

CHENGVELO SECONDARY SCHOOL



Form 3 Options, 2008

INTRODUCTION

In Forms 4 & 5 pupils have some degree of choice as to which subjects they wish to continue to study to external examination level. All students at Chengelo will study nine subjects. The choices need to be made by the end of half-term in term two of Form 3, by which stage it is hoped that students will have sat down with their parents to discuss these options carefully. This will allow time for all students to be subsequently interviewed regarding the choices they have made to check their suitability and viability. In making this decision the pupils, parents and staff must take into account the following factors:

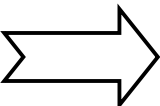
- What subjects does the child need for their intended career?
- What subjects are they good at and enjoy?
- Which subjects are important for their overall development?
- Which subjects can the school viably offer?

The purpose of this booklet is to give you some further information on GCSE/IGCSE and the content of the courses studied so that you are in a better position to make an informed choice for your child's future. The choices will be made from the following curriculum.

CORE SUBJECTS which **all** students will study up to IGCSE level.

- First Language English
- English Literature
- Mathematics

OPTIONAL SUBJECTS which students **may** study up to IGCSE level. Students will study six from the list below:

- Biology
 - Chemistry
 - Physics
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- All students must study at least two out of these three sciences.
- Agriculture
 - Art & Design
 - Business Studies
 - Computer Studies
 - Design & Technology
 - Development Studies
 - French
 - Geography
 - History
 - Religious Studies

Certain guidelines ought to be stressed at this stage. Whilst the system of choosing options is designed to give students the maximum amount of choice and flexibility, there are inevitable restrictions placed upon students in this process. All students are advised to keep their future career paths open by studying a good balance of subjects. Our most able students are advised to continue studying three science subjects and all students must

study at least two science subjects for IGCSE (NB To study a science based degree at the University of Zambia they would insist upon three IGCSE science qualifications).

For practical subjects such as Art & Design, Design & Technology and Agriculture maximum class sizes will be set in each case. The school will reserve the right to make judgements about viability of any course and does not guarantee that all the above mentioned courses will run in every academic year group.

Chengelo is a registered examinations centre for both Cambridge International Examinations IGCSE (International General Certificate of Secondary Education) and London University (Edexcel) GCSE examinations. Both IGCSE and GCSE are internationally recognised and are equivalent to the Zambian O-level. Pupils who expect to achieve high grades and wish to apply to the local universities (UNZA and CBU) can do so. Alternatively, pupils with good IGCSE grades can continue into the Sixth Form at Chengelo to study AS and A-levels or transfer to other schools or colleges. During Form 4 pupils have the option to sit the American P-SAT tests. This serves as a practice for the SAT examinations, which can be taken in Form 5 or 6 and are used as the basis for direct entry to American Colleges and Universities.

GCSE/IGCSE is graded on an eight point scale of A* to G with an A* being awarded for outstanding performance in that subject. These grades compare with the O-level system as follows:

IGCSE	O-level
A	1 or 2 Distinction
B	3 or 4 Merit
C	5 or 6 Credit
D	7 or 8 Satisfactory

In some subjects the syllabus content is divided into 'core' and 'supplement' material. Pupils will be set according to their ability by the relevant subject teachers. Pupils following the core syllabus are entered for the core level examinations and may achieve grades C-G. More able pupils take the core and supplement syllabus and sit the extended level papers aiming for Grades A*-E. Grades C, D and E at core or extended level are equivalent and the final statement of results does not mention which level the pupil was entered at. IGCSE final examinations in French and Religious Studies are sat in May and June of Form 5. All other exams are sat in November. The School retains the right to decide which level the pupil is entered for with the aim of them achieving the highest grade possible.

Coursework is an important part of several of these IGCSE courses. Our staff are qualified to assess this work with the marks counting towards the pupil's final grade.

IGCSE SUBJECTS

ENGLISH

The purpose of English in the Chengelo curriculum is to empower our students to be confident and competent communicators of the English language and to be discerning enthusiasts of a wide range of literature. By training pupils to be effective exponents of both written and spoken English, we are also equipping them to become leaders in their generation. Pupils follow an integrated course of language and literature throughout their time at Chengelo, which culminates in their sitting the IGCSE examinations in both English Language and English Literature.

The English Language course requires them to write in a wide variety of styles: factual, imaginative, informative, argumentative, persuasive, narrative, descriptive, personal, formal and informal. They will also learn to analyse media texts and respond appropriately to facts and opinions in published texts. The final examination will test their ability to comprehend unprepared written passages and to write an assignment in a specific language style.

In Literature, students will study six texts from all three genres of drama, prose and poetry, and from both the English literary heritage and other cultures. They will write coursework essays on three of the texts, while being examined on the other three texts in the final examination. Wherever possible, the drama texts will also be experienced in performance, either through video or through a live production. Video recordings will also be used to enhance pupils' enjoyment and understanding of novels and even poetry. Some popular texts studied in recent years have been:

Things Fall Apart, No Longer at Ease, To Kill a Mockingbird, MacBeth,
The Merchant of Venice, First World War Poetry and Songs of Ourselves.

The weighting between examination and coursework is as follows:

English Language: Examination 50%
Coursework 50%

English Literature: Examination 70%
Coursework 30%

MATHEMATICS

Pupils work towards the examinations based on syllabus 0580 which does not include coursework. The aims of the IGCSE Mathematics course are to enable students to develop their mathematical knowledge and oral, written and practical skills in a way that encourages confidence and provides satisfaction and enjoyment. Pupils will study a number of topics including number-squares, square-roots and cubes, standard form, estimation, limits of accuracy, ratio, proportion, rate, percentages, money, personal and household finance, graphs, algebra, functions, indices, solutions of equations and inequalities, geometry, trigonometry, statistics, probability, matrices, linear programming, constructions, mensuration, locus, trigonometry, vectors and transformations. Mathematics

is a core subject, and it is essential that all pupils have grounding in this subject that will equip them further study in any discipline.

In Form 5, pupils are split into two sets; extended and core. The final exams are available at two levels; Core curriculum with grades C-G available and Extended curriculum with grades A*-E being available. Both of these papers are set in the November of Form 5. Those who obtain grades B or better can proceed to do A-Level in Form 6. In 2010, there will be an exam based on the new syllabus for IGCSE only for very able students. They will sit a total of three papers. Paper 1, there will be no calculator allowed, and Papers 2 and 3, graphic calculators will be allowed.

SCIENCES

In Form 3 students have begun their IGCSE courses in Biology, Chemistry and Physics, with a double lesson of each. In Form 4 pupils continue with at least two of the three sciences Biology, Chemistry and Physics. Our most able students are advised to take all three science subjects. After the mock exams in the June of Form 5, a decision is taken by the subject teacher as to whether pupils should be entered at core or extended level.

Practical work remains fundamental to all the IGCSE sciences and is assessed through the Alternative-to-Practical paper in each subject. To support this there are five well equipped laboratories and a well stocked preparation room.

Reasons to Study Biology include:

- i) You want to be a doctor, dentist, veterinarian, biochemist, nurse, marine biologist, agriculturalist, physiotherapist, geneticist, etc.
- ii) Biology gives you a good understanding of the world you live in and your own body.
- iii) You enjoy doing practicals and lab work and investigating scientific problems by experimentation.
- iv) Biology will give you an understanding of the environment and how man's activities can affect and influence it.

Reasons to study Chemistry include:

- i) No science has contributed as much value to so many fields of human life as chemistry. Food, fuel, clothing, health and entertainment have all been served by chemists, and chemistry, throughout the world.
- ii) New opportunities for chemists are opening up in areas such as computers, biotechnology and the environment, as well as in more traditional areas such as petroleum chemicals, plastics and pharmaceuticals.
- iii) Chemistry will help you develop your problem solving skills, which are vital in all areas of life.
- iv) Chemistry is a required qualification for many college and university courses (e.g. medicine, dentistry, veterinary medicine, biochemistry, chemical engineering, pharmacy, agriculture, and genetics). Chemistry is a useful and enjoyable subject of study for everyone.

Reasons to study Physics include:

- i) Physics enhances your understanding of the World in which we live, and also helps you appreciate the majesty of God through examining his creation.
- ii) Physics gives you thinking skills, which can be applied in any context. It gives you the background knowledge you may need to solve everyday practical problems.
- iii) Physics gives you the technical background that can help with some aspects of political and business decision making.
- iv) Physics at IGCSE level is a very well respected academic qualification and can open up many career opportunities including Medicine, Engineering, and Aviation.

AGRICULTURE

The IGCSE syllabus includes topics such as soil science, crop production and protection, animal production and health, farm structures and machinery, agricultural economics, principles of plant growth and agriculture in a wider sense. The main textbooks used are 'O' level Agriculture by G. Owen, Agricultural Science Books 1,2 and 3 by the same author, Agriculture for Southern Africa by Elliot *et all*, and Senior Secondary Agricultural Science by O. Akinsanmi.

The examination consists of two core papers and an extended paper, along with a practical project of the pupil's choice. The subject has an excellent reputation and the examination results have been very good in recent years.

Reasons to study Agriculture include:

- i) It is an Applied Science, which harnesses the key concepts in the pure sciences for the provision of basic human needs of food, clothing and shelter.
- ii) It derives its productive resources from the natural biophysical environment and therefore creates an increased awareness of man's sole dependence on nature and the ever-pending need to manage our environment in a sustainable manner.
- iii) Agriculture opens up a variety of career paths leading to jobs such as: Agricultural Economists, Agribusiness consultants, International, Development Consultants, Farm Managers, Agricultural Engineers, Crop Scientists, Rangeland Managers, Veterinary Doctors etc.
- iv) Agriculture provides a vast range of opportunities for research in Academic and Socio-economic spheres of human life.

ART & DESIGN

All pupils up to Form 3 study Art & Design. Thereafter, it is an option and is taken up to IGCSE and A-Level. At IGCSE, students are required to submit work for two papers from a wide range of choices, which include Observational, Interpretative and Design Study. At A level students submit 4 pieces of work: two at AS and two at A level.

Reasons to study Art & Design include:

The Art and Design course:

- i) Encourages intuitive, imaginative and design thinking which help with problem solving in tactile, visual, critical and analytical faculties.
- ii) Stimulates interest in environmental and cultural awareness.
- iii) Provides an introduction to artistic appreciation, enjoyment, personal enrichment and increase one's confidence that comes as a result of acquisition of new skills.

Art and Design opens up a number of career paths including fashion designer, jeweller, interior designer, furniture designer, landscaper, architect, ceramist, computer graphics animator and game developer, commercial photographer, film producer, environmental conservationist, artist, art teacher/lecturer and advertising agent designer.

BUSINESS STUDIES

The IGCSE Business Studies course gives a broad introduction to the business world and can prepare a student for many different careers. In addition, it is a good introductory course for students considering the AS or A level in Business Studies.

The IGCSE syllabus is split into 5 sections:

- Why is business activity needed?
- How is business activity organised and financed?
- What is work like?
- What is produced and why?
- How and why do governments and the community influence business activity?

Field trips are made to business organizations to widen the scope of understanding. Final exams are written in the November of Form 5 and students will write 2 papers.

Reasons to study Business Studies include:

- i) I want to run my own business or be involved in business.
- ii) I want to broaden my knowledge (e.g. psychology of work, finance, marketing.)
- iii) Business Studies opens a number of career opportunities including: Management, Accountancy, Business, Administration, Training, Consultancy, Economics, Marketing and Business Law.

COMPUTER STUDIES

The IGCSE Computer Studies course includes sections on applications of computers and their social and economic implications, analysis of computer systems, problem solving including algorithm design and programming concepts, generic software and the organisation of data, and hardware, systems and communications.

The course aims are to:

- Develop in students an appreciation of the range and power of computer applications.
- Foster an interest in, enjoyment of, and confidence in the use of computing.
- Develop students' abilities to solve problems using computing techniques.
- Develop an awareness in students of the place of computing in society and issues computing raises in society.
- Provide students with a firm understanding of the basic techniques and knowledge required for computing applications.
- Foster a desire to use computers within other interests.

Reasons to study Computer Studies include:

- i) Computers are having, and will continue to have, an impact on education, business, administration, communications and all aspects of everyday life.
- ii) Universities and colleges increasingly expect students to have a thorough grounding in ICT skills.
- ii) Computer Technology will play an increasing role in the continuing development of Zambia.

DESIGN & TECHNOLOGY

All pupils study Design & Technology up to Form 3. Thereafter, it is an option and is taken up to IGCSE. The subject includes theory and practical work, which takes an idea through from design (solution seeking) to realization (the actual making of the designed product). At IGCSE pupils sit for two written papers and undertake a practical project. The syllabus covers a range of resistance materials such as metal (welding and machining), wood (including lathe work) and plastics.

Reasons to study Design & Technology include:

- i) It encourages the acquisition of a body of knowledge applicable to solving practical/technological problems operating through processes of analysis, synthesis and realization.
- ii) It promotes the development of curiosity, enquiry, initiative, ingenuity, resourcefulness and discrimination.
- iii) Design and Technology opens up a number of career paths including industrial designing, mechanical, electronic engineering and all the other related fields.

DEVELOPMENT STUDIES

Development Studies is practical as well as academic and helps pupils to think for themselves about life in Zambia. They learn to analyse the concept and practice of development and to evaluate the prospects for, and the constraints on, development in the "South". During the course they learn to appreciate their own talents and their role in helping society in their future careers.

Pupils initially study development at a local level, investigating projects around Chengelo, such as the water scheme or the workers' primary school and living conditions. They then study global issues, often using simulation games or role-plays, to get a deeper experience of the topics studied. At IGCSE the following topics are studied: the meaning of development, the Millennium Development goals in the light of Sustainable Development, population, health and education, rural development, industrialisation, urbanisation, trade and aid, politics and development and the role of women in development. Use is made of resources from across the Humanities Department since Development Studies covers a wide range of academic disciplines. The excellent results in this subject over the past years indicate that Development Studies is one that has a wide-ranging appeal to students of all abilities.

Visits made to local community projects broaden students' understanding and appreciation of the subject.

Reasons to study Development Studies include:

- i) I enjoy subjects that have practical application in the field.
- ii) I enjoy working with people participating in the community against poverty and injustice. I would like to contribute to development in less developed societies.
- iii) I often wonder why different countries are at different levels of social, economic and political development.
- iv) Development Studies opens up a number of career paths including: Research Work (including data analysis), Politics, Social-Work, Business-Management, Environmental Science, Work with Non-Governmental Organisations in community development projects.

FRENCH (GCSE EDEXCEL)

Pupils follow the Edexcel (London) GCSE French course and continue to develop their skills in listening, speaking, reading and writing. They cover in depth a variety of topics relating to living and working in a French-speaking environment. The course is assessed by examinations in the May and June of Form 5 and pupils may be entered for higher papers in each of the four skills.

Knowledge of a foreign language is an asset to any student, providing opportunities to develop communication skills and an understanding of an influential foreign culture. French is particularly useful to those pupils whose careers may lead them to travel or to work in Northern Africa or Europe.

A foreign language qualification is also required for entry to Higher Education by some colleges and universities outside Zambia.

Reasons to study French include:

- i) I enjoy learning to speak a different language and learning about another culture.
- ii) I am interested in how language works and in using communication skills.
- iii) French is the main language of communication in many African countries.
- iv) French opens a great many career opportunities including; Modern Languages, Law and French, Business Management and French, Marketing and French, Interpreting and Translating, Business and Trade links with French Speaking countries, Tourism.

GEOGRAPHY

Geography is basically the study of 'places', 'people' and often how they interact together. It is often regarded as a bridging discipline between natural and social sciences. It is popular with most students as they can easily grasp the reality and interest of the subject. Making Geography alive by the use of case studies and fieldwork is the key to its success. The use of the 'Wider World' series of texts is perfect for this approach. Case studies from all over the world are used as well as Zambian ones, giving the students a well-rounded global view of the subject.

Geography is also a practical subject and so field trips are an essential part of its study. Field trips include a river study at Kundalila Falls, a visit to industries on the Copperbelt and a town study of Kabwe. Along their geographical journey students will pick up skills such as map work and data presentation. They will also be able to analyse statistical

information and diagrams. Their increased knowledge and understanding of how the world 'operates' will be invaluable in many different careers from business to game ranching. Geography lessons at Chengelo are the first steps to encourage the students to go and see the world at firsthand for themselves!

Reasons to study Geography include:

- i) I enjoy learning about real places and people.
- ii) I enjoy learning subjects that have practical application in the field.
- iii) I am interested in understanding how the world operates and what my role is in improving the environment we live in.
- iv) Geography opens a number of career paths including: Environmental Science, Tourism, Demography, Geology, Meteorology, Social Work, Economics, Town and Country Planning.

HISTORY

The aim of the IGCSE course is to enable students to gain a better understanding of human activities in the 20th Century. Students learn about the causes and consequences of key historical events. Such knowledge promotes toleration, a respect for other cultures and an enhanced understanding of the many problems (political, social and economic), which face our world today.

History at IGCSE level also equips students with a number of vital skills. For example, to;

- use information accurately in order to support a coherent and logical argument.
- communicate in a clear and concise manner, using appropriate terminology.
- show an empathetic understanding of individuals and societies.
- interpret different sources of information, appreciating the potential for distortion through bias and propaganda.

Over two years, students cover a diverse range of topics. The focus is international and a basic outline is given below:

- International Relations, 1919-39
- Tension and Co-operation Since 1945
- Germany, 1918-45
- America in the 1920's and 30's.

Aspects of the course, which students find particularly intriguing, are the Vietnam War, the rise of Hitler and the end of the Cold War.

Reasons to study History include:

- i) I enjoy finding out about the past, or I am interested in politics, society or just seeing how things were different in different places and at different times.
- ii) I enjoy reading about and investigating subjects, I enjoy reasoning and debating subjects.
- iii) I often ask why things are the way they are today.
- iv) History opens a number of career paths including: Law, Management Administration, Data Analysis, Accountancy, Business Management.

RELIGIOUS STUDIES (GCSE EDEXCEL)

The aim of Religious Studies at Chengelo is to look at Religion and specifically Christianity from an academic perspective. The aim is to train pupils to think broadly, to challenge personal beliefs and to increase knowledge. The course aims to cover a wide variety of topics in the first three years including giving a foundation to Biblical knowledge, and a study of other religions such as Judaism, Islam, African Traditional Religions and Hinduism from a Christian perspective.

The GCSE course then focuses on two main topics, 'The Gospel of Mark' and 'Religion and Life from a Christian Perspective'. Pupils will produce a piece of coursework on each of these topics, writing the final examinations in June of Form 5. The course is well balanced and interesting. It is important that the pupils look at the Bible as the main source of knowledge of the Christian religion. It is also vital that they study relevant topics, relating Christianity to life in the present day.

Reasons to study Religious Studies include:

- i) It helps you to understand the beliefs, values and traditions of religions.
- ii) It challenges you to consider religious and other responses to moral and ethical questions.
- iii) It helps you to develop skills to identify, investigate and respond to fundamental questions of life.
- iv) Religious Studies opens a number of career paths including: Law, Sociology, Psychology, Teaching, Ministry, (Church) Caring professions.

NON IGCSE SUBJECTS

INFORMATION TECHNOLOGY (IT)

Students who do not opt for the IGCSE in Computer Studies continue in Form 4 with mastering skills in a wide variety of computer applications. They will be entered as appropriate for certificates in the Cambridge Computer Literacy and Information Technology (CLAIT) Programme. These examinations are set by Cambridge and the students will sit for the exam at any time during the year. The exam papers are moderated in UK at the end of Form 4 and the certificates will be issued in Form 5.

PERSONAL, SOCIAL & MORAL EDUCATION

This course continues in Form 3 through to Form 5 building on the work covered in Forms 1 & 2. During the Form 3 year the decision making process is emphasised in anticipation of the Option Choices. Relationships become even more important at this stage, including those with the opposite sex, and much time is devoted to discussions of this area. Form 4 & 5 move towards preparing for adulthood in terms of decisions for the future, relationships, preparing for careers/further education and other important issues of life. As well as some traditional teaching methods, discussions, role-play, small group work and other methods are used to encourage pupils to think for themselves about growing up and moving towards maturity.

PHYSICAL EDUCATION (COMMON CORE)

PE is taught as a curriculum subject throughout the five years at Chengelo. The school is fortunate in having excellent facilities, and these include a cricket field, 25m swimming pool, two tennis courts, and football, rugby, hockey and netball pitches. We also have two squash courts, two basketball courts, volleyball courts and athletics facilities.

As a result of the extensive facilities pupils enjoy a wide range of activities in PE lessons. Typically, a pupil may participate in athletics, basketball, cricket, cross country, football, hockey, netball, rounders, rugby, softball, swimming and volleyball.

The PE Department is also committed to extra-curricular sport. There are numerous clubs and activities taking place after school and at the weekends. Where possible “friendly” matches are arranged against other schools. Chengelo teams have always competed in the International Schools Association of Zambia (ISAZ) Sports Festivals held annually in Lusaka or the Copperbelt.

www.chengelo.sch.zm

Copies of this booklet can be downloaded from the ‘Parent Information’ section of our website.