

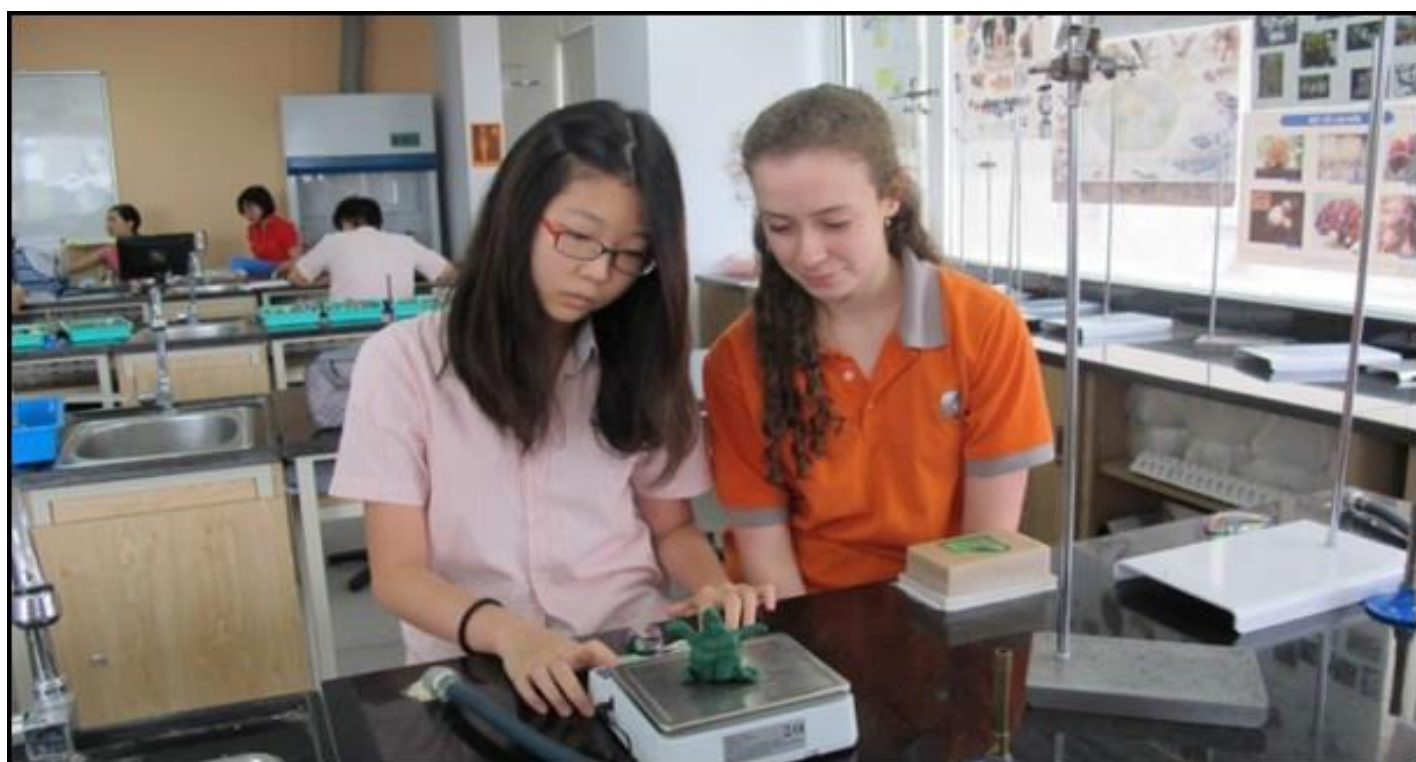


# CAMBRIDGE

International Examinations

Cambridge International School

## IGCSE INFORMATION BOOKLET 2017-19



## Cambridge IGCSE Programme

Cambridge IGCSE is the world's most popular international curriculum for 14-16 year olds, leading to globally recognised and valued Cambridge IGCSE qualifications. Cambridge IGCSE is a two year program where students are assessed at the end of the two years by Cambridge.

The programmes prepare students for life – helping them to develop an informed curiosity and lasting passion for learning.

IGCSE is widely taken in 145 different countries around the world by students learning in a variety of contexts. Students worldwide achieve success with Cambridge IGCSE because it suits a wide range of learner abilities.

Success with Cambridge opens doors to the world's best universities – in the US, the UK, Australia, Canada and beyond.

For more information about the Cambridge programme please visit <http://www.cie.org.uk/cambridge-for/parents-and-students/>

### Inside the classroom

Cambridge IGCSE encourages learner-centred and enquiry-based approaches to learning. It develops learners' skills in creative thinking, enquiry and problem solving, giving learners' excellent preparation for the next stage in their education.

Students become confident, responsible, reflective, innovative and engaged. They are ready to tackle the demands of tomorrow's world, capable of shaping a better world for the future.

Cambridge IGCSE develops learner knowledge, understanding and skills in:

- Subject content
- Applying knowledge and understanding to familiar and new situations
- Intellectual enquiry
- Flexibility and responsiveness to change
- Working and communicating in English
- Influencing outcomes
- Cultural awareness

## Where do Cambridge qualifications take you?

Cambridge qualifications are accepted and valued by universities around the world, including MIT, Harvard and Cambridge.

They are recognised as qualifications that prepare and equip students with the skills they need to succeed both at university and beyond. Universities value the independent research and critical thinking skills, as well as the deep subject knowledge that Cambridge qualifications bring.

The Cambridge Recognition database is a useful resource where you can find:

- A searchable database of university recognition
- Advice for students applying to universities in specific countries, including the UK, US, Germany, Australia, India, Pakistan and South Africa
- Recognition details for each type of Cambridge qualification

<http://recognition.cie.org.uk/>

Students can be confident that their Cambridge IGCSE and Cambridge International AS & A Level qualifications are accepted as equivalent to UK GCSE and AS & A Levels by leading universities worldwide. An independent study by UK NARIC, the national agency in the UK for the recognition and comparison of international qualifications and skills, has found the qualifications to be comparable to UK GCSE and AS & A Level.

## Assessment

Students will receive semester reports throughout the two year course however, official Cambridge IGCSE assessment takes place at the end of the two year course and can include written, oral, coursework and practical assessment. This broadens opportunities for students to demonstrate their learning, particularly when their first language is not English. In many subjects there is a choice between core and extended curricula, making Cambridge IGCSE suitable for a wide range of abilities

Grades are benchmarked using eight internationally recognised grades, A\* to G, which have clear guidelines to explain the standard of achievement for each grade.

Cambridge IGCSE examination occur in June and results are issued in August.

### Grades Available

To take account of differing abilities, there is a choice between Core and Extended curriculum papers in English, Mathematics and Science. This allows teachers to decide on the most appropriate level of papers for their students.

The Core curriculum in each subject is within the ability range of a large majority of students. It provides a full overview of the subject and is targeted at students expected to achieve grades C to G.

The Extended curriculum, which comprises the Core curriculum and the Supplement, has been designed for the more academically able and leads naturally into higher education or professional training. It is targeted at those expected to achieve grades A\* to E. The Supplement describes the extra topics or depth which must be added to the Core to produce the Extended curriculum.

Target Grades	Grades Available
Core Curriculum	C D E F G
Extended Curriculum	A* A B C D E

The overlap of three grades (C, D and E) is designed to accommodate students who perform either better or worse than their teachers expect. Students who fail to meet the minimum satisfactory standard for either the Core curriculum (Grade G) or the Extended curriculum (Grade E) will be ungraded.

In some subjects, the examination covers the complete ability range and there is no choice of curriculum. For these subjects, the full range of grades is available.

## Subjects offered

The following subjects are offered to all students in Singapore International School @ Gamuda Gardens:

- First Language English or English as a Second Language
- Mathematics
- Coordinated Science
- Business Studies
- Global Perspectives

Elective Subjects:

*Students choose one*

- Information Communication Technology
- History
- Art and Design

In addition to this students will also study the following school based subjects:

- Health and Physical Education
- Foundation English A (EFL) – Year 1 IGCSE
- Foundation English B (EFL) – Year 2 IGCSE

## English First Language

Designed for students for whom English is their mother tongue, IGCSE First Language English develops the ability to communicate clearly, accurately and effectively in both speech and writing. Students learn how to employ a wide-ranging vocabulary, use correct grammar, spelling and punctuation, and develop a personal style and an awareness of the audience being addressed. Students are also encouraged to read widely, both for their own enjoyment and to further their awareness of the ways in which English can be used. IGCSE First Language English also develops more general analysis and communication skills such as synthesis, inference, and the ability to order facts and present opinions effectively.

### **Subject content:**

Cambridge IGCSE First Language English offers candidates the opportunity to respond knowledgeably to a rich array of reading passages. Candidates will use some of these passages to inform and inspire their own writing, and write in a range of text types for different audiences.

Candidates also have the opportunity to develop both their speaking and listening skills, presenting to others and responding to feedback and questions. Candidates are able to develop a range of skills in organising content and adapting their written and spoken language to meet the needs of the purpose and audience.

Candidates are encouraged to become appreciative and critical readers, writers, speakers and listeners.

The aims are to enable learners to:

- understand and respond to what they hear, read and experience
- communicate accurately, appropriately, confidently and effectively
- enjoy and appreciate a variety of language
- complement their ability to work with information and ideas in other areas of study, for example, by developing skills of analysis, synthesis and the drawing of inferences
- promote personal development and an understanding of themselves and others

## Assessment

Candidates take either:	Or:
<p>Paper 1: Reading Passage (Core)</p> <p>1 hour 45 minutes</p> <p>Candidates answer three questions on two passages. Passage A will be 500–600 words long and Passage B will be 300–350 words long.</p> <p>This component is set and marked by Cambridge.</p> <p>Weighting 50%</p>	<p>Paper 2: Reading Passages (Extended)</p> <p>2 hours</p> <p>Candidates answer three questions on two passages. Passage A will be 650–750 words long and Passage B will be 550–650 words long.</p> <p>This component is set and marked by Cambridge.</p> <p>Weighting 50%</p>
And either:	Or:
<p>Paper 3: Directed Writing and Composition (Core and Extended)</p> <p>2 hours</p> <p>Candidates answer one question on a passage or passages totalling 650–750 words, and complete a composition task from a choice of four titles.</p> <p>This component is set and marked by Cambridge.</p> <p>Weighting 50%</p>	<p>Component 4: Coursework Portfolio (Core and Extended)</p> <p>This component is assessed by the teacher and moderated by Cambridge.</p> <p>Weighting 50%</p>
Optional:	
<p>Component 5 Speaking and listening Test (Core and Extended)</p> <p>There is no question paper. Candidates conduct an individual task and take part in a discussion.</p> <p>This component is assessed by the teacher and moderated by Cambridge.</p> <p>Marks for this optional component does not contribute to the overall grade candidates receive for the written components. Instead, where candidates perform to an appropriate standard, certificates record achievement of grades 1 (high) to 5 (low).</p>	<p>Approx. 10–12 minutes</p>

## English as a Second Language

Cambridge IGCSE English as a Second Language is designed for students who already have a working knowledge of the language and who want to consolidate their understanding in order to progress in their academic or professional career. The qualification reflects the widespread use of English in education and commerce, and also in entertainment. The aim is to achieve a level of practical communication ideal for everyday use, which can also form the basis for further, more in-depth language study.

### **Subject Contents:**

Cambridge IGCSE English as a Second Language offers candidates the opportunity to develop practical communication skills in listening, speaking, reading and writing.

Learners will be presented with a variety of stimuli that will build up their skills in reading and writing. They will learn to select relevant details, understand the difference between what is directly stated and implied, and practise writing for different purposes and audiences. Learners will listen to a range of spoken material, including talks and conversations, in order to develop listening skills. Learners will engage in conversations on a variety of topics, and develop their skills in responding to different situations and audiences with a degree of accuracy and clarity.

Cambridge IGCSE English as a Second Language will enable learners to become independent users of English, and to be able to use English to communicate effectively in a variety of practical contexts.

The aims are to:

- develop learners' ability to use English effectively for the purpose of practical communication
- form a solid foundation for the skills required for further study or employment using English as the medium
- develop learners' awareness of the nature of language and language-learning skills
- promote learners' personal development.



## Assessment

Candidates take either:		Or:	
Paper 1	Reading and writing (Core)	Paper 2	Reading and writing (Extended)
1 hour 30 minutes		2 hours	
Six exercises testing a range of reading and writing skills		Six exercises testing a range of reading and writing skills	
Weighting 70%		Weighting 70%	
And either:		Or:	
Paper 3	Listening (Core)	Paper 4	Listening (Extended)
Approx 30 – 40 minutes		Approx 45 minutes	
Candidates listen to several short extracts and longer texts, and complete a range of task types, including short answer questions, gap filling, matching, multiple choice and note taking		Candidates listen to several short extracts and longer texts, and complete a range of task types, including short answer questions, gap filling, matching, multiple choice and note taking	
Weighting 30%		Weighting 30%	
And all Core and Extended candidates take:			
Component 5 - Speaking endorsement			
Approx 10 – 15 minutes			
Following a 2–3 minute warm-up conversation, candidates engage in a 6–9 minute discussion with the examiner on a given topic.			
This component is assessed by the teacher and moderated by Cambridge.			
Marks for the Speaking component do not contribute to the overall grade candidates receive for the written components. Instead, where candidates perform to an appropriate standard, certificates record separately the achievements of candidates, with grades 1 (high) to 5 (low) for speaking.			

# Mathematics

An essential subject for all students, IGCSE Mathematics is a fully examined course which encourages the development of mathematical knowledge as a key life skill, and as a basis for more advanced study. The syllabus aims to build students' confidence by helping them develop a feel for numbers, patterns and relationships, and places a strong emphasis on solving problems and presenting and interpreting results. Students also learn how to communicate and reason using mathematical concepts.

## Subject Content:

All candidates will study the following topics:

- Number
- Algebra and graphs
- Geometry
- Mensuration
- Co-ordinate geometry
- Trigonometry
- Matrices and transformations
- Probability
- Statistics

The aims are to enable candidates to:

- develop their mathematical knowledge and oral, written and practical skills in a way which encourages confidence and provides satisfaction and enjoyment
- read mathematics, and write and talk about the subject in a variety of ways
- develop a feel for number, carry out calculations and understand the significance of the results obtained
- apply mathematics in everyday situations and develop an understanding of the part which mathematics plays in the world around them
- solve problems, present the solutions clearly, check and interpret the results
- develop an understanding of mathematical principles
- recognise when and how a situation may be represented mathematically, identify and interpret relevant factors and, where necessary, select an appropriate mathematical method to solve the problem
- use mathematics as a means of communication with emphasis on the use of clear expression
- develop an ability to apply mathematics in other subjects, particularly science and technology
- develop the abilities to reason logically, to classify, to generalise and to prove
- appreciate patterns and relationships in mathematics
- produce and appreciate imaginative and creative work arising from mathematical ideas
- develop their mathematical abilities by considering problems and conducting individual and co-operative enquiry and experiment, including extended pieces of work of a practical and investigative kind
- appreciate the interdependence of different branches of mathematics
- acquire a foundation appropriate to their further study of mathematics and of other disciplines.

## Assessment

Core curriculum		Extended curriculum	
Paper 1	1 hour	Paper 2	1½ hours
Short-answer questions based on the Core curriculum.		Short-answer questions based on the Extended curriculum.	
Weighting 35%		Weighting 35%	
Paper 3	2 hours	Paper 4	2 ½ hours
Structured questions based on the Core curriculum.		Structured questions based on the Extended curriculum.	
Weighting 65%		Weighting 65%	

## Coordinated Science (Double Award)

A double award, earning two grades, IGCSE Co-ordinated Sciences gives students the opportunity to study Biology, Chemistry and Physics within a cross-referenced, scientifically coherent syllabus. Students learn about the basic principles of each subject through a mix of theoretical and practical studies, whilst also developing an understanding of the scientific skills essential for further study. Students learn how science is studied and practised, and become aware that the results of scientific research can have both good and bad effects on individuals, communities and the environment. As well as focusing on the individual sciences, the syllabus therefore enables students to better understand the technological world in which they live, and take an informed interest in science and scientific developments.

### Subject Content:

Biology	Chemistry	Physics
<ul style="list-style-type: none"><li>— Characteristics of living organisms</li><li>— Cells</li><li>— Biological molecules</li><li>— Enzymes</li><li>— Plant nutrition</li><li>— Animal nutrition</li><li>— Transport</li><li>— Gas exchange and respiration</li><li>— Coordination and response</li><li>— Reproduction</li><li>— Inheritance</li><li>— Organisms and their environment</li><li>— Human influences on ecosystems</li></ul>	<ul style="list-style-type: none"><li>— The particulate nature of matter</li><li>— Experimental techniques</li><li>— Atoms, elements and compounds</li><li>— Stoichiometry</li><li>— Electricity and chemistry</li><li>— Energy changes in chemical reactions</li><li>— Chemical reactions</li><li>— Acids, bases and salts</li><li>— The Periodic Table</li><li>— Metals</li><li>— Air and water</li><li>— Sulfur</li><li>— Carbonates</li><li>— Organic chemistry</li></ul>	<ul style="list-style-type: none"><li>— Motion</li><li>— Work, energy and power</li><li>— Thermal physics</li><li>— Properties of waves, including light and sound</li><li>— Electricity and magnetism</li><li>— Electric circuits</li><li>— Electromagnetic effects</li><li>— Atomic physics</li></ul>

As well as a subject focus, the Cambridge IGCSE Co-ordinated Sciences syllabus encourages learners to develop:

- a better understanding of the technological world, with an informed interest in scientific matters
- a recognition of the usefulness (and limitations) of scientific method, and how to apply this to other disciplines and in everyday life
- relevant attitudes, such as a concern for accuracy and precision, objectivity, integrity, enquiry, initiative and inventiveness
- an interest in, and care for, the environment
- a better understanding of the influence and limitations placed on scientific study by society, economy, technology, ethics, the community and the environment
- an understanding of the scientific skills essential for both further study and everyday life.

## Assessment

All candidates must enter for three papers.

Core curriculum		Extended curriculum	
Paper 1	45 minutes	Paper 2	45 minutes
A multiple-choice paper consisting of 40 items of the four-choice type. Questions will be based on the Core syllabus content.		A multiple-choice paper consisting of 40 items of the four-choice type. Questions will be based on the Extended syllabus content.	
Weighting: 30%		Weighting: 30%	
Paper 3	2 hours	Paper 4	2 hours
A written paper consisting of short-answer and structured questions. Questions will be based on the Core syllabus content.		A written paper consisting of short-answer and structured questions. Questions will be based on the Extended syllabus content	
120 marks		120 marks	
Weighting: 50%		Weighting: 50%	
And all candidates take either:			
Paper 5	2 hours	Paper 6	1 hour
Practical Test		Alternative to Practical (written paper)	
45 marks		60 marks	
Weighting: 20%		Weighting: 20%	

## Global Perspectives

Meeting government ministers, organising a local river clean-up project and writing to the United Nations about climate change, are just some of the activities students are pursuing through the Cambridge IGCSE Global Perspectives course. Cambridge IGCSE Global Perspectives is a groundbreaking new course that is cross-curricular, stretching across traditional subject boundaries. It taps into the way students of today enjoy learning as well as including group work, seminars, projects, and working with other students around the world. The emphasis is on developing the ability to think critically about a range of global issues where there is always more than one point of view.

### Subject Contents:

Young people face unprecedented challenges in an interconnected and information-heavy world, not least in how they will gain a sense of their own active place in the world and cope with changes that will impact on their life chances and life choices.

Cambridge IGCSE Global Perspectives candidates will have opportunities to acquire and apply a range of skills to support them in these challenges, including:

- researching, analysing and evaluating information
- developing and justifying a line of reasoning
- reflecting on processes and outcomes
- communicating information and reasoning
- collaborating to achieve a common outcome.

Candidates explore stimulating topics that have global significance. They learn to collaborate with others from another culture, community or country. They assess information critically and explore lines of reasoning. They learn to direct their own learning and develop an independence of thought.

Cambridge IGCSE Global Perspectives emphasises the development and application of skills rather than the acquisition of knowledge. Candidates develop transferable skills that will be useful for further study and for young people as active citizens of the future.

## Assessment

For the Cambridge IGCSE in global perspectives, candidates take three compulsory components: Individual Research, a Group Project and a Written Paper..

Component
<p>Component 1 Written Examination 1 hour 15 minutes</p> <p>Candidates answer four compulsory questions based on a range of sources provided with the paper. Questions 1–4 are worth 12, 14, 20 and 24 marks.</p> <p>Sources will present a global issue from a range of perspectives, personal, local and/or national, global, and will be drawn from a list of eight topics.</p> <p>Weighting 35%</p>
<p>Component 2 Individual Report</p> <p>Candidates research one topic area (from a choice of eight) of personal, local and/or national and global significance and submit one report based on their research.</p> <p>The title is devised by candidates themselves. The report must be 1500–2000 words and written in continuous prose.</p> <p>This component is internally set and externally marked.</p> <p>Weighting 30%</p>
<p>Component 3 Team Project</p> <p>Candidates devise and develop a collaborative project into an aspect of one topic. This choice of project must allow for the exploration of different cultural perspectives. The Team Project comprises two elements.</p> <p>→Team Element Candidates produce as a team one Outcome and one Explanation as a Collaboration. The Explanation must be 200–300 words.</p> <p>→Personal Element Candidates each write a Reflective Paper on their research, contribution and personal learning. The paper must be 750–1000 words.</p> <p>This component is internally assessed and externally moderated.</p>

# Business Studies

The IGCSE Business Studies syllabus develops students' understanding of business activity in the public and private sectors, and the importance of innovation and change. Students learn how the major types of business organisation are established, financed and run, and how their activities are regulated. Factors influencing business decision-making are also considered, as are the essential values of cooperation and interdependence. Through their studies, students not only learn about business concepts and techniques but also enhance related skills such as numeracy and enquiry. The syllabus provides both a foundation for further study at A Level, and an ideal preparation for the world of work.

## Subject Content:

Successful Cambridge IGCSE Business Studies learners will be able to:

- understand different forms of business organisations, the environments in which businesses operate and business functions such as marketing, operations and finance
- appreciate the role of people in business success.

Throughout the course students will study the following topics:

- Understanding Business Activity
- People in Business
- Marketing
- Operations Management
- Financial Information and Decisions
- External Influences on Business Activity

They will also gain lifelong skills, including:

- the ability to calculate and interpret business data
- communication skills needed to support arguments with reasons
- the ability to analyse business situations and reach decisions or judgements.



## Assessment

Candidates take:	
Paper 1	1½ hours
Written examination consisting of four questions requiring a mixture of short answers and structured data responses.	
Weighting 50%	
Paper 2	1½ hours
Written examination consisting of four questions based on a case study, provided as an Insert with the paper.	
Weighting 50%	

# Information and Communication Technology

The Information Communication Technology syllabus combines theoretical and practical studies focusing on the ability to use common software applications, including word processors, spreadsheets, databases, interactive presentation software, e-mail, web browsers and website design. Students will develop a greater awareness of how applications are used in the workplace, and consider the impact of new technologies on methods of working and on social, economic, ethical and moral issues. The skills learnt will be useful to them in their work across the curriculum, and will prepare them for future employment. Assessment of the practical tests is hardware and software independent. Any hardware platform, operating system, and applications packages can be used, providing that students have the opportunity to demonstrate the full range of skills in the syllabus.

## Syllabus Content:

Cambridge IGCSE Information and Communication Technology aims to develop:

- 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.

Cambridge IGCSE Information and Communication Technology encourages learners to develop lifelong skills, including:

- understanding and using applications
- using Information and Communication Technology (ICT) to solve problems
- analysing, designing, implementing, testing and evaluating ICT systems, ensuring that they are fit for purpose
- understanding the implications of technology in society, including social, economic and ethical uses
- awareness of the ways ICT can help in home, learning and work environments.

## Assessment

Candidates take the following:	
Paper 1 Theory	2 hours
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.	
Weighting 40%	
Paper 2 Document Production, Data Manipulation and Presentations	2½ hours
This 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.	
Weighting 30%	
Paper 3 Data analysis and Website authoring	2½ hours
This test assesses the practical skills needed to use the applications covered in sections 20 and 21 of the syllabus content.	
All tasks are compulsory.	
Weighting 30%	

# History

The aims of Cambridge IGCSE History are to stimulate an interest in and enthusiasm for learning about the past, promote the acquisition of knowledge and understanding of individuals, people and societies in the past, ensure that learners' knowledge is rooted in an understanding of the nature and use of historical evidence, promote an understanding of key historical concepts: cause and consequence, change and continuity, and similarity and difference, provide a sound basis for further study and the pursuit of personal interest, encourage international understanding, encourage the development of historical skills, including investigation, analysis, evaluation and communication skills.

## **Subject Content:**

The Cambridge IGCSE History syllabus looks at some of the major international issues of the nineteenth and twentieth centuries, as well as covering the history of particular regions in more depth. The emphasis is on both historical knowledge and on the skills required for historical research.

Learners develop an understanding of the nature of cause and effect, continuity and change, similarity and difference and find out how to use and understand historical evidence as part of their studies. Cambridge IGCSE History will stimulate any learner already interested in the past, providing a basis for further study, and also encouraging a lifelong interest in the subject.

Learners studying Cambridge IGCSE History are given the opportunity to:

- develop an interest in and enthusiasm for learning about and understanding the past
- explore historical concepts such as cause and consequence, change and continuity, and similarity and difference
- appreciate historical evidence and how to use it
- gain a greater understanding of international issues and inter-relationships
- learn how to present clear, logical arguments.

## Assessment

Candidates take the following:	
Paper 1	2 hours
Written paper	
Candidates answer two questions from Section A (Core Content) and one question from Section B (Depth Study).	
All questions are in the form of structured essays, split into three parts: (a), (b) and (c).	
Weighting 40%	
Paper 2	2 hours
Written paper	
Candidates answer six questions on one prescribed topic taken from the Core Content.	
There is a range of source material relating to each topic.	
Weighting 33%	
And all candidates take either:	
Paper 3	Paper 4
Coursework	Alternative to Coursework (written paper)
Candidates produce one piece of extended writing based on a Depth Study from the syllabus or a Depth Study devised by the Centre.	Candidates answer one question on a Depth Study.
Weighting 27%	Weighting: 27%

# Art and Design

The Cambridge IGCSE Art and Design syllabus encourages a range of skills, stimulates aesthetic awareness, knowledge and critical understanding of art, and provides opportunities for learners to develop a range of skills. Crucially, a personal and independent perspective is encouraged at all times. The syllabus is designed to accommodate a wide range of abilities, materials and resources, and allows the different skills of students to be fully explored.

## Subject Content:

Cambridge IGCSE Art and Design has been designed to offer a broad choice of media and approaches so that candidates can produce a personal response and Centres can play to their strengths in terms of staff, expertise and interests.

The broad areas of study are:

- painting and related media
- printmaking
- three-dimensional studies
- photography, digital and lens-based media
- graphic communication
- textile design.

Successful candidates who have taken Cambridge IGCSE Art and Design gain lifelong skills, including:

- confidence and enthusiasm as they develop technical skills in two- and three-dimensional form and composition
- the ability to identify and solve problems in visual and tactile forms
- the ability to develop ideas from initial attempts to outcomes.

## Assessment

Candidates take the following:
Component 1 Broad-based assignment Supporting studies and a controlled eight-hour test. Weighting 50%
Component 4 Coursework assignment Candidates produce a portfolio of up to four sheets of A2 and produce a final outcome in a chosen medium. Weighting 50%

