Arab Unity School





IGCSE COMPULSORY SUBJECTS AND OPTIONS BOOKLET YEAR 10 2021-22



Cambridge International School



IGCSE GRADES and EXPECTATIONS

As in all other Senior schools, we use standardized data from external exams to predict how our students should perform according to their cognitive ability. We use the CAT 4 examination results to accurately predict grades at IGCSE and we track a student's progress very carefully throughout the Key Stage 4 course to ensure that they are on target.

Students who are very strong in a subject are likely to achieve A and A* Grades. This would be indicated by a stanine 8 or 9 in CAT 4. However, Secondary students who are below the expectations for students of their age, or who do not apply themselves throughout a two-year course, are likely to achieve a lower Grade of E, F, G or - in the worst case scenario - U.

The graph below shows a black curve which represents the number of children across the world who take IGCSE each year. It shows that some children excel and get the highest Grades of A* and A, with a similar number of children struggling with their academic study and scoring G or F. Most children score between D and B. This would be indicated by a Stanine 4 - 6 in CAT 4, Stanine 5 being the average ability of children globally.



Please look carefully at your child's report card to see the CAT 4 score. On the reverse of the report card, it explains what this score 'predicts' at IGCSE. It is of great significance when choosing the appropriate subjects for a child.

Given that we want all of our students to achieve their best results, we have made the strategic decision to commence the IGCSE course in Year 9, thus giving the majority of students three academic years to study for their final examinations.

For a number of students, we may offer assisted independent study sessions which will allow them to boost their chances of achieving a pass grade in core subjects. The model given allows us the flexibility to dedicate this extra time should we need to. It is to be noted that this will be unanimously agreed by Heads of Department, Senior Team, Students and Parents in the best interest of the student's IGCSE success.

Our students are encouraged to follow a cohesive pathway of subjects that support and enhance each other. This will maximise their chances of success, while also giving a clear platform for A' Levels, Foundation courses, BTEC qualifications or any other further studies. It is very important that we encourage our children to make the right choices for them, their ability, needs and their wishes.

The IGCSE Target for students is based upon their CAT4 score. However, given that a Grade C is the internationally recognised Pass, they should try their best to achieve a C in each subject. It is important, therefore, that they work hard and make Option Choices that they enjoy and where they will have the greatest chances of success.

It is also important to enter students for a tier that is going to maximise their chances of success. In the Subjects of English, Maths and Science, there are both Core and Extended Level papers. The Heads of Department and Senior Team will decide in Year 10 which tier a student should best be entered for. In the Core Level paper, the highest grade possible is a C; in the Extended paper, the grade range is from $E - A^*$. Any less than an E would not be recognised. It is far better to sit a Core Level paper and achieve a Grade C than to sit an Extended paper, which is significantly more difficult and get a Grade E! In order to sit for an Extended paper, we would be expecting our students to be consistently achieving at least Grade D in their internal assessments throughout their IGCSE courses. We want all of our students to do the best that they can.

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It is important to note that A' Levels are not the only route to tertiary education and the world of work. Many students achieve outstanding success via other routes. In order to cope with AS and A' Level courses, a student would be expected to be achieving at least Grade B results at IGCSE. This implies that their continuous studies throughout the IGCSE courses should also be taken seriously, with high attainment in mind. Without this solid grounding of knowledge and examination evidence, they will find Sixth Form very difficult indeed. These students should be achieving at least Grade B and above by Year 10.

It is very important that both students and parents meet with the School's Career Counsellor in order to discuss the further study options that are available to you, both within UAE and if returning to your home country to pursue further studies. Please ensure that you are forearmed and do not leave such important decisions until it is too late. Students should be well aware of their academic expectations.

COMPULSORY SUBJECTS AND OPTIONS TABLE YEAR 10

COMPULSORY SUBJECTS Year 10 (to meet Ministry of Education and UK Curriculum requirements)		1		ISLAMIC A OR B / VALUE EDUCATION	UAE SOCIAL STUDIES	PE	BIOLOGY OR COMBINED SCIENCE	ENGLISH ESL OR EFL With integrated MORAL EDUCATION	MATHS	ICT Or COMPUTER SCIENCE	ENVIRONMENTAL MANAGEMENT OR URDU	TOTAL PERIODS
PERIODS		4		2	1	1	3	5	4	3	3	26
	BLOCK 1	DESIGN AND TECHNOLOGY	ART & DESIGN	BUSINESS STUDIES	CHEMISTRY		I	I	1	1		3
YEAR 10 OPTIONS	BLOCK 2	ENTERPR	RISE	ECONOMICS	PHYSICS	IYSICS Students choose one subject only from each block; e.g. D & T + Economics + Accounting					3	
	BLOCK 3	TRAVEL & TOURISM ACCOUNTING GEOGRAPHY			OR Chemistry + Physics + Geography				3			

Application Process and Other Information

- All students will follow 9 COMPULSORY SUBJECTS. This will provide them with the necessary foundation subjects and ensures compliance with both the National Curriculum for England and the Ministry of Education. Five of these are IGCSEs, two are Ministry exams and the others are compulsory requirements that do not have a summative examination.
- In addition, students will choose 3 IGCSE subjects, one from each of three blocks 1, 2 and 3. All of these subjects will run through to Year 11.
- Students are required to fill in the IGCSE Options Request Form at the back of this booklet in order to identify their Options Pathway. They will submit one copy to school and retain one copy for their reference. In the event of this being done remotely, the choices will be submitted to the following email address:

options@arabunityschool.ae

Option subjects will be provided if <u>at least 20 students choose that subject</u> and limited to <u>an</u> <u>absolute maximum of 30 students.</u>

- For these reasons, students are required to tick a FIRST CHOICE from each list and a RESERVE CHOICE from each list, in case their First Choice is not able to go ahead, or if their First Choice has more than 30 applicants.
- It is our aim to provide seats for all students in their First CHOICE OPTION if possible.
- If we have too few, or too many, applicants for any subject, we will meet each child concerned to consider their RESERVE CHOICE. In the event of this not being possible, we will telephone or email.
- If a course is over-subscribed, the decisions for applicants will be based on their previous internal results.
- Parents will be involved if we can only offer the RESERVE CHOICE. Decisions in these regards will include:
 - a) Students' recent academic performance and their likely success in that Option subject
 - b) Students' career aspirations
 - c) School's ability to create additional classes in any oversubscribed subjects, in terms of costs, rooms and staffing
- Students will not be allowed to change their Option Choices unless there are exceptional circumstances, in which case SLT will consider those circumstances.

The following pages give a summary of the OPTION SUBJECTS CONTENT (with the Cambridge Syllabus Number in brackets).

Please read this information carefully.

More detailed descriptions may be found on the following websites:

www.cambridgeinternational.org

and

https://qualifications.pearson.com/en/home.html

ACCOUNTING (0452)



The Cambridge IGCSE Accounting syllabus introduces learners to the theory and concepts of Accounting and the ways in which accounting is used in a variety of modern economic and business contexts. Learners focus on the skills of recording, reporting, presenting and interpreting financial information.

The course builds an ideal foundation both for further study and for a future career within the profession. The aims are to enable students to develop:

- knowledge and understanding of the principles and purposes of accounting for individuals, businesses, non-trading organisations and society as a whole
- an understanding of accounting concepts, principles, policies, techniques, procedures and terminology
- improved skills of numeracy, literacy, communication, enquiry, presentation and interpretation

• improved accuracy, orderliness and the ability to think logically • an excellent foundation for advanced study.

Content includes:

- 1. The fundamentals of accounting
- 2. Sources and recording of data
- 3. Verification of accounting records
- 4. Accounting procedures
- 5. Preparation of financial statements
- 6. Analysis and interpretation
- 7. Accounting principles and policies

ART & DESIGN (0400)



The Cambridge IGCSE Art & Design syllabus aims to encourage a personal response by stimulating imagination, sensitivity, conceptual thinking, powers of observation and analytical ability. Learners gain confidence and enthusiasm as they develop technical skills in two and three dimensional form and composition, and are able to identify and solve problems in visual and tactile forms.

Students learn how to develop ideas from initial attempts to final solutions and engage and experiment with a range of materials, media and techniques. The course develops a greater awareness of the role played by the visual arts in society and in history, broadening cultural horizons and individual experience.

The broad areas of study are:

- painting and related media
- print making
- three-dimensional design
- photography, digital and lens-based media
- graphic communication
- textiles and fashion.

There is an external assessment + coursework (50% + 50%). Candidates can respond to either component using any of the media above.

BIOLOGY (0610)



With an emphasis on human biology, the Cambridge IGCSE Biology syllabus helps learners to understand the technological world in which they live, and take an informed interest in science and scientific developments. Learners gain an understanding of the basic principles of biology through a mix of theoretical and practical studies. They also develop an understanding of the scientific skills essential for further study at Cambridge International A Level, which are useful in everyday life. As they progress, learners understand how science is studied and practised, and become aware that the results of scientific research can have both good and bad effects on individuals, communities and the environment.

Candidates study the following topics:

- 1 Characteristics and classification of living organisms
- 2 Organisation of the organism
- 3 Movement in and out of cells
- 4 Biological molecules
- 5 Enzymes
- 6 Plant nutrition
- 7 Human nutrition
- 8 Transport in plants
- 9 Transport in animals
- 10 Diseases and immunity
- 11 Gas exchange in humans
- 12 Respiration
- 13 Excretion in humans
- 14 Coordination and response
- 15 Drugs
- **16 Reproduction**
- 17 Inheritance
- 18 Variation and selection
- 19 Organisms and their environment
- 20 Biotechnology and genetic engineering
- 21 Human influences on ecosystems

*There are both Core and Extended tier papers in this subject.



The Cambridge IGCSE Business Studies syllabus develops learners' understanding of business activity in the public and private sectors, and the importance of innovation and change. Learners find out how the major types of business organisations are established, financed and run, and how their activities are regulated. Factors influencing business decision-making are also considered, as are the essential values of cooperation and interdependence.

Learners not only study business concepts and techniques but also enhance related skills such as numeracy and enquiry. Learners will be able to:

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

They will also gain lifelong skills, including:

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

The syllabus provides both a foundation for further study at Cambridge International A Level and an ideal preparation for the world of work.

CHEMISTRY (0620)



The Cambridge IGCSE Chemistry syllabus enables learners to understand the technological world in which they live and to take an informed interest in Science and scientific developments. Learners gain an understanding of the basic principles of Chemistry through a mix of theoretical and practical studies. They also develop an understanding of the scientific skills essential for further study at Cambridge International A Level, skills which are useful in everyday life.

As they progress, learners understand how Science is studied and practised, and become aware that the results of scientific research can have both good and bad effects on individuals, communities and the environment.

Candidates study the following topics:

- 1 The particulate nature of matter
- 2 Experimental techniques
- 3 Atoms, elements and compounds
- 4 Stoichiometry
- 5 Electricity and chemistry
- 6 Chemical energetics
- 7 Chemical reactions
- 8 Acids, bases and salts
- 9 The Periodic Table
- 10 Metals
- 11 Air and water
- 12 Sulphur
- 13 Carbonates
- 14 Organic chemistry
- *There are both Core and Extended tier papers in this subject.

COMBINED SCIENCE (0653)

Cambridge IGCSE Combined Sciences gives learners the opportunity to study Biology, Chemistry and Physics, each covered in separate syllabus sections. It is a single award qualification, earning one grade. Learners gain an understanding of the basic principles of each subject through a mix of theoretical and practical studies, while also developing an understanding of the scientific skills essential for further study.



Students learn how science is studied and practised, and become aware that the results of scientific research can have both good and bad effects on individuals, communities and the environment. As well as focusing on the individual sciences, the syllabus helps learners to understand the technological world in which they live, and take an informed interest in science and scientific developments.

Specifics studied are:

Biology B1. Characteristics of living organisms B2. Cells B3. Biological molecules B4. Enzymes B5. Plant nutrition B6. Animal nutrition B7. Transport B8. Gas exchange and respiration B9. Coordination and response B10. Reproduction B11. Organisms and their environment B12. Human influences on ecosystems

Chemistry C1. The particulate nature of matter C2. Experimental techniques C3. Atoms, elements and compounds C4. Stoichiometry C5. Electricity and chemistry C6. Energy changes in chemical reactions C7. Chemical reactions C8. Acids, bases and salts C9. The Periodic Table C10. Metals C11. Air and water C12. Organic chemistry

Physics P1. Motion P2. Work, energy and power P3. Thermal Physics P4. Properties of waves, including light and sound P5. Electrical quantities P6. Electric circuits.

*There are both Core and Extended tier papers in this subject.

DESIGN AND TECHNOLOGY (0445)



The Cambridge IGCSE Design and Technology syllabus enables learners to identify, consider and solve problems through creative thinking, planning and design, and by working with different media, materials and tools.

Students will study the core syllabus plus one specialist option at the discretion of the teacher:

Resistant Materials OR

Systems and Control OR

Graphic Products

Design and Technology is beneficial for students opting for a higher education in Engineering, Information Technology, Architecture and Computer Science.

It gives learners the opportunity to:

Study Electronics, Mechanisms, and Structures and Product Design; develop skills in research and design and make products, using Electronics, Mechanisms or structures.



The Cambridge IGCSE Economics syllabus develops an understanding of economic theory, terminology and principles. Learners study the economics of different countries and how these interrelate.

They also learn to work with simple economics data and to use the tools of economic analysis. Learners apply understanding of economics to current economic issues.

They will cover the following content:

- 1 The basic economic problem
- 2 The allocation of resources
- 3 Microeconomic decision makers
- 4 Government and the macro-economy
- 5 Economic development
- 6 International trade and globalization

ENTERPRISE (0454)



This a unique syllabus that brings the world of business into the classroom and gives learners a clear insight into what it means to think like an entrepreneur.

This is the first Cambridge IGCSE syllabus which asks learners to adopt the thoughts and actions of entrepreneurs, developing their knowledge and understanding of the practicalities of setting up and running their own new enterprise.

Cambridge IGCSE Enterprise equips learners with a range of vital life skills for use in:

Planning and organisation, communication and financial management.

Students will cover the following:

- Introduction to enterprise;
- Setting up a new enterprise;
- Enterprise skills;
- Enterprise opportunities, risk, legal obligations and ethical considerations;
- Negotiation;
- Finance;
- Business planning;
- Markets and customers;
- Help and support for Enterprise and Communication.

ENVIRONMENTAL MANAGEMENT (0680)



The syllabus is designed to teach learners about sustainable development in a world where the security of resources and life-sustaining systems is endangered by human impact.

It draws upon disciplines such as:

- Biology,
- Earth Science,
- Geography
- Economics.

Learners gain an understanding of the Earth's natural systems and how people use natural resources; they then investigate the impact of human development on the environment and learn how the environment can be managed sustainably in the future, from a local as well as a global perspective.

GEOGRAPHY (0460)





Through the Cambridge IGCSE Geography syllabus, learners will develop a 'sense of place' by looking at the world around them on a local, regional and global scale.

Learners will examine a range of natural and man-made environments, and study some of the processes which affected their development. They will also look at the ways in which people interact with their environment, and the opportunities and challenges an environment can present, thereby gaining a deeper insight into the different communities and cultures that exist around the world.

The syllabus is divided into three themes:

- Population and settlement
- The natural environment
- Economic development.

The themes are designed to develop an understanding of natural and human environments.

PHYSICS (0625)

Cambridge IGCSE Physics enables learners to:

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

Candidates study the following topics:

- 1 General physics
- 2 Thermal physics
- 3 Properties of waves, including light and sound
- 4 Electricity and magnetism
- 5 Atomic physics

*There are both Core and Extended tier papers in this subject.

URDU (0539) جناڭ بالمتنان كوخوش ادرخوش

Cambridge IGCSE Urdu as a Second Language is designed for learners who already have a working knowledge of the language and who want to consolidate their understanding to progress their education or career.

سیں اپنی پوری نؤجہ او کور

Through their studies, learners gain an understanding of how to use Urdu effectively in the type of situations, and Urdu-speaking environments, they will encounter in their daily lives.

The syllabus focuses on the linked language skills of reading, writing, listening and speaking.

Through their study of Cambridge IGCSE Urdu as a Second Language, learners can achieve a level of practical communication ideal for everyday use, which can also form the basis for further, more indepth language study.

• Urdu is currently a requirement for those students who hope to go to Pakistan to pursue their studies and / or careers beyond IGCSE.

Some students are not sure what career they wish to follow and therefore are worried that they may choose the wrong Options. Here is our advice:

If you wish to study medicine, veterinary science, dentistry, ophthalmology or physiotherapy, you would be advised to take Chemistry as an Option at IGCSE and then at A Level in order to gain access to most Universities across the world. However, please be reminded that the numbers are limited and dependent upon prior internal and CAT 4 results as these clearly indicate whether or not a student will be able to make good progress and attain in the subject.

For Engineering, you would be advised to take Physics. However, this will be dependent not only upon your prior Science results but also Maths, as this is a significant component.

Otherwise, there are no definite careers that will depend on you choosing or dropping any of the Option subjects. At IGCSE, the compulsory subjects will provide you with the basics for every other career and you can choose to specialise more at A Level.

If you are unsure, we advise that you choose subjects:

- which you enjoy
- which interest you and you would like to know more about
- which you are already good at

If the subject you are considering is new and you have never studied it before, read this booklet again and choose what you wish. Also refer to the full syllabi on the relevant websites. Sometimes it is best to choose one slightly 'easier' option so that there is not too much pressure on you.

Supplementary syllabus information can be found at: <u>www.cambridgeinternational.org</u> and <u>https://qualifications.pearson.com/en/home.html</u>

School's Copy

Option Subject Choices Form (Year 10)

Name of Student	Class			
Options choices:				
FIRST CHOICE	RESERVE CHOICE			
Block 1(1)	(2)			
Block 2(1)	(2)			
Block 3(1)	(2)			
Student Signature				
Parent Signature				
Date				
Head of Secondary School Signature				

OPTIONS CHOICES

BLOCK 1	DESIGN AND & TECHNOLOGY DESIGN	BUSINESS STUDIES	CHEMISTRY
BLOCK 2	ENTERPRISE	ECONOMICS	PHYSICS
BLOCK 3	TRAVEL & TOURISM	ACCOUNTING	GEOGRAPHY

• Indicate your first choice with 1 and your Reserve choice with 2. If choosing Chemistry and Physics, you will require at least stanine 5 and a Grade C in your internal examinations. This form should be sent remotely to <u>options@arabunityschool.ae</u> the event that school remains closed. You should put the **student's name**,

school ID number and class clearly in the Subject box.						
	Option	Subject Ch	oices Form(Yea	Student's Copy		
Name of Stu	dent		Class			
Options choi	ces:					
	FIRST CHC	DICE	RESERVE CHOICE			
Block 1(1)			(2)			
Block 2(1)			(2)			
Block 3(1)			(2)			
Student Sign	ature					
Parent Signa	ture					
Date						
	ondary School Sign	ature				
		OPTION	IS CHOICES			
BLOCK 1	DESIGN AND TECHNOLOGY	ART & DESIGN	BUSINESS STUDIES	CHEMISTRY		
		1				

BLOCK 1	DESIGN AND TECHNOLOGY	ART & DESIGN	BUSINESS STUDIES	CHEMISTRY
BLOCK 2	ENTE	RPRISE	ECONOMICS	PHYSICS
BLOCK 3	TRAVEL &	TOURISM	ACCOUNTING	GEOGRAPHY

Indicate your first choice with 1 and your Reserve choice with 2. If choosing Chemistry and Physics, you will require at least stanine 5 and a Grade C in your internal examinations