

A young man with reddish-brown hair and blue-rimmed safety glasses is focused on his work in a laboratory. He is wearing a white lab coat over a white shirt and a dark blue tie with small white dots. He is wearing white nitrile gloves and is carefully handling a small, reddish object, possibly a specimen or a piece of equipment. The background is slightly blurred, showing other people in white lab coats, suggesting a busy laboratory environment. A purple speech bubble with a yellow border is overlaid on the right side of the image, containing the text 'A-Level Options' in a white, cursive font.

A-Level Options



THE BRITISH SCHOOL
OF GUANGZHOU
A NORD ANGLIA EDUCATION SCHOOL



NORD
ANGLIA
EDUCATION

Be Ambitious

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The AS & A2 Level Examination Programme (Sixth Form)

Lower Sixth Form – Year 12, Upper Sixth Form – Year 13

Students who achieve good passes at (I)GCSE are invited to move into the next phase of The British School of Guangzhou to prepare themselves for life at University. This is a two-year programme in Advanced Level (A2 Level and AS Level) study.

Minimum Entrance Requirements

Each student's application to the Sixth Form will be treated individually and assessed on a case-by-case basis. For those students who have studied at GCSE or IGCSE level, the minimum entrance requirements are usually that students must have obtained 5 A*-C grades and ideally have A*-B grades in those subjects which they are hoping to study in the Sixth Form. Further details on the entry requirements for each subject can be found later in this booklet. Applications are welcome from students who have not studied the IGCSE programme and their entrance will be determined through a combination of admissions tests and school reports.

Choosing Subjects at A-Level

Upon entry into the Sixth Form, students choose either 3 or 4 subjects to study at AS-Level (in Year 12), which will progress into 3 subjects in Year 13. Previously all subjects had exams at the end of Year 12 which provided students with an AS Level qualification (effectively half of the full A-Level) however, due to important changes recently introduced by the British Government, all A-Level subjects are now split into 2 groups:

1. Some subjects now only have exams at the end of Year 13, which means that students will NOT be able to stop doing these subjects at the end of Year 12 (as there are no AS Level exams).
2. Other subjects have continued using the previous system and still have AS Level exams at the end of Year 12 and A2 exams at the end of Year 13. Any student who chooses one of these subjects will be able to stop studying them after their AS exams.

This important change means that students need to ensure they consider which courses they choose carefully to ensure that they are not studying more than 3 subjects in Year 13. For example, if a student chooses 4 subjects which are all in group 1 (with no Year 12 exams), they will be unable to continue all of these into A2. Instead they would need to pick 3 subjects in group 1 and one subject in group 2, which they could then stop after their Year 12 (AS Level) exams.

It is important to note that the very top global universities only require 3/4 subjects at AS Level and 3 full A-Levels. No additional advantage is given to any students who study more than this therefore students are strongly encouraged to ensure that they choose subjects to match these expectations.



ART & DESIGN

Aims

To develop:

- intellectual, imaginative, creative and intuitive capabilities
- investigative, analytical, experimental, practical, technical and expressive skills, aesthetic understanding and critical judgement.
- independence of mind in developing, refining and communicating their own ideas, their own intentions and their own personal outcomes.
- an interest in, enthusiasm for and enjoyment of art, craft and design.
- their experience of working with a broad range of media.
- an understanding of the interrelationships between art, craft and design processes and an awareness of the contexts in which they operate.
- knowledge and experience of real-world contexts and, where appropriate, links to the creative industries.
- knowledge and understanding of art, craft, design and media and technologies in contemporary and past societies and cultures.
- an awareness of different roles, functions, audiences and consumers of art, craft and design.

Syllabus Content

Students are expected to:

- Develop ideas through sustained and focused investigations informed by contextual and other sources, demonstrating analytical and critical understanding.
- Explore and select appropriate resources, media, materials, techniques and processes, reviewing and refining ideas as work develops.
- Record ideas, observations and insights relevant to intentions, reflecting critically on work and progress.
- Present a personal and meaningful response that realizes intentions and, where appropriate, makes connections between visual and other elements.

MARKETING MANAGER, PRODUCT DESIGNER, V
DESIGNER, GRAPHIC, DESIGNER, FASHION, FO
PRODUCER, ONLINE PUBLISHER, ANIMATION AI
INTERIOR, DESIGNER, ARCHITECT PHOTOGRAP
ILLUSTRATOR, MULTIMEDIA ARTIST...

Assessment

Exam board: EDEXCEL

Year 12	Year 13
INTERNALLY SET & ASSESSED BY TEACHER & EXTERNALLY MODERATED = 60%	EXTERNALLY SET, ASSESSED BY TEACHER & EXTERNALLY MODERATED = 40%
<p>Component 1: Personal Portfolio</p> <p>This component allows students opportunities to generate and develop ideas, research primary and contextual sources, record practical and written observations, experiment with media and processes, and refine ideas towards producing personal resolved outcome(s). The project takes the form of complete A1 and A2 sized sheets and an investigative and experimental sketchbook.</p> <p>The subject theme will be set by the teacher. The general theme for the first project will be Surfaces working in both 2D and 3D disciplines.</p> <p>A personal study of a minimum 1000 words continuous written prose.</p> <p>This component will start in Year 12 and continue until February in Year 13.</p>	<p>Component 2: Externally Set Assignment</p> <p>This component incorporates two major elements: preparatory studies and the 15-hour period of sustained focus .</p> <p>This allows students opportunities to generate and develop ideas, research primary and contextual sources, record practical and written observations, experiment with media and processes, and refine ideas towards producing personal resolved outcome(s) in response to an externally set theme.</p> <p>This component usually starts in February and continues until the Summer examination period.</p>

, WEB DESIGNER, APP DESIGNER, SOFTWARE
 CLOTHING & ACCESSORIES DESIGNER, VIDEO
 ARTIST, GAME DESIGNER, TEXTILES, DESIGNER,
 ARCHITECT, FINE ARTIST, STYLIST, CURATOR, DIGITAL

BIOLOGY

Aims

The aims of the International Advanced Level in Biology enable students to:

- develop their interest in, and enthusiasm for, biology including developing an interest in further study and careers in the subject.
- appreciate how society makes decisions about biology-related issues and how biology contributes to the success of the economy and society.
- develop and demonstrate a deeper appreciation of the skills, knowledge and understanding of How Science Works.
- develop essential knowledge and understanding of different areas of biology and how they relate to each other.
- prepare for higher educational courses in biology and related courses.

Syllabus Content

The Key Concepts taught at AS Level: Biological molecules, genetics, human anatomy & physiology, plant anatomy & physiology, disease, cellular biology, theory of evolution by natural selection & biodiversity.

The Key Concepts taught at A2 Level: Photosynthesis, respiration, ecosystems, human influence on ecosystems, microbiology, muscle function, homeostasis, co-ordination & response in plants & animals.

MEDICINAL SCIENCE, VETERINARY
MEDICINE, DENTISTRY, PHARMACOLOGY,
RESEARCH SCIENTIST,
MICROBIOLOGY...

Assessment

Exam board: EDEXCEL

Year 12	Year 13
EXTERNALLY ASSESSED = 50%	EXTERNALLY ASSESSED = 50%
<p>Paper 1 - 20% 1 hour 30 minutes The written paper will consist of questions based on the following topics; biological molecules, structure & properties of cell membranes, structure of DNA and RNA, DNA replication & protein synthesis, monohybrid inheritance, gene mutations and gene therapy.</p> <p>The paper will consist of objective, structured and short-answer questions.</p>	<p>Paper 2 - 20% 1 hour 30 minutes The written paper will consist of questions based on the following topics; photosynthesis, global warming, theory of evolution, nutrient cycling, DNA profiling and PCR, structure of bacteria & viruses, infectious diseases and immunology.</p> <p>The paper will consist of objective, structured and short-answer questions.</p>
<p>Paper 2 - 20% 1 hour 30 minutes The written paper will consist of questions based on the following topics; structure & ultrastructure of eukaryotes and prokaryotes, meiosis, genetic & environmental influence, stem cells, biodiversity, taxonomy, transport in plants and uses of plant products.</p> <p>The paper will consist of objective, structured and short-answer questions.</p>	<p>Paper 5 - 20% 1 hour 45 minutes The written paper will consist of questions based on the following topics; respiration, control & functioning of the human heart, homeostasis, nervous system, impact of exercise, hormonal coordination, brain structure & development, brain chemicals and the human genome project.</p> <p>The paper will consist of objective, structured and short-answer questions.</p>
<p>Paper 3 - 10% 1 hour 30 minutes Students are expected to develop experimental skills, and a knowledge and understanding of experimental techniques, by carrying out a range of practical experiments and investigations while they study Units 1 and 2. This unit will assess students' knowledge and understanding of experimental procedures and techniques that were developed throughout Units 1 and 2.</p> <p>The paper will consist of objective, structured and short-answer questions.</p>	<p>Paper 6 - 10% 1 hour 30 minutes Students are expected to develop a wide knowledge and understanding of experimental procedures and techniques throughout the whole of their International Advanced Level course. They are expected to become aware of how these techniques might be used to investigate interesting biological questions. This unit will assess students' knowledge and understanding of experimental procedures and techniques and their ability to plan whole investigations, analyse data and to evaluate their results and experimental methodology.</p> <p>The paper will consist of objective, structured and short-answer questions.</p>

BUSINESS STUDIES

Aims

This syllabus aims to enable you to:

- understand and appreciate the nature and scope of business, and the role of business in society, internationally and within your own country .
- develop critical understanding of organisations, the markets they serve and the process of adding value.
- evaluate business behaviour from the perspective of a range of stakeholders including owner/ shareholder, manager, employee, customer, supplier, lender and government.
- develop an awareness of the political, economic, social, technological, legal, environmental and ethical issues associated with business activity.
- develop quantitative, problem-solving, decision-making and communication skills.

Syllabus Content

The AS and A Level syllabus content is divided into six main topic areas:

- Business and its environment
- People in organisations
- Marketing
- Operations and project management
- Finance and accounting
- Strategic management (A Level only)

CHARTERED MANAGEMENT ACCOUNTANT, COF
HUMAN RESOURCES OFFICER, INSURANCE UN
OPERATIONAL RESEARCHER, RISK MANAGER, F
DISTRIBUTION MANAGER, MARKETING EXECUT
SALES EXECUTIVE, SYSTEMS ANALYST

Assessment

Exam board: Cambridge International Examinations (CIE)

Year 12	Year 13
EXTERNALLY SET= 50%	EXTERNALLY SET = 50%
<p>Paper 1 - Short answer and essay</p> <p>1 hour 15 minutes Section A: Four short answer questions Section B: One essay from a choice of three questions</p> <p>AS Level syllabus content</p> <p>20% OF THE FULL A LEVEL</p>	<p>Paper 3 - Case study</p> <p>3 hours Five questions and one essay (from a choice of two) based on a case study</p> <p>A Level syllabus content</p> <p>50% OF THE FULL A LEVEL</p>
<p>Paper 2 - Data response</p> <p>1 hour 30 minutes Two data response questions</p> <p>AS Level syllabus content</p> <p>30% OF THE FULL A LEVEL</p>	

CORPORATE INVESTMENT BANKER,
 UNDERWRITER, MANAGEMENT CONSULTANT,
 HUMAN RESOURCES OFFICER, LOGISTICS &
 OPERATIVE, RETAIL MANAGER,

CHEMISTRY

Aims

To provide:

- to provide, through well designed studies of experimental and practical chemistry, a worthwhile educational experience for all learners, in particular, to enable them to acquire sufficient understanding and knowledge to: become confident citizens in a technological world, able to take or develop an informed interest in scientific matters, recognise the usefulness, and limitations, of scientific method and appreciate its applicability in other disciplines and in everyday life, be suitably prepared for employment and/or further studies beyond Cambridge International A Level in Chemistry.

To develop:

- abilities and skills that: are relevant to the study and practice of science, are useful in everyday life, encourage efficient and safe practice, encourage the presentation of information and ideas appropriate for different audiences and purposes, develop self-motivation and the ability to work in a sustained fashion.
- attitudes relevant to science such as: a concern for accuracy and precision, objectivity, integrity, a spirit of enquiry, initiative, insight.
- interest in, and care for, the environment.
- an awareness that the study and practice of science are co-operative and cumulative activities, and are subject to social, economic, technological, ethical and cultural influences and that the limitations and the applications of chemistry may be both beneficial and detrimental to the individual, the community and the environment.
- learners and create a sustained interest in chemistry so that the study of the subject is enjoyable and satisfying.

Syllabus Content

The Key Concepts taught are: Atoms and Forces, Experiments and evidence, Patterns in chemical behavior and reactions, Chemical bonds, Energy changes.

MEDICINE, ENGINEERING, FINANCE, RESEARCH

Assessment

Exam board: Cambridge International Examinations (CIE)

Year 12	Year 13
EXTERNALLY ASSESSED= 50%	EXTERNALLY ASSESSED = 50%
<p>Paper 1 – 15.5% 1 hour This paper consists of 40 multiple choice questions, 30 of the direct choice type and 10 of the multiple completion type, all with four options. All questions will be based on the AS Level syllabus content. Candidates will answer all questions. Candidates will answer on an answer sheet. 40 Marks</p>	<p>Paper 4 – 38.5% 2 hours This paper consists of a variable number of free response style questions of variable mark value. All questions will be based on the A Level syllabus but may require knowledge of material first encountered in the AS Level syllabus. Candidates will answer all questions. Candidates will answer on the question paper. 100 Marks</p>
<p>Paper 2 – 23.0% 1 hour 15 minutes This paper consists of a variable number of structured questions of variable mark value. All questions will be based on the AS Level syllabus content. Candidates will answer all questions. Candidates will answer on the question paper. 60 Mark</p>	<p>Paper 5 – 11.5% 1 hour 15 minutes This paper consists of a variable number of questions of variable mark value based on the practical skills of planning, analysis and evaluation. The context of the questions may be outside the syllabus content, but candidates will be assessed on their practical skills of planning, analysis and evaluation rather than their knowledge of theory. Candidates will answer all questions. Candidates will answer on the question paper. 30 Marks</p>
<p>Paper 3 – 11.5% 2 hours This paper requires candidates to carry out practical work in timed conditions. Candidates will be expected to collect, record and analyse data so that they can answer questions related to the activity. The paper will consist of two or three experiments drawn from different areas of Chemistry. Candidates will answer all questions. Candidates will answer on the question paper. 40 Marks</p>	<p>The overall proportion of marks allocated to Physical, Inorganic and Organic Chemistry will be in the ratio of 3:2:3</p>

CH, CONSULTANT, LAW, FORENSICS, DESIGNER...

CHINESE

Aims

To develop:

- and enhance linguistic skills to broaden the capacity for critical thinking with regard to the language, culture and society where the language is spoken.
- control of the language in order to convey meaning, using spoken and written skills, for both practical and intellectual purposes.
- language learning skills and strategies to sustain communication and build fluency and confidence.
- the ability to engage critically with texts, films and other materials in the original language.

Syllabus Content

Students need to develop knowledge, understanding and the capability to evaluate the following topics for countries where the language is spoken:

- Food, diet and health
- Transport, travel and tourism
- Education and employment
- Leisure, youth interests and Chinese festivals

DIPLOMACY AND INTERNATIONAL
RELATIONS, ACCOUNTANCY AND LAW,
INTERNATIONAL MARKETING AND SALES,
EDUCATION, HOTELS AND HOSPITALITY,
TRAVEL & TOURISM INDUSTRIES,
JOURNALISM...

Assessment

Exam board: Cambridge International Examinations (CIE)

Year 12	Year 13
EXTERNAL = 50%	EXTERNAL = 50%
<p>Unit 1. Speaking (30% of AS, 15% of the total GCE marks)</p> <ul style="list-style-type: none"> • 15 minutes preparation time for the task. • up to 5-6 minutes to respond to the stimulus and bullet points in Chinese. <p>Unit 2 –Understanding and Written Response (70% of AS, 35% of the total GCE marks)</p> <p>2 hours and 30 minutes (70 marks)</p> <p>Section A Listening (20 marks)</p> <p>Students listen to a number of recordings and answer questions testing comprehension.</p> <p>Section B Reading (20 marks)</p> <p>Students read a number of texts and answer questions testing comprehension.</p> <p>Section C Writing (30 marks)</p> <p>Students will be required to write 180–200 characters of Chinese in the form of a letter, report or article based on a short printed Chinese-language stimulus.</p>	<p>Unit 3. Understanding, Written Response and Research in Chinese</p> <p>2 hours 45 minutes (80 marks)</p> <p>Section A. Reading (10 marks)</p> <p>Students read a text and answer questions testing comprehension.</p> <p>Section B. Translation (10 marks)</p> <p>Students translate a short passage written in English into Chinese.</p> <p>Section C. Essay Writing (30 marks)</p> <p>Students must write an essay in Chinese (250–500 characters) in response to an essay title that links to the reading text in Section A.</p> <p>Section D. Research Based Essay (30 marks)</p> <p>Students will write in Chinese (250–500 characters) about an area of interest to them and which they have researched in advance.</p>

COMPUTER SCIENCE

Aims

To develop:

- computational thinking.
- an understanding of the main principles of solving problems using computers.
- an understanding of the component parts of computer systems and how they interrelate, including software, data, hardware, communications and people.
- the skills necessary to apply this understanding to develop computer-based solutions to problems.

Syllabus Content

Students will use the skills and knowledge acquired through this course to:

- Theory fundamentals including information representation and internet technologies
- Fundamental problem solving and programming including algorithms, programming and software development
- Advanced theory including hardware, systems software and security
- Further problem solving and programming skills including algorithm design methods, object-oriented programming, and testing.

COMPUTER PROGRAMMERS, SOFTWARE
DEVELOPERS & MANAGERS,
CHIEF INFORMATION OFFICERS...

Assessment

Exam board: Cambridge International Examinations (CIE)

EXTERNAL	AS level	A Level
Paper 1 - Theory Fundamentals 1 hour and 30 mins Written paper contains short answers and structured questions. 75 marks. Externally set and Assessed	50%	25%
Paper 2 - Fundamental problem solving and programming 2 Hours Written paper contains short answers and structured questions. Topics will include those given in pre-release materials. 75 marks. Externally set and Assessed	50%	25%
Paper 3 - Advanced Theory 1 Hour and 30 mins Written paper contains short answers and structured questions. 75 marks. Externally set and Assessed		25%
Paper 4 - Further Problem solving and Programming skills 2 Hours Written paper contains short answers and structured questions. Topics will include those given in pre-release materials. 75 marks. Externally set and Assessed		25%

ENGLISH LITERATURE

Aims

To develop:

- wide reading of independently set texts and others they have selected for themselves.
- critical and creative engagement with a substantial body of texts and ways of responding to them.
- effective application and development of their knowledge of literary analysis and evaluation.
- exploration of the contexts of texts and other's interpretations of them.
- independent and sustained study skills to deepen their appreciation and understanding of English literature, including its changing traditions.

Syllabus Content

Students must study a range of Literature across the three forms: Poetry, Prose and Drama. Students will study:

- One Shakespeare play and one other drama from a 'tragedy' genre.
- Critical essays related to their selected Shakespeare play.
- Two prose texts on the theme of Women in Society. This year's chosen texts are: 'Wuthering Heights' by Emily Bronte and 'A Thousand Splendid Suns' by Khaled Hosseini.
- Poetic form, meaning and language
- A selection of post-2000 specified poetry and a specified range of poetry from a literary period

LAW, EDUCATION, POLITICS, JOURNALISM,
PHILOSOPHY...

Assessment

Exam board: EDEXCEL

Year 12	Year 13
<p>EXTERNALLY ASSESSED = 100% (Please note that AS marks achieved in the first year of the course are NOT carried through to the final A level year).</p>	<p>EXTERNALLY ASSESSED = 80% (All components must be assessed in the final year of the course. No AS marks will be carried forward).</p>
<p>Component 1: Poetry and Drama – 60%</p> <ul style="list-style-type: none"> • An open book written exam lasting 2 hours. • Two sections where students must answer one question from a choice of two on their studied poetry collection in Section A and one question from a choice of two on their studied drama text in Section B. <p>Component 2: Prose – 40%</p> <ul style="list-style-type: none"> • An open book written exam lasting 1 hour. • Students answer one comparative essay question from a choice of two on their studied theme. 	<p>Component 1: Drama – 30%</p> <ul style="list-style-type: none"> • An open book written exam lasting 2 hours and 15 minutes. • Two sections where students must answer one question from a choice of two on their studied text for both Section A (Shakespeare) and Section B (other Drama text). <p>Component 2: Prose – 20%</p> <ul style="list-style-type: none"> • An open book written exam lasting 1 hour. • Students answer one comparative essay question from a choice of two on their studied theme. <p>Component 3: Poetry – 30%</p> <ul style="list-style-type: none"> • An open book written exam lasting 2 hours and 15 minutes. • Students answer one question from a choice of two, comparing an unseen poem with a named poem from their studied contemporary text and one question from a choice of two on their studied movement.
	<p>INTERNAL = 20%</p>
	<p>Coursework:</p> <ul style="list-style-type: none"> • Students have a free choice of two texts to study. • They must produce one extended comparative essay referring to two texts with a word count of 2500 – 3000 words.

ECONOMICS

Aims

This syllabus aims to enable you to:

- understand the factual knowledge of economics.
- provide you with a facility for self-expression, not only in writing but also in using additional aids, such as statistics and diagrams, where appropriate.
- use works of reference as sources of data specific to economics.
- develop the habit of reading critically to gain information about the changing economy we live in.
- appreciate the methods of study used by the economist, and of the most effective ways economic data may be analysed, correlated, discussed and presented.

Syllabus Content

The AS and A Level syllabus content is divided into seven main topic areas:

1. Basic economic ideas
2. The price system
3. Government intervention in the price system
4. International trade (AS Level only)
5. Theory and measurement in macroeconomy
6. Macroeconomic problems
7. Macroeconomic policies

BUSINESS, BANKING AND FINANCE ECONOMICS
GOVERNMENT, HEALTHCARE, INTERNATIONAL TRADE
PUBLIC POLICY, URBAN PLANNING

Assessment

Exam board: CIE

Year 12	Year 13
<p>EXTERNALLY SET= 50%</p> <p>Paper 1 – Multiple-choice 1 hour</p> <p>AS Level syllabus content</p> <p>20% OF THE FULL A LEVEL</p>	<p>EXTERNALLY SET = 50%</p> <p>Paper 3 – Multiple-choice 1 hour</p> <p>A Level syllabus content</p> <p>15% OF THE FULL A LEVEL</p>
<p>Paper 2 - Data response 1 hour 30 minutes</p> <p>1 data response question and 1 structured essay from a choice of 3</p> <p>AS Level syllabus content</p> <p>30% OF THE FULL A LEVEL</p>	<p>Paper 4 Data response 2 hours 15 minutes</p> <p>1 data response question and 2 structured essays from a choice of 6</p> <p>A Level syllabus content</p> <p>35% OF THE FULL A LEVEL</p>

MIC DEVELOPMENT, ENTREPRENEURSHIP,
AL TRADE, LAW, MARKETING AND RETAIL,

FURTHER PURE MATHEMATICS

Aims

To:

- develop their understanding of mathematics and mathematical processes in a way that promotes confidence and fosters enjoyment.
- develop abilities to reason logically and recognise incorrect reasoning, to generalise and to construct mathematical proofs.
- extend their range of mathematical skills and techniques and use them in more difficult, unstructured problems.
- develop a deeper understanding of coherence and progression in mathematics and of how different areas of mathematics can be connected.
- recognise how a situation may be represented mathematically and understand the relationship between 'real-world' problems and mathematical models and how these can be refined and improved.
- use mathematics as an effective means of communication.
- read and comprehend mathematical arguments and articles concerning applications of mathematics.
- acquire the skills needed to use technology such as calculators and computers effectively, recognise when such use may be inappropriate and be aware of limitations.
- develop an awareness of the relevance of mathematics to other fields of study, to the world of work and to society in general.
- take increasing responsibility for their own learning and the evaluation of their own mathematical development.

Syllabus Content

Students need to develop knowledge, understanding and the capability to evaluate:

- complex numbers; roots of quadratic equations; numerical solution of equations; coordinate systems; matrix algebra; transformations using matrices; series; proof.
- inequalities; series; further complex numbers; first order differential equations; second order differential equations; Maclaurin and Taylor series; Polar coordinates.
- kinematics of a particle moving in a straight line or plane; centres of mass; work and energy; collisions; statics of rigid bodies.
- the Binomial and Poisson distributions; continuous random variables; continuous distributions; samples; hypothesis tests.
- Algorithms; algorithms on graphs; the route inspection problem; critical path analysis; linear programming; matchings.

ACCOUNTING, MEDICINE, ENGINEERING, FORE
CONSULTANCY, TEACHING, IT, GAMES DEVELOP
PROGRAMMING, CIVIL SERVICE, DESIGN, CONS

Assessment

Exam board: EDEXCEL

Year 12	Year 13
EXTERNAL= 50%	EXTERNAL = 50%
For IAS Mathematics students need to take exams in Further Pure Mathematics 1 and two applied modules. All exams are 1.5 hours in length and consist of 75 marks. All exams are weighted at 33.3% for the IAS. For the full A-Level these weightings change to 16.7%.	For IAL Mathematics students need to take exams in Further Pure Mathematics 2 and two applied modules. All exams are 1.5 hours in length and consist of 75 marks. All exams are weighted at 16.7% for the IAL.

RENSIC PATHOLOGY, FINANCE, BUSINESS,
OPMENT, SCIENTIFIC RESEARCH,
STRUCTION, ASTROPHYSICS...

GEOGRAPHY

Aims

Cambridge International AS and A Level Geography is accepted by universities and employers as proof of knowledge and understanding of Geography. Successful candidates gain lifelong skills, including:

- an appreciation of the need for understanding, respect and co-operation in conserving the environment and improving the quality of life both at a global scale and within the context of different cultural settings.
- an awareness of the usefulness of geographical analysis to understand and solve contemporary human and environmental problems.
- a sense of relative location, including an appreciation of the complexity and variety of natural and human environments.
- an understanding of the principal processes operating within Physical and Human Geography.
- an understanding of the causes and effects of change on the natural and human environments.
- an awareness of the nature, value, limitations and importance of different approaches to analysis and explanation in geography.
- a concern for accuracy and objectivity in collecting, recording, processing, analysing, interpreting and reporting data in a spatial context.
- the ability to handle and evaluate different types and sources of information.
- the skills to think logically, and to present an ordered and coherent argument in a variety of ways.

Syllabus Content

AS Level -The Physical Core

- Hydrology and fluvial geomorphology
- Atmosphere and weather
- Rocks and weathering

AS Level - The Human Core

- Population
- Migration
- Settlement dynamics

A2 Level - Physical Geography Options

- Coastal environments
- Hazardous environments

A2 Level - Advanced Human Geography Options

- Global interdependence
- Environmental Management.

LOCAL GOVERNMENT, ARMED FORCES, POLICE
CONSULTANCIES, ENVIRONMENTAL PROTECT
CHARITIES...

Assessment

Exam board: EDEXCEL

Component	AS Level	A-Level
Paper 1 Core Physical Geography 1 Hour 30 minutes Section A: Three data response questions (30 Marks) Section B: One structured question from a choice of three (30 Marks) Total: 60 Marks	50%	50%
Paper 2 Core Human Geography 1 Hour 30 minutes Section A: Three data response questions (30 Marks) Section B: One structured question from a choice of three (30 Marks) Total: 60 Marks	50%	25%
Paper 3 Advanced Physical Geography Options 1 Hour 30 minutes Candidates answer questions on two of the optional topics. Each topic consists of one structured question (10 marks) and a choice of essay questions (20 marks) Total: 60 Marks		25%
Paper 4 Advanced Human Geography Options 1 Hour 30 minutes Candidates answer questions on two of the optional topics. Each topic consists of one structured question (10 marks) and a choice of essay questions (20 marks) Total: 60 Marks		25%

CE SERVICE, ENVIRONMENTAL
 TION AGENCIES, UTILITY COMPANIES,

HISTORY

Aims

The syllabus aims to develop:

- an interest in the past and an appreciation of human endeavour.
- a greater knowledge and understanding of historical periods or themes.
- a greater awareness of historical concepts such as cause and effect, similarity and difference, and change and continuity.
- an appreciation of the nature and diversity of historical sources available, and the methods used by historians.
- an exploration of a variety of approaches to different aspects of history and different interpretations of particular historical issues.
- the ability to think independently and make informed judgements on issues.
- an empathy with people living in different places and at different times.
- a firm foundation for further study of History.

Syllabus Content

- Component 1 - The Search for International Peace and Security, 1919–1945
- Component 2 - International Relations, 1871–1945
- Component 3 - The Holocaust
- Component 4 - Europe of the Dictators, 1918–1941

HERITAGE MANAGER, HISTORIC BUILDINGS INS
EDUCATION OFFICER, MUSEUM/GALLERY CUR
OFFICER, SECONDARY SCHOOL TEACHER, ACA
ARCHIVIST, BROADCAST JOURNALIST, CIVIL SE

Assessment

Exam board: Cambridge International Examinations (CIE)

Year 12	Year 13
EXTERNAL = 20% A2, 40% AS	EXTERNAL = 20% A2
<p>Paper 1 1 hour</p> <p>2 questions based around source documents.</p> <p>Question 1 – focus on comparing and contrasting sources.</p> <p>Question 2 – evaluate all sources in the context of a statement included on the paper.</p>	<p>Paper 3 1 hour</p> <p>1 question focused on Historiography.</p> <p>Students are provided with an extract. They must use the extract, combined with own knowledge, to answer a question based on Historical interpretations of the Holocaust.</p>
EXTERNAL = 30% A2, 60% AS	EXTERNAL = 30% A2
<p>Paper 2 1 hour and 30 minutes</p> <p>2 questions based around comprehension.</p> <p>Question 1 – causation question.</p> <p>Question 2 – evaluation question.</p>	<p>Paper 4 1 hour and 30 minutes</p> <p>2 30 mark questions.</p> <p>All questions are based around causation.</p>

INSPECTOR/CONSERVATION OFFICER, MUSEUM
 RATOR, MUSEUM/GALLERY EXHIBITIONS
 ADEMIC LIBRARIAN, ARCHAEOLOGIST,
 SERVICE ADMINISTRATOR, SOLICITOR...

MATHEMATICS

Aims

To:

- develop their understanding of mathematics and mathematical processes in a way that promotes confidence and fosters enjoyment.
- develop abilities to reason logically and recognise incorrect reasoning, to generalise and to construct mathematical proofs.
- extend their range of mathematical skills and techniques and use them in more difficult, unstructured problems.
- develop an understanding of coherence and progression in mathematics and of how different areas of mathematics can be connected.
- recognise how a situation may be represented mathematically and understand the relationship between 'real-world' problems and mathematical models and how these can be refined and improved.
- use mathematics as an effective means of communication.
- read and comprehend mathematical arguments and articles concerning applications of mathematics.
- acquire the skills needed to use technology such as calculators and computers effectively, recognise when such use may be inappropriate and be aware of limitations.
- develop an awareness of the relevance of mathematics to other fields of study, to the world of work and to society in general.
- take increasing responsibility for their own learning and the evaluation of their own mathematical development.

Syllabus Content

Students need to develop knowledge, understanding and the capability to evaluate:

- algebra and functions; coordinate geometry in the (x, y) plane; sequences and series; exponentials and logarithms; trigonometry; differentiation; integration; numerical methods; vectors.
- mathematical models in mechanics; vectors in mechanics; kinematics of a particle moving in a straight line; dynamics of a particle moving in a straight line or plane; statics of a particle; moments.
- mathematical models in probability and statistics; representation and summary of data; probability; correlation and regression; discrete random variables; discrete distributions; the normal distribution.

ACCOUNTING, MEDICINE, ENGINEERING, FORE
CONSULTANCY, TEACHING, IT, GAMES DEVELOP
PROGRAMMING, CIVIL SERVICE, DESIGN, CONS

Assessment

Exam board: EDEXCEL

Year 12	Year 13
EXTERNAL= 50%	EXTERNAL = 50%
For IAS Mathematics students need to take an exam in Core Mathematics and an applied module (Usually Mechanics 1 or Statistics 1). The Core Mathematics paper is 2.5 hours in length and consists of 125 marks. The applied exams are all 1.5 hours in length and consist of 75 marks. The Core Mathematics exam is weighted at 66.6% and the applied exam is 33.3% for the IAS. For the full A-Level these change to 33.3% and 16.7% respectively.	For IAL Mathematics students need to take an exam in Core Mathematics and an applied module (Usually Mechanics 1 or Statistics 1). The Core Mathematics paper is 2.5 hours in length and consists of 125 marks. The applied exams are all 1.5 hours in length and consist of 75 marks. The Core Mathematics exam is weighted at 33.3% and the applied exam is 16.7% for the IAL.

RENSIC PATHOLOGY, FINANCE, BUSINESS,
OPMENT, SCIENTIFIC RESEARCH,
STRUCTION, ASTROPHYSICS...

MODERN FOREIGN LANGUAGES

Aims

To develop:

- and enhance linguistic skills to broaden the capacity for critical thinking with regard to the language, culture and society where the language is spoken.
- control of the language in order to convey meaning, using spoken and written skills, for both practical and intellectual purposes.
- language learning skills and strategies to sustain communication and build fluency and confidence.
- the ability to engage critically with texts, films and other materials in the original language.

Syllabus Content

Students need to develop knowledge, understanding and the capability to evaluate the following topics for countries where the language is spoken:

- The Evolution of Family Structure
- The Political and Artistic Culture of the country
- Immigration and Multiculturalism
- Historical Issues in the country
- Students will also be required to read novels and study cinema in the language. Written questions will be based on this research

DIPLOMACY AND INTERNATIONAL RELATIONS,
INTERNATIONAL MARKETING AND SALES, EDUCATION,
TRAVEL & TOURISM, JOURNALISM, TRANSLATION,
ANY MULTI-NATIONAL INDUSTRY...

Assessment

Exam board: EDEXCEL International A-Level (IAL)

Year 12 (IAS)	Year 13 (IA2)
EXTERNAL = 50%	EXTERNAL = 50%
<p>Paper 1 : Spoken Expression & Response</p> <p>10 minutes (31%) This paper contains set question responses and a discussion on a pre-chosen topic.</p> <p>Paper 2: Understanding and Written Response</p> <p>2 hours 30 minutes (69%) This paper contains listening and reading activities focussed on authentic sources as well as a written composition in Spanish.</p>	<p>Paper 1 : Understanding & Spoken Response</p> <p>11-15 minutes (31%) The student is required to defend a stance on a pre-chosen topic and enter a spontaneous discussion on a range of additional topics.</p> <p>Paper 2: Researching, Understanding and Written Response</p> <p>2 hours 30 minutes (69%) This paper contains listening and reading activities focussed on authentic sources as well as a written composition based on a text or film studied during the course.</p>

S, ACCOUNTANCY & LAW,
EDUCATION, HOTELS AND HOSPITALITY,
TRAVELLING & INTERPRETING,

MUSIC

Aims

A-level Music is a linear qualification. This means that all examinations must be sat (and non-examination assessment submitted) at the end of the two-year course.

This course aims to:

- actively engage in the process of music study.
- develop performing skills to demonstrate an understanding of musical elements, style, sense of continuity, interpretation and expression.
- develop composing skills to demonstrate the manipulation of musical ideas and the use of musical devices and conventions
- broaden musical experience and interests, develop imagination and foster creativity.
- develop broader life skills and attributes, including critical and creative thinking, aesthetic sensitivity, emotional awareness, cultural understanding, self-discipline, self-confidence and self-motivation.
- personal attributes including self-confidence, resilience, perseverance, self-discipline and commitment.

Syllabus Content

Students will work on three main areas of content: Performance, composition and appraising.

Performing:

- make use of musical elements, techniques and resources to interpret and communicate musical ideas with technical and expressive control and an understanding of style and context. This must be achieved by one or more of the following means: playing or singing solo or in ensemble, improvising, or realising music using music technology.
- perform music with control and continuity, using appropriate tempi, showing critical understanding of the music chosen.
- perform fluently, showing critical understanding of the overall shape, direction and style of the music chosen.

Composing:

- make use of musical elements, techniques and resources to create and develop musical ideas with technical control and expressive understanding, either freely as the composer chooses, or by responding to a brief or commission supplied by others.
- compose music that develops musical ideas and shows understanding of musical devices and conventions in relation to the chosen genre, style and tradition.
- compose music that is musically convincing and shows a sophisticated use of musical elements in combination.
- compose music that makes creative use of musical ideas and shows understanding of musical devices and conventions in relation to the chosen genre, style and tradition.

Appraising:

- Students develop their listening and appraising skills through the study of music across a variety of styles and genres. Students will engage critically with music and develop an understanding of the place of music in different cultures and contexts. The skills of musical analysis and evaluation of music in aural and written form are core to this component. These skills will be developed through attentive listening coupled with acute aural perception skills. Analysis of the key musical elements will lead to an understanding of genres, styles and traditions, students will demonstrate specialist musical vocabulary and notation skills.

Assessment

Exam board: EDEXCEL

Year 13
Component 1: Performing NON-EXAMINED ASSESSMENT: EXTERNALLY ASSESSED - 30% OF THE QUALIFICATION
A public performance of one or more pieces, performed as a recital. <ul style="list-style-type: none">• Performance can be playing or singing solo, in an ensemble, improvising, or realising music using music technology.• The total performance time across all pieces must be a minimum of 8 minutes.• Performances must be recorded after 1 March in the year of certification.
Component 2: Composing NON-EXAMINED ASSESSMENT: EXTERNALLY ASSESSED - 30% OF THE QUALIFICATION
<ul style="list-style-type: none">• Total of two compositions, one to a brief set by Pearson and one either free composition or also to a brief.• One composition must be from either a list of briefs related to the areas of study, or a free composition. This composition must be at least 4 minutes in duration.• One composition must be from a list of briefs assessing compositional technique. This composition must be at least 1 minute in duration, unless the brief specifies a longer minimum duration.• Total time across both submissions must be a minimum of 6 minutes.
Component 3: Appraising WRITTEN EXAMINATION: 2 HOURS EXTERNALLY ASSESSED - 40% OF THE QUALIFICATION
<ul style="list-style-type: none">• One written paper of 2 hours, with a total of 100 marks.• One audio CD with the extracts to accompany questions on the paper will be provided per student.• This paper comprises two sections: A and B. Section A: Areas of study and dictation• Three questions related to the set works (audio and skeleton score provided).• One short melody/rhythm completion exercise. Section B: Extended response• Two essay questions – essay one and essay two• Essay one asks students to draw links from their study of the set works to the music heard as an unfamiliar extract.• Essay two gives a choice of three questions that ask students to evaluate the musical elements, context and language of one set work. Each option will be from a different area of study.

ARTS ADMINISTRATION, AUDIO ENGINEER,
ACCOUNTANT, CHAMBER MUSICIAN,
COMPOSER, CONDUCTOR...

PHYSICAL EDUCATION

Aims

To:

- develop theoretical knowledge and understanding of the factors that underpin physical activity and sport and use this knowledge to improve performance .
- understand how physiological and psychological states affect performance.
- understand how the key socio-cultural factors that influence people's involvement in physical activity and sport.
- understand the role of technology in physical activity and sport.
- develop the ability to perform effectively in physical activity and sport by developing skills and techniques.
- develop the ability to analyse and evaluate to improve performance.
- develop understanding of the contribution which physical activity makes to health and fitness.

Syllabus Content

Component 1 Scientific Principles of Physical Education

- The anatomical/structural and physiological/functional roles performed in the identified systems of the body.
- Stress of exercise on the systems and the way that the effect is measured.
- The principles of Newton's Three Laws of Motion – force, centre of mass and stability.
- The importance of diet and nutrition pre-, during and post-physical activity.
- Energy systems and how to train, maintain and improve their performance.
- An understanding of fitness components, methods of training and physiological adaptations.
- Prevention and rehabilitation from injury.
- Development of skills in sport.

SPORTS SCIENCE, PHYSIOTHERAPY, SPORTS M
SPORTS MARKETING, BIOCHEMIST, SPORTS JC
TEACHER TRAINING...

Syllabus Content

Component 2 Psychological and Social Principles of Physical Education

- Learning theories and how they relate to skill development and the role of memory systems in the acquisition of skill.
- Practices, feedback and guidance to practical performance situations.
- Use of quantitative data in skill acquisition and be able to produce and evaluate the meaning of such data.
- Sports psychology and optimal sporting performance of an individual athlete, sports teams and individuals in the teams.
- Psychological view points, theories and perspectives.
- Relationship between sport and society, parallels between societal changes and sport.
- The development of society as increasingly commercial and political and how these phenomena were reflected in sport.
- Ethics, pressures on performers to cheat and factors that influence deviance and the response of national and international organisations.
- The relationship between media and sport and the role of social media.

Assessment

Exam board: EDEXCEL

Assessed at the end of A2
External 40%
Component 1 Scientific Principles of Physical Education Written examination: 2 hours and 30 minutes 140 marks
External = 30%
Component 2 Psychological and Social Principles of Physical Education Written examination: 2 hours 100 marks
Internal: 15%
Component 3 Practical Performance 40 Marks
Internal = 15%
Component 4 Performance Analysis and Performance Development Programme 40 Marks

MANAGEMENT, SPORTS DEVELOPMENT,
JOURNALISM, SPORTS COACHING,

PHYSICS

Aims

To develop:

- an enjoyment of, and interest in, physics and its applications.
- an understanding of the link between theory and experiment and foster the development of skills in the design and execution of experiments.
- essential knowledge and understanding in physics and, where appropriate, the applications of physics with an appreciation of their significance and the skills needed for the use of these in new and changing situations including How Science Works.
- demonstrate the importance of physics as a human endeavour that interacts with social, philosophical, economic and industrial matters.
- prepare for higher educational courses in physics and related courses.

Students are required to:

- recognise, recall and show understanding of scientific knowledge
- select, organise and communicate relevant information in a variety of forms.
- analyse and evaluate scientific knowledge and processes.
- apply scientific knowledge and processes to unfamiliar situations.
- assess the validity, reliability and credibility of scientific information.
- demonstrate and describe ethical, safe and skilful practical techniques and processes, selecting appropriate qualitative and quantitative methods.
- make, record and communicate reliable and valid observations and measurements with appropriate precision and accuracy.
- analyse, interpret, explain and evaluate the methodology, results and impact of their own and others' experimental and investigative activities in a variety of ways.

Syllabus Content

The Key Concepts taught are: mechanics, materials, waves, electricity, quantum mechanics, electric and magnetic fields, particle physics, Thermal Physics, atomic physics, oscillations, astrophysics and cosmology.

MEDICINE, ENGINEERING, FINANCE, RESEARCH

Assessment

Exam board: EDEXCEL

Year 12	Year 13
EXTERNALLY ASSESSED = 50%	EXTERNALLY ASSESSED = 50%
<p>Paper 1 - 20% 1 hour 30 minutes</p> <p>This unit involves the study of mechanics (rectilinear motion, forces, energy and power) and materials (flow of liquids, viscosity, Stokes' Law, properties of materials, Young's modulus and elastic strain energy). This unit is assessed by means of a written examination paper which will consist of objective, short-answer and long-answer questions.</p>	<p>Paper 2 - 20% 1 hour 35 minutes</p> <p>This unit involves the study of further mechanics (momentum and circular motion), electric and magnetic fields, and particle physics. This unit is assessed by means of a written examination paper which will consist of objective, short-answer and long-answer questions.</p>
<p>Paper 2 - 20% 1 hour 30 minutes</p> <p>This unit involves the study of waves (including refraction, polarisation, diffraction and standing (stationary) waves), electricity (current and resistance, Ohm's law and non-ohmic materials, potential dividers, emf and internal resistance of cells, and negative temperature coefficient thermistors) and the wave/particle nature of light. This unit is assessed by means of a written examination paper which will consist of objective, short-answer and long-answer questions.</p>	<p>Paper 5 - 20% 1 hour 35 minutes</p> <p>This unit involves the study of thermal energy, nuclear decay, oscillations, astrophysics and cosmology. This unit is assessed by means of a written examination paper which will consist of objective, short-answer and long-answer questions.</p>
<p>Paper 3 - 10% 1 hour 20 minutes</p> <p>Students are expected to develop experimental skills, and a knowledge and understanding of experimental techniques, by carrying out a range of practical experiments and investigations while they study Units 1 and 2. This unit is assessed by means of a written examination paper which will consist of objective, short-answer and long-answer questions.</p>	<p>Paper 6 - 10% 1 hour 20 minutes</p> <p>Students are expected to further develop the experimental skills and the knowledge and understanding of experimental techniques that they acquired in Units 1 and 2 by carrying out a range of practical experiments and investigations while they study Units 4 and 5. This unit is assessed by means of a written examination paper which will consist of objective, short-answer and long-answer questions.</p>

CH, CONSULTANT, LAW, FORENSICS, DESIGNER...

PSYCHOLOGY

Aims

To develop:

- essential knowledge and understanding of different areas of psychology and how they relate to each other.
- a deep appreciation of the skills, knowledge and understanding of scientific methods.
- competence and confidence in a variety of practical, mathematical and problem-solving skills.
- their interest in and enthusiasm for psychology, including developing an interest in further study and careers associated with the subject.
- an appreciation of how society makes decisions about scientific issues and how the sciences contribute to the success of the economy and society.

Syllabus Content

Students need to develop knowledge, understanding and the capability to evaluate:

- content in the area of focus, involving theories and studies
- methodology, to see how psychology works
- studies – one classic and one contemporary
- a key question in the area of focus
- a practical investigation to carry out in the area of focus
- issues and debates.

Areas of focus are divided into 'foundations of psychology' (social, cognitive, biological psychology and learning theories) and 'applications of psychology' (clinical and either child or criminological psychology).

MEDICINE, EDUCATION, SCIENCE, COUNSELING

Assessment

Exam board: EDEXCEL

AS Level* (Year 12)	A level (Year 12 & 13)
EXTERNALLY ASSESSED = 100%	EXTERNALLY ASSESSED = 100%
<p>Paper 1 70 marks, 1.5 hour exam. Covers social and cognitive psychology and is worth 50% of the AS level.</p>	<p>Paper 1 90 marks, 2 hour exam. Covers the four foundations of psychology: social, cognitive biological psychologies and learning theories. It is worth 35% of the A level.</p>
<p>Paper 2 70 marks, 1.5 hour exam. Covers biological psychology and learning theories; it is worth 50% of the AS level.</p>	<p>Paper 2 90 marks, 2 hour exam. Covers two application – clinical psychology and either criminological or child psychology. It is worth 35% of the A level.</p> <p>Paper 3 80 marks, 2 hour exam. Covers psychological skills – all the methodology in the course, a review of the classic studies as well as issues and debates. It is worth 30% of the A level. * All examinations to be sat at the end of Year 13 (whether AS level was taken or not).</p>
<p>*AS level to be sat at the end of Year 12 and does not count towards the A level. They are separate examinations.</p>	

NG, SPORTS PSYCHOLOGY, LAW...

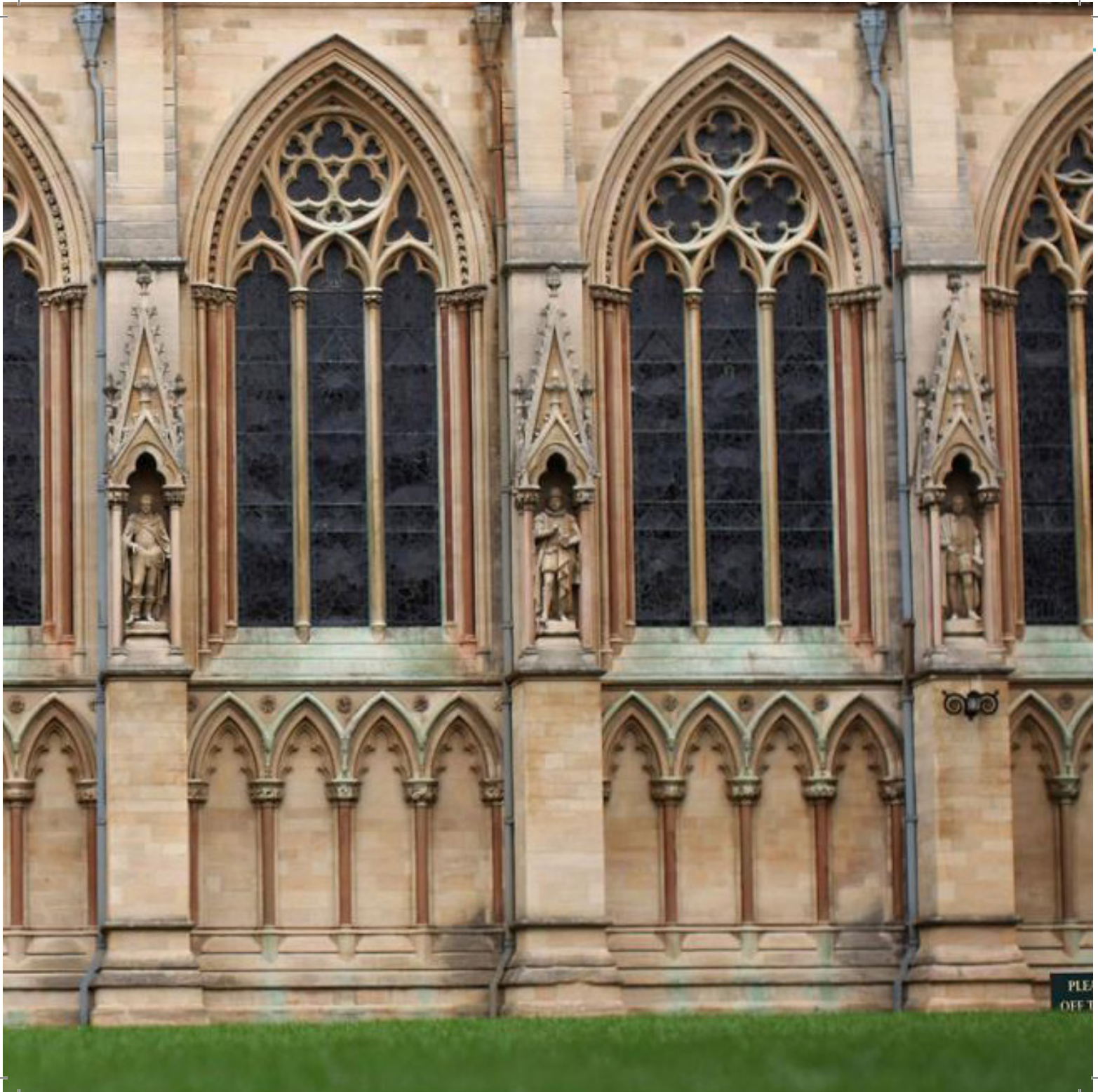
University & Careers Advice & Support

As well as maintaining this academic excellence, one key element of our upper school provision is to continue in providing all of our students and parents with the best possible careers and university applications guidance. Please find below a list of support available to all students in Years 10-13 and their parents:

1. **University Visits:** Our growing success continues to attract an ever-expanding list of top global universities who are sending representatives to BSG. Each year we attract presentations from top-10 UK universities, Ivy League Universities from North America as well as universities in Hong Kong and Australia.
2. **Summer Courses:** As the competition for places at top universities around the world increases, summer programmes (many held on university campuses) are becoming increasingly popular in providing students with invaluable experiences to help support their university applications. Each year we will arrange for speakers to come into to school to present information regarding these courses.
3. **SATs:** For those considering applications to US universities, BSG is accredited as an official SAT centre, allowing our students to sit both SAT and SAT Subject Tests.
4. **Work Experience:** This is also becoming an increasingly important way of adding value to university applications. As part of our 6th Form provision, all Year 12 students are assisted in organising a work placement lasting at least one week, however this support is also available to younger students.
5. **University Applications:** All 6th Form students will receive 1-1 support in completing their university applications and writing their personal statements. We believe this personalised service gives all of our students the best possible chance of obtaining offers at top universities around the world.
6. **1-1 Discussions:** Parents and students are always welcome to contact the Assistant Head: Curriculum or the Head of 6th Form to arrange a 1-1 appointment to discuss any individual concerns or questions regarding the IGCSE or A-Level Programmes.







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