

ST MARGARET'S  
SCHOOL

# A-Level Options



















By following the guidance given on the following pages and discussion with teachers and tutors, students will make the right subject choice that allows them to make a strong application to the university of their choice.

The Russell Group of universities has produced an informative, interactive online guide to choosing A-Level subjects for their degree courses, which can be found at <https://www.informedchoices.ac.uk>

## Competitive universities

Universities in the UK use A-Level results to offer places. Some universities require specific grades [ABB for example]; some require 'UCAS Tariff' points [an A grade at A-Level counts for 48 points, B for 40, C for 32 and so on].

Highly selective universities including Cambridge, Oxford, some London colleges and Russell Group universities may use the A\* grade in their offers. The offer will also vary depending on the subject the student wishes to read. Importantly, without at least grades that match a likely offer for a university course, any student will find it hard to convince universities that they are worthy of an offer.

For many courses, such universities will also expect a very strong performance in the Year 12 mock examination and it is clear that a student who achieves as highly as they can in the mock examinations puts themselves in the best possible position for universities to make offers.

Please note that some university courses require good GCSE scores for entry as well – for example, Medicine at Edinburgh requires an applicant to have achieved GCSE level 6 grades in Sciences, Mathematics and English. Other universities create a points or aggregate system around a student's number/quality of GCSE levels.

From experience, we see that most students who are subsequently offered a place on a competitive course are those who have achieved **six or more** level 8 or 9 grades at GCSE. In a few cases a minimum number of level 8 or 9 grades at GCSE is a stated requirement for selection and the university publishes this information on its website. Most universities, however, do not publish such information and look at the whole application including predicted A-Level grades, personal statement, the school's reference, interviews and admissions tests, if sat.

Nonetheless, when faced with a large number of very strong applicants for just a few places, strong level 8 and 9 performance at GCSE inevitably becomes compelling evidence of all-round sustained ability.





# Oxbridge: Additional Considerations

In addition to the extra Oxbridge programme of support students will receive in the Sixth Form, it is essential to select the right A-Levels that will feed into the course of their choice. Generally, students who are applying to Oxbridge will have a good idea of the course to which they wish to apply well in advance so that they might have a chance of adding depth to this subject area during Sixth Form study.

Some colleges offer very specific or unique courses, which may also require an additional A-Level, or an extra year of study while on the undergraduate course e.g. the Classics course at Oxford or Cambridge requires Latin or Greek A-Level to be considered for the 3 year course, but students can apply for the 4 year course if they do not have this.

Although every subject offered at St Margaret's is well-respected and for some admissions the diversity of these subjects will look favourable, it is of course in the university's best interests to encourage applications from students who are working at the highest level with a complementary range of subjects.

**If students are planning an application to a competitive university including Oxbridge, they should speak with the Head of Sixth Form or the Oxbridge Coordinator before making A-Level selections.**



University  
A-Level Entry  
Requirements

# A-Level Subjects Required for University Courses

Subject requirements differ depending on the university and the course. Where an A-Level subject is stated to be 'required' it means that over 75% of university courses currently list this subject as a requirement for entry.

It is important to realise that if a university says "Subject X is recommended/preferable" it really means, "if your school offers Subject X, you must study it and offer it at application". If students do not have the correct subjects/qualifications, they are making a weaker application.

The Sixth Form Team has made every effort to ensure that the information given in this table is correct at the time of printing. However, universities often change or make additions to entry requirements. It is advised that students check on university websites and carry out their own research regarding entry requirements for the course(s) they are interested in studying post A-Level.

## A-Level subjects required for university courses

University course	A-Level subjects required	Notes
Accountancy, Finance, Business and Management	Mathematics and Economics are certainly advantageous, Mathematics required for top universities.	Interested candidates should refer to <a href="http://wwwucas.com/courses">www.ucas.com/courses</a> , since requirements vary considerably.
Acting	Drama & Theatre. Music may also be valued, especially for courses with a Musical Theatre pathway.	Interested candidates should consult lists of accredited drama schools, such as the Federation of Drama Schools ( <a href="https://www.federationofdramaschools.co.uk/">https://www.federationofdramaschools.co.uk/</a> ) or CDMT ( <a href="https://cdmt.org.uk/accredited-schools-and-colleges/drama-and-acting">https://cdmt.org.uk/accredited-schools-and-colleges/drama-and-acting</a> ). Applications will usually include a form of audition.
Agriculture	Two of Chemistry, Physics or Biology.	Biology preferred.
Ancient History	Classical Civilisation, History or Latin recommended.	
Archaeology	Classical Civilisation or Latin recommended.	An MFL qualification is also an advantage.
Architecture	Mathematics usually specified, plus one additional Science (Physics usually preferred). A-Level Art an advantage.	A portfolio of drawings and sketches must be developed, and is required for interview.
Art (Fine Art) and other Art-related Degrees	Art.	A portfolio of artwork and sketch book is required for interview as well as spoken knowledge.
Biochemistry	Chemistry and two subjects from Biology, Physics or Mathematics.	
Biological Sciences (Anatomy, Bacteriology, Botany, Physiology, Zoology)	Biology and Chemistry.	

## A-Level subjects required for university courses

University course	A-Level subjects required	Notes
Chemistry	Chemistry- and Mathematics to at least Year 12 Level; A-Level for Oxbridge and top universities.	
Classics	Latin is preferred for top universities and Classical Civilisation is also valued.	No prior knowledge of Greek is expected but it may be recommended that a summer school is attended.
Classical Civilisation/ Classical Studies	Classical Civilisation or Latin preferred.	
Computer Science	Mathematics required by all but a few universities and Physics is sometimes advantageous.	Further Mathematics is preferred by top universities.
Dentistry	Chemistry and Biology A-Level are both required.	
Drama/ Theatre Studies	Drama & Theatre. English may be required for top universities. Music may also be valued, especially for courses with a Musical Theatre pathway.	English requested for combined courses with English.
Economics	Mathematics and Economics are certainly advantageous; Mathematics essential for the top universities.	Further Mathematics required for certain top universities and Oxbridge colleges.
Engineering: Aero, Mechanical	Physics, Mathematics.	Many Engineering courses are now open to those without Science/Mathematics qualifications, but such courses are longer and may require an additional foundation year. Further Mathematics recommended for top universities.
Engineering: Chemical	Physics, Chemistry, Mathematics.	Further Mathematics strongly advised for Oxbridge and other top universities.
Engineering: Civil	Physics, Mathematics.	Further Mathematics strongly advised for Oxbridge and other top universities.
Engineering: Electrical	Physics, Mathematics.	Candidates must check course requirements of individual institutions on <a href="http://www.ucas.com">www.ucas.com</a> . Further Mathematics recommended for top universities.
Engineering: Electronic	Physics, Mathematics.	Further Mathematics strongly recommended for top universities.
English Literature	English Literature required.	
English Language	Check university websites. Some want to see A-Level English Language.	
Geography (BA)	Geography required.	
Geography (BSc)	Geography and one Science; or Geography and two Sciences, or Geography, Mathematics and one Science.	Some universities increasingly prefer a Science background for their BSc Geography course.
Geology	Two Sciences and/or Mathematics.	Chemistry and Mathematics recommended for top universities.
History	History required.	

## A-Level subjects required for university courses

University course	A-Level subjects required	Notes
HSPS	Different colleges have different selection preferences, therefore you should <b>check the individual college websites</b> .	
Land Economy	N/A.	Economics, Geography and Mathematics are useful subjects.
Law	None specified though essay based subjects, which develop a careful, analytical approach to reading and which require students to present information in a well-structured and thoughtfully argued way are advantageous for any Russell Group university and Oxbridge.	Degree courses in Law with a language, European Law, or English Law with French/German/Spanish Law, require the language at A-Level.
Mathematics	Mathematics required. Further Mathematics required for Oxbridge, and frequently preferred for other top universities.	Mathematics and Physics often acceptable.
Medicine, Dentistry	Chemistry required to A-Level. Biology usually required (some medical and dental schools actively seek a broader academic base with one non Science subject to at least Y12).	<b>Consult the Biomedical Coordinator and Oxbridge Coordinator</b> , who can give more information regarding Oxford and Cambridge, and the possible requirement for GCSE Physics. Experience of both the profession and working with people is essential.
Metallurgy; Materials Sciences	Mathematics and at least one of Chemistry or Physics for top universities.	
Modern Languages: French Spanish	French. Spanish.	Degree courses are available in single languages, but more often as joint honours or in combination with other disciplines. Less common languages may be started ab initio (from scratch).
Music	Music.	Proficiency in instruments/ voice required. Candidates must check the requirements of individual institutions.
Natural Sciences	Any two Sciences, plus Mathematics.	Oxbridge prefer Further Mathematics. Candidates should consult university websites to confirm.
Optometry	Two from: Chemistry, Biology, Physics or Mathematics.	
Pharmacology	Chemistry and two from: Physics, Mathematics or Biology.	
Philosophy		You may apply for Philosophy having done any combination of subjects but in order to demonstrate that you have the required skills of writing analytically and abstract reasoning a humanities subject such as English Literature, History, Classical Civilisation, Theology or a MFL along with Mathematics or Physics may be advantageous. It is not necessary to have studied Philosophy but it would help you to demonstrate an interest and develop the tools needed for the required independent reading.

## A-Level subjects required for university courses

University course	A-Level subjects required	Notes
Physics	Physics and Mathematics.	Further Mathematics at AS Level or A-Level is an advantage.
Physiotherapy	One Science (Biology preferred).	One further Science is often preferred.
Politics/Social Studies/Sociology	None specified.	Politics, History, Philosophy, Economics, English Literature or Theology may be useful.
Politics, Philosophy and Economics	None specified.	You may apply for PPE with any combination of A-Level subjects, <b>but competitive</b> applicants should be strong at Mathematics. It is <b>not</b> necessary to have studied Politics, Philosophy or Economics at School; but taking at least one of these subjects with English Literature, Geography, History Theology or any ancient or modern language, would help you to develop and demonstrate relevant skills, knowledge and understanding. You are strongly advised to access the university website course requirements. Oxford requires that applicants sit the Thinking Skills Assessment (TSA).
Psychology	Mathematics and one Science an advantage or a requirement at a top university.	Available as BA or BSc. Many universities prefer one Science (Biology or Chemistry) and/or Mathematics to at least AS Level. Candidates must check requirements of individual institutions at <a href="http://www.ucas.com/courses">www.ucas.com/courses</a> .
Religious Studies/Theology	Although Theology may not be a requirement, it is in a student's interest to be able to demonstrate an enjoyment of the subject to A-Level standard.	If students decide to study Theology without having studied the subject to A-Level, this should not be detrimental to a successful application. For Oxbridge and applications to other top universities, evidence of an interest in language study is important.
Sports Science	None specified.	One Science is often preferred (usually Biology).
Veterinary Science	Chemistry, Biology, Mathematics/Physics.	Experience of working with animals is essential.



# Strengthening A-Level Studies

At St Margaret's we promote the enjoyment of a broad education. Along with A-Levels, students will be expected to undertake a wide range of co-curricular activities that will strengthen students' university applications by developing skills such as independence, leadership and confidence. St Margaret's Sixth Form offers a wealth of opportunities in order for students to begin this journey.

In addition to A-Level courses, students will also receive:

## Extended project qualification

Highly regarded by UK universities, this timetabled qualification is offered to all Sixth Form students and is roughly equivalent to half an A-Level. Extended Projects support students with the transition to higher education or into the world of work. They provide opportunities for the development of critical, reflective, problem-solving and independent learning skills through the planning, research and evaluation of a self-selected project – all invaluable preparation for university. Individual project work begins in Year 12 under the guidance of a dedicated mentor. Students have the opportunity to explore a topic or a question that is of particular interest to them. Under the guidance of their mentor they will write a dissertation, make an artefact, put on a performance or undertake a fieldwork investigation. Those who achieve an A/A\* may be eligible for reduced offers when making UCAS applications; some universities also like the EPQ to be course related e.g. Warwick and Oxbridge, so it is important that students spend some time strategically planning what it is they wish to research.

If students elect not to study the EPQ, then they will study for a short in-house St Margaret's Independent Research Project or will submit an entry for a national essay prize led by individual subject departments.

## General studies

All Sixth Form students attend a structured programme of academic, social, citizenship, welfare and careers-motivated talks as part of the General Studies lecture series.

## Careers provision

All students have the opportunity to discuss career options with a member of staff. There is also a careers intranet page which provides links to reliable and current information, advice and guidance resources. In order to gain direct experience from the world of work and apply knowledge learned within Careers sessions, Year 12 are advised to organise at least one work experience placement after their GCSE examinations and again in the summer of Year 12; for more vocational courses like Medicine and Dentistry, regular and longer placements will need to be arranged as a matter of course. They are welcome to use the large employer's database by arranging an appointment with the Head of Careers or organise a placement through their own contacts, as well as reach out to our alumnae network.

## A-Level heritage languages

There may also be opportunities for speakers of other native languages to take an exam in a native language qualification and students should make themselves known to the Sixth Form Team as soon as possible.

## Duke of Edinburgh award scheme

This is a real adventure from beginning to end. Pupils achieve an award by completing a personal programme of activities. Students find themselves helping people, getting fitter, developing leadership skills and going on expeditions. The programme is full of activities and projects that get pupils buzzing. Along the way students pick up experiences, friends and talents that will stay with them for the rest of their lives.

## English as a second language

If English is not a student's first language, lessons are included in the curriculum in order to prepare them for the IELTS examination. Up to 2 hours a week of after-school EAL provision is provided to both Year 12 & 13 students respectively. These sessions provide a variety of interactive exercises to improve the students' reading, writing and speaking skills; interview practice is also included in this provision, as is guidance with intonation and basic etiquettes. Please note that it is compulsory for students to continue attending even after they have taken their IELTS to further improve their academic English skills.

## Music

There are many opportunities for students to involve themselves in co-curricular music. As well as the full range of instrumental and singing lessons, there are various choirs. There is also a school orchestra and many Sixth Form students take up the opportunity to play chamber music.



## Online learning

Online learning courses may also be available from time to time during weekly enrichment slots, for example teaching English as a foreign language, learning British Sign Language and MOOCs [massive, open online courses].

## Games

Students have the opportunity to take part in a wide variety of sporting activities. During a double lesson each week, pupils can choose from a wide range of activities including swimming, dance, yoga, athletic development, team and individual sports. In addition, we encourage our students to commit to play in one of our school teams who take part regularly in fixtures against other schools. A wide range of co-curricular clubs and team practices are also available and all students are encouraged to take part in these, or set up their own if there is sufficient demand. Sixth Form students also have the opportunity, where appropriate, to assist in lessons and team practices for younger students, from which they gain valuable experience.

## Peer mentoring scheme

Following a process of successful application, interview and training, Year 12 and Year 13 students play a significant mentoring role in the lives of students lower down the School. This could involve general discussion with a younger student, offering help with study skills or something more academically focused.

## Societies

These will be academic and non-academic clubs designed to enrich and challenge students during a number of designated slots during the week.

## Speech and drama

These extra lessons continue to be very valuable in the Sixth Form as a means of developing communication skills, building confidence for an interview or when addressing an audience. They are an excellent means of supporting IELTS speaking and listening examinations.

## Volunteering in The Junior School

Following a process of successful application, interview and training, students may either volunteer to work as a classroom assistant in The Junior School and with this experience, apply for a formal paid role as an After School Club Assistant at the end of Year 12.



A-Level  
Scholarships  
and Study  
Requirements

# Scholarships

Being a Sixth Form scholar is a position of academic prestige in the School, and we are committed to rewarding and celebrating excellence both inside and outside of the classroom. All students rewarded with a scholarship are expected to play a full and impactful role in their respective area of the School.

In return, it is expected that they will grow and develop in their chosen areas of expertise well beyond the A-Level curriculum.

## Details

Scholarship applications are open to both internal and external Year 11 students.

Scholarships are awarded at the Head's discretion and are available for:

- Academic achievement
- Commitment & loyalty to the School and the local community
- Co-curricular excellence in Sports, Music, Art, Drama, Dance, DT and STEM

The number of scholarships awarded each year will be dependent on the pool of applications and, although there is a selection process attached to each scholarship, these are awarded at the Head's discretion.

Students are eligible to apply for up to two scholarships.

Details of the scholarships available and their respective selection processes are listed below:

### Academic

Students will sit a written paper in the A-Level subject for which they are applying to be a scholar.

Students will have an additional formal interview with a member of the Senior Management Team, which will involve students preparing a 5 minute piece on how they will contribute to the academic life of the School.

### Commitment and loyalty to the School and the local community

Students will deliver for example a 10 minute presentation to a panel of staff which evidences their consistent commitment to the School and/or the local community; this will be followed by a formal Q+A session from the panel.

### Co-curricular excellence in sports, music, art, drama, dance, DT and STEM

All co-curricular scholars will be expected to play a full part in the life of the School to which they are attached.

The assessment for each subject specific scholarship will involve a practical element and more details can be found in the online Scholarship brochure.

# Fine Art (AQA)

This course will give students a broad approach to the subject allowing students to develop a sound grounding in a number of areas including portraiture, landscape, still life, human form, abstraction, experimental imagery, narrative and installation. It builds on the skills, knowledge and understanding which students have acquired in Art and Design at GCSE level.

**Entry recommendations:** Level 6 or above at GCSE Art is preferable.

## A-Level syllabus

Component	Assessment & weighting	Summary of the component content
<b>Unit 1: Foundation skills building</b>	Internally assessed	In the autumn term Year 12 students follow a foundation course in order to develop their skills using a wide range of media, techniques and processes. Some examples of these are: painting (oil, watercolour, acrylics), drawing, printmaking (mono, etching, lino and screen printing), lens based media (Digital and/or analogue), digital manipulation and drawing, sculpture (ceramics, mixed media). Students will work from direct observation, analyse, record and learn how to develop and apply relevant processes.
<b>Unit 2: Personal investigation</b>	NEA Externally moderated 60%	The A-Level gives students the opportunity for more focused, in depth work around a particular topic and to develop their favoured area of study from the Foundation Unit 1. Students will build on their skills and knowledge to produce a Personal Investigation of their own chosen theme. They will evaluate and develop their ideas to show evidence of a personal and creative response with maturity and independent thought. As part of the investigation they will complete a related written study of a minimum of 1000 words.
<b>Unit 3: Externally set task</b>	NEA Externally moderated 40%	Students produce a second project chosen from an OCR set choice of themes, producing the final outcome in a 15 hour examination.

Related university courses that students could go on to study include: Art Foundation, Fine Art, Architecture, History of Art, Fashion Design, Theatre Design, Graphic Design, Digital Media, Illustration, Product Design, Interior Design, Advertising, and Computer Games/Visual Effects. This list is not exhaustive as there are a huge range of art related degrees out there.

## Key skills developed

Communication & Literacy	Information Technology	Numeracy	Problem Solving	Team Work	Independent Study
✓	✓		✓		✓

# Art & Design: Textiles (AQA)

The textiles course runs alongside the fine art course so students choose to study **either** Fine Art or Textiles. This subject focuses on developing skills such as: printmaking, machine and hand stitching, textiles illustration, and materials sampling.

**Entry recommendations:** Level 6 or above at GCSE Art is preferable.

## A-Level syllabus

Component	Assessment & weighting	Summary of the component content
<b>Unit 1: Foundation skills building</b>	Internally assessed	Students are given opportunities to explore, research and develop their skills, knowledge and understanding in a range of textile media. They explore relevant images, artefacts and resources relating to textile design. Students may work in areas such as garments and fashion, accessories, soft furnishings, printed and/or dyed textiles, constructed textiles, textile installation or expressive textiles. Specific techniques include: fabric printing, mono-printing, relief printing, screen printing, tie-dye, batik, spraying, transfer, fabric construction, stitching, appliqué, patchwork, padding, quilting, embroidery, weaving, knitting, felting and mixed-media applications.
<b>Unit 2: Personal investigation</b>	NEA Externally moderated 60%	The A-Level gives students the opportunity for more in depth study. Students will build on their individual skills and knowledge to produce a Personal Investigation of their own chosen theme. They will evaluate and develop their ideas to show evidence of a personal and creative response with maturity and independent thought. As part of the investigation, they will complete a related written study of a minimum of 1000 words.
<b>Unit 3: Externally set task</b>	NEA Externally moderated 40%	Students produce a second project chosen from an OCR set choice of themes, producing the outcome in a 15 hour examination.

Related university courses that students could go on to study include: Art Foundation, Fine Art, Fashion Design, Textiles and Interior Design. This list is not exhaustive as there are a huge range of art related degrees out there.

## Key skills developed

Communication & Literacy	Information Technology	Numeracy	Problem Solving	Team Work	Independent Study
✓	✓		✓		✓

# Business Studies (Edexcel)

Business Studies enables students to develop an insight into business organisations and their ability to meet society’s needs, business behaviours in a range of contexts, business enterprise, problems, solutions and ethical dilemmas facing business in the modern world.

**Entry recommendations:** GCSE English Language at level 5 and above is an ideal requirement to study this subject as AS and A-Level. If you select Business Studies, in the interest of breadth you will not be able to select Economics at A-Level.

## A-Level syllabus

Component	Assessment & weighting	Summary of the component content
Unit 1: UK Marketing and people	Written examination 2 hours 35% of the overall qualification covering units 1 & 4	Meeting customer needs; the market; marketing mix & strategy; managing people; entrepreneurs and leaders.
Unit 2: Managing business activities	Written examination 2 hours 35% of overall qualification merging units 2 & 3	Raising finance; financial planning; managing finance; resource management; external influences.
Unit 3: Business decisions and strategy		Business objectives and strategy; business growth; decision-making techniques; influences on business decisions; assessing competitiveness; managing change.
Unit 4: Global businesses	Written examination as per unit 1	Globalisation; global markets and business expansion; global marketing; global industries & companies (multinational corporations).
Unit 1-4	Written examination, synoptic pre-release skills based paper 2 hours 30% of the overall qualification covering all four units	

Students should expect trips to revision lectures and to engage in enterprising co-curricular activities for example Young Enterprise or national competition. Business Studies can lead to university degrees in Business, Management, International Relations, IT, Hospitality, Accountancy and more. Business Studies graduates are typically employed by: accountancy and banking organisations, charities, councils, law firms, local and national government, retail, IT and media companies.

## Key skills developed

Communication & Literacy	Information Technology	Numeracy	Problem Solving	Team Work	Independent Study
✓	✓	✓	✓	✓	✓



# Chinese (Edexcel)

A course for those already fluent in Chinese, this is a motivating course of study that will enable students to develop an advanced level knowledge and understanding of the Chinese language, the culture of China and other Chinese-speaking countries, as well as practical and valuable language and transferable study skills.

**Entry recommendations:** A formal qualification in Chinese e.g. GCSE or a qualification from the student's native country. As a matter of course, we recommend that all students whose native language is Mandarin Chinese take this as a 4th or even 5th A-Level.

## A-Level syllabus

Component	Assessment & weighting	Summary of the component content
<b>Paper 1: Listening, reading, writing and translation</b>	Externally assessed written paper 40% 2 hours	The focus of this paper is on four themes which are based on the society and culture of Chinese-speaking countries.
<b>Paper 2: Written response to works in translation</b>	Externally assessed 30% 2 hours 40 mins	This paper requires students to translate a previously unseen passage from English into Chinese. This paper also draws on the study of two discrete Chinese works: either two literary texts, or one literary text and one film. The works must be taken from a list of prescribed literary texts and films. The literary texts listed include novels and short stories. All of the films are feature length.
<b>Paper 3: Speaking</b>	Internally conducted and externally assessed 30% 30 mins	Task 1 draws on vocabulary and structures across all four themes. Task 2 is based on independent research selected and carried out by the student. The research may be based on one of the themes or on the student's own subject of interest related to the society and culture of the Chinese-speaking world.  Students will be assessed on their ability to use a range of language accurately, communicate and interact effectively, summarise and analyse findings from written sources relating to their research subject, and show knowledge and understanding about the society and culture of the Chinese-speaking world.

This A-Level will lead to a variety of degree courses in languages, Cultural Studies, Business, Mandarin Studies, Education and much more. Our experience is that students who are native speakers with this A-Level are at an advantage when it comes to making UK university applications in a variety of courses too.

Students should expect to take part in the Global Day of Languages as celebrated by the MFL Department, assist the Boarding House running a variety of cultural enrichment events, offer support with younger students and perhaps even run a Chinese club for non-native speakers.

## Key skills developed

Communication & Literacy	Information Technology	Numeracy	Problem Solving	Team Work	Independent Study
✓	✓		✓	✓	✓

# Classical Civilisation (OCR)

In A-Level Classical Civilisation you will study the literature, society, culture and history of the Classical world, which shaped modern Europe. This qualification combines well with other Humanities subjects and can also complement non-arts subjects. You will study the literary and artistic legacy of the Ancient Greeks and Romans, and read in translation a range of the great works of literature and thought which helped to shape the ideas and values of modern European society - such as the *Odyssey*, *Aeneid* and the works of Plato.

**Entry recommendations:** A GCSE in this subject is not required, but a level 5 in both English and English Literature is advisable.

## A-Level syllabus

Component	Assessment & weighting	Summary of the component content
<b>World of the hero</b>	Externally assessed 40%	Students read two great epics: <ul style="list-style-type: none"> <li>Homer's <i>Odyssey</i> or <i>Iliad</i>, stories from the time of the Trojan War. You will also learn about the ancient society in which the poem is set.</li> <li>Virgil's <i>Aeneid</i>, a story of romance and the foundation of cities, a key influence on modern European literature. The historical background to the story, in particular the reign of the first Roman emperor Augustus, and his influence on one of the most celebrated epics of all time.</li> </ul>
<b>Culture and the arts</b>	Externally assessed 30%	Greek Theatre: the invention of drama by the Ancient Greeks. Students read comedy ( <i>Frogs</i> by Aristophanes) and tragedy ( <i>Oedipus the King</i> by Sophocles and <i>Bacchae</i> by Euripides) in English translation. The plays focus on themes such as family relations, gender fluidity, politics, democracy, fate and free will which remain relevant today.
<b>Beliefs and ideas</b>	Externally assessed 30%	Love and Relationships: Greek and Roman ideas about love, desire, sex and relationships, including the writings of Plato, Ovid and the poet Sappho, one of the few female voices to survive from the ancient world.  Or: Politics of the Late Republic: the Roman civil wars, the downfall of the republic and the characters, ideas and literature of the time.

The A-Level can lead to honours degrees in Humanities courses, such as Classics, Classical Civilisation, Ancient History, Archaeology, or Ancient and Modern History. The skills acquired prepare students for careers in education, business, management, museum work, publishing, accountancy, Civil Service and law among many others.

Co-curricular: trips to museums and study days, opportunities to help run Classics clubs for younger students and to learn the rudiments of Classical Greek in Greek Club. For those interested in applying for Classical Studies or Classical Civilisation courses at university, Senior Classics Society will broaden their experience of the subject beyond the A-Level syllabus.

## Key skills developed

Communication & Literacy	Information Technology	Numeracy	Problem Solving	Team Work	Independent Study
✓	✓		✓	✓	✓

# Computer Science (OCR)

Computer Science is a practical subject where students can apply the academic principles learned in the classroom to real-world systems. At the heart of computer science lies the notion of computational thinking: a mode of thought that goes well beyond software and hardware, and that provides a framework within which to reason about systems and problems. The aim of the A-Level is to equip learners with skills to solve complex problems, design systems and understand the power and limits of human and machine intelligence, in addition to the relationship between computer science and mathematical logic.

**Entry recommendations:** A GCSE level 7 grade, or above, in Computer Science is highly recommended. Additionally, a minimum level 7 grade in English and Maths is required.

## A-Level syllabus

Component	Assessment & weighting	Summary of the component content
<b>Component 1: Computer systems</b>	Written examination 40%	<ul style="list-style-type: none"> <li>• The characteristics of contemporary processors, input, output and storage devices</li> <li>• Software and software development</li> <li>• Exchanging data</li> <li>• Data types, data structures and algorithms</li> <li>• Legal, moral, cultural and ethical issues</li> </ul>
<b>Component 2: Algorithms and programming</b>	Written examination 40%	<ul style="list-style-type: none"> <li>• Elements of computational thinking</li> <li>• Problem solving and programming</li> <li>• Algorithms to solve problems and standard algorithms</li> </ul>
<b>Programming project</b>	Non-exam assessment 20%	<ul style="list-style-type: none"> <li>• Analysis of the problem</li> <li>• Design of the solution</li> <li>• Developing the solution</li> <li>• Evaluation</li> </ul>

Computer programmes directly affect every aspect of our lives; we rely on computer scientists for this. Computer scientists theorise, design, develop and apply the software and hardware for technology embedded in everyday devices. As the digital world rapidly evolves, the need for computer scientists increases and so do the degree options at leading universities.

Furthermore, an impressive array of degree apprenticeships are offered by world leading technology firms such as Google, Microsoft and Meta in exciting fields such as artificial intelligence, software engineering and cyber security. An A-Level in Computer Science is the ideal pathway for aspiring tech innovators and can pave the way to a highly successful and rewarding career.

## Key skills developed

Communication & Literacy	Information Technology	Numeracy	Problem Solving	Team Work	Independent Study
✓	✓	✓	✓	✓	✓

# Dance (AQA)

Dance is a physically demanding and academically challenging course which prepares students for multiple career pathways with a number of transferable skills. Students taking this course should be creative, enjoy practical work and performing to a live audience.

**Entry recommendations:** Ideally students will have completed Dance at GCSE to a minimum level 6 standard; a minimum level 6 in English Language and Literature is also preferred. Exceptional candidates without a GCSE in Dance will also be considered on a case by case basis at the discretion of the Head of Dance.

## A-Level syllabus

Component	Assessment & weighting	Summary of the component content
<b>Component 1: Performance and choreography</b>	Solo performance linked to a specified practitioner within an area of study Performance in a quartet Group choreography Practical examination 80 marks 50%	<ul style="list-style-type: none"> <li>Students perform a solo in the style of a practitioner. There is a lengthy list of practitioners from a variety of styles. The solo is choreographed to best highlight the ability of the student.</li> <li>Students are required to perform in a quartet which is a collaborative project between the teacher and group. The quartet is choreographed to best highlight the ability of the student.</li> <li>Students must choreograph a group piece based on a stimulus set by the exam board. This must be a group performance where the student takes the role of the choreographer and not the student.</li> <li>Component 1 work will be assessed in a live performance.</li> </ul>
<b>Component 2: Critical engagement</b>	Written examination Externally assessed 2 hours 30 mins 100 marks 50% Section A: short answer questions (25 marks) and one essay question (25 marks) on the compulsory set work/area of study. Section B: two essay questions on the second set work/area of study (25 marks for each essay).	<p>Section A: Students study the compulsory work, Christopher Bruce's 'Rooster' 1991, as well as the compulsory area of study, The Rambert Dance company (formerly known as Ballet Rambert). This is completed in Year 12.</p> <p>Section B: Students study the second set work, Gene Kelly and Stanley Donan's 'Singin' in the Rain' 1952, as well as the second area of study, the development of the American Jazz Period 1940-75. This is completed in Year 13.</p>

Students will be invited to be part of the School's Dance Company and perform at school events. Dance offers an exceptional list of transferable skills with students continuing onto dance and performing arts careers as well media, law, business management and teaching.

## Key skills developed

Communication & Literacy	Information Technology	Numeracy	Problem Solving	Team Work	Independent Study
✓			✓	✓	✓

# Design and Technology: Product Design (Edexcel)

Encouraging creativity and innovation, students will be able to recognise design needs and develop an understanding of how current global issues, including integrating technology, impact on today's world. At A-Level students will have the confidence to innovate and produce creative design solutions as they develop their own design brief with a client/end user.

**Entry recommendations:** Level 6 or above at GCSE in DT and Grade 5 in Science.

## A-Level syllabus

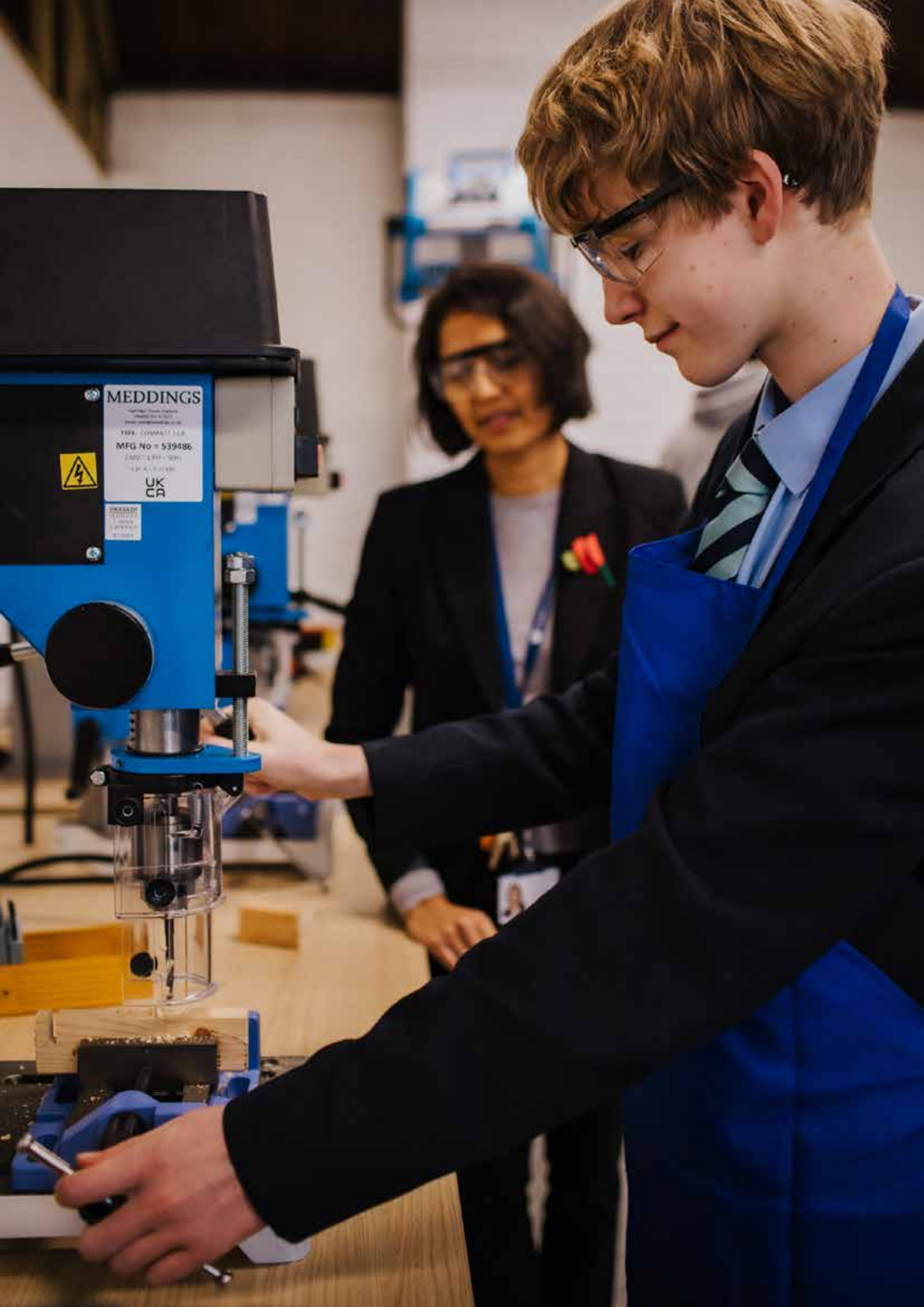
Component	Assessment & weighting	Summary of the component content
<b>Component 1: Principles of Design and Technology</b>	Written examination: 2 hours 30 minutes 50% of the qualification 120 marks	The paper includes calculations, short-open and open-response questions, as well as extended-writing questions focused on: <ul style="list-style-type: none"> <li>• Analysis and evaluation of design decisions and outcomes, against a technical principle, for prototypes made by others</li> <li>• Analysis and evaluation of wider issues in design technology, including social, moral, ethical and environmental impacts</li> <li>• Material properties and manufacturing processes used in industry.</li> </ul>
<b>Component 2: Independent Design and Make Project</b>	Non-examined assessment 50% of the qualification 120 marks	Assessment Overview <ul style="list-style-type: none"> <li>• The investigation report is internally assessed and externally moderated</li> <li>• Students will produce a substantial design, make and evaluate project which consists of a portfolio and a prototype.</li> </ul>

“Design and technology is a phenomenally important subject. Logical, creative and practical, it's the only opportunity students have to apply what they learn in maths and science - directly preparing them for a career in engineering.” - James Dyson

Co-curricular: trips to London design museums, fairs, workshops, lectures and visiting manufacturing factories.

## Key skills developed

Communication & Literacy	Information Technology	Numeracy	Problem Solving	Team Work	Independent Study
✓	✓	✓	✓	✓	✓



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# Drama and Theatre (Edexcel)

Drama and Theatre is an exciting and challenging course which develops a vast array of cross-transferable and employability skills.

**Entry recommendations:** Students will have ideally completed Drama at GCSE to a minimum level 6 standard; a minimum level 6 grade in English Language and Literature is also preferred. A keen interest in Classics, History, Music, Politics and/or Psychology would also be advantageous.

Exceptional candidates without a GCSE in Drama will also be considered on a case by case basis at the discretion of the Head of Drama.

## A-Level syllabus

Component	Assessment & weighting	Summary of the component content
<b>Component 1: Devising</b>	Creation of and participation in a group devised performance as a performer or designer Individual written portfolio 40%	Students use an extract from a text and the work of a practitioner as a stimulus to create a devised performance, rehearsing and refining their performance/design realisations for an assessed performance. Students record and evaluate the exploration and rehearsal process of creating their devised performance, as well as the final performance.
<b>Component 2: Text in performance</b>	Participation in a monologue or a duologue, and a group performance as a performer or designer 20%	Students create a group performance from a text, rehearsing and refining their performance/design realisations for an assessed performance. They also create a monologue or duologue from another text, rehearsing and refining their performance/design realisations for an assessed performance.
<b>Component 3: Theatre makers in practice</b>	Written examination Section A Live theatre evaluation Section B Page to Stage - Realising a Performance Text Section C Interpreting a Performance Text 40%	Students are audience members for a live performance. They make and refine notes on the performance. Students practically explore a chosen set text from a prescribed list, focusing on performance and design aspects. Students practically explore a second set text, from a second list, in the light of a practitioner. Students create a director's concept for a re-imagined production of the play.

Potential careers in the arts, media, teaching, theatres, production and acting. The A-Level can lead to honours degrees in related courses such as Acting, Drama, Musical Theatre, Film and Media to name a few. Past students have gone on to a broad range of courses including English, History, Journalism and Law. Past students have pursued careers in the Arts, Business Management, Education, Law, and Media among many others.

## Key skills developed

Communication & Literacy	Information Technology	Numeracy	Problem Solving	Team Work	Independent Study
✓	✓	✓*	✓	✓	✓

\* If design options are followed in A-Level Components 1 and 2.

# Economics (Edexcel)

Economics will help students to develop a critical understanding of the economic problems society faces and will allow students to consider policies to alleviate these problems. Analytical and evaluative skills are practised by applying them to case studies and current economic events.

**Entry recommendations:** GCSE Mathematics and English Language at level 6 or above is preferred.

## A-Level syllabus

Component	Assessment & weighting	Summary of the component content
<b>Theme 1: Introduction to markets and market failure</b>	Externally assessed examination covering Themes 1 and 3 2 hours 35%	Considers the role and operation of the market.
<b>Theme 2: The UK economy - performance and policies</b>	Externally assessed examination covering Themes 2 and 4 2 hours 35%	Considers the economy as a whole and problems such as inflation, unemployment, and economic growth are discussed and government policies for meeting objectives are evaluated.
<b>Theme 3: Business behaviour and the labour market</b>	As per Theme 1	This Theme develops the microeconomic concepts introduced in Theme 1 above and focuses on business economics. Topics covered include, business growth, business objectives, market structures, costs revenue and profits, labour market and government intervention.
<b>Theme 4: A global perspective</b>	As per Theme 2	This Theme develops the macroeconomic concepts introduced in Theme 2 above and focuses on global economics. Topics covered international economics, poverty and inequality, emerging and developing economies, financial sector, role of the state in macroeconomy.
	Externally assessed examination covering Themes 1, 2, 3 and 4 2 hours 30%	

Economics is a well-respected discipline and will provide students with essential knowledge if students hope to pursue a career in business management, financial services or accountancy. It also provides students with useful background knowledge for careers in Law, Finance, Medicine or Engineering.

Students can participate in the Royal Economic Society Essay competition, Churchill College Cambridge's Winston Churchill Sixth Form Economics Prize, attend economic workshops in central London and have an opportunity to attend the Women in Economics Day at Gonville & Caius College Cambridge in September.

## Key skills developed

Communication & Literacy	Information Technology	Numeracy	Problem Solving	Team Work	Independent Study
✓	✓	✓	✓	✓	✓

# English Literature (Edexcel)

This course will develop students' interest and enjoyment of literature through reading widely and independently. They will engage critically and creatively with a wide range of literature and learn to develop and apply their knowledge of literary analysis and evaluation. They will explore the context of the texts they are reading and others' interpretation of them. It is expected that they will undertake independent and sustained studies to deepen their appreciation and understanding of English Literature and its changing traditions.

**Entry recommendations:** GCSE English Literature and English Language at level 6 or above is preferred.

## A-Level syllabus

Component	Assessment & weighting	Summary of the component content
<b>Component 1: Drama</b>	Externally assessed 30%	Students will study aspects of the form of drama via two plays. The central focus of the drama study is the literary text. Students will study one tragedy or comedy drama by Shakespeare and one other tragedy or comedy drama by another writer. The study of Shakespeare will be enhanced by engagement with critical writing.
<b>Component 2: Prose</b>	Externally assessed 20%	Students will study aspects of prose via two thematically linked texts, at least one of which must be pre-1900. Literary study of both texts selected for this component will incorporate the links and connections between them, and the contexts in which they were written and received.
<b>Component 3: Poetry</b>	Externally assessed 30%	Students will study a selection of poems from two published poetry texts. They will consider the concerns and choices of modern-day poets in a selection of contemporary poems. Students will also develop depth of knowledge about poetic style by studying a selection from the work of a single named poet, or a selection from within a literary period or movement.
<b>NEA [coursework]</b>	Internally assessed, externally moderated 20%	Coursework will be assessed via two texts which may be drawn from poetry, drama, prose or literary non-fiction. The selected texts may be linked by theme, movement, author or period. Literary study of both texts will be enhanced by study of the links and connections between them, different interpretations and the contexts in which they were written and received.

English is a well-respected discipline, which combines naturally with Law, Journalism, or other arts based courses. It is also of benefit for those pursuing a scientific route since it will sharpen critical thinking and communication skills.

Students studying English are encouraged to get involved with 'The Crown' or the Sixth Form Magazine, 1749, in an editorial role. They can attend various lectures at a number of different universities. Literature students in the Sixth Form are encouraged to hone their writing skills on the Peterhouse, Cambridge and Corpus Christi, Cambridge essay competitions as well as the Connell Essay Guides Competition.

English students routinely go on to study careers in law, education, the civil service, communications, media, theatre, advertising, marketing, sales, copywriting, administration, web development and social media to name a few. Those aiming for Medicine or similar would also find English an excellent complement and contrast to their studies.

## Key skills developed

Communication & Literacy	Information Technology	Numeracy	Problem Solving	Team Work	Independent Study
✓	✓		✓	✓	✓

# Film Studies (Educas/WJEC)

Film Studies is designed to introduce learners to a wide variety of films in order to broaden their knowledge and understanding of film and the range of responses films can generate. The students will have the opportunity to study mainstream American films from the past and the present, as well as a range of recent and contemporary British films, American independent films and global films, both non-English language and English language.

**Entry recommendations:** A minimum of level 6 in both English Language and English Literature is preferred.

## A-Level syllabus

Component	Assessment & weighting	Summary of the component content
<b>Component 1: Varieties of film and filmmaking</b>	Written examination Externally assessed 35%	<p><b>Section A: Hollywood 1930-1990</b> One question from a choice of two, requiring reference to two Hollywood films, one from the Classical Hollywood period (1930-1960) and the other from the New Hollywood period (1961-1990).</p> <p><b>Section B: American film since 2005 /2012</b> One question from a choice of two, requiring reference to two American films, one mainstream film and one contemporary independent film.</p> <p><b>Section C: British film since 1995</b> One question from a choice of two, requiring reference to two British films.</p>
<b>Component 2: Global filmmaking perspectives</b>	Written examination Externally assessed 35%	<p>This component assesses knowledge and understanding of five feature-length films (or their equivalent).</p> <p><b>Section A: Global film</b> One question from a choice of two, requiring reference to two global films, one European and one produced outside Europe.</p> <p><b>Section B: Documentary film</b> One question from a choice of two, requiring reference to one documentary film.</p> <p><b>Section C: Film movements - Silent cinema</b> One question from a choice of two, requiring reference to one silent film or group of films.</p> <p><b>Section D: Film movements – Experimental film (1960-2001)</b> One question from a choice of two, requiring reference to one film option.</p>
<b>Component 3: Production</b>	Non-examined assessment 30%	<p>This component assesses one production and its evaluative analysis. Learners produce:</p> <ul style="list-style-type: none"> <li>• either a short film (4-5 minutes) or a screenplay for a short film (1600-1800 words) plus a digitally photographed storyboard of a key section from the screenplay</li> <li>• an evaluative analysis (1600 - 1800 words).</li> </ul>

Students may find work in the media, creative, cultural and heritage industries. As well as traditional destinations in the film and broadcasting industries, students may also be interested in other media sectors such as publishing, journalism, advertising and research.

## Key skills developed

Communication & Literacy	Information Technology	Numeracy	Problem Solving	Team Work	Independent Study
✓	✓		✓	✓	✓

# Geography (Edexcel)

Geography A-Level is a challenging and interesting course which builds on the skills and topics covered at GCSE. A combination of physical and human geography topics are studied which enable students to develop a comprehensive understanding of the world around them and the interactions that humans have with the natural environment.

**Entry recommendations:** A minimum level 6 in GCSE Geography is preferred. It is also useful, although not essential, to have achieved level 5 in GCSE Mathematics and level 6 in GCSE English Language. Students will undertake a minimum of four days of fieldwork during the course.

## A-Level syllabus

Component	Assessment & weighting	Summary of the component content
Dynamic landscapes and physical systems and sustainability	Written examination Externally assessed 2 hours 15 mins 30%	Topic 1 Tectonic Processes and Hazards Topic 2 Landscape Systems, Processes and Change Topic 5 The Water Cycle and Water Insecurity Topic 6 The Carbon Cycle and Energy Security
Dynamic places and human systems and geopolitics	Written examination Externally assessed 2 hours 15 mins 30%	Topic 3 Globalisation Topic 4 Shaping Places option - Regenerating Places Topic 7 Superpowers Topic 8 Global Development: Health, Human Rights & Intervention
Synoptic investigation of a contemporary geographical issue	Written examination Externally assessed 2 hours 15 mins 20%	The synoptic investigation will be based on a geographical issue within a place-based context that links to the three synoptic themes and is rooted in two or more of the compulsory content areas: Players; Attitudes and actions; Futures & uncertainties.
Independent investigation (NEA)	Written report, 3000-4000 words Internally assessed 20%	The student creates a question or issue for investigation, relating to any aspect of geography contained within the specification. The student's investigation will incorporate fieldwork data.

Students visit museums, RGS (Royal Geographical Society) lectures, study days and overseas visits. They take on additional responsibilities to promote geography and help run the geography club for younger students. Geography A-Level links to various degrees in similar subjects at university. It leads to a wide range of careers such as environmental planning, education and urban planning, diplomatic service, government departments and the military.

## Key skills developed

Communication & Literacy	Information Technology	Numeracy	Problem Solving	Team Work	Independent Study
✓	✓	✓	✓	✓	✓

# History (AQA)

History A-Level candidates should be interested in people and society, in finding out why things happen and their consequences. They should enjoy thinking, reading, researching, working things out for themselves, and drawing conclusions.

**Entry recommendations:** A minimum level 6 in GCSE History is preferred.

Students should be able to write clear, precise English. It is also useful, although not essential, to have achieved a level 6 in GCSE English Language or Literature.

## A-Level syllabus

Component	Assessment & weighting	Summary of the component content
<b>Unit 1K: The making of a superpower: USA, 1865 - 1975</b>	Externally assessed 40%	Students will study the concepts of change, continuity, cause and consequence over the course of US history, and gain a deep understanding of one of the world's most powerful countries. They will examine in what ways America altered its identity over time as it healed from the wounds of war in the post-Civil War era, as it became a global superpower following World War Two, and as it reimagined itself after the Civil Rights Movement. Students will engage with changes to the US economy, politics and American society over that time period.
<b>Unit 2B: Religious conflict and the Church in England 1529 - 1570</b>	Externally assessed 40%	Students will study the religious controversies in the Tudor times up to 1570. This unit covers a period of major change in the English Church and government, focusing on issues which led England to break with Rome and the problems surrounding the establishment of a new Anglican Church and faith. Concepts such as piety, humanism, Protestantism, Catholicism, authority and conformity and an in-depth understanding of the relationship between Church and state, monarch / parliament, faith and pragmatism are covered.
<b>Non-examined assessment</b>	Internally assessed Externally moderated 20%	Students will also complete a piece of coursework which tests understanding of change over 100 years. Students are recommended to keep within a word limit of 3000-4000 words.

History can lead to university degrees in American Studies, Ancient History, Archaeology, Heritage Studies, Law, Economics, Medieval Studies, Modern History, Social History and more. Those who study a history degree should be practised in applying the lessons of the past to help resolve problems of the present, and have the ability to deploy an analytical mindset to all kinds of situations and challenges.

Popular career paths nationally for those who studied History for A-Level in recent years include merchant banking, accountancy, law, the Civil Service, industrial management, financial services, journalism, retail management, marketing and sales, advertising and public relations.

Trips overseas, themed lectures, interview practice and study days are offered.

## Key skills developed

Communication & Literacy	Information Technology	Numeracy	Problem Solving	Team Work	Independent Study
✓	✓		✓	✓	✓

# Latin (OCR)

Latin offers students the opportunity to discover more about the Latin language, their own language, and the nature of language in general, as well as about the culture and history of the Romans which was the single greatest key influence in the shaping of modern European society. The course enables students to read and appreciate a range of Latin literature in the original language, and students learn to analyse and respond to these texts in their historical context.

**Entry recommendations:** Ideally students should have at least a level 7 in Latin at GCSE, and an interest in Latin literature and thought.

## A-Level syllabus

Component	Assessment & weighting	Summary of the component content
Language (2 papers)	Externally assessed 50%	Prose and verse passages for translation, based on prescribed authors (Livy and Ovid); choice of further passage with comprehension questions or a shorter passage to translate into Latin. Candidates prepare through study of the language and readings from a range of authors.
Literature (2 papers)	Externally assessed 50%	Prose and Verse authors studied from a selection including Ovid, Horace, Virgil, Cicero, Tacitus and others: essay questions on the language and style and on the socio-historical context of the literature. Candidates must demonstrate understanding of both language and the socio-historical context, ability to evaluate evidence and to draw conclusions using appropriate reference and quotation.

Latin can lead to university degrees in Classics, Classical Studies, Classical Civilisation, Ancient History, Archaeology, Law, languages and more. It trains students in skills of analysis and logical thinking which are useful in a wide range of careers, including law, finance, industry and commerce, publishing, the Civil and Diplomatic Services, journalism and even computing. Latin students have founded dot.com companies, become pop stars, bestselling authors and even Prime Ministers! Latin is a useful complement to the study of mathematics and the sciences because it requires logical, analytical and other higher level thinking skills.

The Classics Department runs trips to museums and study days; there are opportunities to help run Classics clubs for younger students and to learn the rudiments of Classical Greek in Greek Club. Senior Classics Society broadens students' experience of the subject beyond the A-Level syllabus.

## Key skills developed

Communication & Literacy	Information Technology	Numeracy	Problem Solving	Team Work	Independent Study
✓	✓		✓	✓	✓

# Mathematics (Edexcel)

Mathematics builds on topics students will have studied at GCSE but involves several new areas. Studying mathematics gives training in logical thinking and gives students the ability to work confidently with numbers and analytical methods. There is an emphasis on modelling, problem-solving and reasoning, use of IT and dealing with large data sets.

**Entry recommendations:** Students are required to have gained at least level 7 in GCSE Mathematics to study this subject at A-Level.

## A-Level syllabus

Component	Assessment & weighting	Summary of the component content
<b>Paper 1: Pure Mathematics 1</b>	Written examination 100 marks 2 hours 33.33% per paper	Topic 1 Proof
<b>Paper 2: Pure Mathematics 2</b>		Topic 2 Algebra and functions
		Topic 3 Coordinate geometry in the (x, y) plane
		Topic 4 Sequences and series
		Topic 5 Trigonometry
		Topic 6 Exponentials and logarithms
		Topic 7 Differentiation
		Topic 8 Integration
		Topic 9 Numerical methods
		Topic 10 Vectors
<b>Paper 3: Statistics and Mechanics</b>		Section A: Statistics
		Topic 1 Statistical sampling
		Topic 2 Data presentation and interpretation
		Topic 3 Probability
		Topic 4 Statistical distributions
		Topic 5 Statistical hypothesis testing
		Section B: Mechanics
		Topic 6 Quantities and units in mechanics
		Topic 7 Kinematics
		Topic 9 Forces and Newton's laws
		Topic 10 Moments

As well as being a fascinating subject in its own right, mathematics serves as a useful support for many other subjects. If students wish to study Economics, Medicine, Science, Engineering, Architecture, Accountancy, Psychology, Sociology or Geography at university, students will find that A-Level Mathematics provides them with useful skills.

## Key skills developed

Communication & Literacy	Information Technology	Numeracy	Problem Solving	Team Work	Independent Study
✓	✓	✓	✓	✓	✓

# Further Mathematics (Edexcel)

If a student's mathematics is particularly strong and they are thinking of studying a mathematics related subject at university, they may wish to study Further Mathematics in addition to Mathematics. Studying Mathematics and Further Mathematics would use two teaching blocks, taking a total of 18 lessons each fortnight. The Further Mathematics course provides more depth and breadth of mathematics through the opportunity to study pure mathematics, mechanics and statistics to a higher level, but is taught alongside the topics covered in single Mathematics.

**Entry recommendations:** Students are required to have gained at least level 8 in GCSE Mathematics to study this subject.

## A-Level syllabus

Component	Assessment & weighting	Summary of the component content
<b>Paper 1: Core Pure Mathematics 1</b>  <b>Paper 2: Core Pure Mathematics 2</b>	Written examination 75 marks per paper 1 hour 30 mins 25% per paper	Proof Complex numbers Matrices Further algebra and functions Series Further calculus Further vectors Polar coordinates Hyperbolic functions Differential equations Volumes of revolution
<b>Paper 3: Further Mathematics Option 1</b>	Written examination 75 marks 1 hour 30 mins 25%	B: Further Statistics 1 Discrete random variables Poisson distributions Geometric and negative binomial distributions Hypothesis testing Central limit theorem Chi-squared tests Probability generating functions Quality of tests
<b>Paper 4: Further Mathematics Option 2</b>	Written examination 75 marks 1 hour 30 mins 25%	C: Further Mechanics 1 Momentum and impulse Work, energy and power Elastic strings and springs Elastic collisions in one and two dimensions

Whilst it is not always a requirement to apply for Mathematics or Mathematics related courses at university it is often a distinct advantage in terms both of the level of offer when applying and a student's preparation for such a course.

## Key skills developed

Communication & Literacy	Information Technology	Numeracy	Problem Solving	Team Work	Independent Study
✓	✓	✓	✓	✓	✓



# Modern Languages: French and Spanish

Language skills are set to be more vital than ever if the UK is to remain outward looking and open for business in a post-Brexit world. Speaking another language not only boosts job prospects but also allows you to connect with another culture. The A-Level course in a modern language will develop your language skills to a high level of fluency and allow you to acquire a deeper understanding of the society and culture of the countries where that language is spoken.

**Entry recommendations:** Ideally students embarking on this course will have achieved at least a level 6 at GCSE in their chosen language.

## French A-Level syllabus (AQA)

Component	Assessment & weighting	Summary of the component content
Unit 1	Listening, reading and translation 50%	<p><b>Theme 1: Social issues and trends</b></p> <ul style="list-style-type: none"> <li>• What 'family' looks like today</li> <li>• The role of technology in our lives</li> <li>• The importance of voluntary work</li> </ul> <p><b>Theme 2: Artistic Culture in the French-Speaking World</b></p> <ul style="list-style-type: none"> <li>• Pop music from France, Belgium, Canada and Africa</li> <li>• Discussing French traditions and famous buildings, food, people and French words used in English</li> </ul> <p><b>Theme 3: Aspects of French society</b></p> <ul style="list-style-type: none"> <li>• A study of the diversity in France</li> <li>• Life for the vulnerable and marginalised</li> <li>• How criminals are treated</li> </ul> <p><b>Theme 4: Aspects of Political Life in France</b></p> <ul style="list-style-type: none"> <li>• Discussing young people's rights to vote and how to encourage political commitment</li> <li>• Learning about previous demonstrations and strikes</li> <li>• Discussing contemporary French politics and debating topics such as immigration</li> </ul>
Unit 2	Written response to works and translation 20%	<p>Study of the film <i>Au Revoir les Enfants</i> by Louis Malle</p> <p>Study of the novel <i>Un Sac de Billes</i> by Joseph Joffo (both are set in the Second World War during the German occupation of France).</p>
Unit 3	Speaking 30%	<p>Photo card based on an A-Level topic</p> <p>Independent research presentation and discussion: candidate chooses their own research project from a variety of topics: famous person, period in history, building etc.</p>

## Spanish A-Level syllabus (Edexcel)

Component	Assessment & weighting	Summary of the component content
Unit 1	Listening, reading and translation 40%	<p>Theme 1: Development of Spanish society</p> <ul style="list-style-type: none"> <li>• Changes to family life</li> <li>• The world of work</li> <li>• The impact of tourism</li> </ul> <p>Theme 2: Political and artistic culture in the Hispanic world</p> <ul style="list-style-type: none"> <li>• Music</li> <li>• Media</li> <li>• Festivals and traditions</li> </ul> <p>Theme 3: Immigration and Spain's multicultural society</p> <ul style="list-style-type: none"> <li>• Immigration through history</li> <li>• Integration and multiculturalism</li> </ul> <p>Theme 4: Franco's dictatorship and the transition to democracy</p> <ul style="list-style-type: none"> <li>• The Spanish Civil War and Franco's rise to power</li> <li>• Daily life during the dictatorship</li> <li>• The transition to democracy</li> <li>• The impact of the dictatorship on Spain today</li> </ul>
Unit 2	Written response to works and translation 30%	<p>Study of one film and one literary text:</p> <p><i>La Lengua de las Mariposas</i> directed by José Luis Cuerda</p> <p><i>Como Agua Para Chocolate</i> by Laura Esquivel</p>
Unit 3	Speaking 30%	<p>Discussion on a theme</p> <p>Independent research presentation and discussion</p>

Many students choose to combine a language with the study of another subject at university. It is hugely advantageous to be proficient in more than one language; employers look favourably on these candidates as they have excellent communication skills and are able to collaborate effectively on international projects.

We emphasise the importance of visiting the target-language country and, if possible, of staying with a family. In the past, we have organised visits to France and Spain, including work experience. We also have recently revived our connection with St Margaret's School in Chile so that our students have an opportunity to understand more deeply about life in another Spanish-speaking country.

A-Level linguists also regularly take part in national and international competitions, and engage with films and relevant theatre performances in the target language to hone their language skills. Above all, learning about another language and culture is fascinating and will be a great asset to students in whatever career they choose.

### Key skills developed

Communication & Literacy	Information Technology	Numeracy	Problem Solving	Team Work	Independent Study
✓	✓		✓	✓	✓

# Music (AQA)

This course is designed to provide clear progression from the interrelated skills developed at Key Stage 3 and GCSE: performing, composing, listening and appraising. It allows access for all musicians and provides opportunities to study a range of musical styles.

**Entry recommendations:** Although it is likely that a student studying A-Level Music will have taken GCSE Music, this is not a requirement. It is more important that a student can read music and has reached a reasonable standard on an instrument or in voice (equivalent to Grade 5 ABRSM level).

## A-Level syllabus

Component	Assessment & weighting	Summary of the component content
<b>Component 1: Appraising</b>	Externally assessed 40%	Listening and analysing unfamiliar music, study pieces and named composers from three areas of study: Western Classical Tradition 1650-1910 plus two other optional areas of study (e.g. Music for Theatre, Art Music since 1910).
<b>Component 2: Performing</b>	Externally assessed 35%	Pupils will be required to produce a minimum 10-minute performance as a soloist and/or as part of an ensemble. The music performed may be in any style. Any instrument(s) and/or voice(s) are acceptable (minimum grade 5 standard).
<b>Component 3: Composing</b>	Externally assessed 25%	Students will be required to compose two pieces (minimum 4½ minutes): Composition 1 will be to a set brief and Composition 2 will be a free composition. Pupils are encouraged to use Sibelius and/ or Logic software.

Those looking to apply for music or music related courses at universities or conservatoires should contact the Director of Music. Career pathways stretch far beyond being a professional musician and can include teaching, therapy, digital arts, events management, film, TV, sound technician and many more.

## Key skills developed

Communication & Literacy	Information Technology	Numeracy	Problem Solving	Team Work	Independent Study
✓	✓	✓	✓	✓	✓

# Music Technology (Edexcel)

This course is designed to provide progression from the skills developed at Key Stage 3 and GCSE, with an emphasis on the practical and theoretical elements of music technology. It allows access for all musicians and provides opportunities to study a range of musical styles and develop a broad range of skills including project management, appraising and analysis, creativity and imagination.

**Entry recommendations:** Although it is not a requirement for a student studying A-Level Music Technology to have taken GCSE Music, it is encouraged. It is more important, though, that a student has good listening and appraising skills, as well as creative musical ideas; the ability to play a keyboard instrument will be an advantage when creating sequenced MIDI parts.

## A-Level syllabus

Component	Assessment & weighting	Summary of the component content
<b>Component 1: Recording</b>	Externally assessed 20%	Pupils will be required to capture (record), edit, process and mix an audio recording chosen from a list of 10 songs, consisting of a minimum of five compulsory instruments and two additional instruments. Keyboard instruments may be sequenced. The total time must be between 3 and 3 ½ minutes.
<b>Component 2: Technology-based composition</b>	Externally assessed 20%	Pupils will be required to create, edit, manipulate and structure sounds to produce a technology-based composition chosen from three set briefs. Synthesis and sampling/audio manipulation and creative effects use must be included. The total time must be 3 minutes.
<b>Component 3: Listening and analysing</b>	Externally assessed 25%	In this written examination, pupils will demonstrate their knowledge and understanding of recording and production techniques for both corrective and creative purposes, principles of sound and audio technology, and the development of recording and production technology in the context of a series of unfamiliar commercial recordings.
<b>Component 4: Producing and analysing</b>	Externally assessed 35%	In this practical and written examination, pupils will demonstrate their knowledge and understanding of editing, mixing and production techniques, to be applied to unfamiliar materials, including audio and MIDI files. Students will correct and then combine the audio and MIDI materials to form a completed mix, which may include creating new tracks or parts from the materials provided.

Those looking to apply for music technology or music technology related courses at universities or colleges should contact the Director of Music. Students will be able to progress to undergraduate study in music technology, sound production, sound engineering and many other courses requiring a similar skill set.

## Key skills developed

Communication & Literacy	Information Technology	Numeracy	Problem Solving	Team Work	Independent Study
✓	✓	✓	✓	✓	✓

# Philosophy (AQA)

Philosophy explores fascinating questions that have puzzled even the greatest of minds for thousands of years. The A-Level course will give you a thorough grounding in key philosophical concepts and methods, and will appeal to you if you enjoy thinking deeply and reading critically, and want to be able to express your ideas clearly in essays and discussion. You will engage with complex texts, analysing and evaluating the arguments of others, and constructing and defending your own arguments.

**Entry recommendations:** Level 6 in both English and English Literature are required. Level 6 in a related subject such as Religious Studies or History is desirable but not essential.

## A-Level syllabus

Component	Assessment & weighting	Summary of the component content
<b>Paper 1: Epistemology and moral philosophy</b>	External exam: 50% of total A-Level 3 hours 100 marks	<p>Epistemology</p> <ul style="list-style-type: none"> <li>• What is knowledge? Is it simply justified true belief?</li> <li>• How do we gain knowledge? Can we trust our senses?</li> <li>• Can we really know anything about the external world?</li> <li>• Could we all be brains in a vat (“The Matrix” scenario)?</li> </ul> <p>Moral philosophy</p> <ul style="list-style-type: none"> <li>• How can we know right from wrong, good from evil?</li> <li>• Should we judge actions themselves or consequences?</li> <li>• Is ethics about a virtuous character rather than actions?</li> <li>• How can we apply these theories to real-life problems?</li> <li>• Do good and evil exist “out in the world” or just in our minds?</li> </ul>
<b>Paper 2: The metaphysics of God and the metaphysics of mind</b>	External exam: 50% of total A-Level 3 hours 100 marks	<p>Metaphysics of God</p> <ul style="list-style-type: none"> <li>• Who or what is ‘God’?</li> <li>• Does ‘God’ exist and can we prove it?</li> <li>• Is religious language meaningful or meaningless?</li> </ul> <p>Metaphysics of mind</p> <ul style="list-style-type: none"> <li>• What do we mean by ‘mind’? Is the mind the same as the brain?</li> <li>• How can we explain consciousness?</li> <li>• Can you know that other people have ‘minds’? Do they experience the world in the same way that you do?</li> </ul>

Philosophy trains you to think carefully and critically, to examine and evaluate ideas, and then to write and speak clearly. These skills can be applied to every area of study and in every profession, as well as preparing students for related university courses such as Philosophy,

PPE, or Theology. Future careers might include anything that involves critical thinking, writing, or the ability to argue a coherent case, such as politics, the Civil Service, journalism, finance, or law.

## Key skills developed

Communication & Literacy	Information Technology	Numeracy	Problem Solving	Team Work	Independent Study
✓	✓		✓	✓	✓

# Photography (AQA)

The photography course focuses on developing skills such as: darkroom technology and printing, digital editing technology, the use of camera equipment and lenses, lighting and exposure techniques. Students are given opportunities to explore, research and develop their skills, knowledge and understanding in a range of photographic media.

**Entry recommendations:** Whilst there are no specific entry requirements recommended, a level 6 or above at GCSE Art is helpful.

## A-Level syllabus

Component	Assessment & weighting	Summary of the component content
<b>Unit 1: Foundation skills building</b>	Internally assessed	In the autumn term Year 12 students follow a foundation course in order to develop their photography skills, introducing pupils to using the camera (both digital and analogue), composition, experimental techniques and processes, digital edition, and using the darkroom. They explore relevant images, artefacts and resources relating to traditional and/or digital photography. Students may use methods such as photographic film and/or digital techniques to produce images. Students will work from direct observation, analyse, record and learn how to develop and apply relevant processes. Areas of study could include: landscape photography, commercial photography, still-life photography, documentary photography, experimental imagery, editorial photography, photographic installation, the photographic process, moving image and animation.
<b>Unit 2: Personal Investigation</b>	NEA Externally moderated 60%	The A-Level gives students the opportunity for more in depth study. Students will build on their individual skills and knowledge to produce a personal investigation on their own chosen theme. They will evaluate and develop their ideas to show evidence of a personal and creative response with maturity and independent thought. As part of the investigation they will complete a written related study of a minimum of 1000 words.
<b>Unit 1: Foundation skills building</b>	NEA Externally moderated 40%	Students produce a second project chosen from an OCR set choice of themes, producing the final outcome in a 15 hour examination.

Related university courses that students could go on to study include: Photography, Film Studies, Visual effects, Media Studies, Cinematography and Animation.

## Key skills developed

Communication & Literacy	Information Technology	Numeracy	Problem Solving	Team Work	Independent Study
✓	✓	✓	✓	✓	✓

# Physical Education (OCR)

The content has been designed to enable students to critically analyse and evaluate physical performance and apply experience of practical activity in developing their knowledge and understanding of the subject. The examined components will provide the knowledge and understanding which underpin the non-exam assessment (NEA). The NEA within this specification allows learners to explore an activity in detail as a performer or coach, chosen from a wide variety of sporting activities. Learners will also analyse and evaluate performance in a chosen activity as part of their NEA.

**Entry recommendations:** Although it is likely that a student studying A-Level Physical Education will have taken GCSE Physical Education, this is not a requirement. It is more important that a student can perform or coach a sport on the prescribed list to a good level.

## A-Level syllabus

Component	Assessment & weighting	Summary of the component content
H555/01 Physiological factors affecting performance	Written examination 90 marks 2 hours 30%	This component will assess: 1.1 Applied anatomy and physiology 1.2 Exercise physiology 1.3 Biomechanics
H555/02 Psychological factors affecting performance	Written examination 60 marks 1 hour 20%	This component will assess: 2.1 Skill acquisition 2.2 Sports psychology
H555/03 Socio-cultural issues in physical activity and sport	Written examination 60 marks 1 hour 20%	This component will assess: 3.1 Sport and society 3.2 Contemporary issues in physical activity and sport
H555/05 Practical performances	NEA 30 marks, weighted up to 45 marks 15%	This component will assess either: Core and advanced skills in performing <b>one</b> activity <b>or</b> Core and advanced skills in coaching <b>one</b> activity
H555/06 Evaluating and analysing performance for improvement	NEA 30 marks, weighted up to 45 marks 15%	This component draws upon the knowledge, understanding and skills a student has learnt throughout the course and enables them to analyse and evaluate a peer's performance in one activity.

Pupils can progress to higher education on full degree single or combined courses, for example: Sports Development and Management, Sports Physiotherapy, Sports Medicine, Sports Therapy, Sports Business Management, Sport and Leisure Management, Sports Science, Exercise, Health and Fitness or BSc (Hons) in Sport and Exercise Psychology.

## Key skills developed

Communication & Literacy	Information Technology	Numeracy	Problem Solving	Team Work	Independent Study
✓	✓	✓	✓	✓	✓

# Politics (Edexcel)

Politics enables students to develop an insight into the structures of government, and political beliefs central to an understanding of the modern world.

**Entry recommendations:** GCSE English Language at level 5 and above is an ideal requirement to study this subject at A-Level.

## A-Level syllabus

Component	Assessment & weighting	Summary of the component content
<b>Unit 1: UK politics</b>	Written examination Externally assessed 2 hours 33.33%	Students will study: democracy and participation, political parties, electoral systems, voting behaviour and the media, as well as core political ideologies like conservatism, liberalism, socialism.
<b>Unit 2: UK government</b>	Written examination Externally assessed 2 hours 33.33%	Students will study: the UK constitution, Parliament, Prime Minister and executive, the UK Supreme Court and relationships between the branches of government. In addition to the ideological concepts introduced in Unit 1, students will also explore one non-core political ideology from a range of five. This includes nationalism, feminism, multiculturalism, ecologicalism, and anarchism.
<b>Unit 3: Comparative politics</b>	Written examination Externally assessed 2 hours 33.33%	Students will study US Politics. Core topics are: the US Constitution, democracy and participation, Congress and Presidency, The US Supreme Court and the separation of the branches of government. Comparison with UK government and politics.

Students should expect a visit to the Houses of Parliament and UK Supreme Court, alongside debates, lectures and study days. Model United Nations is offered as an extracurricular activity, with participants attending and speaking at MUN conferences. A trip to the USA is being considered.

Politics can lead to university degrees in Politics, History, International Relations, Social Policy, Peace Studies, Business, Economics, Social Sciences and more. Politics graduates are typically employed by: accountancy and banking organisations, charities, councils, law firms, local and national government, retail and media companies. Other employers include the United Nations (UN), the European Commission, the Civil Service, non-governmental organisations (NGOs), voluntary organisations and the public sector in general.

## Key skills developed

Communication & Literacy	Information Technology	Numeracy	Problem Solving	Team Work	Independent Study
✓	✓		✓	✓	✓

# Professional Cookery (CTH)

Level 3 Extended Certificate

The Level 3 Extended Certificate in Professional Cookery opens up a world of opportunity for students with a love of cookery. Supporting learners to explore all areas of the food industry, this course helps students to explore their potential across a range of skills and competencies. The confidence and grounding they will gain within this versatile industry is unique to Leiths for this age group.

**Entry recommendations:** No grade requirement.

## CTH syllabus & assessment

Component	Summary of the component content
Topic 1 – Practical Cookery	<p>Students are required to build a portfolio of evidence to record the completion of all mandatory units, as follows:</p> <ul style="list-style-type: none"> <li>• Practical cooking log of weekly menus – photographs of completed dishes, tasting marks, student evaluation and timeplans</li> <li>• Termly theory tests – teacher led tests designed to assess understanding of skills and techniques</li> <li>• Group practical cooking task – photographic evidence and written outline of the group event within their local community – see group project specification.</li> </ul> <p>Comprehensive log/ diary of the dishes recorded and documented to track progress.</p>
Topic 2 – Food Hygiene & Allergen Awareness	
Topic 3 – Menu Planning	

### Assessment

The final assessment is made via five distinct elements as follows:

- Two x 3 hour practical assessments examining all seven mandatory units and marked by a visiting Leiths examiner. These will take place towards the end of the course
- For both practical assessments, a timeplan and costing are required
- Level 2 Food Hygiene and Allergens course and examination. This course is conducted online and must be completed within six weeks of starting the course
- A 30 minute, 20 mark theory test towards the end of the course examining kitchen hygiene and food safety only
- Two written menu planning tasks which will need to be uploaded to the portal – see menu planning specification.

This course, written and run by Leiths Education and accredited by the CTH (Confederation of Tourism & Hospitality), and is an A-Level style course with 12-36 UCAS points (QAN 603/1929/X). This course will not be recognised as an A-Level equivalent course by universities.

This qualification enhances a personal statement and UCAS application and can play a pivotal role in opening the door to careers in the hospitality and catering industry and beyond; from cheffing to food teaching; cookery writing to food photography and journalism; recipe design and development to marketing & advertising.

## Key skills developed

Communication & Literacy	Information Technology	Numeracy	Problem Solving	Team Work	Independent Study
✓	✓	✓	✓	✓	✓

# Psychology (AQA)

Psychology is the scientific study of the mind. It uses scientific methods such as experiments, observations and brain imaging in order to study thoughts, emotions and behaviours, and results are analysed using statistical techniques. Topics range from ‘why do we obey?’ to ‘can we trust the testimony of eyewitnesses?’

**Entry recommendations:** Students do not need to have studied psychology prior to Year 12, however psychology is a science A-Level and includes both scientific and mathematical content. Excellent use of English and the ability to grasp new technical and scientific terminology are also fundamental to success in this A-Level, therefore GCSE Mathematics, English language and Science level 5 and above are preferred.

## A-Level syllabus

Component	Assessment & weighting	Summary of the component content
<b>Paper 1: Introductory topics in psychology</b>	Externally assessed examination 2 hours 33.33%	Topic 1 Social influence Topic 2 Memory Topic 3 Attachment Topic 4 Psychopathology* <small>*Students will learn about certain disorders (OCD, phobias and depression) in more detail</small>
<b>Unit 2: Psychology in context</b>	Externally assessed examination 2 hours 33.33%	Topic 1 Approaches in Psychology Topic 2 Biopsychology Topic 3 Research methods
<b>Unit 1: Issues and options in psychology</b>	Externally assessed examination 2 hours 33.33%	Topic 1 Issues and debates in Psychology Topic 2 Eating behaviour* <small>*Students will study the biological and psychological mechanisms which control eating behaviour</small> Topic 3 Gender* <small>*Students will explore the biological and psychological factors that make us masculine or feminine</small> Topic 4 Aggression

Students will have the opportunity to join the weekly Psychology Society to discuss engaging psychological issues such as whether psychopaths are born or made, the psychology of attraction and whether animals have emotions.

Nationally, psychology is the fourth most popular A-Level choice and is in the top five most popular choices at degree level. Psychology can lead to various careers or areas of further study such as Educational Psychology, Criminal Psychology, Clinical Psychology, Sport Psychology etc.

## Key skills developed

Communication & Literacy	Information Technology	Numeracy	Problem Solving	Team Work	Independent Study
✓	✓	✓	✓	✓	✓



# Science

Science subjects provide an excellent route into a great number of university degrees and subsequent careers. The broad range of skills that students will acquire during their study of science is attractive to universities and employers.

**Entry recommendations:** To take any of the sciences at A-Level, pupils should ideally have achieved a level 7 for that particular separate science at GCSE. Pupils who have taken the Combined Sciences will be considered, but only if they have achieved excellent results for both Combined Science and Mathematics.

Enthusiasm and genuine interest in general scientific topics should be an integral part of a student's decision to opt for science A-Levels. At St Margaret's, we follow the OCR A specification in all three sciences, they will therefore have very similar assessment criteria. Some important aspects of the courses are:

- Students will do a set number of class practicals which are internally assessed and will be awarded a practical endorsement if they complete the required practicals and meet the skills requirements.
- Practical assessments will be examined in the written papers.
- The level of mathematics required has increased and will make up a larger percentage of the exam papers.
- Examinations will include some multiple choice questions.
- Students must be committed to a great deal of hard work and students will be given work to do over the summer holidays to prepare them for A-Level science. Some aspects of the courses will involve social and ethical consequences of scientific discoveries so the ability to think about issues beyond the classroom will be required.

Students may have seen the list of "St Margaret's Scientists" that is on display in the science department building; this shows the success that our students have had in entering an enormous range of university courses. Subjects from Astrophysics to Marine Biology, Civil Engineering, Law, Medicine, Pharmacy, Veterinary Science and Zoology are represented. University degrees and careers in areas such as law, business studies, accountancy, computing and politics all require some of the expertise that is developed in A-Level science courses.

Biomedical Society, Sixth Form Physics Jounalling Club, Y10-13 STEM Club, Biology field trips, Big Bang Fairs, Chemistry Olympiads and visiting speakers are just some of the co-curricular activities students can expect when selecting a science A-Level

## Key skills developed

Communication & Literacy	Information Technology	Numeracy	Problem Solving	Team Work	Independent Study
✓	✓	✓	✓	✓	✓

# Biology (OCR)

Biology is all around us. Every day there are newspaper articles or television programmes about advances in stem cell research, conservation, wildlife, importance of lifestyle choices in prolonging life, as well as the latest CRISPR gene editing technique.

The structure of DNA was discovered in the 1950s. Now scientists have completed the 100,000 Genomes Project. This has led to ethical issues as to who has the right to this information. If you find these topics interesting and you want to know more, then studying Biology at A-Level may suit you.

## A-Level syllabus

Component	Assessment & weighting	Summary of the component content
<b>Paper 1: Biological processes</b>	37%	Module 1 Development of practical skills in biology Module 2 Foundations in Biology Module 3 Exchange and transport Module 5 Communication, homeostasis and energy
<b>Paper 2: Biological diversity</b>	37%	Modules 1, 2 Module 4 Biodiversity, evolution and disease Module 6 Genetics, evolution and ecosystems
<b>Paper 3: Unified Biology</b>	26%	Modules 1-6
<b>Practical endorsement in Biology</b>	Assessed internally as awarded or not awarded	Requires a minimum of 12 practical activities (PAGs) to be completed as well as mastering specific practical skills e.g. safe use of equipment, presenting data in a scientific way etc.

In Biology, 10% of the question papers will consist of mathematical skills assessment and at least another 15% will cover understanding of the practical work.

The study of Biology at A-Level may be combined with other science subjects but may be studied as the only science combined with subjects such as Geography, languages or arts courses. Mixed combinations have proved to be successful in past years.

Biology A-Level is usually a requirement for a number of university courses such as Medicine, Veterinary Science, Physiotherapy, Nursing, Occupational Therapy and Biochemistry. Other Biology related degree courses include Genetics, Animal Behaviour, Physiology, Molecular Biology and Microbiology. The number of career opportunities in Molecular Biology and Genetic Engineering is continuing to increase.

# Chemistry (OCR)

Chemistry is often called the “central science” as it forms the bridge between a number of scientific and non-scientific subjects. It is an essential requirement for many university courses such as Medicine, Veterinary Science, Pharmacy and Biochemistry. Pure Chemistry degrees and other Chemistry related degrees offer many employment opportunities.

The range of skills required for A-Level Chemistry includes mathematical ability, interpretation of written and numerical information, concise written communication, practical and ICT skills. Good quality A-Level Chemistry students have the transferable skills that are in great demand in a wide range of careers.

During your A-Level Chemistry course you will have the opportunity to enter the Cambridge Chemistry Challenge, as well as the RSC Chemistry Olympiad. You will also attend the Chemistry in Action Conferences each year in London.

## A-Level syllabus

Component	Assessment & weighting	Summary of the component content
<b>Paper 1: Periodic Table, elements and physical chemistry</b>	37%	Module 1 Development of practical skills in Chemistry Module 2 Foundations in Chemistry Module 3 Periodic table and energy Module 4 Core Organic Chemistry Module 5 Physical Chemistry and transition elements
<b>Paper 2: Synthesis and analytical techniques</b>	37%	Modules 1, 2, 4 Module 6 Organic Chemistry and analysis
<b>Paper 3: Unified Chemistry</b>	26%	Modules 1-6
<b>Practical endorsement in Chemistry</b>	Assessed internally as awarded or not awarded	Requires a minimum of 12 practical activities (PAGs) to be completed as well as mastering specific practical skills e.g. safe use of equipment, presenting data in a scientific way etc.

The number of different Chemistry degrees has multiplied dramatically in recent years and Chemistry can now be studied alongside environmental science, industry, drug discovery, education, management, forensic science, pharmaceutical science, materials science, physics and biochemistry to name only a few.

An A-Level Chemistry course can therefore be seen as the starting point for a large number of varied and exciting careers. A comprehensive list of Chemistry degree courses approved by the RSC can be found at: <http://www.rsc.org/Education/courses-and-careers/accredited-courses/index.asp>

# Physics (OCR)

The range of skills required for A-Level Physics includes mathematical ability, interpretation of written and numerical information, concise written communications, practical and ICT skills. Good quality A-Level Physics students have the skills and flexibility of thought that are much sought after by employers and universities in a wide range of disciplines that go far beyond the traditional scope associated with the subject.

## A-Level syllabus

Component	Assessment & weighting	Summary of the component content
<b>Paper 1: Modelling Physics</b>	37%	Module 1 Development of practical skills in Physics Module 2 Foundations in Physics Module 3 Force and motion Module 4 Electrons, waves and photons Module 5 Newtonian world and astrophysics
<b>Paper 2: Exploring Physics</b>	37%	Modules 1, 2, 4 Module 6 Particles and medical Physics
<b>Paper 3: Unified Physics</b>	26%	Modules 1-6
<b>Practical endorsement in Physics</b>	Assessed internally as awarded or not awarded	Requires a minimum of 12 practical activities (PAGs) to be completed as well as mastering specific practical skills e.g. safe use of equipment, presenting data in a scientific way etc.

In Physics, 40% of the question papers will consist of mathematical skills assessment and at least another 15% will assess students' knowledge of the practical work.

A comprehensive list of Physics degree courses approved by the IOP can be found at: <http://www.myphysicscourse.org>.

Physics is a sound preparation for a number of university courses such as Architecture, Engineering, Medicine, Chemical Engineering and Aeronautics. Pure Physics degrees and other Physics related degrees offer many employment opportunities.



# Sport CTEC (OCR)

This CTEC course is offered at either Extended Certificate or Diploma level. Students will learn about body systems and the long and short term impacts of sport and physical activity; how sport is organised and the purpose of sports development; health and safety requirements in sport and physical activity; the purpose of, and how to conduct research in sport and physical activity; and how businesses in sport are organised and what success looks like to them.

**Entry recommendations:** Level 5 or above at GCSE (or equivalent qualification) in PE.

## CTEC Extended Certificate syllabus (Equivalent to 1 A-Level)

Mandatory units	Assessment & weighting	Summary of the component content
<b>Unit 1: Body systems and the effects of exercise</b>	Written examination: 1 hour 30 minutes 70 marks 90 GLH	<ul style="list-style-type: none"> <li>Understand the skeletal system in relation to exercise and physical activity</li> <li>Understand the muscular system in relation to exercise and physical activity</li> <li>Understand the cardiovascular system in relation to exercise and physical activity</li> <li>Understand the respiratory system in relation to exercise and physical activity</li> <li>Understand the different energy systems in relation to exercise and physical activity</li> </ul>
<b>Unit 2: Sports coaching &amp; activity leadership</b>	Written NEA & practical assessment 90 GLH	<ul style="list-style-type: none"> <li>Know the roles and responsibilities of sports coaches and activity leaders</li> <li>Understand principles which underpin coaching and leading</li> <li>Be able to use methods to improve skills, techniques and tactics in sport</li> <li>Be able to plan sports and activity sessions</li> <li>Be able to prepare sports and activity environments</li> <li>Be able to deliver sports and activity sessions</li> <li>Be able to review sports and activity sessions</li> </ul>
<b>Unit 3: Sports organisation and development</b>	Written examination: 1 hour 60 marks 60 GLH	<ul style="list-style-type: none"> <li>Understand how sport in the UK is organised</li> <li>Understand sports development</li> <li>Understand how the impact of sports development can be measured</li> <li>Understand sports development in practice</li> </ul>

### Optional Units required to make up additional 120 GLH

- Unit 05: Performance analysis in sport and exercise (60 GLH)
- Unit 08: Organisation of sports events (60 GLH)
- Unit 10: Biomechanics and movement analysis (60 GLH)
- Unit 11: Physical activity for specific groups (30 GLH)
- Unit 12: Nutrition and diet for sport and exercise (30 GLH)
- Unit 17: Sports injuries and rehabilitation (60 GLH)
- Unit 18: Practical skills in sport and physical activities (60 GLH)
- Unit 19: Sport and exercise psychology (60 GLH)
- Unit 20: Sport and exercise sociology (60 GLH)

This course is certificated by Cambridge Technicals. As the different pathways can include vastly different combinations of units with varying emphasis, students interested in pursuing this L3 course will

be invited to a bespoke meeting with the PE team to discuss the route they are keen to take.

## Key skills developed

Communication & Literacy	Information Technology	Numeracy	Problem Solving	Team Work	Independent Study
✓	✓	✓	✓	✓	✓

## CTEC Diploma in Sports Coaching syllabus (Equivalent to 2 A-levels)

Mandatory Units	Assessment & weighting	Summary of the component content
<b>Unit 1:</b> Body systems and the effects of exercise	Written examination: 1 hour 30 minutes 70 marks 90 GLH	<ul style="list-style-type: none"> <li>Understand the skeletal system in relation to exercise and physical activity</li> <li>Understand the muscular system in relation to exercise and physical activity</li> <li>Understand the cardiovascular system in relation to exercise and physical activity</li> <li>Understand the respiratory system in relation to exercise and physical activity</li> <li>Understand the different energy systems in relation to exercise and physical activity</li> </ul>
<b>Unit 2:</b> Sports Coaching & activity leadership	Written NEA & practical assessment 90 GLH	<ul style="list-style-type: none"> <li>Know the roles and responsibilities of sports coaches and activity leaders</li> <li>Understand principles which underpin coaching and leading</li> <li>Be able to use methods to improve skills, techniques and tactics in sport</li> <li>Be able to plan sports and activity sessions</li> <li>Be able to prepare sports and activity environments</li> <li>Be able to deliver sports and activity sessions</li> <li>Be able to review sports and activity sessions</li> </ul>
<b>Unit 3:</b> Sports organisation and development	Written examination: 1 hour 60 marks 60 GLH	<ul style="list-style-type: none"> <li>Understand how sport in the UK is organised</li> <li>Understand sports development</li> <li>Understand how the impact of sports development can be measured</li> <li>Understand sports development in practice</li> </ul>
<b>Unit 4:</b> Working safely in sport, exercise, health and leisure	Written examination: 1 hour 30 minutes 70 marks 90 GLH	<ul style="list-style-type: none"> <li>Understand emergency procedures in sport, exercise, health and leisure</li> <li>Understand health and safety requirements in sport, exercise, health and leisure</li> <li>Understand how to minimise risk in sport, exercise, health and leisure</li> <li>Know first aid requirements for sport, exercise, health and leisure</li> <li>Know how to safeguard children and vulnerable adults in sport, exercise, health and leisure</li> </ul>
<b>Unit 5:</b> Performance analysis in sport and exercise	Written NEA & practical assessment: 60 GLH	<ul style="list-style-type: none"> <li>Understand performance profiling</li> <li>Be able to carry out performance profiling</li> <li>Be able to analyse performance</li> <li>Be able to give feedback on sports performance</li> </ul>
<b>Unit 8:</b> Organisation of sport events	Written NEA & practical assessment: 60 GLH	<ul style="list-style-type: none"> <li>Know different types of sports events and their purpose</li> <li>Know the different roles and responsibilities involved in the planning and delivery of sports events</li> <li>Be able to plan and promote a sports event</li> <li>Be able to participate in the delivery of a sports event</li> <li>Be able to review the planning and delivery of a sports event</li> </ul>
<b>Unit 11:</b> Physical activity for specific groups	Written NEA & practical assessment: 30 GLH	<ul style="list-style-type: none"> <li>Know about the provision of physical activity for specific groups</li> <li>Know the benefits of and barriers to participating in physical activity for specific groups</li> <li>Know the exercise referral process</li> <li>Be able to plan physical activity sessions for specific groups</li> </ul>
<b>Unit 17:</b> Sports injuries and rehabilitation	Written NEA & practical assessment: 60 GLH	<ul style="list-style-type: none"> <li>Know common sports injuries and their effects</li> <li>Be able to minimise the risk of sports injuries</li> <li>Be able to respond to acute sports injuries when they occur</li> <li>Know the role of different agencies in the treatment and rehabilitation of sports injuries</li> <li>Be able to plan a rehabilitation programme for a specific sports injury</li> </ul>
<b>Unit 18:</b> Practical skills in sport and physical activities	Written NEA & practical assessment: 60 GLH	<ul style="list-style-type: none"> <li>Be able to apply skills, techniques and tactics in an individual sport</li> <li>Be able to apply skills, techniques and tactics in a team sport</li> <li>Be able to apply skills and knowledge in outdoor and adventurous activities</li> <li>Be able to officiate in sport and physical activity</li> </ul>

**Optional Units required to make up additional 120 GLH**

Unit 10: Biomechanics and movement analysis (60 GLH)  
 Unit 12: Nutrition and diet for sport and exercise (30 GLH)  
 Unit 13: Health and fitness testing for sport and exercise (60 GLH)  
 Unit 19: Sport and exercise psychology (60 GLH)



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If you would like a tour of the school  
or need any further information please  
contact the Admissions Team.

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