

Choosing Subjects for Years 10 & 11

Your first step into the future



Your first step into the future

As the end of Year 9 approaches, all of you will be faced with what many students (and parents!) consider to be a daunting task - choosing Year 10 & 11 subjects.

For the first time, you have been given a choice about what subjects you want to study over the next two years. Choosing the right subjects thus needs careful thought. The decisions made now will crucially affect choices in higher education and beyond.

When choosing your subjects at this stage, think about the A level/ IB subjects you might want to choose to study. If you are not looking at a career that requires specific subjects, your best path is to study *as broad a range of subjects as possible* - subjects that you enjoy. Where possible, students should carry a balanced programme consisting of at least one science subject, one humanities subject, one creative subject and one modern language.

Most **elc** students take nine academic subjects in Y10. Two subjects are compulsory for all students: 0500 First Language English and 0580 Maths; 0546 Malay – Foreign Language is mandatory for Malaysians. This leaves six or seven optional subjects. Please note, after consultation with the Head of Secondary it is possible to opt for fewer than nine subjects. All IGCSE subjects available at **elc** are placed in 7 bands,

except Mathematics and English. From these, you select *one* subject from each band. The bands have been chosen carefully to allow students to study their preferred subjects.

Positive Achievement

IGCSEs reward students for positive achievement - what they know, understand and can do. As well as testing whether students can recall information and present it in an orderly manner, the curriculum encourages:

- the development of oral and practical skills;
- an investigative approach;
- the use of initiative to solve problems;
- the application of skills, knowledge and understanding;
- the ability to undertake individual projects and to work as a part of a team.

IGCSEs are recognized as high profile qualifications with an excellent reputation which counts towards entry to universities and colleges around the world. For more information about the IGCSE please go to the Cambridge International website (<http://www.cambridgeinternational.org>). You may also visit our website www.elcecho.com for the Parent's Guides to Year 10 and 11 subjects.

Are the IGCSEs difficult? Are they enjoyable?

It is true that the IGCSEs are demanding. If they were easy they would not command the respect that they do. Admissions officers around the world recognize the value of Cambridge IGCSEs. "The Cambridge curriculum is superb preparation for university." (Christoph Guttentag, Dean of Admissions, Duke University. Our small class sizes and experienced teachers will help you to do your best. In the June 2017 exams more than 70% of our students' IGCSE results were A* / A.

ACCOUNTING



Accounting is concerned with what is happening in a business, what the business is worth, analysing and recording what its activities are costing and how much profit it is making.

Why do it? Ultimately, all accounting information is accumulated to help someone make decisions. That someone may be a company president,

a production manager, a small-business owner, a politician – the list is almost infinite. In fact, a survey of managers ranked accounting as the most important business course for future managers.

What skills do you need? You need a good command of English, simple maths using percentages, ratios, proportions etc., an analytical mind, an ability to interpret financial data and make decisions.

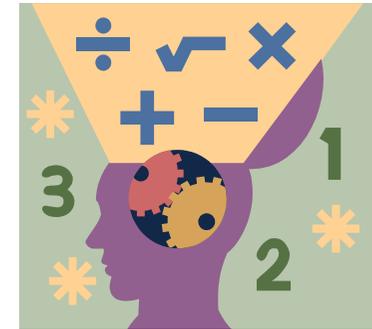
Is it difficult? No, it is not difficult if you are systematic and methodical in your approach as you will be dealing with a lot of numerical figures.

What subjects go with it? Business Studies, Economics, Law, Statistics, Management and Banking.

What degrees does it lead to? A degree in Accounting, Economics, Management or Business. This can lead to a professional course in Chartered Accountancy, Certified Accountancy, Cost and Management Accountancy, Masters in Business Administration etc.

ADDITIONAL MATHEMATICS

The Additional Mathematics syllabus is intended for high ability candidates who have a strong background in algebra, are likely to achieve Grade A* or A in the IGCSE Mathematics examination, and who plan to study Pure Mathematics, Science or Engineering at university.



CIE allows students who have not taken Additional Mathematics to pursue A-level Mathematics. *However, most A-level colleges in Malaysia impose their own requirements which are more rigorous than the exam board's.* If you plan to take up Mathematics as an A-level subject in Malaysia you are strongly advised to do Additional Mathematics in Y10-11.

The aims of the course are to enable students to:

- extend their mathematical skills and use these skills for problem solving;
- devise mathematical arguments and use and present them precisely and logically
- integrate information technology to enhance the mathematical experience
- to prepare for further study in mathematics and the sciences

ART



What is it? Art thoughts and practices are the essential part of the entire history of our human existence. Through art, we not only understand who we are, but also connect our imagination, our ideas, and our reasoning. Studying arts and its disciplines, as well as studying art history and art criticism by observing and interpreting civilizations throughout history and across cultures,

enables students to experience diversity. Art is multiculturalism in practice and in theory, without undermining our own cultural and national identities.

Is it difficult? You must be able to manage your time effectively as you have to produce a substantial amount of work to develop your skills. A strong interest in the subject will motivate you to do well.

Is it enjoyable? Art allows students to acquire the tools and knowledge necessary to create individual responses as independent learners in regard to a spectrum of situations, and is essential not only in understanding life, but in living life to its full extent.

What degrees does it lead to? At university level, you can further your studies in architecture, visual art, art history, and art criticism. Apart from the above, the Art and Design course has the capacity to support further study in disciplines such as art education, product design, fashion design, desktop publishing, and multimedia applications in film making, editing and animation.

BUSINESS STUDIES

What is it? Business studies looks at how businesses are organised into methods of production, marketing, administration and management. It provides a basic understanding of how money is earned and how it is used in the most efficient way.



Why do it? It is good preparation for those who want to be economists, accountants, management consultants/ personnel, businessmen, etc.

What skills do you need? You need a good command of English, an analytical mind to visualise the business world, simple maths using percentages, ratios and proportions.

Is it hard? No, if you are able to understand how decisions are made in buying and selling activities. However, consistent work is absolutely necessary. Reading your text, notes, newspapers, watching business news and applying whatever you have learnt to different situations is essential.

Is it enjoyable? It will be enjoyable for those students who are mature and able to analyse.

What subjects go with it? Accounting, Economics, management and History.

What degrees does it lead to? A degree in Economics, Accounting, Management and Business.

BIOLOGY



What is it? It is the study of living things and how they function. You learn about – and actually use – some of the creative and interesting methods scientists use in their investigations.

What skills will you develop? The ability to sort, organize and interpret information as well as the ability to express an effect or process technically and accurately.

Is it hard? Biology is less mathematical than chemistry or physics. However, you have to write expressions which are accurate and you have to deal with experimental data set in unfamiliar contexts.

Is it enjoyable? Yes, because living organisms are such interesting things and nature has provided design ideas to many creative individuals.

Which subjects go with it? Chemistry and physics.

What degrees does it lead to? Biological sciences - a big umbrella area - and health sciences, not to mention medicine.

CHEMISTRY



What is it? The study of substances, their make-up, their atoms and molecules, and what happens when you combine them.

Why do it? It is good preparation for those who want to be doctors, vets or physiotherapists, but you also use it in accountancy or law.

What skills do you need? You need to be comfortable with using percentages, ratios and proportions. You also need to remember many small details to help you make connections.

What skills will you develop? The ability to see where and how small details fit into a larger pattern, as well as the ability to recognize patterns and use them to make predictions or to interpret data.

Is it hard? Not if you work consistently.

Is it enjoyable? Some of the experiments are good fun, while being able to make predictions and identify unknown substances is also stimulating.

Which subjects go with it? Physics and Maths for those wanting to do medicine; biology for health care; geography for environmental scientists; English or history for those wanting a contrasting subject.

What degrees does it lead to? Chemistry, medicine, health care, environmental science and even business studies, economics and law.

PHYSICS



What is it? It is the study of the laws of nature, with which predictions can be made and problems solved.

Why do it? Physics involves a lot of practical problem solving. Any career in medicine, engineering or electronics requires physics but those pursuing industrial and technical courses will also benefit from this subject. It has a high

reputation in any field because of its emphasis on the application of knowledge.

What skills do you need? You need to be comfortable with using algebraic formulae and working with proportions. However, you also need to be able to explain ideas or effects technically.

What skills will you develop? Studying physics is a good way to develop your logical thinking skills. You can learn to solve problems in everyday situations, and understand the world around you.

Is it hard? Is it enjoyable? Physics provides a satisfying intellectual experience for able students. Less able students will benefit from applying their knowledge to more familiar situations.

What subjects go with it? Chemistry and Maths.

What degrees does it lead to? All branches of engineering. Physics is a prerequisite for computing, medicine, chemistry, and most biology occupations.

GEOGRAPHY



What is it? The IGCSE Geography syllabus aims to encourage students to develop a sense of place and an understanding of relative location on a local, regional and global scale.

You will study and discuss different communities and cultures throughout the world and gain an awareness of the contrasting opportunities and constraints presented by different environments.

Why do it? Geography is happening now.

What skills do you need? You will learn to make judgments and decisions, as well as analyse, investigate and inquire.

Is it difficult? It is probably not, due to the fact that it is so current; however you will need to ensure that you use your time effectively and develop an enquiring mind.

Where can I go with Geography? Geography is one of the most popular subjects as universities and colleges look to people who have a wide range of knowledge.

Getting a job? Maybe a job with the United Nations, maybe volunteering in Africa, as the countries develop. What about becoming a Volcanologist? Furthermore, many employers believe that people who have studied Geography possess all the skills required to be successful.

HISTORY

What is it? History gives you a sense of the past and develops an awareness of the development of differing values and societies.

Why do it? History promotes understanding between different cultures and national traditions. You learn from the past and emerge with an enhanced capacity for informed citizenship. Since history builds your critical thinking skills, it is relevant to *any career*.



What skills do you develop?

- The ability to assess evidence.
- The ability to assess conflicting interpretations.
- The ability to assess past examples of change.

Is it enjoyable? Yes, as you get to understand how societies work and why the world is as it is.

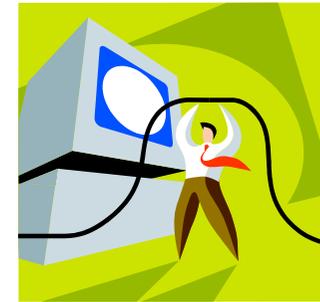
What subjects go with it? Almost every subject has links to history.

Who can do it? Anyone with a good work ethic, a genuine interest and an inquisitive mind will enjoy the subject.

Which degrees does it lead to? Law, arts and social sciences, mass communication and business studies, just to name a few. History is useful for work. It helps create good businesspeople, professionals, and political leaders. The number of explicit professional jobs for historians is considerable.

ICT

What is it? Information & Communication Technology (ICT) is the study of the use of computers, computer-based problems and applications throughout society. It is an ideal preparation for a technological world in which ICT touches every part of our daily lives.



What about coursework/exams? There is no coursework. Practical work makes up 60% of the total mark. You will sit two practical papers under examination conditions. There is a two-hour written exam paper worth 40% of the total mark.

What skills do you need? Basic knowledge in using generic software. You also need an analytical, logical and systematic approach, an interest in solving problems and a natural curiosity.

Is it difficult? Being interested in the subject makes it a lot easier and so does a logical mind.

Is it enjoyable? Yes, as you get to acquire many practical skills that will serve you well in the years ahead.

Which subjects go with it? ICT links well with almost all subjects.

What degrees does it lead to? A huge range of computer-based degree courses as well as subjects like engineering.

ENGLISH LITERATURE



What is it? It is the study of texts from different periods and genres of English literature. You will critically examine many novels, plays and poems.

What skills do you need? You must have a high level of fluency in English. You fall into this category if you have 70% or above in English Language, and/or a recommendation from your

English teacher. You must have a love of reading, a thirst for learning about language, and an ability to see patterns and relationships.

Is it hard? It's harder than some people think. But if you have a flair for the subject and you keep up with your assignments, you can do well.

What subjects go with it? Just about any subject goes with Literature. Traditionally, history, languages and other humanities subjects were seen as the best subjects to complement literature. Now, however, employers in all fields have begun to seek people who have a background in literature and language studies, as Literature helps students think critically and communicate well.

What degrees does it lead to? English, linguistics, media and cultural studies, law, philosophy...the list goes on. The skills you practise in the literature course are essential for many occupations including business management, reporting, creative and technical writing, public relations, medicine, social work, government work, and banking.

MUSIC



What is it? It is the study of music through the three strands of listening, performing and composing.

Why do it? If you love music, enjoy singing, playing an instrument, or writing your own songs, then the IGCSE Music programme is for you.

Is it difficult? Yes and No. Some students find theory work easy and practical work difficult and, of course, vice versa. This is up to the individual and therefore topics and levels of difficulty will vary from student to student.

Is it enjoyable? Yes! This is mostly a practical course which will allow participants to develop a broad range of practical musical skills, based on the theoretical work covered.

Which subjects go with it? Art, Design and ICT, to almost all subjects at this level can be linked to Music. The skills you develop here can be used to enhance your learning in all other areas of study and life.

What skills do you need? It is advisable to have had exposure to music education via either prior classroom music lessons and/or private tuition-style classes.

What degrees does it lead to? A wide range in fact! At university level you can attend a Conservatorium, or become a teacher of music, or study different time periods or cultures and their connection to music, i.e. musicology. There are also wonderful career opportunities linked to multi-media providers e.g. radio and on-line companies, and, of course, 'dream positions' in the music, film and television industries!

PHYSICAL EDUCATION



and healthy lifestyles.

What is it? PE is a well established and recognised qualification. The course is made up of a combination of Practical PE Performance and Theoretical knowledge. The theoretical content is a combination of physiological, psychological and contemporary knowledge related to sport

Why do it? If you want to learn more about training, opportunities in sport, how to adopt a more healthy lifestyle and participate in more practical activities, then you will enjoy PE.

What skills do you need? You need to be able to plan, prepare and perform and analyse various practical sports/activities. You will have to develop a variety of ICT skills in various scenarios and also improve your understanding of effective physical performance.

Is it difficult? Yes and no! Any student who enjoys studying Physical Education and sport will be able to understand and develop their analysing and improving ability. However you need to be assessed in 4 different activities so it is imperative that you have a good wide range of sporting prowess.

Is it enjoyable? Yes, very much so. Being a PE student indicates you like to learn by trying things yourself. Most thoroughly enjoy the practical elements but please remember that there is an exam (which makes up 40% of the course) and coursework which makes up 60% of the course.

What subjects go with it? The most closely related subject to the theory side of PE is human Biology. At 'A' level, many PE students will also study Psychology, Biology and Business Studies (which help with Sports Management)

Who can do it? Pupils with a genuine interest in sport, training and having a healthy body and mind should consider taking IGCSE PE.

Which degrees does it lead to? PE lends itself to many different degree courses, whether it is a degree in Physical Education for those who wish to become a PE teacher, Sport Science, Sports and Recreation Management, Sports Coaching and Development or Leisure as well as sports officiating.

COMPUTER SCIENCE



What is it? Computer science is the study of the foundational principles and practices of computation and computational thinking and their application in the design and development of computer systems.

What does it involve? You will learn to develop computational thinking, that is, thinking about what can be computed and how, and including consideration of the data required. Learning computational thinking involves learning to program, that is to write computer code, because this is the means by which computational thinking is expressed.

What skills do you need? You need to be able to recall information and apply this information or explain it. You should have some problem-solving and practical skills; all of which will be required by you to show your ability to comprehend and analyse computational tasks and to design, implement, test and evaluate solutions using a variety of methods.

Is it difficult? If you are technically inclined and enjoy solving problems, this is the subject for you.

Is it enjoyable? Many subjects teach problem-solving skills to some degree, but Computer Science develops a particularly systematic and deep approach to thinking about complex problems.

What subjects go with it? Obviously ICT and Computer Science are complementary subjects. Other subjects include Mathematics and Physics.

Who can do it? Students who enjoy this course are used to working independently, as programming prowess only comes with hours of practice outside of the classroom. You must enjoy problem solving as in order to create a software solution you must fully understand what the problem is before you can even think of designing a programme. You should be mathematically-minded.

Which degrees does it lead to? You can specialise in software engineering, such as medical and biotechnical software, business software, military software, nanotechnology, computer games, mobile devices and human interfaces.

**REMEMBER, YOU CAN ALWAYS
CHECK WITH THE YEAR 10 AND
11 TEACHERS FOR MORE
SPECIFIC DETAILS.**

GOOD LUCK!