

LOMAGUNDI COLLEGE IGCSE PROSPECTUS 2020

INTRODUCTION

Choosing the right subjects as you enter your formal examination years is never an easy task. Future abilities, skills and passions are not well defined in any student aged 14 years or thereabouts. Here are some general guidelines to assist in making these critical choices.

Parent and student should make the decisions together as far as possible. Parents should not impose their own personal preferences or aspirations upon their children. Parents should do all they can to know their own child, see what they are good at and guide them along those lines.

The existing results already gained by the student in the last two years and the opinions of a student's current teachers are two major factors to take into account when considering options. A common mistake is for a parent to pressure a student into Sciences or Commercials, or for a student to select these, when it is clear that the student should be selecting Arts or Technical Subjects. These latter subjects still have very high 'points earning power' for productive tertiary education. Best long term results are still gained from a student being guided into subjects they enjoy and/or are good at.

Please note that we still have the situation where Applied ICT, Travel and Tourism and Physical Education do not earn any points for applications to South African Universities. This may change but there is no information yet as to when. These are post IGSCE subjects and it is still constructive to take whatever is offered for Form 3 and 4 in these subjects.

ART DEPARTMENT

At Lomagundi College we offer Art as an option at IGCSE and this may ultimately lead to AS and A level for the more talented pupils and those wishing to pursue a career in Art and Design, or Architecture, Animation, Game Design, Graphic Communication, Fashion Design, Industrial design, Textile Design, or Photography. Art gives pupils an opportunity to explore the creative side of their intellect.

Pupils who opt for Art should have some ability, but if they have a passion for Art they will certainly grow as they study. All pupils take two components: Component 1 Coursework and Component 2 Externally set assignment leading to a supervised test of 8hours. The coursework will include work carried out at school over a one year or two year period. Pupils should note that in Art they will be faced with a considerable amount of hard work.

Recent introductions at IGCSE level are ceramics, pottery and use of new media. Pupils may now use an iPad or Laptop to created designs and the use of photography is being increasingly required for the students to demonstrate the sources of ideas for coursework and exam.

There are many Design careers on offer to those who love Art and opt to study this subject. Pupils interested in studying Architecture should be aware that Art is a requirement for University.

COMMERCIAL DEPARTMENT

The department has a lot to offer at IGCSE Level. Form 3As will follow a two-year-to-IGCSE programme. The choices for the traditional A stream classes will include both Accounting and Business Studies. These are both excellent courses if the pupil wishes to pursue a career in Business or end up running his or her own business.

Pupils who opt for Accounting should have a good ability at working with figures, and should enjoy working with numbers. This is a practical subject but does involve a lot of theory as well. Pupils who opt for Business Studies should have a good grasp of the English Language, be competent in English Comprehension and enjoy reading and essay writing. A lot of the questions are case-study based and involve writing essays, although there is also some interpretation of data and number work. Form 3Bs who opt for these subjects will follow a three-year-to-IGCSE programme. Accounting and Business can be taken at AS and A Level and can be combined with subjects such as Maths and Geography at A Level.

COMPUTER DEPARTMENT

The Department runs a network of 72 desktop computers that are housed in three computer laboratories. Two of these are equipped with the latest Clever boards to facilitate the learning process. Internet is available on all of the computers to facilitate access to online resources. The network is well secured by use of the latest Cyberoam technology.

CURRICULUM

Form one and twos

All pupils study the International Computer Drivers Licence (ICDL). This course is administered and examined by the Computer Society of Zimbabwe in conjunction with the ECDL Foundation. The ICDL provides a good base on which to build the Form Three curriculum. By the end of Form Two the pupils are expected to have completed the ICDL course which consists of seven modules. Those that may not have completed it in this time may continue with it into Form Three. The pupils who complete the course before the end of Form Two will be introduced to the theory of Computer Science and Information and Communication Technology.

Forms Three and Four

Computer Science, ICT and ICDL

The department offers Computer Science, Information and Communication Technology and the continuation of ICDL for the pupils who have not have completed the course in Form Two. Both Computer Science and ICT are examined by Cambridge at the end of Form Four. ICDL is also offered to pupils who join Lomagundi College from schools where they do not complete ICDL in Form Two. For a pupil to take up Computer Science, they must have shown very high proficiency in Mathematics and Science at Form Two. They must also pass an aptitude test that is administered early in the first term of Form Three. Information and Communication Technology (ICT) is offered to the second set of Form Three. These are usually the pupils who completed the ICDL but could not qualify for Computer Science. The pupils who do not qualify to take up either Computer Science or ICT will continue with ICDL until they complete the course. For those that complete the course in time there are some advanced courses that are offered until the end of their IGCSE course.

IGCSE DESIGN AND TECHNOLOGY

The school offers Cambridge IGCSE Design and Technology Syllabus code 0445. This is a two year course which starts in Form Three and culminates with a continuous assessment examination project done in the first two terms of Form Four. Students also sit for two other terminal examination papers at the end of the course. This subject is suitable for students who have done the Design and Technology Foundation Course in Form One and Two. In certain cases, students who have done Art, Woodwork, Metalwork or Technical Graphics at junior secondary level, may be allowed to take Design and Technology. Students who study Design and Technology gain technical skills which they are expected to use to create solutions to problems they may encounter. In so doing students develop a range of skills which include communication skills, resourcefulness, problem solving, research and creative skills

"Cambridge IGCSE Design and Technology provides an ideal basis for further study and prepares students for their future in the rapidly changing technological society". Students who have studied Design and Technology have a good foundation to enter into the vast range of design, creative and engineering professions.

ENGLISH DEPARTMENT

In Form Three all pupils will begin their IGCSE Language courses and follow a two or three year to IGCSE programme. The top two streams will, in addition, begin the IGCSE Literature syllabus.

The third stream will do the IGCSE First Language English Core or Extended syllabus. IGCSE English as a Second Language will also be available as the need arises for this class. This will allow them to carry on with English Language General Paper or Business English at AS Level. The third stream will write their exam at the end of their fifth year. It is worth exploring the wide variety of opportunities available for further studies, with A level English in one's portfolio. All IGCSE exams for the first two streams will be written at the end of the fourth year.

FOOD AND NUTRITION DEPARTMENT

We offer Food and Nutrition as an option for A and B streams at IGCSE Level. It is a two years programme with a syllabus that provides candidates with opportunities to develop knowledge and skill in both theoretical and practical aspects of food and nutrition. Universities and employers accept the subject as proof of knowledge and understanding of food and nutrition.

The exam is composed of two papers, which are:

Paper 1 – Theory (2hrs)

Candidates are tested on the science of food and the practical application of food science to food handling and preparation.

Paper 2 - Planning session (1hr 30mins) and Practical (2hrs 30mins)

A practical assignment that links to the nutritional aspects of the subject, the manipulative skills of food preparation and competent use of equipment.

IGCSE Food and Nutrition is an ideal foundation for further study in Food Studies/Food Science, at 'A' Level or Professional Cookery at Tertiary education Level.

In order to enjoy this subject you will need to be interested in food, nutrition, healthy eating and cookery. In Food and Nutrition, pupils learn to become creative cooks, both individually and as members of a team. They combine practical skills with an understanding of aesthetic, social, economic and environmental issues, technology and industrial practices to fit in the modern, changing and multi-cultural society. They analyse and evaluate existing menus as well as producing their own menus and practical work.

Chronic diseases such as heart disease, cancer, obesity and diabetes and ageing itself are all influenced by the diet we consume and, given the current global situation in the early 21st century there is also a growing need to manufacture food in an environmentally responsible way. Students in food and nutrition will be uniquely placed to contribute to this area.

Opportunities exist within the food industry for students who are trained in both food and nutrition, including understanding raw ingredients, their nutritional content, and the effect of processing and storage on food

quality (colour, flavour, texture) and nutritional value. They will also appreciate the physiological link between consumption, nutrient uptake and health benefit or risk.

Food and Nutrition creates a stepping stone to the following employment opportunities:-

Food Technologist, Catering Manager, Dietician, Events Manager, Nutritionist, Hotel Food Service Manager, Restaurant Manager, Chef, Caterer, Confectioner, Hospital Food Service Manager, Weight Loss Counsellor, Teacher, Health Promotion Officer, Consumer Scientist, Sports Nutritionist, Environmental Health Officer etc.

GEOGRAPHY

Geography has important links with many of the subjects offered by the College. There is an interdisciplinary relationship between Geography and Biology, Physics, Chemistry, History, English Language, Business Studies and Travel & Tourism.

Geography by its nature is a practical subject. Learners will pursue a fully integrated course which allows them to develop their practical skills by carrying out fieldwork and geographical investigations within the IGCSE, AS level Core Geography topics and Advanced Geography options. In this respect Lomagundi College takes pupils of every year group on fieldwork and excursions to ensure a complete fulfilment of the requirements of the syllabus.

Studying Geography develops not only subject knowledge but also important life skills. All learners will become **confident** in working with information and ideas of their own and those of others; **responsible** for themselves, responsive to and respectful of others; **reflective** as learners, developing their ability to learn; **innovative** and equipped for new and future challenges and **engaged** intellectually and socially, ready to make a difference.

IGCSE Level

All learners at Lomagundi College study Geography from Form 1 to the end of their IGCSE course. Successful Cambridge IGCSE Geography candidates develop lifelong skills, including:

- an understanding of the processes which affect physical and human environments
- an understanding of location on a local, regional and global scale
- the ability to use and understand geographical data and information
- an understanding of how communities around the world are affected and constrained by different environments.

Examinations

All candidates take three components; Paper 1 and Paper 2, and either Component 3 or Paper 4.

Paper 1: 1 hour 45 minutes

Geographical Themes 45%. 75 marks, weighted to 100 marks. Candidates answer three questions, each worth 25 marks. Candidates must answer one question from each section.

Paper 2: 1 hour 30 minutes

Geographical Skills 27.5%. 60 marks. Candidates answer all the questions

All candidates take either

Component 3:

Coursework 27.5%. 60 marks. Teachers set one Centre-based assignment of up to 2000 words. Centre-based assessment*

or

Paper 4: 1 hour 30 minutes

Alternative to Coursework 27.5%. 60 marks. Candidates answer two compulsory questions, completing a series of written tasks.

HISTORY DEPARTMENT

People who study History are explorers. They investigate past politics, societies, cultures, art, education, economics and conflicts. They thus develop a deep understanding of the dynamics of current affairs. They develop the critical thinking skills that help them see through emotion and propaganda to find the core issues.

This makes the study of History valuable in the pursuit of Law, Marketing, Politics, Diplomatic Services, Business, Journalism and in many of the Humanities. Employers tend to value the research, analytical, teamwork and communication skills that students of History develop.

Twentieth Century History is offered as a 2 year IGCSE course.

One must beware of thinking of this subject as an easy option. It is not. It demands serious attention and considerable reading and though is required in orders or the pupil to be successful.

MATHEMATICS DEPARTMENT

At Lomagundi College all pupils write Maths at IGCSE with the 3A classes taking the two year course and the 3B classes taking the three year course.

Maths can be taken at two levels, Core and Extended. At the Core level, the best symbol a pupil can obtain is a C. However, those who struggle with Maths are strongly recommended to take the subject at Core level, as this gives them the best opportunity of a pass. Only those pupils who do sufficiently well in the internal exams will be allowed to write Maths at the Extended level.

MODERN LANGUAGES DEPARTMENT

French is offered at IGCSE level and may be continued to AS Level.

A second language is not usually required by students for entry into foreign tertiary establishments, but can be an advantage. French is widely spoken around the world and is an asset in many career opportunities.

Generally, this subject is offered to pupils who have ability in and enjoyment of the language and have already successfully completed Forms 1 and 2 in the subject. Acceptance into Form 3 for French, should be discussed with the subject teacher first.

PHYSICAL EDUCATION

The IGCSE Physical Education syllabus provides candidates with an opportunity to study both the practical and theoretical aspects of the subject. It is designed to foster enjoyment in physical activity. The knowledge gained should enable candidates to develop an understanding of effective and safe physical performance.

Sport is now a billion dollar industry with new career opportunities opening up and Physical Education will set the pupil up well to further a career in this new flourishing industry.

Why Choose Cambridge IGCSE Physical Education?

Universities and employers accept Cambridge IGCSE Physical Education as proof that candidates have knowledge, skills and an understanding of a range of relevant physical activities. Candidates' knowledge, skills and understanding come from studying both the practical and theoretical aspects of Physical Education. Successful Cambridge IGCSE Physical Education students gain lifelong skills, including:

- an ability to plan, perform, analyse, improve and evaluate physical activities
- knowledge skills and understanding of a range of relevant physical activities
- an understanding of safe and effective performance
- an understanding of the role of sports and physical activity in society and in the wider world
- an excellent foundation for advanced study
- an enjoyment of physical activity

PHYSICAL EDUCATION AT LOMAGUNDI COLLEGE

Physical Education is a subject that has been available at A Level at the College since 2008. The subject has a good pass rate at both the AS and A2 level and is accepted for University entrance at UK, US, New Zealand and Australian Universities as a full science subject on a par with others. South Africa, however, is still to include it on the list.

Lomagundi Physical Education has produced students who are doing well at US, UK and New Zealand Universities majoring in various fields ranging from Sports Management to Sports Science and Physiotherapy. The subject has also been introduced at junior level at the College (Form 1 and 2).

IGCSE Physical Education will prepare the pupil for advanced studies at the College and later on at University. This is an opportunity to start a career in a growing industry.

SCIENCE DEPARTMENT

All Form 3 pupils will study at least one science subject as it is part of our Core Curriculum.

The top set studies Biology, Chemistry and Physics as separate subjects. There are five periods per week

for each subject and so the pupils need to be able to work at pace and grasp concepts readily in order to keep up.

The second set studies two Science subjects which are Biology and Physical Science. This allows six periods per week for each subject and therefore allows more time for concepts to be developed.

The rest of the group studies Combined Science at either Extended or Core level depending on their aptitude for the subject. Combined Science involves a study of all three Sciences at a more practical level.

Biology, Chemistry and Physics can all be continued to AS and A Level provided the pupil also has a good pass at IGCSE Mathematics. Pupils who struggle with Maths will not cope with Science subjects at Sixth Form Level.

TECHNICAL SUBJECTS

An overview from Form One to IGCSE to A Level.

DESIGN AND TECHNOLOGY

This has been one of the key Departments at Lomagundi College offering a wide variety of subjects from Form One up to Upper Sixth.

1. **DESIGN AND TECHNOLOGY:** This is offered at Form Three after the pupils have undergone basic training in Wood Technology, Metal Technology and Technical Graphics in Forms One and Two. They write IGCSE in Form Four or Form Five depending on which stream they have been placed after the Form Two Grading Tests. Areas covered in this subject include the basic design process from problem identification, realisation up to the final testing and evaluation of the manufactured product.

Pupils may proceed with the subject into AS and A2 levels after successfully completing their IGCSE. Students who have studied Design and Technology have a solid foundation to enter into the vast range of design, creative and engineering professions after further Polytechnic or University specialisation studies.

- 2. AS LEVEL: Component 1. Common Core[compulsory] The Design Process: from the point when a problem is identified, to the conception of a solution, to the realisation and evaluation of the designed product. A three hour paper is written at the end of the year. Component 2: This is a coursework project done over 40-50 hours[about two school terms]. There is a choice of three questions from which to choose one. Pupils also undergo theoretical and practical instruction in Product Design, Graphic Products Technology and Practical Technology competencies throughout the course.
- 3. A Level: Component 3. This is a three hour paper written at the end of the year. There is also a Paper Four. This is a coursework component which also includes the designing and realisation of a product after creating a situation or problem.
- 4. WHO CAN DO A LEVEL DESIGN AND TECHNOLOGY: Any pupil who has successfully passed the subject at IGCSE level with a 'B' grade or better. Pupils who have passed 'O' level Metal Technology and Design or Wood Technology and Design or Technical Graphics and Design with a 'B' or better grade are also welcome to take up this programme.

METAL TECHNOLOGY AND DESIGN:

This subject is available from Form Two up to Upper Sixth. The subject covers all basic workshop technology in areas such as workshop safety, bench work processes, turning ,milling, shaping, forging, drawing and designing and manufacturing given or own designed products. Pupils undergo a three year teaching and training programme which culminates with the writing of ZIMSEC 'O' level exams. The exams comprise of:

A Paper three design and realisation project done over two terms, then a three hour theory, drawing and design paper and also a three hour practical exam.

POST 'O' level studies: Pupils who have successfully passed with a 'B' grade or better at 'O' level can proceed to do the CITY AND GUILDS MECHANICAL ENGINEERING[Manufacturing Technology] Level 2 Course over a period of two years. The same group also do the Local National Foundation Certificate in Machine shop Engineering. These two are polytechnic courses which pupils can latter on use to secure university places all over the world or go to local and international polytechnics to do the higher diplomas up to BSC in Mechanical Engineering. Holders of these qualifications are at Malaysian, Canadian, Australian, Chinese and many more Universities undergoing training in Mechanical, Civil, Automotive and many other related fields. Some have diversified into apprenticeship in Diesel Plant Fitting, Aircraft Engineering and Deep Sea Diving and Welding. The list is endless. Companies like Bell, Goddard, John Deer, Pioneer and many more have taken our past pupils for apprenticeship training and our products have proved to be a cut above many.

OTHER COURSES: The Lomagundi College Metal Technology and Design Teacher in conjunction with the WELDING SKILLS CENTRE of NO 47 Coventry Road Harare, are running professional industrial welding courses for our pupils in GAS, ARC, MIG and TIG. We have several current and past pupils who have done the welding courses up to coded welder level-examined and certified by the Standards Association Of Zimbabwe. These courses have made immense differences in the lives of these pupils across the globe. Any pupil who wishes to go the technical world is advised to go through this department.

TECHNICAL GRAPHICS AND DESIGN AND TECHNICAL DRAWING:

These are key subjects which form a solid foundation for every technical studies pupil from high school up to University. Any technical operative without a basic understanding and application of these subjects is like a

half baked cake. Technical Graphics is offered to all Form Ones to give them an insight and good grounding in basic line work, pictorial drawing, orthographic drawing, graphic product origination and finish applications. Pupils who choose to do this subject at Form Three proceed to write it at 'O' Level under ZIMSEC- the local examining body. After 'O' Level, pupils who pass with an 'A' or 'B' Grade may proceed to study 'A' Level Technical Drawing majoring in Geometrical and Mechanical Drawing or Geometrical and Building Drawing. Past pupils who have successfully completed this course have proceeded to do Architecture, Mechanical, Civil and Electrical Engineering at various Universities and Polytechnics at local and international Universities. Some have gone the apprenticeship way specialising in Drafting and Designing at National Certificate up to the Higher Diploma Level.

COMPUTER AIDED DESIGN

This programme is at the moment being offered by AUTODESK to our current Form Ones and we hope to extend it to other Forms in the near future. Pupils write an exam administered by Autodesk and the successful candidates are awarded certificates. A sound knowledge of CAD has become a basic requirement for all Engineering programmes at most Polytechnics and Universities world wide. We also run a very popular CAD Club within the Technical Drawing portfolio and the members pay an exam fee to Autodesk for certification upon the successful completion of each module. Any pupil from Form One to upper sixth is free to be a Club member.

WOOD TECHNOLOGY AND DESIGN

Currently, all Form Ones do the subject and they are inducted in basic workshop safety, hand tools selection, use, care and basic maintenance. The practical work involves the designing and making of common home and garden artefacts which include cell phone stands, book racks, trays, jewellery boxes and many others. The syllabus at this level gives the pupils a very solid foundation for the highly skills demanding post Form One

Levels of study. If pupils choose the subject at Form Three they embark on the 'O' Level syllabus which comprises of three examinable components being a three hour theory paper, a three hour practical exam and a coursework project done over two terms. This is a local syllabus which is examined by ZIMSEC. Pupils who wish to carry on with this subject after 'O' Level can study it at 'A' Level. The 'A' Level syllabus is more complex and very demanding in theory, practical work, drawing and designing. Most of the work is at industrial level and it involves the use of circular saws, thicknesses, planers, mortising machines, band saws and many other related skills. A pupil who has gone through this syllabus can easily start an own cabinet making venture or proceed to undergo apprenticeship training in related fields or take wood related courses at University. Pupils may also do post 'O' Level Vocational courses examined by HEXCO in Wood Machining and Cabinet Making at National Foundation Certificate or National Certificate Level.



TABATANA