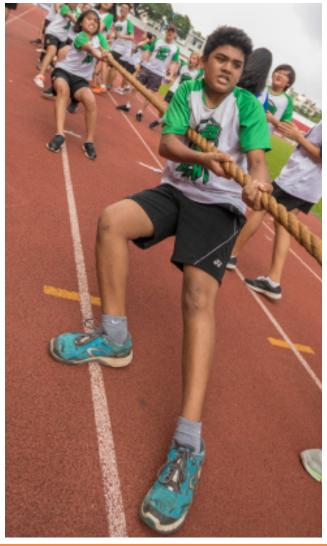


IGCSE Options

2020 - 2022







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Introduction to IGCSE

A Note to Parents

The style in which we have written this guide is to address everything directly to your son or daughter. This is an exciting time in their school career as, for the first time, they are having the opportunity to make significant decisions about what they study. This is, for most, the first of many academic decisions that will define their own distinctive path through life. Experience tells us that education works best and that students get the most from it when they are fully engaged, and we like to think that your son or daughter will make their own choices and truly embrace them. Nonetheless, the best choices come after listening to good advice, and we very much hope that you will read this guide with your son or daughter and offer him or her some of your wisdom and experience. We talk to students about the best possible curriculum choices for them, so that your son or daughter starts out on courses that he or she will greatly enjoy and be highly successful in. We understand that you'll want to be reassured about the choices your son or daughter makes, and we're very happy to talk about them at any point. If you have any questions, suggestions or concerns at any point in the process, please don't hesitate to contact us and we'll do what we can to listen and help.

Welcome to IGCSE: the gateway to your future!

IGCSEs are an internationally recognised set of qualifications based around the British education system which focuses more on content than English language. The benefit of this is that you can still obtain maximum grades even though English is not your native language. It does, however, require a certain proficiency of English.

IGCSE stands for International General Certificate of Secondary Education. It builds on the English National Curriculum work covered in Years 7 - 9 (ages 11-14) and prepares students for examinations at the end of a two year course at age 16 (Year 11). Students are perfectly prepared for the post-16 International Baccalaureate (IB) courses in the 6^{th} Form. It is worth noting that the IGCSEs are globally transferable and enable study in American Colleges or schools offering GCE A levels. It is a course which several independent schools in England offer, as many consider it a better preparation for the IB style of study.

The grades are awarded based on a variety of assessments and include, but are not limited to, conventional written papers. Assessments in nearly all subjects include the option of coursework, oral or practical work which may be assessed by the students' own teachers.

The breakdown of subjects

Certain subjects are compulsory and for many there is the option to enter a **core** or **extended** course. The maximum grade available to core students is C. Subjects available are:

Compulsory Subjects	Options Subjects	
English (First Language)	Chinese (Mandarin) Foreign Language	Drama
English (Second Language)	French (Foreign Language)	Economics
English Literature	Spanish (Foreign Language)	Geography
Vietnamese (For Vietnamese only passport holders)	Art & Design	History
Co-ordinated Science OR	Business Studies	ICT
Separate Sciences	Computer Science	Music
Mathematics	Design and Technology	PE
	Design and reclinology	Separate Sciences

Non-English Native Language Examinations

Students can also sit an IGCSE examination in their native (first) language such as Mandarin Chinese, Japanese, German, and Czech. A home tutor should normally prepare the student. Syllabus content and past examination papers will be provided by the school. Students will be informed of subject availability by letter in October 2020. We encourage students to sit these examinations in Year 10.

Important Note

Please keep this document safe, as it will continue to be a useful reference when discussing your son/daughter's learning with them at home or with us.



Options Advice and Recommendations

The following information is to help you make informed decisions about the choices you make for your IGCSE subjects in Year 10, and in planning ahead for the IBDP in Year 12.

Compulsory subjects

Everyone at BIS has to study the following subjects:

- English Language (first or second language) (decided by the Head of EAL and Academic English). For students who study the second language English Language course, additional time is allocated to support language development. This takes place during the school day when other subjects are being taught. Students are assessed as to whether they will take English as a first language or as a second language at the end of Year 9. Should a student follow the second language IGCSE, their chosen options will be reduced from 4 to 3 to provide the necessary time. Students and parents will be advised if this is the case.
- English Literature
- Mathematics
- Science
 - Either Coordinated Science (where you study all three sciences Biology, Chemistry, and Physics. This is worth 2 IGCSE qualifications);
 - Or Separate Sciences (where you study all three sciences Biology, Chemistry, and Physics at a higher level. This is worth 3 IGCSE qualifications).
- International Life Skills (ILS) a non-examined course.
- Physical Education this is non-examined course and is NOT the same as the IGCSE PE subject offered as an option)
- Vietnamese if you are a Vietnamese national (only holding a Vietnamese passport), you have to continue
 your Vietnamese studies until the end of Year 11. This is currently not an IGCSE examination subject.

Options

Students can then choose up to 4 subjects from the selection available.

Languages:

- Our language subjects are second language subjects; first language speakers of these languages cannot
 opt to do these subjects and should choose another language from those offered. For example, a native
 French speaker cannot choose second language French and should choose either Spanish or Chinese
 (Mandarin) if they have studied this prior to Year 10.
- It is highly recommended that you choose a language. It is also wise to continue with the language you have been studying in Years 7-9.

General Advice:

- Choose subjects you enjoy;
- Choose subjects you are already doing well in;
- Don't choose subjects just because your friends are doing them;
- Don't choose subjects because you like your current teacher whilst this helps, you may not have the same teacher next year:
- If you have an idea about the direction your future career might take, speak to the College and University Guidance Team before you make your final choices – they are based in the Sixth Form Office on the Mezzanine floor.

Thinking Ahead towards IB

Students at BIS will study the IB Diploma Programme in Year 12. This requires them follow a broad and balanced curriculum. To qualify for the full diploma, they must study across five areas of knowledge: Studies in Language and Literature, Language Acquisition, Individuals and Societies, Science and Mathematics. They may also study a subject from the Arts or a second elective subject from the other areas of knowledge. When students are selecting their IGCSE subject choices, they should be considering how their choices facilitate a smooth transition into their IB Diploma. If students wish to find out further information regarding the IB Diploma Programme and the subjects we offer, they should speak with Mr Lambert, the IBDP Coordinator.





Year 9 IGCSE Options Process September 2019

Options Assembly

Students have an assembly to support them in understanding and completing the IGCSE Option Process.

Further activities to focus on this are completed in form time.

IGCSE Options Information Evening: Wednesday 18th September 2019

This will provide an overview of the options process, highlighting the subjects available and how you can help your child to make the best choices. This is combined with additional information from the Deputy Head Teacher: Curriculum & Learning.

An open-floor session with Heads of Department allows students and parents to fully understand what is involved in each subject. The Options Handbook is given to all students, providing subject specific information. Student are then asked to discuss their options with their parents before submitting their first choices.

First Thoughts Forms and Option Blocks Forms

This process begins on **Monday 23rd September**; the deadline for return is **Friday 4th October**. From these first thoughts, the Option Blocks are formed. Students are then issued with a second form which shows the subjects they have chosen in the relevant blocks.

Final submission of Option Blocks Form and Option Confirmation

This form should be signed by the student and parents, and returned to form tutors by **Friday 15th November**. In **March 2020**, students are given a final confirmation of their option choices. These should not be changed again.



English

(First Language, Second Language and Literature)

Why study English Language and Literature?

The study of English and Literature is your passport to the professional and business world. English is a world language which is essential for anyone who wants to become a doctor, engineer, architect, lawyer or a business executive or indeed, gain entry to universities and colleges worldwide.

English Language

We offer the University of Cambridge IGCSE First Language, Second Language and Literature courses. Students take the course which is most suitable for them and their future ambitions, based on the advice and guidance of their English teacher and their record of work in Years 7-9.

Course Description

Both First and Second Language courses develop each student's ability to:

- write fluently in a variety of styles for different audiences and purposes;
- read and respond to a wide range of literature and non-fiction texts;
- take part effectively in oral work, including discussions, role plays and presentations;
- understand the importance of style, audience and purpose as the key to understanding texts;
- learn to summarise accurately;
- learn to compare texts and draw conclusions based on inference as well as on what is clearly stated;
- study sections of the media, including newspapers, film and advertising;
- consolidate knowledge and understanding of grammar, spelling and punctuation in order to make writing more effective:
- the second Language course also develops each student's ability to use English for study (covering areas such as: 'how to make notes', 'how to analyse exam questions', and 'how to write exam answers in History, Geography, Science, Business Studies...'.

The examinations test a student's ability to write fluently and creatively, to write for specific audiences, to summarise and to read for meaning.

For First Language English, the course is 100% examination; however, for Second Language students, 70% of their final marks comes from the reading and writing examination papers and they are also examined on their listening skills (15% of the final mark). An oral component, which tests their listening and speaking skills, makes up the final 15% of the final mark.

English Literature

Since the emergence of human consciousness we have given ourselves imaginative accounts of what it is to be human. To study literature is to engage in a dialogue with your own humanity. Literature is an essential study for all whose future careers involve dealing with people.

As well as the literature offered in First and Second Language courses, the department also offers a separate English Literature IGCSE. Literature is a compulsory component of the course for students studying both First Language English and Second Language English. This course is designed to further promote and develop students' enjoyment of reading and sharing their ideas with others during class discussions. The emphasis of the course is on personal response, backed up by solid understanding of the texts and an awareness of the use of language, structure, characterisation and other literary devices. A wide range of texts is studied, including poetry, prose and drama. Students do not need to be native speakers of English to succeed in the Literature course. In addition, you will study three different texts on which you will answer questions in a series of examinations. The Poetry & Prose and Drama examinations will make up 75% of your Literature mark. The Unseen exam will comprise the final 25% of the total mark; this examination will consist of a text that the students will not be familiar with before taking the exam.

The course will develop your ability to:

- read closely for pleasure and for meaning;
- respond personally to the texts you have read;
- select evidence, details and quotations to support your ideas;
- understand and use basic critical terms in order to explain your response to the text;
- write critical essays and write creatively in role;

increase the fluency, clarity and accuracy of your writing;

Study for both IGCSE Literature and First or Second Language can only enhance your ability to use English with accuracy and sensitivity. These courses are challenging but immensely satisfying and enjoyable. The study of English is compulsory in Years 10 – 11.



Mathematics

'Number rules the universe.' - Pythagoras

Number does indeed rule the universe. The study of Mathematics is as ancient as man himself. It has been developed in all cultures at all times in history, and is at the root of all technological developments.

Aims and Objectives

Modern society, with its emphasis on technology, demands that students should leave school equipped with a wide range of mathematical knowledge and skills. Many areas of further education, business, finance and social sciences require sophisticated mathematical skills.

The aim of the Mathematics course at Key Stage 4 is to enable students to:

- a. develop their mathematical knowledge and skills;
- b. apply mathematics in everyday situations and also to apply mathematics in other subjects, particularly science and technology;
- c. recognise a situation which may be presented mathematically, construct a mathematical model and solve the problem:
- d. develop the abilities to think logically, to classify, to generalize and to prove;
- e. acquire a mathematical foundation appropriate to their further studies;
- f. be fully prepared for the Cambridge IGCSE examination (code 0580).

Course Content

When students enter Key Stage 4 they follow one of three strands:

The Core Curriculum is for students who have a target of a 'C';

The Extended Curriculum is for students who have a target from A* to C;

The Accelerated Curriculum is for more able students. They complete the IGCSE Extended Mathematics in Year 10 followed by IGCSE Additional Mathematics in Year 11.

The curriculum topics for Core students are:

	Positive and negative integers, fractions and
Number	decimal fractions, percentages, reasonable approximations, standard form, powers of 10,
	simple and compound interest
Algebra	Formulae, algebraic manipulation, equations, inequalities, functions.
Shape and Space	Geometrical constructions, angle properties, loci, trigonometry, transformations,
Shape and Space	mensuration.
Statistics and	Statistical diagrams, averages, cumulative frequency, probability of single and combined
Probability	events.

In addition to the topics within the Core curriculum, students within the Extended programme will study the following topics:

Number	Bounds of intervals, direct and inverse
Number	proportion, percentage change.
	Simplification of algebraic fractions, algebraic manipulation, use positive, negative and
Algobro	fractional
Algebra	indices in both numerical and algebraic work, use algebraic formulae and equations, graphs
	of algebraic functions.
Chana and	Scale factors to two and three dimensions and applied to
Shape and	calculating lengths, areas and volumes between actual values and scale models,
Space	trigonometry knowledge including non-right-angled triangles, use of matrices and vectors.
Statistics and	Process data, discriminating between necessary and
Probability	redundant information, use distance/time and speed/time graphs, use of sets.

In addition to the topics within the Extended Curriculum students within the accelerated programme will study the following topics within the IGCSE Additional course:

Set language and notation	Circular measure
Functions	Trigonometry
Quadratic functions	Permutations and combinations
Indices and surds	Binomial expansions
Factors of polynomials	Vectors in 2 dimensions
Simultaneous equations	Matrices
Logarithmic and exponential functions	Differentiation and integration
Straight line graphs	_

Setting in Mathematics

It is the policy of the faculty to 'set' students by curriculum. The sets are decided on the basis of previous assessment tests, teacher recommendations and of course by a student's performance in class and with homework. Students new to the school are tested on arrival, and then placed in a set. Throughout the year the placement of students in each set is carefully monitored.

Those students who have followed the core curriculum are eligible for an award of grades C to G only. Students who have followed the extended curriculum are eligible for an award of grades A* to E only. The IGCSE Additional Mathematics are eligible for an award of grades A*-E.

Assessment

All students will take 2 written papers as follows:

Core Curriculum (Grades C – G)	Extended Curriculum (Grades A* - E)	Additional Curriculum (Grades A* - E)
Paper 1 (1 hour) Short answer questions	Paper 2 (1.5 hours) Short answer questions	Paper 1 (2 hours)
Paper 3 (2 hours) Longer structured questions	Paper 4 (2.5 hours) Longer structured questions	Paper 2 (2 hours)

Calculators

Calculators are essential for Key Stage 4. The model we currently recommend for IGCSE is the Casio fx-570VN.

Resources

All students are issued with a textbook. The textbooks will be supplemented by material from a variety of sources. Technology in the form of software and subscription websites will be frequently integrated into learning. Students will be given their own profile login to mymaths.co.uk.



Science

There are two different routes for students in Science: IGCSE Coordinated Science, a Dual Award Specification which combines all three Sciences into two IGCSEs; and Separate Sciences in Biology, Physics and Chemistry (resulting in 3 IGCSEs).

Many students in Year 10 and 11 will undertake the IGCSE Coordinated Science, Dual Award Specification. At the end of this two-year programme students will attain two IGCSEs, which are graded on the average of the three Sciences studied: Biology, Physics and Chemistry. By taking this course, students are then able to complete any of the three Science subjects as part of their IB Diploma Programme, at Standard Level or Higher Level, dependent on achieving the required grades. For nearly all students this is an excellent route and in no way limits the option of studying Sciences in the IBDP, or further education.

As an IGCSE option, students may also elect to take Separate Sciences. This consists of one IGCSE each in Biology, Chemistry and Physics. The students in this programme will study the sciences to a greater depth; consequently, this is a more challenging option. For those considering taking two sciences in the IB diploma programme this may be beneficial to them as it reduces the knowledge and skills gap between IGCSE and the Diploma Programme. However, students will need to be able to thrive when working at a greater pace and depth.

Those students interested in pursuing Separate Sciences should speak with their Science teachers for more information.



Coordinated Science: Dual Award Specification

Aims and Objectives:

The Coordinated Science syllabus is split into Physics, Chemistry and Biology sections, with the students having separate Physics, Chemistry and Biology lessons with relevant specialist teachers.

The aims and objectives are to:

- Provide insight into the Sciences through well-designed studies of experimental and practical Science. In particular, students' studies should enable them to acquire understanding and knowledge of the concepts, principles and applications of Biology, Chemistry and Physics and, where appropriate, other related Sciences so that they may:
 - Become confident citizens in a technological world, able to take or develop an informed interest in matters of scientific import;
 - Recognise the usefulness, and limitations, of scientific method and appreciate its applicability in other disciplines and in everyday life;
 - Be suitably prepared to embark upon certain post-16 Science-dependent vocational courses and studies in any of the pure Sciences and applied Sciences.
- Develop abilities and skills that:
 - Are relevant to the study and practice of Science;
 - · Are useful in everyday life;
 - Encourage safe practice;
 - Encourage effective communication;

Course Content

Biology	Chemistry	Physics
Characteristics of Living Organisms	Atoms, and the Periodic Table Bonding and compounds	Motion Matter and Forces
Cells	Metals	Energy, Work and Power
Enzymes Plant and Animal Nutrition	Stoichiometry and balancing equations	Simple Kinetic Molecular Model of Matter
Transport in Plants & Humans	Electrochemistry	Matter and Thermal Properties
Respiration & Gas Exchange Coordination & Response	Experimental Techniques Energy Changes	Transfer of Thermal Energy Waves
Reproduction	Chemical Reactions	Light
Inheritance Energy Flow In Ecosystems	Acids, Bases and Salts Air and Water,	Electromagnetic Spectrum Sound
Human Influences on	Sulphur	Magnetism
Ecosystems	Carbonates Organic Chemistry	Electricity Electric Circuits
		Electromagnetic Effects
		Radioactivity

Assessment

For each of the Science areas, (Physics, Chemistry and Biology) all students will be continually assessed to help track their progress against their personal targets and to enable students to reflect upon their learning. Progress will be checked by assessing many aspects of the students' work, including: classwork, homework, end of unit tests, summative assessments such as mid-year examinations, and end of Year examinations. Effort grades will be determined by the student's effort both in lessons and homework.



Separate Sciences

Aims and Objectives

The Separate Sciences syllabi are split into Physics, Chemistry and Biology IGCSEs, with the students having separate lessons for each subject. The depth and breadth of study in each subject area is greater than for the Coordinated Science programme.

The aims and objectives, in addition to those of Coordinated Science Dual Award, are to:

- Develop a broader understanding of Physics, Chemistry and Biology through providing a more challenging course content and more opportunities for exploration of scientific ideas;
- Challenge and stimulate high achieving Science students who have a passion for Science.

Course Content

Biology	Chemistry	Physics
Characteristics of Living	Particulate nature of matter	Length and Time
Organisms	Atoms, Elements, Compounds	Motion
Classification and diversity of	The Periodic Table	Mass and Weight
living organisms	Metals	Density
Simple Keys	Electricity and Chemistry	Forces
Cell structure and organisation	Stoichiometry	Momentum
Levels of organisation	Energy Changes in a reaction	Energy, Work and Power
Size of specimens	Experimental Techniques & ion	Pressure
Movement in and out of cells	tests	Kinetic Molecular Model
Enzymes	Chemical reactions – rates,	Thermal Properties and
Nutrition	reversible, redox	Temperature
Transportation	Acids, Bases, Salts	Thermal Processes
Respiration	Air and Water	General Wave Properties
Excretion	Sulphur	Light
Co-ordination and response	Carbonates	Electromagnetic Spectrum
Reproduction	Organic Chemistry	Sound
Growth and development		Magnetism
Inheritance		Electrical Quantities
Energy flow		Electric Circuits
Food chains and food webs		Digital Electronics
Nutrient Cycles		Dangers of Electricity
Population Size		Electromagnetic Effects
Human Influence on the		The Nuclear Atom
ecosystem		Radioactivity

Assessment

Within each of the Science subjects (Physics, Chemistry and Biology), all students will be continually assessed to help track their progress against their personal targets and to enable students to reflect upon their learning. Progress will be checked by assessing many aspects of the students' work, including: classwork, homework, end of unit tests, summative assessments such as mid-year examinations, and end of Year examinations.



Art & Design

Universities, art colleges and employers accept Cambridge IGCSE Art and Design as evidence of experiences and skills in developing and producing a range of artefacts and designs, showing visual knowledge and understanding along with critical and cultural awareness.

Art and Design complements literary, mathematical, scientific and factual subjects. It is especially concerned with the development of visual perception and aesthetics. The subject encourages visual communication and is a means of expressing ideas and feelings.

Aims and Objectives

The aims of an IGCSE in Art and Design are to encourage and develop:

- An interest in, and a critical awareness of, environments and cultures;
- An ability to identify and solve problems in a visual and tactile form;
- Confidence, enthusiasm and a sense of achievement;
- The technical competence and manipulative skills necessary to form, compose and communicate in two and three dimensions;
- An ability to record from direct observation and personal experience;
- Knowledge of a working vocabulary relevant to the subject;
- Experimentation and innovation through the inventive use of materials and techniques;
- The ability to organize and relate abstract ideas to practical outcomes;
- Intuitive and imaginative responses showing critical and analytical faculties.

Assessment

The assessment objectives for IGCSE inform our ARE's for KS3 therefore there should be some familiarity with the students.

Assessment Objectives

AO1: Record ideas, observations and insights relevant to intentions as work progresses

AO2: Explore and select appropriate resources, media, materials, techniques and processes

AO3: Develop ideas through investigation, demonstrating critical understanding

AO4: Present a personal and coherent response that realises intentions and demonstrates an understanding of visual language

Course Content

Throughout Year 10, students are encouraged to work with as diverse a range of media as possible. There is a strong focus on developing drawing skills from direct observation and working on a variety of different surfaces. They will be experimenting with a range of different drawing, painting and printmaking techniques. They will also be given the option to work with ceramics, printing, painting, sculpture, collage, and mixed media alongside learning critical, contextual and analytical skills. In Year 11, they will be working more independently choosing their theme from a range of selected starting points.

The course is assessed through two components. Coursework and The Controlled Test. Each of these components is worth 50% of the total marks awarded.

Coursework

Students will learn to work thematically and conceptually, using a wide variety of materials and technical skills.

- One coursework project can be submitted with supporting preparatory work which consists of up to eight A2 panels of investigation and observational studies, plus multiple final outcomes which are linked thematically.
- Coursework is worth 50% of the final grade.
- All Coursework is externally assessed.

Controlled Test

Candidates have 8 weeks to investigate and develop ideas and images based on their choice of theme from the paper 1. They are encouraged to interpret the theme in any way they wish. Examples of themes may be 'Compression', 'Pathways', 'Merging Forms'.

- Students are given the examination question paper 8 weeks before the examinations and must use that time to prepare.
- Students are expected to submit preparatory work which consists of up to four A2 panels of investigation and observational studies.
- The examination is **8 hours** and runs over **2 school days** with normal morning breaks and lunch.
- Students may produce 2D or 3D work with no limit on scale.
- The exam is worth **50%** of the final grade.
- All examination work and preparation is externally assessed by Cambridge International Examinations.

Students will work independently with teacher support as needed.



Business Studies

Why study Business Studies?

The Business Studies course involves applying business management theory to real world business scenarios. Students are given basic data about a situation or problem and are expected to respond in the same way as a manager would in a business. Students should have a strong interest in business studies and want to learn about business organisation, operation, planning and decision making.

Course Description

Below is a selection of the areas studied and what is covered:

Understanding Business Activity: Introduces students to the different types of businesses and their objectives.

People in Business: Looks at people in organisations with a focus on their roles, relationships and management in business.

Financial Information and Decisions: Focuses on the use of accounting and financial information as an aid to decision-making.

Marketing: Looks at identifying and satisfying customer needs in a changing and competitive environment. **Operations Management:** Considers the way organisations use and manage resources to produce goods and services.

External Influences on Business Activity: Examines how the external environment such as government and environmental issues influence a business.

At the end of the two-year course, two exams will be undertaken. Each exam is worth 50% of the total mark and is of 1 hour 30 minutes duration.

What kind of student is this course suitable for?

This course will appeal to those students who:

- Have an interest in how a business operates
- Enjoy studying a subject that is relevant to their own lives and experiences
- Would like to do a subject that offers opportunities for a career in business
- Would like to learn how to make business decisions and solve business problems
- Want to keep their options open Business Studies can be a useful choice for a wide range of careers and can be combined with a wide range of subjects.



Computer Science

Why study Computer Science?

Learners following the Computer Science syllabus develop their understanding of the main principles of problem solving using computers. They can apply their understanding to develop computer-based solutions to problems using algorithms and a high-level programming language. Learners also develop a range of technical skills, as well as being able to effectively test and evaluate computing solutions. Studying Computer Science will help learners appreciate current and emerging computing technologies, the benefits of their use and recognise their potential risks. During the course, students will be encouraged to develop computational thinking; that is, thinking about what can be computed and how, and includes consideration of the data required.

Course Content

Section 1: Theory of Computer Science

- Data representation
 - Binary systems
 - Hexadecimal
 - Data storage
- Communication and Internet technologies
 - · Serial and parallel data transmission
 - · Security aspects
 - Internet principles of operation
- Hardware and software
 - Logic gates
 - Computer architecture and the fetch execute cycle
 - Input devices
 - · Output devices
 - · Memory, storage devices and media
 - Operating systems
 - High- and low-level languages and their translators
- > Security
- Ethics

Section 2 - Practical Problem-solving and Programming

- Algorithm design and problem-solving
 - Problem-solving and design
 - Pseudocode
- > Programming
 - Programming concepts
 - Data structures; arrays
- Databases

Assessment

The assessment is by written papers, but the learning should be done in a mainly practical way: problem solving and programming. Questions will require the candidate to think, use knowledge with understanding and demonstrate understanding gained through practising practical skills. Questions will not revolve around pure recall.

Paper 1: Theory - 1 hour 45 minutes (60%)

This written paper contains short-answer and structured questions. There is no choice of questions. No calculators are permitted in this paper. (75 marks.)

Paper 2: Problem-solving and Programming - 1 hour 45 minutes (40%)

This written paper contains short-answer and structured questions. There is no choice of questions. 20 of the marks for this paper are from questions set on the pre-release material. No calculators are permitted in this paper. (50 marks.)

Administrative Information

To ensure students undertake a broad and balanced range of subjects at IGCSE level, students should not select both Computer Science and ICT.



Design and Technology

Why study Design and Technology?

Design and Technology allows students to develop their ability to solve real life design problems creatively with the innovation of products, systems and environments, leading to solutions that will enhance and improve the lives of others. Design and Technology covers a wide range of skills and disciplines including Engineering, Product Design, Graphic Design, Interior Design, Illustration, Architecture, Marketing, etc. The study of Design and Technology encourages students to use skills and knowledge learnt in complimentary subjects which include Science, Mathematics, Art, Business Studies/Economics and Geography. Design and Technology supports their understanding of the world around them, and how they can make a positive impact through innovative design.

Course Description

Students use high order thinking skills and through analysis, synthesis and evaluation, they learn to investigate opportunities for design and development. Throughout the course students develop their design capability through detailed research, drawing and modelling. They learn how to manufacture products with skill and accuracy using a wide range of techniques including Computer Aided Design and Computer Aided Manufacture (CAD/CAM).

Students learn how different manufacturing techniques are used in industrial situations including printing techniques, plastic forming and automation. They consider the social, moral and environmental issues associated with design and technological activity and consider how to minimize its negative impact.

They learn to use a range of different drawing techniques that include geometry, orthographic and isometric projection, perspective, annotated freehand sketching and colour rendering. They use industry standard software including Adobe Photoshop and Illustrator.

Students are given the opportunity to demonstrate their skills in a self-directed coursework project. With teacher guidance they choose their own area of study and develop a design brief that encourages creativity, innovation and the solution of a real life design problem. They learn to overcome technical problems in the pursuit of design excellence.

The assessment for Design and Technology also includes two examinations. Paper 1, Product Design, tests the students design capability and understanding of materials and processes. Paper 2, Graphic Products, focuses on technical drawing and knowledge industrial processes.

Paper	Description	Weighting
Coursework - approx 45 hours	Design and Make Project	50%
Paper 1 – 1 hour 15 minutes	Product Design	25%
Paper 2 – 1 hour	Graphic Products	25%



Drama

Why study Drama?

Drama at IGCSE builds on the skills and experiences of KS3 Drama and is accessible to all. Studying Drama will develop your communication as well as acting skills; it will make you more aware of body language and vocal tones. Studying Drama is not just about becoming a star actor; it is about developing the way that you present yourself to an audience and understanding how theatre and presentation can have a huge impact on an audience (although we will try and make you stars too).

Course Description

The IGCSE Drama course aims to develop students' knowledge of theatrical techniques and styles, whilst also developing their physical and vocal skills. It provides students with the tools to reflect on and evaluate both their own work and that of others allowing them to develop their understanding and proficiency further.

Assessment

The IGCSE Drama course is assessed in two components:

Component 1 Written examination (40%)

This is a 2 hour and 30 minute exam at the end of the course. Questions will be based on the pre-released material that the students will have been studying since the preceding December. This material comprises of an extract from a repertoire script and a stimulus from which to create a devised piece of theatre.

In the exam, students will answer both short and long questions on these materials focusing on areas such as characterisation, design, use of props, and delivery.

Component 2 Performing (60%)

Students will prepare three practical performances during the course; two of these will be created in groups of between 2 and 6 people, and the third will be a monologue from a published play. Students are marked not only on their performance skills but also in their understanding of the characters and scenes that they are portraying, as well as their use of technique in both performance and rehearsal.

Entry Requirements

There are no formal entry requirements to take IGCSE Drama at BIS.

We would encourage involvement in at least one of our extensive co-curricular activities in order to allow scope for further development outside of the classroom environment.



Economics

Why study Economics?

The Economics course is designed to develop an understanding of economic principles in relation to the world in which we live. Economics provides students with an analytical challenge since it seeks answers to difficult questions. Examples include:

- What can we do about poverty?
- What is the best way to allocate resources in society?
- Should governments tax businesses that pollute?
- Is the free market the best way to produce goods and services?

The subject will help students to participate more fully in decision-making processes, as consumers and producers and as citizens of the local, national and international community. Students will also develop an understanding of the economies of developed and developing nations, and of the relationships between them.

Course Description

Below is a selection of the areas studied and what is covered:

- 1. The basic economic problem
- 2. The allocation of resources
- 3. Microeconomic decision makers
- 4. Government and the macro economy
- 5. Economic development
- 6. International trade and globalisation

Assessment

At the end of the two year course, students will be required to take two external examination papers:

Paper	Description	Weighting
Paper 1 (45 mins)	30 multiple choice questions	30 marks
Paper 2 (2 hours 15 mins)	Structured questions	90 marks

What kind of student is this course suitable for?

Students who have an interest in why and how economies exist and how they can be managed and developed.

Those students who have an interest in economic numeracy and literacy, and have the ability to handle simple data including graphs and diagrams.



Geography

"Simply put, Geography is our future. When we look at any issue with the balance and scrutiny that geographical study offers, we move beyond the media hype or political spin. Geography allows us to see the world more clearly." Tom Biebrach

Why study Geography?

IGCSE Geography involves the study of both natural and human environments and the interactions between them. Students will study the key geographical patterns, processes and ideas which are fundamental to the future of the planet and its inhabitants. As globalization brings us all closer together, it is more important than ever to understand the dynamic world we are all a part of.

Although IGCSE Geography can be split into human and physical topics, it is the interactions between these which are crucial to the contemporary study of Geography.

Course Content

Theme 1: Population and Settlement	Theme 2: The natural environment	Theme 3: Economic Development
 Population processes of change Population management possibilities Settlement and service provision Urban environments and urban change 	 Tectonic hazards River processes, impacts and management Coastal processes, impacts and management Weather, climate and natural vegetation 	 Development processes Tourism Industry and food production Energy and water Environmental risks and management of economic development

Geographical skills

These are integrated throughout the course and allow students opportunities to develop application, interpretation and analysis through graphical and mathematical skills.

Fieldwork

All students will attend a series of expeditions over the course to explore the geographical enquiry process through hypotheses development, testing, methodologies and data collection, data presentation and analysis of data in the field.

Assessment

Geography is assessed 100% through externally assessed examinations. All students will take three papers:

Paper 1:	Paper 2:	Paper 4:
Geographical Themes	Geographical Skills	Alternative to Coursework
1 hour 45 minutes	1 hour 30 minutes	1 hour 30 minutes
45% of overall grade	27.5% of overall grade	27.5% of overall grade



History

"Those who cannot remember the past are condemned to repeat it."

Why Study History?

The rise of ISIS; conflict in the Middle East; Brexit; refugee crises. Why are these events occurring? Where have these problems come from?

Everyone has their own perspective on why events happen and if they are dealt with effectively by their government or the global community.

To understand political, social and economic issues in the present day, it is essential to understand and learn about History. If you have an inquisitive mind and want to understand the world around you more, then History is an excellent option to choose. Not only will the course help you to make sense of significant social and political events, but it will also give you the opportunity to discuss what happened and why it happened, whilst encouraging you to argue a point of view.

IGCSE History will also help you to develop many new and valuable skills that will benefit you in whatever you do in life. It will help you to write and argue more coherently, organise your work so that your ideas are clearly explained and evaluate source material more critically. The transferable nature of these skills means it is highly regarded in universities in Europe and the USA and is a great choice for a wide range of careers such as; journalism, law, politics, business, the public sector, broadcasting, NGOs, archaeology and anthropology.

What Skills Do You Need to Study History?

History is not just about memorising facts. At IGCSE, candidates will have to apply their knowledge to a variety of different questions and describe, explain and evaluate certain topics. Source analysis also makes up an important part of the course. Students will have to answer questions analysing a number of sources of historical evidence, from newspapers, photographs, speeches and political cartoons, and draw conclusions as to their usefulness and reliability. The ability to make balanced judgments, on the evidence available, is a skill required in every walk of life - not just History.

Course Description - The Twentieth Century: International Relations since 1919

There are 2 exam papers and a piece of coursework.

Paper 1 – This paper is 2 hours long and is worth 40%. In the paper, you will be given choices from the core content topics below. You must answer 2 of these choices. You will study them all in class.

- 1. Were the Peace Treaties of 1919-23 fair?
- 2. To what extent was the League of Nations a success?
- 3. Why had international peace collapsed by 1939?
- 4. Who was to blame for the Cold War?
- 5. How effectively did the USA contain the spread of Communism?
- 6. How secure was the USSR's control over Eastern Europe, 1948-c.1989?
- 7. Why did events in the Gulf matter, c.1970–2000?

You will also answer 1 question on the Germany Depth Study (see below for content description).

Paper 2 – This is a source analysis paper, which is worth 33% and lasts for 2 hours. You will answer six source questions on <u>one</u> of the nominated topics above. Each year students are made aware of which topic has been selected by the examiner. For 2021, the source paper will be on KQ1: Were the Peace Treaties of 1919-23 fair?

The Depth Study: Germany, 1918-45

Students will also examine the History of Germany in greater depth for Paper 1 and the coursework. The Depth Study is divided into the four main themes below:

- Was the Weimar Republic doomed from the start?
- Why was Hitler able to dominate Germany by 1934?

- The Nazi regime how effectively did the Nazis control Germany 1933-45?
- What was it like to live in Nazi Germany?

Component 3 - Coursework

Candidates produce one piece of extended writing, of 2000 words in length, based on content taken from the Germany Depth Study. It is worth 27% of the final mark. The coursework is a single question, focused on the issue of significance. The coursework component is internally assessed and externally moderated. We will complete this part of the course in class, with teacher guidance.

Assessment

Candidates will be assessed using a mixture of coursework and exams. The coursework will normally be completed in Year 11, with some focus on building the necessary research skills in Year 10. At the end of the two years, they will be entered for two exam papers. As the papers are not tiered according to ability, all students will be assessed using the same criteria.



Information and Communications Technology (ICT)

Why study ICT?

ICT is everywhere! The increasing use of technology in all aspects of society makes confident, creative and productive use of ICT an essential skill for life. ICT capability encompasses not only the mastery of technical skills and techniques, but also the understanding to apply these skills purposefully, safely and responsibly in learning, everyday life and employment. ICT capability is fundamental to participation and engagement in modern society. ICT can be used to find, develop, analyse and present information, as well as to model situations and solve problems.

During this course, students will learn how organisations use information communications technology to help them achieve their objectives, and in doing so students develop skills in using a range of software as tools for solving problems. Students will explore the transformational effect of technology on people and communities and find out about components of technology systems – what they do and how they work.

Course Description

The course provides students with the opportunity to develop a range of life long skills, including:

- knowledge of ICT including new and emerging technologies;
- autonomous and discerning use of ICT;
- skills to enhance work produced in a range of contexts;
- skills to analyse, design, implement, test and evaluate ICT systems;
- skills to consider the impact of current and new technologies on methods of working in the outside world and on social, economic, ethical and moral issues;
- ICT-based solutions to solve problems;
- the ability to recognise potential risks when using ICT, and use safe, secure and responsible practice.

Lessons will involve a combination of theory and practical work. Students need to be able to follow instructions precisely for the practical exams; class activities will encourage students to broaden their skills and be able to justify and explain their use of hardware and software. As ICT is a subject that is constantly developing, marks will be awarded for relevant answers which relate to new or emerging technology that has not been specified in the syllabus.

Course Content

- Types and components of computer systems
- Input and output devices
- Storage devices and media
- Networks and the effects of using them
- The effects of using IT
- ICT applications
- The systems life cycle
- Safety and security
- Audience
- Communication
- File management
- Images
- Layout
- Styles
- Proofing
- Graphs and charts
- Document production
- Data manipulation
- Presentations
- Data analysis
- Website authoring

Assessment

Paper 1 – Theory (40%). This written paper tests sections 1–21 of the syllabus content. All questions are compulsory, mostly multiple choice or short answer questions, but also some require longer answers.

Paper 2 – Document Production, Data Manipulation and Presentations (30%). This practical test assesses the practical skills needed to use the applications covered in sections 17, 18 and 19 of the syllabus content. All tasks are compulsory.

Paper 3 – Data Analysis and Website Authoring (30%). This practical test assesses the practical skills needed to use the applications covered in sections 20 and 21 of the syllabus content. All tasks are compulsory. Papers 2 and 3 may also assess some core knowledge and understanding from the theory section of the syllabus.

Administrative Information

To ensure students undertake a broad and balanced range of subjects at IGCSE level, students should not select both ICT and Computer Science.



Modern Foreign Language French/Mandarin/Spanish

Why study a modern foreign language?

French and Spanish are widely spoken throughout the world and are the dominant languages in many countries throughout the Americas, Europe and Africa. They are the mother tongues of 500 million people and also have a continuing impact both culturally and in the diplomatic world. Chinese, with around a billion native speakers, is spoken by more people as a first language than any other. With China being one of the world's economic and political superpowers, knowledge of Chinese is likely to become an asset of anybody's CV.

For many universities a foreign language qualification is either required for entry or highly recommended. This applies to universities in Europe, America and Asia, especially for international programmes. The IB Diploma programme also requires a second foreign language – a good grade at IGCSE will prepare students to continue their studies in the French, Chinese or Spanish B course. Being able to communicate in a variety of languages will enhance your career and mobility prospects, whether you want a career in business, engineering, teaching, law, tourism, fashion or sport. Moreover, the social value of being able to communicate in more than one language is enormous, as it opens up many opportunities throughout the world. English is not enough.

If you are currently studying French, Spanish or Chinese, you are strongly advised to carry on with that language. You should have a sound basis for going on to take an exam qualification – in our case, IGCSE.

Course Description - French Foreign Language (0520) and Spanish Foreign Language (0530)

This is a multi-skill course (speaking, listening, reading and writing) which features different topic areas. Each skill attracts 25% of the total marks – just like you have been used to in previous years.

The subject content is organised around five broad Topic areas which provide contexts for the acquisition of vocabulary and the study of grammar and structures. The Topic areas are:

- Everyday activities
- Personal and social life
- The world around us
- The world of work
- The international world.

This course builds upon language taught in KS3 and will be an ideal preparation to move onto French or Spanish B in IB. It also equips you to use your modern foreign language in practical, everyday situations – on holiday, at the shops, in the restaurant, introducing yourself, finding a job, etc. and also offers valuable insights into the culture where the language is spoken.

Course Description - Chinese as a Second Language (0523)

This course offers learners the opportunity to develop practical communication skills in listening, speaking, reading and writing. It will enable you to become independent users of Chinese and to use Chinese to communicate effectively in a variety of practical contexts.

The subject content is organised around four broad Topic areas which provide contexts for the acquisition of vocabulary and the study of grammar and structures. The Topic areas are:

- Young people and education
- Society
- The world
- Cultural diversity

This course builds upon language taught in KS3 and will be an ideal preparation to move onto Chinese B in IB. It also equips you to use your modern foreign language in practical, everyday situations – on holiday, at the shops, in the restaurant, introducing yourself, finding a job, etc. and also offers valuable insights into the culture where the language is spoken.



Music

Why study Music?

Music at IGCSE is a direct extension of the work covered at BIS in Key Stage 3. Any student who has successfully completed the music course at BIS in Years 7 to 9 (or followed a similar course elsewhere) can opt for IGCSE music confidently and achieve a strong passing grade. Music IGCSE is not just for superstar violinists and pianists!

Course Description

The IGCSE music course aims to enable students to develop their knowledge and understanding of various styles of music through activities in listening, composing and performing. It helps pupils to recognize and understand the music from the main Western historical periods and styles, and music from around the World, forming an appreciation of cultural similarities and differences. The course also provides a foundation for further study in music.

Assessment

The IGCSE exam is made up of 3 components:

Component 1 Listening (40%)

This is a 1 hour and 15 minutes exam at the end of the course. Questions will relate to unprepared pieces of music from Western Classical music and from around the world, listened to on a CD. The questions will test students' understanding and perception of the music. Students will also be expected to follow a skeleton score. Questions will require short answers or be in multiple choice formats.

During this written exam, students will also be assessed on **TWO** areas of study previously chosen.

Section A: Music from around the World. Students will study in detail the music from a specific region of the world. In the 2020 examinations the focus is Arabic Music. They will be expected to identify the instruments used and describe the texture and the structure of the music.

Section B: Set Works. Students will prepare in detail the set work, which will be part of Mozart's Piano Concerto 21 in 2020. They will hear one or two extracts and a skeleton score of the extract will be provided in the question paper. They will be expected to answer questions on aspects of the music.

Apart from specialist musical terms, the paper is not linguistically demanding, and may be confidently attempted by ESL learners.

Component 2 Performing (30%)

Students will prepare two pieces of music for performance in the final exam. One performance will be a solo piece on any instrument (with piano accompaniment if required), and the other as part as an ensemble with at least two other performers. Students will be marked on:

- The range of technical and musical skills demonstrated.
- The accuracy of playing the notes and rhythm or the quality of improvisation.
- The choice and control of tempo and ensemble co-ordination
- Sensitivity to phrasing and expression
- · Technical control of the instrument.

Component 3 Composing (30%)

Students submit two compositions, similar to the compositions they have been writing in Year 9, written during the course. They will be recorded onto CD. One of these pieces must be written in a Western tonal style and show a familiarity with basic traditional harmonic language; this composition should be fully notated using Sibelius music software. Students will be marked on:

- Their musical ideas
- Structure of the compositions
- Use of the chosen medium (the instruments and how they are used).
- Compositional technique
- Presentation and notation of their score.

Both component 2 and 3 of the Music IGCSE course are internally assessed and completed by April of Year 11: 60% of your IGCSE Music exam is complete before your Easter break. Component 1, worth 40%, is then completed during the exam period in May/June.

Entry Requirements

There are no formal entry requirements to take IGCSE music at BIS. However, the following notes may be useful:

- To take IGCSE music it is helpful but not compulsory if students already play an instrument/sing with some degree of musical literacy;
- If students have not played an instrument before, they may still opt for the course but must be prepared to take up an instrument as part of the BIS Instrumental Programme. (Details of this are available from the Music Department);
- Involvement in at least ONE of our extensive co-curricular activities is compulsory. This equips IGCSE musicians with valuable ensemble and musical experience outside of the classroom environment.



Physical Education

Why study Physical Education?

Probably one of the most interesting IGCSE subjects, this course is designed not only for those students who have a strong personal interest in all aspects of sport and physical education, but also for those who may be considering one of the many sports related degrees in their higher education.

The last ten years has seen not only a steady increase in peoples' leisure time but also a correspondingly dramatic increase in the recreation and leisure industry. This course would be a great stepping stone to the many different fields of this exciting industry.

Course Description

Students follow a syllabus which gives them the opportunity to study both practical sports and theoretical aspects of the human body and sports participation.

There are two components to the examination:

Component 1 is a written paper comprised of two sections. Section A consists of short answer questions and Section B has longer structured questions, covering the four topic areas of; Anatomy and physiology; Health, fitness and training; Skill acquisition and psychology; Social, cultural and ethical influences.in sport. Component 2 gives students the opportunity to take part in a variety of physical activities, including individual or team games, outdoor and adventurous activities, gymnastics, dance, athletics and swimming. Students choose four sports in which they are assessed. They learn to analyse their own performance in their chosen activities and plan for improvement throughout the course.

Assessment

At the end of the two year course students will be assessed in their four practical activities, as well as one written theory exam paper.

Paper	Description	Weighting
Component 1 (1 ¾ hours)	Structured questions in the four topic areas	50%
Component 2	Practical assessment of four chosen main sports (video moderation)	50%

If you are considering undertaking the IB Sports and Exercise Health Science course (SL/HL) then this course would be highly recommended.

If you need any further information, please see any member of the PE Department.



Vietnamese

Aims and Objectives

- To understand and build up a positive attitude towards the Vietnamese language either in respect to the national culture or aesthetic appreciation.
- To read a wide range of texts, with good understanding, enjoying and appreciating a variety of language.
- To develop and enrich students' analytical skills of Vietnamese Literature, so that Vietnamese students can look forward to IB Vietnamese course in Year 12 & 13.

Course Content

The content of Vietnamese is mostly based on the Ministry of Education & Training curriculum. The key subject is Literature, along with History, Geography and Culture.

- > Year 10
 - Students will be studying and analysing extracts and poems from Literature in the Middle & Modern Periods. Writing skills are focused in the commentary essay. The main textbooks are "Ngữ Văn 9 tập 1 & 2".
 - History is focused on the life of President Ho Chi Minh and Vietnam during and after the war.
 - Geography consist of Vietnamese nations and discovery of different parts in Vietnam
- Year 11 students are learning Vietnamese in term 1 & 2
 - Students will be studying some extracts related to the Vietnamese folklore, reviewing literary devices applied in poetry, short stories and some works in translation. The longer commentary essays will be required in year 11. The main textbooks are "Ngữ văn 10 tập 1 and Ngữ văn 11"
 - History is focused on Vietnam at the end of the 19th century and the period from 1930-1945
 - Learning Geography, students will discover some big cities in Vietnam including nations, population, economy, natural factors.

Assessment

The Internal assessment is an integral part of the course. Students will be asked to complete termly tests. The final results of Year 11 will show which IB levels students should study if they would like to take the IB Vietnamese course over 2 years.



Be Ambitions