, the Core and Options make up the Welsh Baccalaureate qualification.

The Welsh Baccalaureate Qualification is offered at Foundation, Intermediate and Advanced levels, the Advanced level being the one which allows direct entry to university.

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If I want to apply to university, what do I need to think about when making my Welsh Baccalaureate Qualification choices?

Your choice of options will be key to determining the university courses open to you. Generally speaking, universities will expect you to be taking two or three A-levels (equivalents like BTEC may also be acceptable) as part of your Welsh Baccalaureate.

Please see separate guidance on subject requirements for additional information to support your choices.

Advanced Diploma

How is it organised?

The Advanced Diploma is a new qualification that combines theoretical study with practical experience. Diplomas are available in 14 subject areas or 'lines of learning'.

The Advanced Diploma has three components:

- Principal learning focuses on developing and applying the core skills and knowledge which are relevant to the line of learning you have chosen.
Generic learning includes personal, learning and thinking skills, at least ten days work experience as well as an extended project, which will encourage you to work critically, reflectively and independently and give you the opportunity to think about how everything you have learned links together.
Additional and specialist learning. You will choose from a wide range of options which might include specialist courses directly linked to your chosen line of learning (for example, for Engineering, you could decide to concentrate on Robotics, Medical Engineering, Aerospace, Car or Motorcycle Maintenance) or you could pick up subjects which will help you to secure a university place.

WARNING!

Many universities will ask you to take an A-level in a named subject as part of your additional and specialist learning.

If I want to apply to university, what do I need to think about when choosing my advanced diploma?

When it comes to subject requirements, broadly speaking, there are four different kinds of university course:

- Those which accept students with a wide range of entry qualifications and subject backgrounds and do not assume any prior knowledge of the subject to be studied at university. If you are interested in applying to these programmes, you should have some flexibility in your choice of Diploma line and any options within it.
Those which do not assume any prior knowledge of the subject to be studied at university but, in order to make sure you are able to cope with the programme's learning and teaching style, will ask you to study for an A-level as part of your additional and specialist learning.
Those which expect you to have developed some knowledge of the subject to be studied before you arrive. Universities offering this kind of programme will have looked in detail at the content of the Advanced Diplomas and decided whether or not this will satisfy their subject requirements. For some courses they may decide that completion of a Diploma in a named line of learning (for example IT) will be enough. Others may decide to accept any Diploma as long as a named A-level subject is offered as part of the additional and specialist learning. Others again may want a Diploma in a named line of learning with a named A-level subject as part of the additional and specialist learning. In the case of Engineering, some universities may ask you to include in your additional and specialist learning a tailor-made Mathematics for Engineering module which has been developed to satisfy their mathematics requirements.
Those which, for a variety of reasons, have decided not to accept the Advanced Diploma. This is most likely to happen where the subject knowledge required for entry to a degree programme can only be gained by studying two or more named A-levels (as for Medicine or Physics degrees, for example). In some such cases, universities have indicated that they will consider the Advanced Diploma (with an A-level as additional and specialist learning) in combination with an additional A-level.

What A-levels should I consider taking as part of my additional and specialist learning?

If you are studying for an Advanced Diploma, the subject requirements section of this guide is a good starting point. It explains which courses are likely to require A-level applicants to include named subjects among their choices, and will also be useful for Diploma applicants.

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If a course generally requires an A-level or equivalent in a certain subject (e.g. Biology) this is an indication that the university needs to know that you have sufficient background in that subject to cope at university. In many cases, universities will ask you to take the A-level concerned as part of your additional and specialist learning. In some specific cases, you may be able to satisfy the subject requirement by choosing a certain subject for specialist learning. For example, a 'Mathematics for Engineering' module has been specifically developed within the Engineering Diploma to cover the mathematics background for many (but not all) Engineering courses.

Entry Profiles in the UCAS Course Search will provide detailed information on subject requirements for specific programmes.

International Baccalaureate Diploma

How is it organised?

The International Baccalaureate (IB) Diploma programme comprises:

- Six subjects, chosen from across the different subject groups
• Three studied at higher level (courses representing 240 teaching hours)
• Three studied at standard level (courses representing 150 teaching hours).
• Three compulsory core components
• An extended essay
• A course on the Theory of Knowledge
• A component called 'creativity, action, service' which requires that students actively learn from the experience of doing real tasks beyond the classroom.

WARNING!

Although it is possible to seek certification of individual subjects studied, many universities require completion of the full Diploma for admissions purposes and will not accept individual IB certificates.

If I want to apply to university, what do I need to think about when making my IB choices?

The International Baccalaureate is well-established as a qualification, having been offered in international schools worldwide for many years. In recent years, a growing number of UK schools have started to offer the International Baccalaureate as an alternative to A-levels. Because the IB is not as well known in the UK, this often leads to concerns about its acceptability for university admission.

In practice, the vast majority of university Admissions staff have a lot of experience of assessing IB applicants and are more than happy to accept it for university entry purposes.

If you are studying for the IB, your choice of higher level subjects will be key to determining the university courses open to you. The guidance provided in relation to subject requirements shows which degree courses are likely to require an advanced level qualification in a certain subject. For IB applicants this guidance can be used to identify the degree courses most likely to require you to have studied a certain subject at the higher level within the IB.

It is less usual for universities to require particular subjects at standard level within the IB although you should always check entry requirements carefully before applying to be certain of this.

Cambridge Pre-U

The Cambridge Pre-U is a qualification aimed particularly at 16-19 year olds who want to go on to university.

How is it organised?

You will typically choose up to four Pre-U Principal Subjects to study over a two-year period. In each subject you will sit one set of exams at the end of the two years of study.



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If you are aiming to obtain a Cambridge Pre-U Diploma, you will need to take:

- Any three Principal Subjects, and
The Global Perspectives and Independent Research (GPR) course.
The Global Perspectives element of the course is intended to help students to explore the challenges they will face as young people – wherever they live and work. Students choose from within five broad themes: Ethics, Economics, Environment, Technology, and Politics and Culture. The emphasis is on developing the tools to identify, evaluate and explore competing arguments and perspectives. This is usually examined at the end of the first year of study.
The Independent Research Report is a single piece of extended writing, based on individual reading and research on a topic that students choose themselves.

Your final Diploma mark will be based on the total of the scores for your three Principal Subjects and the core component, GPR.

Individual Pre-U subjects can also be taken in combination with other qualifications such as A-levels. Within the Cambridge Pre-U Diploma it is possible to substitute one or two of the Principal Subjects for A-levels.

If I want to apply to university, what do I need to think about when choosing my Pre-U Principal Subjects?

Although it is a relatively new qualification, universities are already familiar with the Pre-U and are happy to consider candidates applying with the Cambridge Pre-U Diploma or one or more Principal Subjects in combination with A-levels. It is likely that universities will expect you to have studied at least three Principal Subjects and/or A-levels. (It is not a good idea for you to be examined in the same subject for both Pre-U and A-level.)

Your choice of Principal Subjects will be key to determining the university courses open to you. The guidance provided in relation to subject requirements shows which degree courses are likely to require an advanced level qualification in a certain subject. For Pre-U applicants this guidance can be used to identify the degree courses most likely to require you to have studied a certain Pre-U Principal Subject. Not all universities will necessarily include the GPR component in offers.

CACHE Diploma in Child Care and Education

The CACHE Diploma in Child Care and Education is a qualification focusing on knowledge and understanding of child development and education, awarded by the Council for Awards in Children's Care and Education.

If I want to apply to university what are the issues if I choose the CACHE Diploma in Child Care and Education?

While this course enables you to become fully qualified as a child care worker, it is also a route to some university courses. Students with high grades and the relevant GCSE passes do progress onto some (but a limited number of) courses at Russell Group universities, such as Childhood Studies, Sociology and Subjects Allied to Medicine, for example Nursing. Where this is possible, there is very often some sort of link between the content of the CACHE course and the intended degree course, for example CACHE contains Sociology which would be relevant to a degree in Sociology.

WARNING!

When applying to university we would advise you to check with Admissions staff to see if the CACHE Diploma meets the entry requirements for your chosen course.

Vocational options: Applied A-levels, BTEC National and OCR National

Applied A-levels provide a broad introduction to a single vocational area (for example, Applied Leisure Studies, Applied ICT). Students can study for an AS-level, an AS (Double Award), an A-level or an A-level (Double Award).

BTEC qualifications and OCR Nationals are particular types of work-related qualifications, available in a wide range of subjects. They are available at various different levels.

I am thinking about taking an Applied A-level (Double Award) or BTEC National Diploma or OCR National, what are the issues when it comes to university application?

Let us imagine you are in year 11 and instead of considering a four AS-level package, you are looking at doing a two-year course in a vocational field such as Business. You could do an Applied A-level (Double Award), or a BTEC National, or an OCR National. You may find the information on the Advanced Diploma useful.

If you are going to be studying Business in sixth form or college, you may be considering studying Business or Management at university.

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**ATTENTION!!**

**It is extremely important that you are aware that for several university courses these vocational qualifications are not considered to be suitable.**

Some important issues to consider:

- If you do an Applied A-level (Double Award) **you will need very high grades indeed plus a high grade in an extra A-level** to be considered by most Russell Group universities.
- Some universities consider these vocational qualifications in certain circumstances but the circumstances do vary. It is therefore particularly important to check requirements with individual universities.
- You will still need certain GCSEs or other **▶ standard level qualifications**. Doing a vocational course will not exempt you from these requirements.

Entrance requirements of individual universities will differ. However, as a general guide, applicants with these vocational qualifications wishing to study for a degree in Management at a competitive university may encounter the following entrance requirements:

- Applied A-level (Double Award): In many cases universities will accept this **only when combined with other qualifications**. You may well be required to achieve AA in the Double Award, plus an extra A-level.
- BTEC National Diploma: Some universities will accept this on its own, or combined with other qualifications. However, you are likely to be required to achieve high grades, for example, three Distinctions, or two Distinctions and one Merit.

# Pre-16 qualifications and university entry

When applying to a competitive university and especially for a very competitive course at a competitive university, it is important that you consider all the aspects of the entrance requirements, including the GCSE or other standard level requirements.

Universities may ask for a specific number of GCSEs (or their equivalent). For example, a number of medical courses ask for five (sometimes more) A\* grades.

GCSE English or another standard level equivalent is very often required at Grade C at least. At many universities, this is a universal entry requirement for any course. Mathematics is only slightly less commonly asked for. Occasionally, a university will require a foreign language for entry to any course, for example, University College London is introducing such a requirement from 2012 entry.

For many courses a B grade at least in GCSE English is needed with science and engineering courses in particular often specifying this. Equally, courses such as Business and Psychology, which may attract applicants who aren't necessarily strong mathematicians, commonly ask for a B grade in Mathematics and, in some cases, sciences.

A number of institutions ask that grades and number of subjects are achieved at one sitting. **Some do not accept 're-sits' at GCSE or standard level qualifications.** If you think this might affect you and a university's policy is not clear from its published admissions policies, it is sensible to check with Admissions staff before applying.

The GCSE or other standard level entrance requirements for individual degree courses is quite varied. In some cases, a particular subject or grade is required at standard level if it isn't being offered at advanced level.

The summary below gives an idea of some of the GCSE requirements that you might come across for certain degree courses. Remember that these are only examples. It's important to check university websites for detailed requirements before applying.

- Applicants to study Medicine are usually required to have very good GCSE results in Maths, Science, and English.
- For a degree in English, universities often look for applicants to have a GCSE in a modern or classical language.
- For a Business degree, a grade B in GCSE Maths is often required.
- A grade B in Maths and sometimes Science is often required for a degree in Psychology.
- To study a science subject at university (including Biology, Chemistry or Physics) applicants who are not offering Maths at advanced level will often need to have achieved a grade C in Maths at GCSE.

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What subjects can give me the most options?

What if the facilitating subjects don't appeal to me?

Do universities prefer certain advanced level subjects over others?

How do certain subject combinations relate to university courses?

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# Making your post-16 subject choices

Three reasons you may want to continue to study a subject at a higher level are:

- You have been good at and have enjoyed the subject in the past.
- You need this subject to enter a particular career or course.
- You have not studied the subject before but you have looked into it and think it will suit your strengths.

Three further considerations should be taken into account:

- Some subjects are distinctly more difficult at an advanced level than at standard level.
- Make sure you get your facts straight. There are many misconceptions about subjects required for courses and careers.
- Don't take an uninformed risk. What is the new subject actually about?

The most important thing that your teachers will be looking for as you make your choices is evidence: either evidence that you are *good enough* to take the subject at advanced level, or evidence that you are *interested enough* in a subject to take it at advanced level if you have not studied it before.

Another factor to consider if you are aiming for incredibly competitive courses at university, such as Medicine, is that you may require a very high performance in standard level qualifications. Does your performance to date match your ambition?

It is important that your decisions are taken on the basis of accurate information and clear thinking. Whatever you choose now will commit you to certain directions at university and perhaps rule out certain careers. As much as you may wish to remain cool about this decision, it *does* matter.

## If I know what I would like to study at university, what subjects do I need to take at advanced level?

### Subject requirements

If you know what you wish to study at university and want to know what subjects you will need to have studied in preparation, you will find detailed information on each university's entry requirements on the [UCAS website](#). This section will give you some idea of general patterns.

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Some degrees will be open to you whatever subjects you choose to study for your advanced level qualifications or at Higher Level (for IB or Scottish students). Just try to make sure that you stick to the ► **five-point plan**.

Also some courses will be happy with a subject at a lower level (for example, at AS-level instead of A-level or at Standard Level rather than Higher Level in the IB). This will be something to check before you apply.

Some popular degrees will **normally** be open to you without any specific subject background. These include:

Accountancy, Anthropology, Archaeology, Business Studies, History of Art, Law, Management Studies, Media Studies, Philosophy, Politics, Psychology, Religious Studies, Sociology, Surveying.

**ATTENTION!!**

**Although they may not be specified as required subjects, many successful applicants to the above courses do have advanced level qualifications in at least two of the facilitating subjects (see below). Some of these courses may still have a preference for some of the facilitating subjects and one or two universities may be more prescriptive in their subject requirements – check the Entry Profiles on UCAS Course Search.**

For a general guide as to the likely requirements for different degree courses, you can refer to ► **subjects required for different degree courses**.

**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 course. 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:

- Mathematics and Further Mathematics
- English (Literature)
- Physics
- Biology
- Chemistry
- Geography
- History
- Languages (Classical and Modern)

There are some advanced level subjects, which provide suitable preparation for entry to university generally, but which we do not include within the facilitating subjects, because there are relatively few degree programmes where an advanced level qualification in these subjects would be a *requirement* for entry. Examples of such subjects include Economics, Religious Studies and Welsh. Advanced-level Welsh has separate curricula for first- and second-language Welsh speakers. The former develops literary and linguistic skills equivalent to those in advanced-level English; the latter develops skills equivalent to those in Modern Languages. Both routes are suitable preparation for university study in Wales and elsewhere in the United Kingdom.

**WARNING!**

**If you wish to study Music or Art at university advanced level qualifications in Music or Art are usually required. Some Mathematics courses may require both Mathematics and Further Mathematics.**

You will probably have many other subjects open to you at advanced level but, unlike the facilitating subjects listed above, they are unlikely to be required for any particular degree course and so choosing them doesn't increase your options at university.

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By choosing facilitating subjects at advanced level, you will have a much wider range of options open to you at university. An advanced level qualification in any facilitating subject will keep open to you a number of degree courses. At some universities, a qualification in the subject is a requirement for entry to the course. At other universities, it may not be a requirement for the course, but will still be useful to gain entry.

Of course, by choosing facilitating subjects you are not restricted to applying for degree courses which require those subjects. For example, even if you study three facilitating subjects at advanced level, you would still be able to apply to study Law at university (for which most universities do not require any specific advanced level subjects). So, by choosing facilitating subjects you are keeping open as many options as possible.

For information about the different degree courses open to applicants with each of the facilitating subjects listed above, you can refer to the UCAS website and university websites. For some of the most popular degree courses, you can also refer to the subjects required for different degree courses.

ATTENTION!! If you decide not to choose some of the facilitating subjects at advanced level, many degrees at competitive universities will not be open to you.

What if the facilitating subjects don't appeal to me?

If you are thinking of taking more than two subjects which are not, facilitating subjects please do consider the following:

- In many countries all 16- and 17-year olds have to study Mathematics, their home language, a science and a foreign language.
Have you considered why you do not wish to study a facilitating subject? Are you looking for a change? Or are you trying to avoid a challenge? In other words, have you thought your decision through carefully?
The jump between standard and advanced level qualifications can be demanding, even in subjects that you have studied before. If you are starting a particular subject from scratch, you are taking a risk that you won't enjoy the subject, or will find it particularly difficult. Take more than one new subject and you multiply the risk.

- Many specialist courses at advanced level take the majority of their course content from facilitating subjects (for example, Sports Studies is based heavily on Biology). If you choose to study the facilitating subject rather than the specialist subject you will still learn the specialist information but you will also gain greater flexibility in your university choices.

Do universities prefer certain advanced level subjects over others?

There are many rumours about subjects being regarded as 'hard' or 'soft' and different people will have differing opinions on the matter.

In general, subjects referred to as being 'hard' are more traditional and theoretical subjects, for example: English, History, Physics and Chemistry. In fact all the facilitating subjects listed earlier can be considered 'hard' with the addition of others such as Economics and Politics.

'Soft' subjects are usually subjects with a vocational or practical bias, for example: Media Studies, Art and Design, Photography and Business Studies. However, there is no set definition of a 'hard' and 'soft' subject.

Generally speaking, students who take one 'soft' subject as part of a wider portfolio of subjects do not experience any problems applying to a Russell Group university.

ATTENTION!! If you plan to take more than one perceived 'soft' subject, some caution may be needed.

Critical Thinking and/or General Studies are usually better taken only as an 'extra', rather than as one of the advanced level subjects on which your university application will be relying.

One of the best ways to keep your options at university open is to choose your advanced level subjects from the list of facilitating subjects. If you are not sure of what to study at university, why not think about your two favourite subjects from the facilitating subjects list? The section on what subjects can give me the most options may help you choose.

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**How do certain subject combinations relate to university courses?**

In considering your advanced level subject choices, it is a good idea to consider the broad ways in which certain subject combinations at advanced level tend to relate to broad groups of university degree courses.

For those studying for AS and A-levels, the most common patterns are described in detail below. The issues for students studying for an IB or for Highers are similar but the structure of these qualifications means that there is less pressure to focus on a relatively narrow range of subjects.

**The scientist**

A student who is good at science often chooses Chemistry, Biology, Mathematics and Physics. This will keep open all the science/mathematics options at university.

For the sake of maintaining a wider outlook on life, however, many students in this category will replace one of the sciences with an arts/humanities subject or a social science (indeed, some universities encourage this). Students who are very good at maths may well do **Further Mathematics** (this is often now done in the same option block as Mathematics).

So, often the choice will look more like this: Chemistry, Mathematics, Physics with an arts/social science/humanity/creative subject as an AS/IB standard level subject or to broaden the range of Scottish Highers studied.

The person who made this choice, however, would have to look at the implications of not doing Biology AS (or equivalent). When considering such implications, it is worth noting that, in the science field at university, many degrees fall into one of two camps: Biological/Life Sciences and Physical Sciences.

**Biological/Life Sciences** are degrees based on Chemistry and Biology. As long as you choose these two subjects at advanced level, a huge range of degrees will be open to you. These include degrees leading to a definite career path (for example, Medicine, Dentistry, Veterinary Science, Pharmacy, Dietetics) and degrees based on research (for example, Biochemistry, Biomedical Materials Science, Pharmacology).

**Physical Sciences** involve the practical application of Mathematics and Physics. As long as you take these two subjects at advanced level a huge range of degrees will be open to you, such as: Engineering (mechanical, electronic/electrical and civil), Physics and Materials Science.

If you are a very talented scientist/mathematician, it is important that out of the four available sciences – Biology, Chemistry, Maths (which includes both Mathematics and Further Mathematics) and Physics – you should choose three. If you know you are inclined towards the life sciences then you should choose Chemistry and Biology. If you know you are on the engineering side you should choose Mathematics (and possibly Further Mathematics) and Physics.

**Essays, essays, essays**

The majority of students fall into the 'essay' category, where all their subject choices will be in the arts/humanities and social sciences (with perhaps one creative/talent-based subject). A large range of university degrees in the arts/humanities, social sciences and business fields will be open to these students, but not normally degrees in the mathematics/sciences field.

Let's imagine that you do History, English Literature, Politics and Sociology at advanced level. Your degree at university might well follow on from one of these subjects – you could do a degree in History, Politics, English Literature or Sociology.

You could also do a degree in another arts/humanities subject (for example, Philosophy). Or you could do a degree in another social science (for example, Psychology). Or you could do a degree in something more vocational (for example, Law or Management Sciences). As you can see, you will have many options open to you.

**The linguist**

Some students will emphasise their linguistic abilities by doing not one but two foreign languages. Students that study languages are highly sought after by universities for language degrees or courses with a language component.

**The artist**

If you have talent in music you may well want to study it at university. If so, it is important that you take Music to advanced level (along with performance grades).

If you have a talent in art you may well be thinking about an art foundation course as a precursor to a degree programme. You might want to consider an advanced level qualification in either Art or Art and Design. Either of these will provide you with the basis for your portfolio, which you will need to gain entry to an art foundation course.

For drama and dance courses, entry does not depend on you possessing the relevant subject. For a few courses (particularly those with a strongly theoretical base) Theatre Studies may put you at an advantage but most universities advise that you take subjects such as Theatre Studies purely out of interest, with entry to higher education in these fields often largely dependent on performance at an audition. Preparation for such auditions can be gained from many different out-of-school activities, from drama and dance groups within school and, of course, from your school leaving qualifications themselves.

### Choices for entry to universities in Scotland

Scotland has two Russell Group institutions – the University of Glasgow and the University of Edinburgh.

If you are looking to study in Scotland, the following information about the Scottish university system may be helpful.

The Scottish degree structure differs significantly from that in the rest of the UK. Typically, students in Scottish universities study for four years to gain an Honours degree. In years one and two, students take a wide range of subjects, only then having to decide which subject or subjects to study during their final two Honours years.

The Scottish degree structure may appeal to you if you are not quite ready to narrow down your studies to a single subject area, or if you would like the opportunity to put your degree subject into a wider academic context.

The key aspects of Scottish higher education are flexibility and choice – many subjects can be studied without previous school qualifications, students can often change the nature of their degree as they progress through a course, and advanced entry into second or even third year of a degree is also possible.

Because of this broad-based degree structure, in order to be admitted to a Scottish university, you will usually be expected to demonstrate breadth in your studies at school or college. By developing different academic skills and knowledge, you will be well prepared for university-level study in a range of subjects.

There are exceptions to the traditional broad-based Scottish degree. Most vocational and professional courses – Engineering, Dentistry, Medicine, Veterinary Medicine and Architecture, for instance – offer only limited flexibility and opportunities for personal choice. Some professional subjects and some science degrees take more than four years to complete.

For the subjects most likely to be required for entry to a Scottish university see section ► **If I know what I would like to study, what subjects do I need?**



# Subjects required for different degree courses

You will see below the advanced level subjects which are most commonly essential requirements 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 is 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.

### Accountancy (also Banking/Finance/Insurance)

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

Usually none although one or two universities require Mathematics.

USEFUL ADVANCED LEVEL QUALIFICATIONS

Mathematics, Business Studies (AGCE, National and Diploma), and Economics.

### Actuarial Science/Studies

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

Mathematics

USEFUL ADVANCED LEVEL QUALIFICATIONS

Further Mathematics, Economics, Business Studies (AGCE, National and Diploma).

### Aeronautical Engineering

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

Mathematics and Physics.

USEFUL ADVANCED LEVEL QUALIFICATIONS

Further Mathematics, Design Technology.

## American Studies

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

Requirements vary but English and/or History are often asked for.

USEFUL ADVANCED LEVEL QUALIFICATIONS

Politics

## Anthropology

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

None

USEFUL ADVANCED LEVEL QUALIFICATIONS

A small number of courses like a science AS-level such as Biology. Sociology is also very relevant.

## Archaeology

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

None

USEFUL ADVANCED LEVEL QUALIFICATIONS

Geography, History or science subjects can all be useful.

## Architecture

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

Some courses say they want an arts/science mix. Some may require Art.

USEFUL ADVANCED LEVEL QUALIFICATIONS

Art, Mathematics, Design Technology and Physics. AGCE or National Art and Design may also be useful at some universities. Do note that a portfolio of drawings and ideas may be asked for.

## Art and Design

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

Art or Design Technology including AGCE/National (to give you the portfolio to get onto an Art Foundation Course, though sometimes AGCE/National Art and Design applicants go straight onto a degree).

USEFUL ADVANCED LEVEL QUALIFICATIONS

Design Technology, Art & Design. Do note that most entrants onto Art and Design degrees will have done a one-year Art Foundation Course after completing year 13.

## Biochemistry

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

Always Chemistry and some degrees will say you must have Biology as well, while some will say Chemistry plus one from Mathematics/Physics/Biology. Doing Chemistry, Biology and Mathematics or Physics will keep all Biochemistry courses open to you.

USEFUL ADVANCED LEVEL QUALIFICATIONS

Biology, Mathematics, Further Mathematics, Physics.

## Biology

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

Biology, Chemistry.

USEFUL ADVANCED LEVEL QUALIFICATIONS

Mathematics or Physics.

## Biomedical Sciences (including Medical Science)

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

Normally two from Biology, Chemistry, Mathematics and Physics. Chemistry is essential for some courses.

USEFUL ADVANCED LEVEL QUALIFICATIONS

Mathematics, Further Mathematics, Biology, Chemistry, Physics.

## Business Studies

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

None

USEFUL ADVANCED LEVEL QUALIFICATIONS

Mathematics, Business Studies (AGCE, National and Diploma) and Economics.

## Chemical Engineering

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

Chemistry and Mathematics and sometimes Physics as well.

USEFUL ADVANCED LEVEL QUALIFICATIONS

Physics, Biology, Further Mathematics.

## Chemistry

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

Chemistry and occasionally Mathematics. Most courses require Chemistry and would like Mathematics and one other science subject (for example, Physics or Biology).

USEFUL ADVANCED LEVEL QUALIFICATIONS

Mathematics, Further Mathematics, Physics, Biology.

## Childhood Studies

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

None

USEFUL ADVANCED LEVEL QUALIFICATIONS

CACHE, Psychology, Sociology, AGCE/National/Diploma Health and Social Care.

## Classical Studies

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

For Classics courses Latin or Ancient Greek are required. For Classical Studies and Classical Civilisation courses most subjects will be considered.

USEFUL ADVANCED LEVEL QUALIFICATIONS

Modern foreign language, English Literature, History, Classical Civilisation.

Do note that there are some Classics courses which will allow you to start Latin and/or Classical Greek from scratch.

## Computing

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

For some courses, Mathematics.

USEFUL ADVANCED LEVEL QUALIFICATIONS

Mathematics, Further Mathematics, Computing, Physics, Philosophy, ICT.

## Dentistry

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

Chemistry and Biology for most courses, but some require Mathematics or Physics as well.

USEFUL ADVANCED LEVEL QUALIFICATIONS

Mathematics, Physics, Further Mathematics.

## Dietetics

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

Chemistry, Biology.

USEFUL ADVANCED LEVEL QUALIFICATIONS

Mathematics

## Drama

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

Some courses require English Literature and for a few courses English and/or Theatre Studies.

USEFUL ADVANCED LEVEL QUALIFICATIONS

English Literature, English Literature and Language, Theatre Studies.

## Economics

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

Usually Mathematics.

USEFUL ADVANCED LEVEL QUALIFICATIONS

Economics

## Education

» See Teacher Training

## Electrical/Electronic Engineering

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

Mathematics, Physics.

USEFUL ADVANCED LEVEL QUALIFICATIONS

Further Mathematics, ICT, Design Technology.

## Engineering (General)

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

Mathematics and Physics.

USEFUL ADVANCED LEVEL QUALIFICATIONS

Further Mathematics, Design Technology.

## English

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

English Literature or combined English Language & Literature (some courses will accept English Language).

USEFUL ADVANCED LEVEL QUALIFICATIONS

History, Religious Studies, a foreign language.

## Environmental Science/Studies

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

Many courses will ask for two from Biology, Chemistry, Mathematics, Physics and Geography.

USEFUL ADVANCED LEVEL QUALIFICATIONS

Another facilitating subject, particularly a science.

## European Studies

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

A modern foreign language.

USEFUL ADVANCED LEVEL QUALIFICATIONS

Another modern foreign language, English Literature, History, Politics.

## French

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

French

USEFUL ADVANCED LEVEL QUALIFICATIONS

Another modern foreign language, English Literature, History, Politics.

## Geography

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

Most degrees require Geography.

USEFUL ADVANCED LEVEL QUALIFICATIONS

Some Geography BSc (science) degrees prefer one from Biology, Chemistry, Mathematics or Physics.

## Geology/Earth Sciences

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

Usually two from Mathematics, Physics, Chemistry and Biology.

USEFUL ADVANCED LEVEL QUALIFICATIONS

Geography, Geology.

## German

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

German (a handful of universities offer the opportunity to study German from scratch, without German A-level).

USEFUL ADVANCED LEVEL QUALIFICATIONS

Another modern foreign language, English Literature, History, Politics.

## History

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

Most degrees require History.

USEFUL ADVANCED LEVEL QUALIFICATIONS

Economics, English Literature, Philosophy, Politics, Sociology, Theology/Religious Studies, a modern or classical language.

## History of Art

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

None

Useful advanced level qualifications

Art, English Literature, History, Theology/Religious Studies, French, German, Spanish, Italian.

## Italian

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

Italian or another language such as French, German or Spanish.

USEFUL ADVANCED LEVEL QUALIFICATIONS

Another modern foreign language, English Literature, History, Politics.

## Law

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

Usually none, although a few universities require English.

USEFUL ADVANCED LEVEL QUALIFICATIONS

History; other facilitating subjects.

There really are no essential subjects for Law. Maybe one choice should involve **» essay** / report writing. History gives you good relevant skills for Law but is not essential.

## Management Studies

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

Sometimes Mathematics.

USEFUL ADVANCED LEVEL QUALIFICATIONS

Mathematics, Economics, Business Studies (AGCE, National and Diploma).

## Materials Science (including Biomedical Materials Science)

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

Normally two from Chemistry, Mathematics, Physics, Biology (also Design Technology for some universities).

USEFUL ADVANCED LEVEL QUALIFICATIONS

Chemistry, Design and Technology, Further Mathematics.

## Mathematics

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

Mathematics and sometimes Further Mathematics.

USEFUL ADVANCED LEVEL QUALIFICATIONS

Further Mathematics, Physics.

## Mechanical Engineering

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

Mathematics, Physics.

USEFUL ADVANCED LEVEL QUALIFICATIONS

Further Mathematics, Design Technology.

Mechanical Engineering departments may have a preference for Mathematics A-levels with a strong mechanics component.

## Media Studies (including Communication Studies)

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

A few courses ask for English or Media Studies.

USEFUL ADVANCED LEVEL QUALIFICATIONS

English, Media Studies, Sociology, Psychology.

## Medicine

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

If you do Chemistry, Biology and one from Mathematics or Physics you will keep all the medical schools open to you. If you do Chemistry and Biology you will keep open the vast majority. If you do Chemistry and one from Mathematics and Physics you will limit your range of choices much more.

USEFUL ADVANCED LEVEL QUALIFICATIONS

Further Mathematics or a contrasting (non-science) subject.

## Music

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

For most traditional courses, Music and Grade VII/VIII.

USEFUL ADVANCED LEVEL QUALIFICATIONS

Some universities have a preference for at least one **» essay-based subject**.

## Nursing and Midwifery

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

Usually Biology or another science.

USEFUL ADVANCED LEVEL QUALIFICATIONS

Biology, CACHE, Sociology, Psychology, Chemistry.

## Occupational Therapy

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

Some courses ask for Biology.

USEFUL ADVANCED LEVEL QUALIFICATIONS

Psychology, Physical Education, Sociology or another science.

### Optometry (Ophthalmic Optics)

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

Two from Biology, Chemistry, Mathematics or Physics (some courses prefer Biology as one of the choices).

USEFUL ADVANCED LEVEL QUALIFICATIONS

Further Mathematics.

### Orthoptics

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

Biology

USEFUL ADVANCED LEVEL QUALIFICATIONS

Chemistry, Mathematics, Physics.

### Pharmacy

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

Chemistry and one from Biology, Mathematics and Physics keeps the vast majority of courses open to you. Some courses like to see Chemistry, Biology and Mathematics. Doing Chemistry and Biology keeps most courses open.

USEFUL ADVANCED LEVEL QUALIFICATIONS

Mathematics, Physics.

### Philosophy

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

None

USEFUL ADVANCED LEVEL QUALIFICATIONS

Mathematics, Classical Civilisations, Philosophy and Religious Studies/Theology.

### Physics

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

Mathematics, Physics.

USEFUL ADVANCED LEVEL QUALIFICATIONS

Further Mathematics, Chemistry.

### Physiotherapy

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

Most courses will consider you with just Biology, however some also require a second science from Chemistry, Mathematics or Physics.

USEFUL ADVANCED LEVEL QUALIFICATIONS

Chemistry, Mathematics, Physics, Psychology.

### Politics

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

None

USEFUL ADVANCED LEVEL QUALIFICATIONS

Politics, History, Philosophy, Law, Sociology.

### Psychology

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

A few courses ask for one from Biology, Chemistry, Mathematics, Physics.

USEFUL ADVANCED LEVEL QUALIFICATIONS

Biology, Mathematics, Psychology, Sociology.

### Religious Studies/Theology

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

None

USEFUL ADVANCED LEVEL QUALIFICATIONS

Religious Studies/Theology, Philosophy, English Literature, History.

### Sociology

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

None

USEFUL ADVANCED LEVEL QUALIFICATIONS

Sociology, Psychology, Geography.

## Spanish

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

Spanish (some degrees will also consider French, German or Italian).

USEFUL ADVANCED LEVEL QUALIFICATIONS

Another modern foreign language, English Literature, History, Politics.

## Speech Therapy

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

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 ADVANCED LEVEL QUALIFICATIONS

A modern foreign language (for example, French, German, Spanish, Italian), English Language (and Literature), Psychology.

## Sports Science/Physical Education

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

Many courses want to see one from Biology/Chemistry/Mathematics/Physics (some courses will treat Physical Education as a science equivalent).

USEFUL ADVANCED LEVEL QUALIFICATIONS

Physical Education, Psychology.

## Surveying

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

None

USEFUL ADVANCED LEVEL QUALIFICATIONS

For some types of Surveying i.e. Building Surveying, Mathematics 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 ADVANCED LEVEL QUALIFICATIONS

(THOSE BEST FOR PRIMARY TEACHING SHOWN IN ITALICS)

At least one from Art, Biology, CACHE, Chemistry, Design and Technology, Drama (Theatre Studies), *English*, French, *Geography*, German, *History*, ICT, Italian, *Mathematics*, *Music*, *Physics*, *Physical Education*, *Religious Studies (Theology)*, Spanish.

CACHE meets the entry requirements for early years Primary Teaching and a large number of Primary Education Teacher Training Degrees.

USEFUL ADVANCED LEVEL QUALIFICATIONS

Another of the subjects listed above.

## Veterinary Science

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS

You should do Chemistry and Biology and one from Mathematics/Physics so that you have all universities open to you.

USEFUL ADVANCED LEVEL QUALIFICATIONS

Further Mathematics

# How subject choices can affect your future career options

## Graduate occupations

In the 1960s, 70s and 80s graduates represented only a very small percentage of the school-leaving population: eight per cent. Now it is more than forty per cent. Being a graduate no longer makes you part of a small elite and taking advanced level qualifications is now very common. You now need to think about what sort of graduate you may become.

There are now five major types of graduate occupation:<sup>1</sup>

- **Traditional graduate occupations**  
There are established professions for which, historically, the normal entry route has been via an undergraduate degree programme. Examples are Barristers, Doctors, Engineers, Higher Education and Secondary Education Teachers, and Research Scientists.
- **Modern graduate occupations**  
The newer professions, particularly in management, IT and creative vocational careers, are areas which graduates have been entering since educational expansion in the 1960s. Examples are Accountants, Computer Programmers, Primary School Teachers, and Journalists.
- **New graduate occupations**  
Areas of employment, many in new or expanding occupations, where the route into the professional area has recently changed such that it is now via an undergraduate degree programme. Examples are Marketing Managers, Physiotherapists, and Computer Games Designers.
- **Niche graduate occupations**  
Occupations where the majority of incumbents are not graduates, but within which there are stable or growing specialist niches which require higher level skills and knowledge. Examples are Leisure Centre Managers, Hotel Managers, Nursing, and Retail Managers.
- **Non-graduate occupations**  
All jobs that do not fall into the previous four categories are considered 'non-graduate occupations'. This does not automatically imply that it is not appropriate for a graduate to be doing them, or that a graduate cannot enjoy a fulfilling job. It means that, in the main, a degree is not required to enter these occupations.



## WARNING!

**While you may be aware of the subject requirements of a well-known career such as Medicine, other career-related requirements may be less well-known. Did you know, for example, that some of the new graduate occupations such as Computer Games Design can prefer a facilitating subject such as Maths, as well as a Design subject?**

If you have some career ideas already, you should check entry requirements both in related degree subjects on the [UCAS website](#) in the [Course Search section](#), and in the [Connexions Jobs4u website](#). See also the [Best Course 4 Me website](#) for advice on careers and university courses.

## Professional careers

As explained above, a wide range of graduate occupations are in professional areas.

A profession is a job or an occupation that requires a certain level of specialist training. People working in each profession (called professionals) are required to demonstrate expertise and specialised knowledge, as well as ethical behaviour. Professions are almost always regulated in some way, either by law or through membership of a professional body. Professions offer some of the highest graduate earnings, as well as the opportunity to enjoy a challenging career in an area where you'll become a recognised expert.

Some of the most well-known professionals are doctors, solicitors and accountants but in fact there are several hundred different professions covering a huge range of sectors including building, engineering, business, education, technology, hospitality, sciences, the environment, finance, research, information, health, and culture.

If you already have some idea of the business or industrial sector you want to go into, you are advised to explore the options it offers for a professional career. If you want to enter a profession this may influence your choice of degree course, and possibly also your choice of advanced level qualifications.

For example, if you are interested in engineering, you could learn more about the many different disciplines within engineering, the various routes into the engineering profession, and the academic and professional

qualifications you will need to achieve in order to become a practising engineer.

For many professionals, a university degree is the first step towards entering their chosen profession. In terms of qualifying as a professional, there are often advantages to doing a degree course which is accredited or certified by the relevant professional body. Some accredited programmes provide a recognised fast-track route to professional status, whilst others offer exemptions from certain professional examinations.

## ATTENTION!!

**Not all degree courses are accredited by the relevant professional body. If you are hoping to do a degree leading to a professional qualification you are advised to check with the university or with the professional body itself to see which courses have the necessary accreditation from the professional body.**

If you are hoping to enter a profession, you should try to ensure that your choices for post-16 education will give you the best possible preparation for the degree and professional qualifications you will need for your chosen career.

More information about professional careers and training can be found on the [Total Professions website](#) and on the [Connexions Jobs4u website](#).

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1 Elias, P, and Purcess, K. *Researching Graduate Careers Seven Years On*, Research Paper No. 6, *SOC (HE): A classification of occupations for studying the graduate labour market*, March 2004

# The five-point plan for making your post-16 choices

## 1. Know what you want to study? – Check out the entry requirements

If you have a university course which you are keen on, have you checked the relevant university website or [UCAS course search](#) to find out whether this course requires certain subjects at advanced level?

### WARNING!

If you are considering the Advanced Diploma, have you checked the additional and specialist learning options that will be open to you or the Diploma entry requirements for the courses that you are considering at university?

## 2. Not sure yet? – Keep your options open!

If you are not sure about what course you want to study at university, have you tried to choose at least two [facilitating subjects](#) (Maths, English Literature, Physics, Biology, Chemistry, Geography, History, Languages)?

### ATTENTION!!

These 'facilitating subjects' (Maths, English Literature, Physics, Biology, Chemistry, Geography, History, Languages) are the subjects most likely to be required or preferred for entry to degree courses, and choosing them will keep more options open to you at university.

To get a rough idea of the options the different facilitating subjects will give you in applying to university, you can look at the [UCAS website](#) or university websites, or guidance on [subjects required for different degree courses](#).

## 3. GCSEs and other standard level qualifications matter...

Make sure you understand [the GCSE or standard level requirements for entry to a competitive university](#).

Are you on track to achieve the standard level grades to progress onto the course/courses that you want to do at advanced level and the university course that you may choose to do?

#### 4. Think balance

Do you have a balance of subject choices that reflect your abilities, strengths and interests?

Have you considered [» how certain subject combinations relate to university courses?](#)

#### 5. Make sure you know WHY

If you want to take a subject that you have not studied before, can you talk for a minute on what this subject is about? Try and unpick why you wish to study this subject. It's not enough to say 'It's interesting', 'I think I'll like it' or 'It will be fun'.

You may also find it useful to refer to guidance on [» making your post-16 subject choices](#), and [» how your choices will affect your future career options](#).

# Abbreviations

<b>AGCE</b>	Applied General Certificate of Education (Double award)
<b>BTEC</b>	Business and Technician Education Council (merged into Edexcel in 1996)
<b>CACHE</b>	Council for Awards in Care, Health and Education
<b>GCSE</b>	General Certificate of Secondary Education
<b>IB</b>	International Baccalaureate
<b>ICT</b>	Information and Communication Technologies
<b>IGCSE</b>	International General Certificate of Secondary Education
<b>IT</b>	Information Technology
<b>NVQ</b>	National Vocational Qualification
<b>OCR</b>	Oxford Cambridge and RSA Examinations
<b>S5</b>	Fifth year of secondary school (Scotland)
<b>S6</b>	Sixth year of secondary school (Scotland)
<b>UCAS</b>	Universities & Colleges Admissions Service
<b>VCE</b>	Vocational Certificate of Education

# Links

The following organisations can provide additional advice to students making decisions about their post-16 education:

**Connexions – post-16 choices**

<http://www.connexions-direct.com/index.cfm?pid=7>

**Conservatoires Admissions Service (UK)**

<http://www.cukas.ac.uk>

**Directgov**

- **Careers Advice**

<http://www.careersadvice.direct.gov.uk/>

- **University and higher education**

<http://www.direct.gov.uk/en/EducationAndLearning/UniversityAndHigherEducation/index.htm>

- **It's your choice: options after 16**

<http://www.direct.gov.uk/en/EducationAndLearning/14To19/OptionsAt16/index.htm>

- **14–19: your life, your options**

<http://www.direct.gov.uk/en/EducationAndLearning/14To19/index.htm>

**LearnDirect**

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

**National Apprenticeship Service**

<http://www.apprenticeships.org.uk/>

**Skills Funding Agency**

<http://skillsfundingagency.bis.gov.uk/>

**Student Awards Agency for Scotland**

<http://www.saas.gov.uk/>

**Student Finance in England**

<http://www.direct.gov.uk/en/EducationAndLearning/UniversityAndHigherEducation/StudentFinance/index.htm>

**Student Finance NI**

[http://www.studentfinancenl.co.uk/portal/page?\\_pageid=54,1265897&\\_dad=portal&\\_schema=PORTAL](http://www.studentfinancenl.co.uk/portal/page?_pageid=54,1265897&_dad=portal&_schema=PORTAL)

**Student Finance Wales**

[http://www.studentfinancewales.co.uk/portal/page?\\_pageid=56,1274359&\\_dad=portal&\\_schema=PORTAL](http://www.studentfinancewales.co.uk/portal/page?_pageid=56,1274359&_dad=portal&_schema=PORTAL)

**Total Professions**

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

**UCAS**

<http://wwwucas.ac.uk/>

**Young People's Learning Agency**

<http://www.ypla.gov.uk/>

The following resources may be useful for staff in schools or colleges with responsibility for advice or guidance on higher education:

**Admissions to Higher Education: Advisers' Directory**

<https://www.ssatrust.org.uk/community/highereducation/Pages/AHEAD.aspx>

**Applying to Higher Education: Advisers' Certificate**

<https://www.ssatrust.org.uk/community/highereducation/Pages/Adviserscertificate.aspx>

### Notes

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Abbreviations

Links

**RUSSELL**

UNIVERSITY OF BIRMINGHAM

UNIVERSITY OF BRISTOL

UNIVERSITY OF CAMBRIDGE

CARDIFF UNIVERSITY

UNIVERSITY OF EDINBURGH

UNIVERSITY OF GLASGOW

IMPERIAL COLLEGE LONDON

KING'S COLLEGE LONDON

UNIVERSITY OF LEEDS

UNIVERSITY OF LIVERPOOL

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QUEEN'S UNIVERSITY BELFAST

UNIVERSITY OF SHEFFIELD

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