

# **UNIVERSITY SUBJECTS**

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# Art History: History of Art beyond A level

Art both reflects and helps to create a culture's vision of itself. Studying the art of the past teaches us how people have seen themselves and their world, and how they want to show this to others. [1]

Scientists have tracked the movements of an art historian's eyes: the results show how they scan, fixate and linger on particular points of the canvas reveals their skill and is entirely different to someone with an untrained eye. (Dr Danile Glaser, Director, Science Gallery, King's College London)

A History of Art degree will expose you to social, cultural and intellectual history; philosophy; literary studies; and some of the technical aspects of the production, curatorship, and use of visual material, as well as the history and analysis of different movements, styles, and individual works.

Unlike other humanities subjects, studying History of Art also teaches you visual literacy – the ability to analyse images and objects. In an increasingly visual world, this skill is invaluable.

Many go on to further study, to complete Masters' degrees and/or PhDs in related fields. Students frequently gain employment in areas related to their degree such as museums, galleries, the care and maintenance of collections, conservation and heritage management, design, the fashion industry, film and television, advertising, the built environment, and the art market. Some become practising artists themselves. Others use the skills and insights gained in their studies to pursue successful careers as lawyers, bankers, actors, writers, doctors, accountants, politicians, and in business, as well as in many other walks of life.[2]

There's so much more to the study of History of Art than admiring the aesthetics of an object. History of Art is a way of unlocking the past through material culture.

The study of art history helps you tease out the social, political and personal narratives of a piece of art - whether this be painting, sculpture, installation, photography or film - so that you can carve out a story of human experience, informed by your own background and interests such as social history, philosophy, anthropology, feminism and religion.[3]

- [1] University of Bristol
- [2] <u>University of Cambridge</u>
- [3] University of Birmingham

# **Art & Photography Foundation**

## Why do an Art Foundation?

A Foundation Diploma in Art and Design is a one year course designed to enable students to make an informed decision about what specialist degree in art and design to apply for and to build a suitable portfolio for applications.

Degree options include such specialisms such as visual communication, illustration, fashion, textiles, ceramics, product design, photography, interior design and architecture.

It is possible to apply for a place directly on to a degree course without a foundation but you will be competing against students with more sophisticated portfolios.

#### What are the costs?

As foundation is classified as FE rather than HE, if you start the course before you are 19 there are no fees. However, you can't apply for a student loan for living expenses. Therefore, although there are courses all over the country, most people have to carry on living at home so apply to quite local courses.

## Where can I apply?

University of the Arts London (UAL) offers two foundation courses – Central St Martins (CSM) and Chelsea, Camberwell, Wimbledon (CCW). You can't apply to both but most CSG students do choose one or other. Competition for these prestigious London art schools is fierce so you should also look at other ones. Eg. The Royal Drawing School, Kingston University, Ravensbourne College of Art, The University of the Creative Arts, The Working Men's College, Kensington and Chelsea College, City and Islington College. There are also some private ones that do charge fees – City and Guilds of London and The London Art School.

You can apply to lots but we recommend applying for 2-3. You need to research your options on the colleges' websites and by going to the open days. Most open days are this term and require you to book a place.

Foundation is not done through UCAS so you need to apply to each individual college. Most have online application forms.

#### How do I get a place?

Offers are made on the basis of a portfolio plus a personal statement and a reference from us so please tell us if you are applying so we can prepare your reference. Your personal statement should focus on you as an artist, so talk about your work, your artistic influences and how you see your work developing. You should complete your application in the Autumn term as the deadline for most colleges to receive the application is the end of January. You will then be sent a date to bring your portfolio - usually February or March.

The colleges have varying portfolio requirements but typically it is up to 20 mounted sheets of work organised into sections such as themes or projects plus sketchbooks. Any sculpture or work too big for an A1 portfolio needs to be photographed with the media and scale indicated. Some colleges interview you with your portfolio but lots of them look at the portfolios without you there. Some colleges ask you to send a digital portfolio first as a pre-selection method. Your portfolio will be your A Level work plus any

other independent work you have so it's really important to be productive. You also need to be organised – it takes time to prepare a portfolio and show your work off to its best advantage so you need to start early.

The Art Department are happy to do portfolio tutorials so do ask us.

There are minimum entry requirements – usually of 5 GCSEs including maths and English plus 2 A Levels or equivalent.

# **Biology**

## What should I study if I want to do a biology degree?

Most universities want to see some evidence confirming a prospective student's interest in biology before accepting them on a degree course, so studying biology at school/college prior to university is a must for anyone hoping to study the subject at degree level.

Often, universities require a student to have achieved a certain standard in another science or mathematics subject, such as chemistry, physics, psychology, geography, geology or maths. Relevant work experience is also something worth pursuing for prospective biology students, not only because it may help them to decide whether there is a specific field they want to specialise in but also because it shows a willingness to go beyond school-level education to study.

For example, a student interested in studying zoology at degree level may try to obtain work experience in a veterinary surgery, a zoo, a wildlife trust or even a museum. Some universities require prospective students to pass an entrance examination too, so it is worth looking at course information and requirements in great detail before deciding which universities to apply to.

## What jobs do biology graduates go on to do?

The broad nature of the subject is reflected by the wide-ranging jobs that biology graduates go into. A lot of biology students choose to continue their university studies beyond undergraduate level, with a master's or a doctoral degree course being a popular choice for biology graduates. While undergraduate level biology degrees help students develop transferable skills, further levels of study are often necessary to land careers in the more advanced areas of biological studies.

Biology graduates can go on to work in research and, depending on their specialisation, they often find themselves in either molecular and cellular, organismal or field biology. Roles in molecular and cellular biology include neuroscientists, microbiologists and genealogists, while graduate roles in the organismal field of biology include zoologists, botanists and entomologists.

Field biologists are often employed in positions as ecologists, oceanographers and marine scientists. The medical industry is also a common destination for biology graduates, with medical treatment developers, nutritionists and medical researchers among the roles often taken by biology students.

Graduates who choose not to continue their studies further than undergraduate level can become laboratory technicians, science writers, teachers, and biotech marketing and sales roles, among numerous other positions. The career prospects of a biology graduate are by no means limited, and the skills developed during the course can be transferred to almost any scientific or non-scientific industry.

# Why is a degree in Chemistry a good idea?

## What is chemistry?

Chemistry is, in the simplest terms, the science of substances and how they change. It is the exploration of the qualities of atoms, some of the most basic building blocks of all matter, and how those atoms join together to form new kinds of matter, called compounds. Everything in the universe, from the gas in a distant nebula to the tips of your fingers, is a mixture of atoms of different elements.

When atoms join to form compounds they can take on astonishingly different properties, like the way poisonous chlorine gas reacts with sodium to form ordinary salt. Atoms can also react to each other with bursts of energy that can harm us, or can be harnessed for our benefit. The role of chemists is to understand the properties of atoms, the forces between them, and how they react to other elements. Chemists have changed the world with numerous groundbreaking discoveries.

The computer you're reading this sentence on would not exist without the invention of plastic, the result of mixing substances to form new compounds. The medicines created through biochemistry have revolutionised human life, doubling our life spans and erasing many horrific diseases from existence. Chemistry shows us that knowledge of the smallest particles gives us enormous power.

## What do you learn in a chemistry degree?

A chemistry degree will likely start with core modules setting out basics, such as the distinctions between organic and inorganic matter, the physical forces that govern atoms, and how scientists can predict an element's behaviour based on its atomic makeup. Students grapple with modern theories like quantum mechanics, which seek to explain the behaviour of matter. Some courses also include background information on the history and philosophy of science. Chemistry is a highly practical degree, with significant teaching time spent in the lab perfecting techniques and performing experiments.

As students gain experience in the lab, they are offered the opportunity to perform open-ended experiments, trying out different solutions to chemistry problems posed to them. To do this, students master a variety of analytical techniques. Spectroscopy, the analysis of matter's interaction with radiation, is one of the most important techniques taught, and features prominently in many degrees. As students advance, they may choose to take modules in specialist topics such as pharmacology, chemical engineering, electrochemistry or nanotechnology.

There may be options that allow students to specialise in a certain field that they find particularly interesting, whether biochemistry, medicine, environmental chemistry or sustainability. Some courses also include options like industrial management, in which students can learn about the applications of chemistry in industry from a business perspective.

## What do people who study chemistry do after graduation?

Chemistry graduates are in demand from companies carrying out scientific research. Depending on which topics they specialised in during their course, students might find a career working for pharmaceutical or metallurgical companies, or providing analysis for commercial laboratories. The criminal justice system needs chemistry graduates to work as forensic scientists, providing evidence for the courts using state-of-the-art techniques. Outside of the lab there are many opportunities for chemists.

Graduates can become consultants in fields like the environment and sustainability, offering insights into how organisations should adhere to environmental regulations. A chemistry degree also gives graduates the scientific insight to become a patent attorney, with further study into intellectual property law. Many chemistry graduates opt for a career in teaching at school or university level, and others continue to study for an MSc or PhD.

# Why is a degree in Chemical Engineering a good idea?

## What is chemical engineering?

Chemical engineering can be defined as the supervision and design of chemical reactions on an industrial scale, for the purposes of energy production or human development in general.

To excel in this field one must manage complex projects in a wide range of fields such as mathematics, biochemistry and economics proving both business acumen and scientific nous.

A key area in which chemical engineering is important is in the energy sector and the utilisation and refining of resources such as oil and gas in generating electricity or powering engines.

Chemical engineering will also be important in the global shift towards renewable resources such as solar and hydroelectric, requiring innovation and development to ensure these sources can meet our energy needs.

Chemical engineering is also used in processes such as the creation of pharmaceuticals and food manufacturing. While the Romans were using chemical reactions to create quantities of cement as early as 300BC, the modern discipline came to prominence in the 20th century.

## What might you find on a chemical engineering degree?

Universities across the world offer a three year modular bachelor's of engineering programme, or a four year master's qualification. A first year will often focus on transferable skills, such as those in information technology and the basic concepts of chemical and energy engineering such as distillation and membrane technology.

Study may also focus on academic ideals of energy and transport, focusing on equations relating to objects on a scale from atoms to oil tankers. Courses will be rapidly evolving, ensuring that a student is kept informed of the latest developments in the shifting energy and manufacturing sectors.

Working on large projects as part of a team will also be part of a course, and laboratory research in areas such as catalysis and unit operations can also feature. Degree programmes can often feature a sandwich year in industry, where students can experience a paid entry level position in the field, and also establishing a professional network to utilise upon graduation.

In many courses, undergraduate and graduate master's degrees will be similar for the first two years, before the graduate course diverges into more specialist study. Graduate courses will be a chance for a student to focus on an area and can be combined with other areas of expertise, for instance nuclear engineering.

## What should I study to do a chemical engineering degree?

Essential to any university study is an educational grounding in chemistry, and universities will usually require a student to have a proficient level of understanding before acceptance onto a course. As well as chemistry, traditional sciences such as biology, in which a student can learn about digestion and the impact of food manufacturing services, and physics, which can touch on the formulas of nuclear power, are also highly important.

Not to be overlooked is any opportunity to study courses in business and economics, as the feasibility and execution of projects in chemical engineering will invariably come with cost analysis and management responsibilities.

In an education system in which one chooses a major after beginning a university course, a business minor can be an ideal accompaniment. In a globalised industry, written English language skills can be crucial, and languages such as Mandarin or Arabic can also be highly valued by both employers and higher learning institutions.

Given the confluence of business and science, mathematics is also an important subject for a student to learn.

## What do people go on to do?

The industrial sector of chemical engineering is rapidly expanding, and as well as its traditional outlets it offers graduates careers opportunities in fields such as nanotechnology and biotechnical engineering.

Chemical engineers will find jobs directly related to their profession in the energy sector. An energy engineer will be involved in the development of existing processes and the creation of new avenues for enhancing energy usage and extraction, and is closely related to professions such as a nuclear or petroleum engineer.

A degree course in chemical engineering will teach a student many transferable skills, which can be adopted to a wide variety of sectors. Business and leadership are an important part of a chemical engineering degree, and these can be used to forge a career in manufacturing, textiles, or even retail management.

Quality assurance is based on both the maintenance basic standards and motioning a system that can consistently continue a high standard of output, which can be ideal for a graduate who is able to appreciate the functions of a large business.

Also applicable is skills in information technology, and the potential for a graduate to pursue a career in this field also, for instance as a software engineer. The combination of business and chemistry is used in the pharmaceutical sector, in the development and patenting of healthcare drugs.

# **Classics at University**

## What can they involve?

You do not need to have studied Classics or the ancient languages at school to take a Classics-based degree. This makes it an excellent opportunity to start something brand new which includes elements of lots of other things you might enjoy: literature, history, philosophy, linguistics, history of art...

Classical Civilisation courses vary widely from university to university, but you can be sure that you will be exploring the literature, culture, history, philosophy, art and architecture and language of the Roman and Greek worlds. You do not need to have studied Classics or the ancient languages at school to take a Classics degree. Different courses have different requirements for how much Latin or Ancient Greek forms part of the course - and usually there is an element of choice around this aspect. Many courses also offer units which explore modern reception of the ancient world, looking at how we interact with the Romans and Greeks in a literary and sociological way. Some courses will offer opportunities for extended independent research; others will be more exam-focused - so you can find whichever balance works for you.

Latin and Greek are usually pursued as the linguistic element of a Classical Civilisation degree, but there are some courses which focus specifically on Latin and the Roman culture behind the literature and language. Often Latin courses form part of a combined degree, for example Latin and Linguistics, or Latin and MFL.

Ancient History courses focus on this specific aspect of the ancient world - using a wide variety of textual and visual source evidence and archaeology to piece together the history of the Roman and Greek worlds and consider the impact, consequences and importance of events, people and places in the ancient world. Different courses have different requirements for how much Latin or Ancient Greek forms part of the course - and usually there is an element of choice around this aspect.

## Why should I consider a Classics-based degree?

- Classics degrees of all types are extremely multi-disciplinary you are able to explore and exercise a variety of different ways of exploring an entire world, and choose which combination reflects your own passions, abilities and interests. No two Classics degrees are the same everyone chooses a different combination of units on language, history, literature, philosophy, art and architecture.
- You can exploit this vast range to reflect your own developing interests: the degree you begin with in first year might look very different by the end of your course so if you're someone who worries about a three year commitment to one thing, Classics is a very flexible and adaptable course which provides endless interesting and varied opportunities.
- You will definitely emerge from a Classics degree having used your brain in more ways than you can possibly imagine, and having explored a whole world from such a wide variety of angles, you will leave not only with a broad and deep knowledge of ancient civilisations, but with a lifelong curiosity about the people and cultures of all places and times.
- Travel! Many courses or Classics societies at university arrange trips to Italy and Greece not to mention Turkey, Egypt, the Middle East... you'll have the chance to explore the ancient world in person during your holidays with a new depth of understanding.

#### To what can it lead?

- It can lead to ANYTHING you want it to! Classics is highly respected by employers, as it produces analytical, critical, flexible, rigorous graduates who can turn their hand to anything.
- Because of the multidisciplinary nature of the study, Classicists are highly employable in any field you can imagine: the arts, journalism, law, technology, publishing, the media, politics, business and

marketing, museums and archaeology, education, the civil service and foreign office - these are just some of the careers that people in our cohorts at university have pursued since graduating.

Come and speak to us if you have any questions whatsoever about what Classics might have to offer for you!

Ms Maguire, Mr Beecroft and Mr Deary

# **Economics: Studying Economics at University**

## Why study economics

- To get a better understanding of how the world works
- Replace vague ideas or prejudiced thoughts with sound reasoning and logical analysis
- To train the mind......economics is not just a set of theories. It is a way of thinking, based on logical reasoning, which helps us understand complex systems and problems
- To get a better job. Some economics graduates get jobs as specialist economists, but most enter more general employment areas in the private and public sectors. Broadly speaking, employers like Economics graduates
- Better Pay! Economics usually appears at the top of the graduate pay tables Which degree should you study to get rich quick?

## Things to consider

- Economics is a very broad subject and includes many sub-branches:
  - o Macro, Micro, Development, Industrial, Econometrics, ......
- Make sure you choose the course that you enjoy to the end. Research the university and subject carefully
- Some courses can be very mathematical and highly theoretical. Depends on the course you choose.
- Look at the whole 3/4 year program. Research what modules are covered each year
- Would you prefer a joint degree (history, politics, philosophy,.....)

## **Entry Requirements**

- Economics is one of the more popular subjects at A level and it is also very popular as a University subject
- Entry requirements are generally quite high (Russell Group A\*AA/AAA)
- Check if your course requires Maths. Many courses require Maths A level but A level Economics is not a mandatory requirement
- If you don't do A level Maths look at BA economics offerings. B.Sc. courses generally require A level Maths.

## **Course Structures**

- Course structures vary enormously, but usually have core subjects of Macroeconomics,
  Microeconomics and Statistics or Quantitative Methods in the first two years, plus optional/specialist modules in the second and third years
- Economics options are typically modules like: International Economics, Public Policy, Applied Econometrics, Industrial Economics, Finance, History of Economic Thought, and so on
- Non-Economics options can vary enormously: Politics, Accounting, foreign languages, Philosophy, Economic Geography, Business Strategy, and so on
- Check out the websites of Universities you are interested in to see what they offer.....in some cases you may be able download course notes

# Selection of some Economics Faculties: Click on the links to access the economics faculty web sites

Bath	<u>Leicester</u>	<u>Sheffield</u>
<u>Birmingham</u>	Liverpool	SOAS
Bristol	London School of Economics	Southampton
Cambridge and Undergraduate Study	<u>Manchester</u>	St Andrews
<u>Durham</u>	Newcastle	<u>Surrey</u>
<u>Edinburgh</u>	<u>Nottingham</u>	Sussex
Exeter	<u>Oxford</u>	UCL
<u>Lancaster</u>	Queen's University (Belfast)	Warwick
<u>Leeds</u>	Royal Holloway (London)	York

# Selection of Overseas Universities / Faculties

Columbia (New York)	Stanford (Economics)	Wharton (Economics)
Harvard (Economics)	Trinity College Dublin (Ireland)	Yale (Economics)
Princeton (Economics)		

# **English: Why Study English at University?**

'Literature irrigates the desert that our lives have become.' C S Lewis

'Books are the cornerstone of civilisation. Without books, history is silent, science crippled, thought and speculation at a standstill. Books are the engines of change, windows on the world, lighthouses erected in the sea of time.' Barbara W Tuchman

An English Literature degree will take you on a whirlwind tour of literary legends, big texts and famous names. But it will also expose you to new writings, different voices, and original experiences far away from the confines of your day to day life. It will let you explore a variety of literary forms – from short stories, to novels, drama to poetry.

English Literature is also a sociable subject – doing a degree should never mean three years of silent reading in a library. You will be encouraged to debate in classes, to speak about your thoughts and feelings on the texts you study, and to listen and value the opinions of others. The ability to form and communicate a compelling argument is a key skill in an English degree.

## What can you do with an English degree?

Almost anything! You don't have to be a teacher! (Though I have to say that I think I have the best job in the world). English is a highly prestigious degree with transferable skills, much respected by employers.

## **English degrees OPEN doors!**

Employers love English Literature students because a degree in English Literature trains you to be an independent critical thinker, someone who can process and communicate diverse data in creative ways, an individual who is reflective in practice, and analytical in approach. English Literature graduates are global scholars with global horizons, who are flexible and adaptable to the changing contexts and demands of the modern world.

Check out the raft of major companies that are singing the praises of English Literature degrees and their graduates. The transferability and relevance of these skills enable English graduates to adapt and evolve in the rapidly changing socio-economic and political contexts of the modern world:

- The CEOs of many Fortune 500 companies are English graduates.
- Harvard Business Review recently profiled the increasing trend for top corporate companies targeting English graduates in their recruitment strategies.
- The financial industries have also stepped up their targeted recruitment of English graduates.
- Goldman Sachs recently revealed that English students were among its second largest cohort of recruits, and that the company has begun holding special recruitment events aimed at English-related subjects at under and postgraduate levels.
- The creative industries film, TV, advertising, journalism, publishing value English graduates.

DO AN ENGLISH DEGREE AND YOU WILL BE: 'LEARNING FROM THE PAST, IN THE PRESENT, FOR THE FUTURE' Professor Katy Shaw

## **Help in School**

I shall be running after-school sessions from September:

**ELAT** 

Other entrance tests ie at UCL, Warwick

Interview practice

## **Summer Preparation**

READ! ALL THREE GENRES!		
Create your own area of expertise.	Start with A-Level texts: read more by the same author/ explore the writers who influenced your set author/ other writers writing at the same time.	
	Become an expert on a particular author or set of authors outside the syllabus.	
	Be daring! Go for the unusual. What about Pope, Dryden and other satirical writers of the period?	
	What about the Romantics? Blake/Keats/ Shelley/Wordsworth/ Byron.	
	What about contemporary poetry? Check out the Forward Poetry Prize	
	Writers in the first half of 20th century: D H Lawrence/ Virginia Woolf/ Yeats/ Auden etc	
	The Victorian novelists? Dickens/ Hardy/ the Brontes/ George Eliot	
	The Mann Booker winners and nominees?	
Watch NT I	ive performances. Read plays	

Watch NT Live performances. Read plays.

Read review columns in newspapers/ Listen to 'Front Row' on Radio 4 at 7.15 every Weekday. Listen to In Our Time back catalogue

Read the university course descriptions. Make sure you know what the course entails/ how it is assessed etc

## DO ENGLISH! You'll never regret it!

If you want to know more, see Ms Fearnside.

# Geography: Advice for anyone considering geography at university

Students should be reassured they have a very wide choice of universities. The UK is probably the best place to study geography, with many of the highest ranking courses in the world. A lot of courses tend to make offers of AAB, but there are universities which offer lower (as well as higher) entry requirements than this, and experience over the years shows quite some flexibility.

BA degrees tend to have a greater focus on human geography. BScs tend to have a focus on physical geography, and often have slightly lower entry requirements. Even if you think you are definitely "a human geographer" or "a physical geographer" at this stage, be cautious about settling on a course that is only one or the other. University offers the chance to widen your horizons and, exposed to new ideas, you may surprise yourself. All geography courses allow you to specialise to varying degrees in Years 2 and 3 anyway.

Look <u>at the experience of other students</u> from Camden School For Girls who went on to study geography at university.

University Geography departments often attract students with their promises of exciting looking field trips. Two questions: how much will they cost you (some universities heavily subsidise these), and what is the likelihood they will be going ahead in a post COVID world?

The Royal Geographical Society provides advice on why it might suit you to study geography at university and how to choose a course.

Do a bit of <u>wider geographical reading</u>. If you are serious, you might like to see what a <u>geography</u> <u>academic paper</u> looks like - you'll be reading a lot of these later...

Don't be remotely concerned if your UCAS Personal Statement says nothing about you climbing Everest, gaining DofE Gold Award aged 15, or having experience running a small United Nations department. Such achievements are likely to say more about your parents than you. A good Personal Statement for geography can demonstrate your passion for the subject with some astute observations made from your bus journey to school, or reflections on some conversations with your granny.

Email me: mevans@csg.school

# History/Politics/Sociology at University

If you are interested in any of the above at university you must read. Read books on topics that you are interested in, either things related to your areas of study or topics outside of that. Try to summarise the main arguments of the work and think about whether you agree or not with the overall argument.

Other ways to 'go beyond the textbook' are listening to podcasts, watching documentaries as well as visiting museums and exhibitions (if you can!).

Generally speaking, courses in the above subjects are very broad in the first year and become more specialised as the years go on. When applying to universities, look at the courses on offer as these will vary greatly between universities. If you have an area of particular interest, make sure your options offer something in line with that. Another useful resource is university league tables (such as the Guardian university rankings) which you can sort by subject - this may give you some options that you hadn't previously considered.

The above subjects and related degrees offer a wide variety of career choices, from journalism to law and will equip you with skills looked upon very highly by employers (namely argument and analysis).

For any more guidance on ideas for reading, please speak to your teachers.

I will also be running a weekly lunchtime Sixth Form History Seminar where we discuss articles and books to prepare you for university History - if you are interested please email me (dgunn@csg.school).

# Languages: Studying a modern foreign language at University

Studying Modern Foreign Languages provides both practical training in written and spoken language and an extensive introduction to literature and thought written in the foreign language. As well as learning to write and speak the language(s) fluently, you can study a broad range of literature, or focus your studies on any period from the medieval to the present day. A wide range of other options allow you to explore subjects including linguistics, philology, film or gender studies as well as advanced translation.

Modern Languages students spend a year abroad, usually in the third year. Past opportunities abroad typically include working as a paid language assistant in a school, undertaking an internship and/or studying at a University, all of which provide valuable experiences for improving language competence.

Many universities offer a European Language in combination with another subject, such as Classics, a Middle Eastern Language, English, History or Philosophy.

Up to 90% of languages graduates are in work or pursuing further study within 6 months of graduating.

As we enter a post-Brexit era, the UK needs students of languages who will be able to take their skills into the workplace, working with colleagues from around the world in their own native languages. Bilingualism opens many doors and fosters social mobility. A 2018 European Commission report found that just 32% of 15-to-30 year olds from the UK can read and write in a foreign language – far behind France (79%), Germany (91%) and Denmark (99%).

Just incorporating a language into your degree can set yourself ahead of the rest when applying for jobs once uni is over. Studying languages shows a high level of communication skills, the ability to work independently and that you are mature, confident and can easily adapt to different situations and cultures. These skills are essential in the multicultural, global society that we live in.

## **Maths**

## You like thinking about things

Mathematics has a beauty and a power that few other subjects can touch. As a mathematician you can answer questions that have puzzled people for hundreds of years.

## You want to make a difference

Medical researchers, economic policy makers, and technology firms all want highly numerate graduates. If you want to stop the next major disease outbreak, become a mathematician.

## You enjoy working things out

As technology advances more and more data is being generated, creating new and interesting problems for future mathematicians to solve.

The clearest change of emphasis in mathematics at university is in the need to prove things. Much mathematics is too abstract or technical to simply rely on intuition, and so it is important that you can write clear and irrefutable arguments, which make plain to you, and others, the soundness of your claims. This ability to think logically and argue your thoughts clearly is incredibly valuable, both in mathematics and in the wider world.

Mathematicians usually work in either pure or applied maths (although recent advances mean that even topics traditionally considered to be pure maths are seeing applications in medical imaging, art history, and e-commerce). An academic mathematician will be part of a research group; these groups can be very specific (e.g. Analytic Topology) or interdisciplinary (e.g. Mathematical Geosciences) and provide an opportunity to discuss your research with other researchers in your field. To become an academic students will typically study to undergraduate and Master's level, before doing a PhD in a mathematical area. Around 30% of our undergraduates go onto further study (including Masters and PhD programmes).

The majority of mathematics students don't go on to become academics. Google Maths careers to find out the full range of options.

## Medicine

Medicine is a very broad subject area and can lead to jobs in a range of areas. There are more options than ever for graduates wishing to specialise in a particular field.

The path into medicine is tough, and courses are generally at least five years long. Many universities have their own teaching hospitals, allowing students to gain practical experience early on in their studies, equipping them for the realities of working life in the medical profession.

## What should I study if I want to study medicine?

If you want to study medicine you will need good grades in sciences and maths. Many universities require top grades in chemistry and prefer graduates to have good grades in subjects like biology, physics and maths. Excellent communication skills and a good bedside manner are also extremely important in this career as well as an understanding of ethics, although this is also taught as part of the degree.

Other useful skills for studying medicine include: time management, attention to detail, organisation, problem solving, discipline, teamwork, leadership and patience. As well as the practical medical skills there is also a lot of administrative work that doctors have to do, keeping patient records up to date and making sure paperwork is filled out. Medicine is a demanding career that requires you to completely commit but the rewards are well worth the years of study and late nights on the wards.

## What do people who study medicine do after graduation?

There are a lot of options open to students studying medicine after they graduate. Few medical graduates find themselves looking for work for long since employment rates are high for medical graduates.

There are so many branches of medicine it can appear daunting, but students will receive guidance during the foundation stages of their course as to what specialisation is right for them. Options include: emergency medicine, practice medicine, nursing, paediatrics, radiology, obstetrics and gynaecology, anaesthetics and surgery.

Whatever specialisation you choose you can be sure of a rewarding career; doctors and medical professionals are well respected the world over and rates of pay for some jobs in medicine are very high.

Occasionally medical graduates choose not to practise medicine in which case there are other options open to them. Some become journalists, public health workers or medical researchers while others work for companies who provide medical expertise to public health services, helping to train local doctors in cutting-edge techniques and equipment.

# **Music: Studying Music beyond 6th form**

There are different - and they are very different - routes to take if you study music beyond A level:

## **Music at University**

This will end with you receiving a degree in Music - classified as either a Bachelor of Music (BMus) Bachelor of Arts (BA) or even, for some degree courses that study a good deal of acoustics, electronic composition or sound synthesis, a Bachelor of Science (BSc).

Vitally, a Music degree from a university will qualify you for the same general career choices that any other

humanities, social sciences or arts degree will. The skills that a Music degree will teach you are broadly the same as any other: research, critical thinking, a wide understanding of the social, historical and cultural context (viewed through music) of a range of countries and eras. However, in addition to this a Music degree will hone your creative skills in performance and composition further. It will almost certainly encourage you to continue performing in ensembles and extend your musicality in new and unexpected directions.

Courses at different universities are very different from each other. Some will be quite 'traditional'. This means that you will study the music of European composers and the musical language associated with these composers. However, increasingly, Music degrees have a far wider reach. Many universities now allow you to focus upon jazz, popular music, production and using technology to create music. Many universities will look beyond Europe and encourage you to study how music is made in other cultures around the world. Others will allow you to specialise in areas that have career paths open, such as film/TV/gaming music production. In the 21st century, most courses are modular and allow you to make some choices of your own about which of these areas you study. Each university will have its own focus: the core modules that all have to study, and a different menu of options. Hence you should look very closely at the broadest range of institutions possible in order to make the best decision for you. DO NOT simply look at Oxford, Cambridge and Russell Group universities; some of the most exciting music degrees on offer do not fall under these groups.

## **Music at Conservatoire**

The main difference between conservatoire study and university is that conservatoire study focuses largely on you as a performer (or occasionally as a composer). Most courses award a BMus (Bachelor of Music). As such, entry onto these courses is by audition; they are less interested in your A level results. Conservatoire study can be viewed as a vocational course; it is preparing you for a career as a performing musician on your instrument/voice. These are often highly competitive courses to get onto; you are likely to be studying with internationally renowned musicians as these are highly-specialised and well-respected institutions. The sacrifice for specialism is breadth, and conservatoire study will not provide you with the same breadth of education as a general Music degree. As such you should weigh up your decision about which course to apply for carefully.

Some conservatoires still focus largely on classical performers with a side order of jazz students. However, increasingly, other conservatoires offer courses on popular music instruments or composition/production. For example, Leeds College of Music offers Popular Music performance courses on all relevant instruments and also a Popular Music with Production course that teaches you to become an expert on music production software. It is worth looking carefully at the individual institutions.

## Other options

Beyond this there are a wealth of other higher and further education opportunities that don't quite fall into either of the above categories. A local example is the ICMP - Institute of Contemporary Music Performance - that offers 3 year degree courses in Songwriting, the Music Business or Production alongside degrees in Popular Music instruments. Other specialised institutions offer film/gaming production, live music and ever-increasing specialisms!

Be careful that you know what you are looking at: some are degrees, some are diplomas, and future employers will look at the actual qualification that you end up being awarded - not necessarily the content!

In short: you will need to do research for the best Music course for you. We will happily advise you, but the

courses are forever multiplying and changing - so get out there and look around.

You can begin here.

# **Theology and Religious Studies**

These days many universities offer courses which accommodate the study of Theology and the study of religion under one umbrella. The former, technically speaking, is the analysis of the nature of God and usually involves the study of ancient texts, and sacred scripture. Often courses in Theology will include the study of ancient languages like Hebrew, Greek, or Latin. Sometimes these ideas might seem remote or irrelevant. At the same time, we cannot understand who we are as individuals without recognising that the roots of our culture lie in these texts.

Alongside Theology, the study of religion straddles different disciplines, often incorporating sociology, anthropology, politics and history. On a religious studies course, you might be asked to think about the rise and fall of secularism in the twentieth century. You might study the growth of New Religious Movements (such as Scientology, Mormonism, or Falun Gong). Some courses will ask you to evaluate the terms that we use when studying religion. What is a religion? Is it a complex system of rituals and ethics accompanied with a set of metaphysical truth claims? If so, can democracy, or utilitarianism, or Marxism be referred to as religions?

We are emerging from a period - the twentieth century - in which many people believed that the role of religion in society would gradually recede. Unfortunately, this 'secularization hypothesis' has been proven to be false. A sociologist living in the 1940s would never have dreamed that avowedly religious political parties would hold so much political control in countries like Brazil, Saudi Arabia, India, and the United States. There has never been a time when the study of religions was more vital and urgent than it is today. An undergraduate degree in Theology and Religious Studies is an excellent place to start.

# **Philosophy**

Philosophy provides the principles upon which the study of almost all other subjects are based. The study of medicine teaches us how to prevent pain and how to prolong life. The question of whether preventing pain and prolonging life are worthwhile activities is not addressed in the field of medicine but is rather addressed in the branch of philosophy known as ethics. The study of politics helps us to understand the different theories which promise freedom and prosperity. But what does the word freedom mean? What if the desire for freedom conflicts with the desire for happiness? Should one be sacrificed in order to safeguard the other? Physics seeks to discover the regular laws which govern our universe. It does not ask why such regularity exists in the first place. Or whether it does. Biology and other experimental sciences afford us the ability to predict events which will take place in the future to a very high degree of certainty. But can we really call this truth? Is it true to say that the claim "water boils at a hundred degrees celsius" is true in the same way that it is true to say that two and two is four? Or that bachelors are unmarried?

Because philosophy deals with the essential, rather than the superficial, questions, it requires a higher degree of interdisciplinary engagement than many other subjects. Depending on the field you choose to specialise in, over the course of a philosophy degree at undergraduate level, you may be asked to hone your skills in ancient culture and languages, in history, in mathematics and logic, in political thought or in science and technology.

It is not an accident that such a remarkable number of world leaders - today and in the recent past - studied this subject at undergraduate level. There are fewer better tools for sharpening the mind than the study of philosophy. As Bertrand Russell said: Philosophy "enlarges our conception of what is possible, enriches our intellectual imagination and diminishes the dogmatic assurance which closes the mind against speculation."