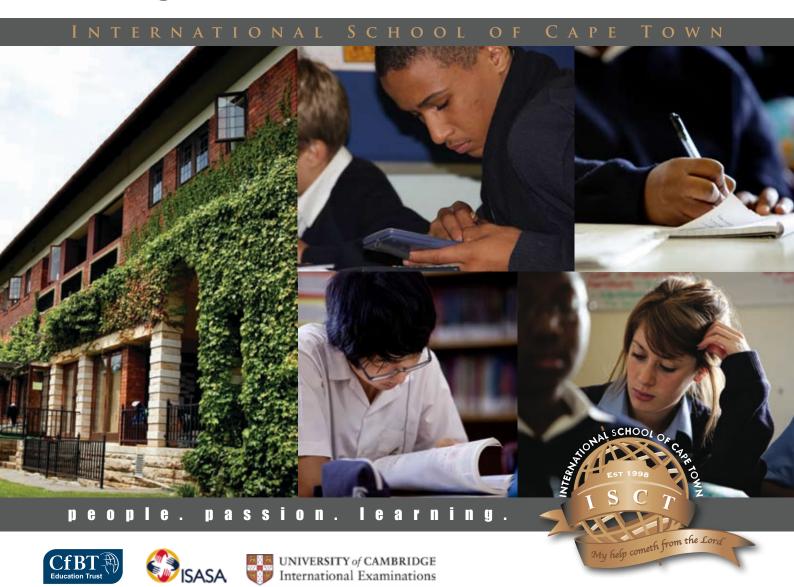
Key Stage 4 & 5 Course Information

Cambridge International IGCSE & A-levels





Why choose Cambridge International Examinations?

IGCSE

CAMBRIDGE IGCSE is the world's most popular international qualification for 14-16 year-olds. It is designed to be offered as a two-year course, although ISCT offers it over 18 months, starting in the beginning of Year 10 (January) and running through to June of Year 11. It is internationally recognised as being equivalent to the GCSE in the UK.

A levels

CAMBRIDGE Advanced Subsidiary (AS) Level represents the first half of a full A level course and gives students the opportunity to study a broader range of subjects without committing to doing a full A level. You can choose to complete an AS Level examination, then stop studying for that particular subject. Or you can gain an AS Level qualification, then complete the remaining course of study in order to take the A level assessment.

Our AS level programme begins in July of each year and runs for 18 months. This is then followed by the one year (optional) A level. Many of our students complete the AS level and then enter a South African University, while those who wish to study overseas often stay on to complete the full A level in three subjects.

Advanced (A or A2) Levels switch from the full classroom teaching method in AS to a tutor-supported self-study system. This involves on average two contact hours per subject per

week while the student follows a well-constructed curriculum in each subject with regular compulsory assignments and assessments

Subjects

Our subject range for IGCSE and AS/A level includes the following, although all are not on offer every year as it depends on the particular interests of the current year group.

IGSCE students are required to take eight subjects (some subjects are compulsory) and AS usually have a choice of four. Choices are made according to prescribed option blocks that vary slightly from year to year depending on the needs and desires of our students. A level students choose to continue with three subjects.

English Language and Literature

English Language English Literature

Mathematics Biology
Physics Chemistry
Business Studies History
Geography Art
Music French

Computing Drama (only to IGCSE level)

If a student is certain he or she wishes to enter for full A levels then three subjects may be chosen at the beginning of the AS year.

Please take a look at our website at www.isct.co.za where you can see a history of our results as well as get a better sense of the school.

You may also find it helpful to look on the CIE website www.cie.org.uk in order to get a sense of the subjects and their syllabi.

Entry requirements

Students are required to write an assessment test for entry into IGCSE, and we work on a points system for entry into both AS and A levels. This will be discussed in an interview with the Director of Studies.

Cambridge exams

- IGCSE in May/June of Year 11
- AS levels in October/November of Year 12
- A levels in October/November of Year 13

School life

In addition to the academic subjects required for IGCSE and AS/A levels, ISCT students enjoy a balanced school life. Additional lessons include PSHE (Personal Social & Health Education), PE (Physical Education), Tertiary Talks (Year 12 only) and a varied enrichment programme. Participation in an extramural sport is compulsory at ISCT, and there are a small number of codes offered after school. Most sport is taken to a competitive level.

Year 12 is traditionally viewed as the senior class in the school. It is from this group that portfolio leaders, house captains and prefects are selected, and the class has a number of privileges not available to the rest of the school. One of the highlights of the year is the Year 12 Dance.

ISCT prides itself on its commitment to the needs of each individual and the CIE programme allows for a certain amount of flexibility in a student's academic journey. In addition, our Learning Support Coordinator provides assistance for those students in need of this.





Art and Design

IGCSE Level Art and Design

The first year of the IGCSE course is teacher directed in that students are given themes to work on that they develop according to their individual strengths and interests. The focus is upon observational skills, research and recording of information, and the continued development of their own knowledge of processes learned in Key Stage 3. The second part is much more student-directed. Themes are still given for the students to work upon which they develop according to their individual strengths and interests, but now students may introduce their own ideas and starting points. The emphasis is on how successfully students work through an idea from conception to realisation, working independently. Focus is placed upon working in a systematic way through the use of detailed sketchbooks & annotated work sheets to assist the assessment objectives of the IGCSE course. High levels of teacher support continue to play an important role. Whether this is to a greater or lesser degree depends upon the individual student's level of attainment.

IGCSE course assessment consists of a course work project and one 8-hour controlled exam piece. Each is weighted equally.

AS and A2 Level Art and Design

The AS and A2-level course builds on the skills and learning of the IGCSE course. Students become increasingly responsible for motivating their own projects and are encouraged to focus on their personal style.

AS/A2 course assessment is as with IGCSE, but at a higher standard. The A2 level exam includes a course-work project with the addition of a student-led personal project which can be presented in any form as the student deems appropriate: written, drawn, digital image etc. The A level result is a combination AS and A2 level results.

A Level Art would be an advantage should a student wish to follow a career in, amongst others, animation, design, photography, advertising, theatre, film and television, architecture, art therapy and teaching.

Business Studies

IGCSE Level Business Studies

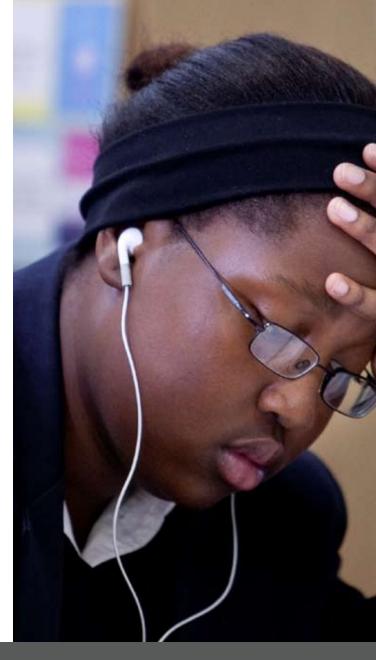
At IGCSE level the students are introduced to various aspects of business life. This ranges from the broader study of international economies to more detailed aspects of finance, marketing and production. Students are also expected to understand the importance of management, human resources and communication within the business context.

IGCSE course assessment consists of two papers, one based on contextual questions and the other on a case study.

AS and A2 Level Business Studies

The Business Studies syllabus enables students to understand and appreciate the nature and scope of business, and the role business plays in society. Students will learn how to analyse and evaluate business decisions. Similar areas are covered as with IGCSE, except that the depth at which they study business activities increases. Analytical and evaluative skills are tested more extensively. They will be expected to develop critical understanding of organisations and how they operate, taking into account how best to market their business and product within a local and global market, while facing the challenges set by the transactional as well as environmental factors in which they operate.

Course Assessment	Contextual Questions	Case Study	Additional Paper
AS	50%	50%	_
A2	25%	25%	50%



Cambridge International A Level Business Studies is accepted by universities and employers as proof of essential knowledge of the business environment and the ability to make informed decisions. Areas which include Business Science, Management and Marketing could be seen as a natural progression.





Computing

IGCSE Level Computing

IGCSE Computing students are introduced to Visual Basic. They use various techniques to learn how coding works and how the code structure is used in Data Handling and Spreadsheet design using Access and Excel. They program in Visual Basic for Application as well as SQL (Structured Query Language). In addition to this, students learn to use Advance Databases and Spreadsheets and study the theory behind modern technology and programming concepts.

IGCSE course assessment consists of one theory paper and one written practical paper.

AS Level Computing

Students are taught the basics of a high level language and are expected to know all the instructions needed to write a complete program, do error-checking and design advanced programs. They learn to write interfaces for databases as well as programs for database connectivity.

A2 Level Computing

A2 Level Computing requires students to design their own computer game. They are also required to complete a coursework task which will be given to them at the beginning of their final year.

Course Assessment	Theory Paper	Written Practical	Theory Paper	Coursework
AS	50%	50%	-	_
A2	-	-	60%	40%

Cambridge A level computing provides a useful foundation for further study of computing or more specialist aspects of computing.

Drama

IGCSE Level Drama

This course develops an understanding of the processes leading up to a performance and the elements involved in creating such a performance. Students will be able to evaluate the various stages of performance work and develop an understanding of the different roles within the context of theatre work. As part of the course, theatre outings, speakers and workshops are attended.

IGCSE course assessment

Practical work 60% Students are expected not only to produce individual performance pieces in the form of monologues, but also to work in groups preparing scripted and devised work for performance. Devised work involves developing a script from scratch, from an idea originated by the students themselves. They are expected to perform the piece as part of their practical examination. Script work involves learning lines from a published play. They are not allowed to use television, radio or unpublished works for their final performance.

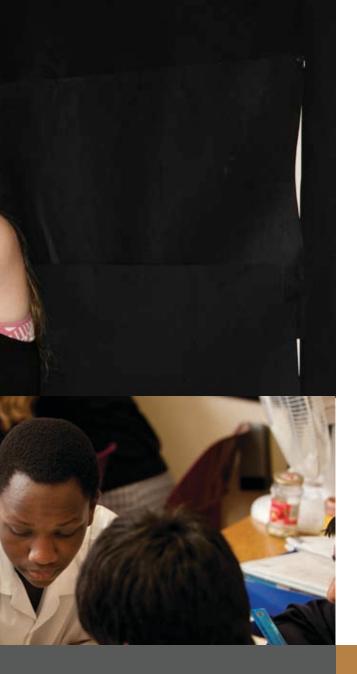
Theory 40% Students prepare coursework for the final examination. They receive an extract from a script and three stimuli which they have to work on in advance. The three stimuli are usually one-liners or words to spark ideas for the creation of devised pieces. These devised pieces follow the same form as in the practical component, except that they will also be examined theoretically.





Creativity, confidence and cooperation are explored, nurtured and developed in Drama.





English Language

IGCSE Level English Language

The course is designed to develop students' reading and writing skills with particular focus on summary skills, directed writing and composition in a broad range of forms. Students also explore how writers achieve effects, learning to draw inferences, evaluate effectiveness, compare, analyse and synthesise.

IGCSE course assessment consists of a Reading Passages paper and a Directed Writing and Composition paper, each weighted equally.

AS Level English Language

(There is no A2 course in English Language)

There are two areas of focus at AS Level: Commentary on and analysis of the style and language of a wide range of written sources, learning to recognise and respond to more sophisticated linguistic devices; Composition across a wide range of genres, within the Narrative, Descriptive and Argumentative categories. During the course candidates learn to analyse and use language for imaginative effect as well as to construct an argument and present views clearly.

AS course assessment consists of one paper which requires in-depth language and style analysis and one composition paper, each weighted equally.

English Language studies improves comprehension and communication skills.



Literature in English

IGCSE Level English Literature

Through the study of a mix of drama, prose and poetry texts, students gain lifelong skills, including the ability to interpret and evaluate texts; developing an understanding of literal and implicit meaning, relevant contexts and themes or attitudes that may be expressed; they learn to recognise and appreciate the ways in which writers use English to achieve a range of effects.

IGCSE course assessment consists of two exams: one open book based on set texts, and one a response to an extract from unseen texts.

AS/A2 Level English Literature

Students while studying a range of texts in different forms, and from different periods and cultures, develop the interdependent skills of reading, analysis and communication. Students will develop informed, independent opinions.

Course Assessment	Poetry & Prose	Drama	Shakespeare Pre-20th Century	Comment & Appreciation
AS	50%	50%	-	-
A2	25%	25%	25%	25%



Being academic, analytical and literary subjects, English Language and Literature in English are excellent preparation for all arts courses at tertiary level. They encourage the development of qualities sought in areas such as academia, law and journalism.





Geography

IGCSE Level Geography

The course is designed to develop knowledge and understanding of the human and physical world using subject-specific skills and also to develop other skills, such as analysis, interpretation and decision-making by applying these to the key geographical themes of the course. Core themes include Population and Settlement; the Natural Environment and Economic development and the use of resources

IGCSE course assessment consists of three papers, one based on the main themes covered, another examining skills learnt (including map work), and a third assessing fieldwork techniques.

AS Level Geography

The course builds on basic skills developed at IGCSE level and applies these to the main human and physical themes: Population and Migration, Settlement, Hydrology and Fluvial Geomorphology, Rocks and Weathering, and Atmosphere and Climate.

A2 Level Geography

Builds on the core topics studied at AS level and includes Human Geography, Manufacturing and Industry, Environmental Management, Tourism, Physical Geography, Hazardous Environments, and Coastal Environments.

Course Assessment	AS Exam	Paper 2: Physical	Paper 3: Human
AS	100%	-	-
A2	50%	25%	25%

■ Geography provides a good foundation for many Humanities, Social Sciences and Physical Sciences at degree level, and is one of the most employable sectors of University graduates.

History

IGCSE Level History

History offers students the opportunity to study some of the major international incidents of the 19th and 20th centuries. The emphasis within the syllabus is as much on developing lifelong historical skills as on acquiring knowledge. Specific content covered: International Relations since 1919, focusing on peace treaties, League of Nations, the Cold War and the United Nations. In addition, there is a depth study on Germany, focusing on the Weimar Republic, the Nazi Party and the Nazi Regime.

IGCSE Course Assessment

Paper 1: Depth study on Germany plus Core: 40%

Paper 2: Source paper: 33%

Paper 4: Alternative to coursework: 27%

AS Level History

AS & A2 Level History gives students the opportunity to study the past and develop an understanding of complex historical events and processes. Specific content covered: key developments after World War II and during the Cold War (1945-1991), including the establishment of the United Nations, and the origin and globalisation of the Cold War, the crisis in communism and the Nuclear Arms Race.

A2 Level History

A Level History focuses on the historical developments in Europe from 1789 to 1939, specifically the origins of the First World War, the French Revolution, the Industrial Revolution, Nationalism, New Imperialism, the Russian Revolution and Totalitarianism.

AS/A2 course assessment: Paper 3: 100%

Course Assessment	Paper 1	Paper 3
AS	-	100%
A2	50%	50%



History offers students a sound knowledge and a better understanding of humanity through past events, forms a sound basis for further history study, and develops strong analytical and comprehension skills which are useful at tertiary level and beyond.



Mathematics

IGCSE Level Mathematics

The IGCSE Mathematics course consolidates the work done in Key Stage 3 and extends it. Work covered in this course includes: graphs of complex functions, further algebraic manipulation, functions and function notation, linear programming, the geometry of circles, mensuration, advanced trigonometry, statistics, probability, vectors, matrices and transformations. In addition to this, students in IGCSE will complete a number of Mathematical Investigations, more open-ended tasks that encourage the development of creative thought.

IGCSE course assessment: one short-answer exam paper and one long-answer question paper is written.

AS/A2 Level Mathematics

The work covered in AS Level Mathematics is far more abstract than that of IGCSE and is aimed at students with both an aptitude for, and a love of the subject. The majority who continue with Mathematics to AS Level will be those who require Mathematics to enter a chosen university course. The course has two major components:

Pure Mathematics: Quadratics, Functions, Co-ordinate Geometry, Circular Measure, Trigonometry, Vectors, Series, Differentiation, Integration, Advanced Algebra, Logarithmic and Exponential Functions, Differential Equations, Numerical solution of Equations and Complex Numbers.

Statistics: Representation of Data, Permutations, Combinations and Probability, Discrete Random Variables, the Normal Distribution, the Poisson Distribution, Linear Combination of Random Variables, Continuous Random Variables, Sampling, and Estimation and Hypothesis Tests.

Course Assessment	Paper 1 (Maths)	Papers 2 or 6	Paper 3 (Maths)	Paper 7 (Stats)
AS	60%	40%	-	_
A2	30%	20%	30%	20%

Mathematics is required for entrance to many university courses. It is the most widely used subject in the world.

Modern Foreign Languages (MFL) ~ Afrikaans/French/Spanish

IGCSE Level Modern Foreign Language

At this level of study, the IGCSE MFL program encompasses all aspects not only of the academic and linguistic content, but of cultural studies as well. Within this course, all students gain a solid linguistic and vocabulary foundation that enables them to converse in the language, instead of just having a theoretical knowledge. Topics relating to everyday life, including school, home, holidays, personal interests, general conversation and the like, enable the student to hold steady conversations and clearly express themselves. Cultural aspects are emphasised within all lessons. This includes historical knowledge, music, cultural activities and the use of authentic resources to immerse the student in the language. In order to prepare the student to be at his/her most proficient and confident in the language, this course focuses on reading, writing, listening, and speaking skills.

IGCSE course assessment consists of a Reading & Writing paper, a Listening exam, as well as Creative Writing (only French and Spanish). An oral exam is compulsory in French and Spanish, and optional in Afrikaans.

AS/A2 Level Modern Foreign Language

AS level is a programme that principally incorporates the advanced use of language, vocabulary, idiomatic use and cultural knowledge in order to prepare a student for more advanced university language studies. This course enables the student to gain a high level of understanding of current affairs and international issues that affect the regions in which the languages are spoken. The high standard of the grammar, vocabulary and linguistic content of the AS level thoroughly prepare its students to go straight into university studies with ease. At the end of the programme, the student should be proficient in both speaking, reading and writing essays using an elevated style of language. If desired, the student can take the literary component of the course (A2 level) in addition to the language; however, in order to complete the literary module, the student must have a very strong grasp of the language or be a native speaker owing to the linguistic difficulty and nuance of the pieces studied.

Course Assessment	Oral	Reading & Writing	Essay	Literature Text
Afrikaans	Optional	70% (AS); 45% (A2)	30% (AS); 20% (A2)	35% (A2)
French	30% (AS); 20% (A2)	50% (AS); 35% (A2)	20% (AS); 15% (A2)	30% (A2)
Spanish	30% (AS); 20% (A2)	50% (AS); 35% (A2)	20% (AS); 15% (A2)	30% (A2)

Cambridge AS /A2 level modern foreign language is considered advanced preparation for University level language studies.



Music

IGCSE Level Music

When studying the IGCSE Music syllabus, students will listen to, perform and compose music, encouraging aesthetic and emotional development, self-discipline and importantly, creativity. As a result, students enhance their appreciation of music, an achievement that forms an ideal foundation for future study and enhances lifelong musical enjoyment. Students study music of all styles; each style is placed in its historical and cultural context, and students are encouraged to be perceptive, sensitive and critical when listening. Although the majority of the syllabus examines Western European music, the music of other cultures is always represented.

IGCSE course assessment examines Listening, Performance and Composition.

AS/A2 Level Music

AS and A2 Level Music students develop an appreciation of, and an informed critical response to music of the Western tradition from at least two genres and periods. Students learn how to listen attentively and responsively in order to better understand the musical processes at work; they also learn how to communicate this understanding, supporting their judgements by evidence-based argument. As part of the course, students are encouraged to develop their own creative and interpretative skills through the disciplines of composing and performing in Western and/or non-Western traditions. This leads, in turn, to a deeper understanding of music in its wider cultural context.

AS/A2 course assessment

A choice of at least two of the following: Listening, Performance, Composing or Investigation and Report. A2 builds on and extends work covered in AS.



The AS and A level music syllabi are the perfect preparation to any University course in Music Studies.





ISCT offers three separate sciences in Key Stages 4 and 5: Biology, Chemistry and Physics. Cambridge (at both IGCSE and AS and A2 levels) places considerable emphasis on understanding and use of scientific ideas and principles in a variety of situations, both familiar and not-so-familiar to the student. The programme develops scientific and technological skills.

Sciences: Biology

IGCSE Level Biology

The syllabus covers a wide range of topics including biochemistry, microbiology, nutrition, respiration, excretion, reproduction, chemical and nervous co-ordination, homeostasis, genetics and inheritance, as well as energy flow in ecosystems, ecological balance and the effects of human interaction. Each topic endeavours to inform students of its relevance and application in everyday life.

AS Level Biology

This is a rigorous academic course which builds on the foundations laid in IGCSE but explores in greater depth and detail the most relevant topics like molecular biology, epidemiology, cardiovascular and respiratory diseases, infectious diseases, genetic control and immunity. Skills taught include analysis of information, and integration and application of principles within the context of recent scientific research.

A2 Level Biology

The course builds on the foundations laid in AS and covers a new set of topics such as energy and respiration, regulation and control, inherited change, selection and evolution, biodiversity and conservation, gene technology and biotechnology, as well as crop plants and aspects of human reproduction. There is a strong emphasis on integration and application of the biological principles as well as practical insight into more complex biological investigations.

See end of Sciences section for course assessment.

Siology at AS and A2 level provides an excellent platform for the students' further studies and equips them with the necessary academic and scientific skills to cope with rigours of tertiary studies in the Sciences.

Sciences: Chemistry

IGCSE Level Chemistry

Cambridge IGCSE topics include the particle nature of matter; experimental techniques; atoms, elements and compounds; stoichiometry; electricity and chemistry; chemical changes; chemical reactions; acids, bases and salts; the Periodic Table; metals; air and water; sulphur; carbonates and Organic Chemistry. These topics are covered through a mix of theoretical and practical studies. Students develop an understanding of the scientific skills necessary for further study at A levels, skills which are useful in everyday life.

AS Level Chemistry

This section of the syllabus is designed to allow candidates to use the chemical knowledge gained in the core syllabus to explore key areas of modern chemical science. The course provides opportunities to revise content from the core syllabus, as well as introducing candidates to some new chemistry. It focuses on the applications of chemistry in research, industry and everyday life, and raises awareness of the associated ethical issues. The teaching of this section will incorporate practical work.

A2 Level Chemistry

The A2 Chemistry builds on the AS syllabus and uses these topics to examine and question the applications of chemistry in industry and life.

See right hand page for course assessment.



Chemistry is an excellent preparation for careers in the Sciences, Medicine, Engineering and Education.





Sciences: Physics

IGCSE Level Physics

The IGCSE Physics course builds on work covered at Key Stage 3 and aims to develop the students' knowledge and understanding of scientific processes, concepts, facts, laws and theories, further improving their scientific vocabulary. Topics covered include General Physics; Thermal Physics; Properties of Waves; Electricity and Magnetism and Atomic Physics. They solve problems using knowledge learnt and explore the applications of Physics. Since Physics is a practical subject, students learn using experiments to help fully understand how the world around us operates.

AS Level Physics

This course is designed to give a thorough introduction to the study of Physics and scientific methods. It develops skills and abilities that are relevant to the safe practice of science and to everyday life such as concern for accuracy and precision, objectivity, integrity, the skills of enquiry, initiative and inventiveness. Students learn the understanding and application of scientific concepts and principles, rather than the recall of actual material. The course is designed to enable students to become confident citizens in a technological world and to take an informed interest in matters of scientific importance.

A2 Level Physics

This course builds on the knowledge learnt in AS Physics and goes further into the wonderful applications of Physics in Medicine, Telecommunications and Electrical engineering.

Assessment in the Sciences

The assessment procedure and examination structure is the same in all three of the Sciences. IGCSE course assessment evaluates knowledge, understanding, data handling, problem solving and practical skills via multiple choice and structured question papers.

AS/A2 level assessments are done as follows:

AS Multiple Choice Paper 1	AS Structured Questions Paper 2	AS Laboratory Practical Paper 3	A2 Structured Questions Paper 4	A2 Laboratory Practical Paper 5
31%	46%	29%	-	-
15%	23%	12%	38%	12%

S Physicists play a vital role in many technology-based industries ~ optoelectronics, nanotechnology, computing and renewable energy, to name a few. Others investigate the universe, and others still go on to healthcare (medical physics), or to study the processes of the Earth (geophysics) or the climate (meteorology).

INTERNATIONAL SCHOOL OF CAPE TOWN

Woodland Heights • Edinburgh Close Wynberg 7800 • Cape Town • South Africa +27 (0) 21 761 6202

we know education. we love learning. we love children.

