

Sixth Form



مدرسة الإبداع العلمي الدولية
Intl. School of Creative Science

2010-2011


GCE AS/A Level Prospectus

Welcome to ISCS Sixth Form

Dear Parent(s),

This prospectus has been compiled in an attempt to keep you both fully informed about life and expectations in the Sixth Form in the hope that we can work together to achieve success for your son/daughter. It may be useful to refer to it at various stages of the academic year. If however you have any queries or concerns at any stage during the year please do not hesitate to contact us.

Yours sincerely,



Mr Mohammad Saleem Bhudye
Head of Sixth Form & ICT

Dear Student,

Welcome to the ISCS Sixth Form. You will find grade 12/13 (well known as AS/A2-Level) a complete different experience to your previous school life. Our expectations of you will be as high as ever in terms of your attainment, attendance, uniform and punctuality to lessons, but there is no doubt that you will find studying for A levels liberating and empowering. You will have more freedom and independence than ever before, but coupled with this, there must be an acceptance of the need to be responsible and self-disciplined.

The Sixth Form curriculum is varied, balanced and offers you a great deal of opportunities. You will also be more fortunate than your predecessors in terms of the facilities that the school can offer you. Do not be under any illusions, however, studying for A levels is extremely hard work, therefore requires dedication and commitment. Learn from the wisdom and experience of former students by asking for their comments on what Grade 12/13 is like.

Above all, our hope is that you find the A-Level challenging and rewarding in every aspect, both personally and intellectually. Whenever you feel like you need help, ask your teachers, form tutors and the Sixth Form coordinator. The door is always open.

Good luck.

Yours sincerely,



Mr Mohammad Saleem Bhudye
Head of Sixth and ICT

ISCS Sixth Form aims to provide a unique education in keeping with the Islamic core values, preparing students with the knowledge and the skills they need to pursue further education locally and internationally. Students will gain leadership skills; will be trained to take responsibility as growing adults and above all to be independent. ISCS will also create opportunities for work experience, social skills and mentoring sessions in managing their life whilst being taught in a challenging and rewarding environment.

ISCS Sixth Form Mission & Vision

We will achieve our goal through the provision of an outstanding curriculum with a variety of subjects taught at the highest level by a team of A Level experienced teachers creating opportunities for students to choose to expand their knowledge in their chosen subjects at University Level both locally and Internationally.

Our Sixth Form has grown in reputation since September 2008 due to the outstanding delivery, outstanding results and provision within all subject area. Our dedicated team of experienced A level teaching staff ensure that students are given the highest level of academic support throughout their study at Sixth Form both at AS and A2 level.

As we regard our senior students *ISCS Sixth Formers* to play an important role as leaders in the school community we have created many opportunities for them to develop a variety of skills to the highest possible level. Amongst such opportunities are:

1. Peer support programme where a pair of Sixth Formers will work with younger students on a weekly basis to support their learning, reading and study skills.
2. Year Book for the whole school.
3. Helping during Salaat time.
4. Working alongside with staff in different areas
5. Contributing to the whole school community
6. Take part in the Leadership programme
7. Attend different Educational Shows and University Trips

We are expecting 100% of our students to take on tertiary education in Universities across the world pursuing studies in a wide range of field with in house support with Universities applications and career/pathways guidance.

STUDYING IN THE SIXTH FORM

The Sixth Form will be the first time when students are not in all day time-tabled lessons. They must therefore learn how to use **STUDY TIME** effectively.

- Most Grade 12/13 students will have lots of unsupervised sessions. During the free times students are asked to work independently and arrange meeting with subject teachers for extra help.
- There is always background reading, research, reviewing and learning to do even if ALL work that is to be marked has been completed and handed in.
- Appointments, where possible should be arranged out of school hours, **BUT** if this is impossible, under no circumstances should they be arranged during timetabled lessons with the exception of sickness which also require a doctor's note if more than 1 day and up to 1 day a parental note is enough.
- Absence from lessons causes loss of continuity which can lead to problems and should therefore be kept to an absolute minimum. Under **NO** circumstances should students take holidays during term time unless this is an **UNAVOIDABLE FAMILY** emergency. *(Please check dates of module exams, avoid taking holidays during/before/after those dates).*
- Absence notes are still required in the Sixth Form, a parental phone call informing the school that a student is about to be absent is also very helpful. In the event that you are absent more than one day a doctor's note or a note from your parent is mandatory.
- Lateness notes are still required in the Sixth Form and will be available directly from the Sixth Form coordinator and respective supervisors. Punctuality to lessons is a must and teachers will have the right to refuse entry to lesson if this is not observed correctly.
- Students' behaviour policy is the same as secondary and further additions such as **NO Mobile Phones/Games console/Other distractions** should be adhered at all times, proper housekeeping of the common rooms.
- All students should have their hair cut normal, short and clean. All students should be in school with the correct school's uniform.

PROGRESS CHECKS AND REPORTS

Regular monitoring of each student's progress takes place within the Sixth Form. If progress causes concern, parents will be contacted. A meeting will be scheduled with the subject's teacher, parents and the Sixth Form coordinator.

At the beginning of the year all subjects will carry out 3 Major Assessments before the January Exams to identify any students' concerns at an early stage. Teachers will also carry out regular assessments which would be given to the Sixth Form Coordinator to analyse before giving to students. At which point any students not performing as they should would be identified for a one to one meeting with the subject teacher & Sixth Form Coordinator. All G12/13 teachers will monitor/record all tests/quizzes/assessments done in class which are then used as a means to report progress to parents as when needed.

All students joining the ISCS Sixth Form have their IGCSEs grades converted to A Level grades using the ALPS conversion method which are then used as baseline to monitor progress and value added by each teacher at the end of unit exam and final exam at the end of the academic year. All the analysis is shared with students and parents in the yearly meeting during the Sixth Form Information Evening and Induction Evening.

A Parents' Evening with Sixth Form teachers will take place before/after the formal Exam in January of each academic year.

All students will be required to take the first unit exams in January, results of which will be available around Mid-March. ALL students will be also required to take in May/June with final results in August. The Parents' Evening to discuss these results will be during the Grade 13 choices' evening and G12 Induction meeting.

Attendance at tutor time and lessons will be recorded electronically and attendance concerns will be reported to parents daily.

What is GCE AS/A Level?

The General Certificate of Education (Advanced Level) or A Level is the 'gold standard' of International Qualifications. The International A Level is one of the most recognised qualifications around the world and it is accepted as proof of academic ability for entry to universities worldwide.

Study and examination at A Level gives students in-depth knowledge and lifelong skills that prepare them for success in higher education and employment.

The A Level is awarded after successful completion of the Advanced Subsidiary AS (Grade 12) and the A2 (Grade 13) courses.

AS Level examinations are usually taken at the end of Grade 12 and new opportunities are also available in January of each year. Grades 12/13 at ISCS are based on 6 hours of guided learning per week per subject. AS Levels are highly specialised and a student will normally take a minimum of two to a maximum of four subjects.

At ISCS, we offer the following subjects to be studied at both AS and A Levels

- Mathematics
- Physics
- Chemistry
- Biology
- English Language
- Applied ICT
- Business Studies
- Arabic

There are five passing grades (A-E) at GCE A Level.

An AS level qualification is normally made up of three units, each assessed by a written examination that can be taken in January and June. Some subjects (for example the sciences) will also have a third practical/coursework unit. Some other subjects may have only two units to comprise a full AS Level.

Sixth Form Policy & Procedures

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ISCS Sixth Form Entry Requirements

Academic entry into ISCS Sixth Form normally requires B grades in the subject students want to study at AS Level and at least 5 IGCSE subjects with grade C or above. We shall discuss individually with you and your parents any case where it turns out that you do not meet the minimum requirements, so that we can all agree how best to use the rest of your Academic career with ISCS.

The most important entry qualification, however, is your personal commitment. Our range of A-Level courses gives you a wonderful opportunity to choose a programme which is individually suited to you: to build on the knowledge and skills which you have developed up to grade 11 and to apply them in an increasingly specialised programme which will allow you to move on into Higher Education or work.

Entry Requirements

- Students can study a maximum of 4 A/AS Level English courses and a minimum of 2 AS/A Level English courses.
- Arabic is not considered part of the minimum 2 AS/A Level courses.
- To be accepted onto the AS/A Level courses students from IGCSE should fulfil the minimum requirements of 6 A*-C and a B grade in the subject they want to study in Grade 12.
- If **Mathematics** is one of the subjects they want to study at A Level the minimum requirements from the IGCSE Grade is an A.
- If you achieve Grade C and above at AS Level, you may continue onto the A2 Level programme with maximum four A2 Level subjects.
- Full-time A levels are normally allocated 5 hours per week. Arabic Language and Islamic Studies are two compulsory subjects by The Ministry of Education at grade 12.

Whilst on the course

The school has the right to sanction anyone not complying with school procedures. In very exceptional cases the school can also decide to remove someone off a course if they are not performing as they should or cause hindrance to the learning of others as well as their own learning. Sixth formers have the responsibility to behave like growing adults and should always be a role model for the younger students.

Daily Procedures & Registration (am/pm)

1. Arrive school on time and make use of the common room.
2. All Students are required to attend registration in Sixth Room 2 in the Sixth Form Area
3. Assemblies will take place as when required.
4. Students will be required to attend whole school assemblies at times.
5. Students are required to follow the normal school's bell for lessons.
6. Students need to wear full school uniform at all times and hair normally done.
7. Students to stay on site and will not be permitted to leave school site unless authorised by the Director or Head of Sixth Form.
8. Students will be expected to attend all lessons and make sure they keep up with 100% attendance.
9. Students can arrange to meet teachers during school times and arrangements should be made at least 24 hours prior to the meeting unless the teacher agrees alternatively.
10. No mobile phone, personal electrical devices are allowed on school site, in lessons or in the corridors.
11. Students will be able to use their laptops in the 6th form common rooms and in lessons where applicable or permitted.
12. Do not stand or chat in corridors.
13. Do not use a classroom unless you have a lesson.
14. Students can use the canteen during break times and food can be taken out and consumed in the **common rooms only**.
15. All students should respect the school environment and should ensure that the clear up after eating.
16. Entrance & Exit to the Sixth Form area are through main staircase near 6th form coordinator's office for Boys and through the corridor from the girls section for the girls.

Rewards

- Appraisal in school and will be communicated home.
- Certificates which will contribute towards Record of Achievement Portfolio
- Reward system for the nomination of the best Grade 12 students at ISCS
- School trips, visits to universities
- Experience letters
- And many more Insha Allah

Extra-Curricular Activities which can be added to CV

- Social Skills (Helping in the community eg Nursing Home, Orphanage...)
- Young Leaders Programme & Assisting Teachers during free time links with subject they are doing.
- School Termly Newsletter Online, Paper based or E-Mail version including the corner for students/parents voice.
- Activities and Projects with primary and secondary (Links with PE, IT, Maths...) Sharing of experiences during assemblies to other students or meeting with parents.
- Attend support/catch classes during lunch time, after school or Saturday for any subjects they are falling behind.

ISCS Student Behaviour Management

At The International School of Creative Science we believe that discipline should be positive, proactive, and progressive. We are taking the following steps to ensure that each of these elements is addressed in a variety of ways.

Our positive strategies include:

- A sense of pride, belonging, and school spirit promoted school wide
- Opportunities for student leadership
- Individual and school wide student recognition by staff
- Classroom celebrations for student achievements

Our proactive strategies include:

- Classroom and school expectations taught and re-taught
- Presentations on problem solving techniques
- Lessons on making good choices
- Presentations of playground rules
- Discipline assembly at the beginning of school year
- Welcome Room orientation for new students

Students must take responsibility for their own actions and understand that every choice has a consequence. Our ultimate goal is to help the students be responsible, successful, and contributing members of society.

A high priority is placed upon appropriate student conduct. No student at ISCS School is permitted to disrupt the educational process and thereby infringe upon another student's right to learn or the teacher's right to teach. Behaviour which disrupts or obstructs instruction is not tolerated. All students have the right to attend school free from harassment (verbal or physical).

In order to maintain a learning environment, policies and procedures have been established. Students are expected to follow these rules and regulations. Students can expect consistent enforcement of school policies and fair administration of consequences for failure to follow rules.

GENERAL SECONDARY SCHOOL POLICIES AND PROCEDURES:

1. Students may not disrupt the educational process of others.
2. Inappropriate, rough behaviour will not be tolerated and will be subject to disciplinary action.
3. Students should walk quietly and stay to the right in the hallway.
4. Students must report directly to their assigned destination. Loitering or unnecessary movement creates congestion and noise.
5. A hall pass is required whenever a student is in the hallway during class time. ISCS students are expected to be in class at all times to avoid unnecessary loss of instructional time.
6. Students are not permitted to sell any item on school grounds other than school approved fund-raisers items and any money involved become school property.
7. Pagers, i-pods, computer games, radios, cameras, mobile phones, MP3 MP4/CD/tape players and all other kinds of games or toys are not permitted at ISCS. If they are brought to school they will be confiscated and held until the end of the year. ISCS is not responsible for lost or stolen items. .
8. Students may not leave school grounds during the school day without proper leave forms.
9. Students may not loiter in the school building, on school grounds, or reroute to and from the bus.
10. Students may not wear hats, sunglasses, or headbands inside the school building, unless it is for a medical reason. In that case, a letter from parents is required.
11. Students should be in ISCS School uniform (check uniform policy)

Our progressive (CONSEQUENCES) strategies

Failure to abide by established rules and accepted standards of behaviour will warrant disciplinary action. This action may include the following:

- Nonverbal cues
- Classroom management systems
- Time out or loss of privileges
- Problem solving sessions with students
- Removal/Exclusion From extracurricular activities
- Detention
- FYI's (For Your Information forms)
- Scholastic Warnings for major offenses
- Parent contact and conferences
- In and out of school suspensions
- Expulsions

TEAM RESPONSIBILITY - Consistent with the secondary school philosophy all school personnel will follow and enforce ISCS discipline plan. Students will be given a 24 hour notice in their Student Diary or a written notice for a detention or other disciplinary action.

TIME-OUT - A student may be assigned to the “time out room” for the duration of a class period. The teachers will provide school work for the student to complete during this time.

DETENTION - Students who fail to comply with school rules will be subject to an after school detention. Parents are responsible for transportation home after the detention. Written notification will be given to the student at least 24 hours before the detention is to be served. Parent notification is the student's responsibility. Students may accumulate a total of 5 detentions for the school year. Students having exhausted their 5 detentions for the year will be issued in-school suspension letter.

SATURDAY SCHOOL - Students who have repeatedly failed to comply with school rules may be assigned a Saturday School (SS). Saturday School will start: at 8:00 p.m. and last until 12:00 a.m. on the assigned date. Students are required to bring books and supplies and be prepared to work until 12:00. Misbehaviour in Saturday School will result in an out of school suspension. Parents are expected to pick up their child at 12:00am. Students may accumulate a total of 7 (SSs) for the entire school year. Students having exhausted their 7 Saturday Schools will be assigned to “Out of School Suspension”.

Students who have an excused absence on the assigned Saturdays School date will be reassigned to the next available Saturday. An unexcused absence from Saturday School will result in a 3 day “Out of School Suspension”

FYI FORM

Student's Name _____ Grade _____ Section _____

Teacher's Name _____ Subject _____ Date/Time _____

The teacher will complete this form when a student is sent to the office.

DISCRPTION OF INCIDENT/MISBEHAVIOUR (PLEASE CHECK)

- | | | | |
|-------|---|-------|--|
| _____ | Class disruption | _____ | Fighting, Inappropriate physical contact |
| _____ | Not working | _____ | Stealing |
| _____ | Answering back | _____ | Disrespecting school property |
| _____ | Being rude | _____ | Disrespecting rights of others |
| _____ | Defiant | _____ | Talking at inappropriate times |
| _____ | Being disrespectful | _____ | Not paying attention |
| _____ | Teasing others | _____ | Lack of participation |
| _____ | Not in uniform | _____ | Excessive absences |
| _____ | Disobedient | _____ | Unexcused absences from class |
| _____ | Inappropriate language | _____ | Unexcused tardiness |
| _____ | Homework incomplete | _____ | Failing to have necessary supplies |
| _____ | Out of seat constantly | _____ | Cheating |
| _____ | Unsatisfactory academic progress | _____ | Lying |
| _____ | Bringing undesirable literature | _____ | Wearing make-up/gel |
| _____ | Disturbing others during salah, assembly or line up times | _____ | Wrongfully blaming others |
| _____ | Late for class | _____ | littering |

ACTION(S) TAKEN (PLEASE CHECK)

- | | | | |
|-------|-------------------------------|-------|-------|
| _____ | Warning, Verbal Reprimand | _____ | Date |
| _____ | Time Out | _____ | _____ |
| _____ | Teacher/Student Conference | _____ | _____ |
| _____ | Director/Student Conference | _____ | _____ |
| _____ | Removal of Privileges | _____ | _____ |
| _____ | Parent Contacted (Phone/Note) | _____ | _____ |
| _____ | Parent Conference | _____ | _____ |
| _____ | Seating Change | _____ | _____ |
| _____ | Detention | _____ | _____ |
| _____ | Extra Assignments | _____ | _____ |
| _____ | Suspension | _____ | _____ |

_____	Teacher's Signature	_____	Supervisor's Signature	_____	Director's Signature
_____	Parent's Name (Please Print)	_____	Parent's Signature	_____	Date

COMPULSORY COURSES

1. Arabic

Arabic native speakers & ASL students will be required to take the compulsory Arabic grade 12 course by the Ministry of Education UAE.

2. Islamic Studies

3. Quran classes

4. University Workshop/Shows

Career Service

In the spring and summer term all students will be given guidance on **Career Choices** and **University Applications**. Students will be expected to work a lot independently. Students will also be encouraged to take part in the greater school life and get involved in helping students at different grades as this will help develop their leadership and social key skills.

The system of Progress Checks and Monitoring of students would be carried out constantly and subject teachers will be carrying out rigid assessment almost every week for each unit.

Other Optional Courses

A Level Biology (AS)

What will I gain from this course?

Developments in biological science have brought about changes in agriculture, conservation, plant and animal breeding, diagnosis of disease, nutrition and crime detection. This course will help you develop essential skills and knowledge of biological principles as they relate to every living organism. The course will also help you:

- develop an interest in, and enthusiasm for, biology including developing an interest in further study and careers in the subject
- appreciate how society makes decisions about biology-related issues and how biology contributes to the success of the economy and society
- develop and demonstrate a deeper appreciation of the skills, knowledge and understanding of *How Science Works*
- develop essential knowledge and understanding of different areas of biology and how they relate to each other.

What is the course specification? (Edexcel 8BIO1)

This course will prepare you to sit the AS Units for the Edexcel specification 8BIO1. These units can be taken individually in the months indicated below (modular assessment) or altogether at the end of the full 'AS' level course (linear assessment).

AS Unit 1: 1 hour 15 minutes; 40% of the total AS marks; availability: January and June

AS Unit 2: 1 hour 15 minutes; 40% of the total AS marks; availability: January and June

AS Unit 3: Coursework; 20% of the total AS marks.

What topics are covered by this course?

- Unit 1: Lifestyle, Transport, Genes and Health
- Unit 2: Development, Plants and the Environment
- Unit 3: Practical Biology and Research Skills

Unit 1: Lifestyle, Transport, Genes and Health

- structure and function of carbohydrates, lipids and proteins; enzyme action
- structure and properties of cell membranes; passive and active transport
- structure and role of DNA and RNA
- replication; protein synthesis
- monohybrid inheritance
- gene mutations
- principles of gene therapy; social and ethical issues.

Unit 2: Development, Plants and the Environment

- cell structure and ultrastructure of eukaryote and prokaryote cells: cell specialisation
- the role of meiosis
- genotype and environmental influence
- stem cell research and its implications
- biodiversity, adaptations and natural selection
- principles of taxonomy
- plant cell structure
- transport of water in plants
- uses of plant products.

Unit 3: Practical Biology and Research Skills

Students write a report of between 1500 and 2000 words, either a record of a visit to a site of biological interest or a report of research into a biological topic. This piece of work will be marked by the teacher and moderated by Edexcel. Students' practical skills will be assessed by the teacher against criteria provided in the specification.

Requirements

A pass at A*- B in Biology at IGCSE level.

A Level Chemistry (AS)

What will I gain from this course?

Chemistry has an impact on many areas of our everyday lives - from developing new medicines and consumer goods to how we use natural resources. The specification enables motivating contemporary chemistry contexts to be included in the teaching and learning programme. It is designed to motivate both teachers and students, to encourage more students to study chemistry and to encourage teachers to update the content that they deliver. Students will study aspects of chemistry that are often in the media and affect their lives. It is important that students have the necessary knowledge and understanding to explain many different aspects of contemporary chemistry. These areas include:

- climate change
- green chemistry
- pharmaceuticals
- chemistry research

What is the course specification? (Edexcel 8CH01)

This course will prepare you to sit the AS Units for the Edexcel specification 8CH01. These units can be taken individually in the months indicated below (modular assessment) or altogether at the end of the full 'AS' level course (linear assessment).

AS Unit 1: 1 hour 15 minutes; 40% of the total AS marks; availability: January and June

AS Unit 2: 1 hour 15 minutes; 40% of the total AS marks; availability: January and June

AS Unit 3: Coursework; 20% of the total AS marks.

What topics are covered by this course?

Unit 1: The Core Principles of Chemistry

This unit provides opportunities for students to develop the basic chemical skills of formulae writing, equation writing and calculating chemical quantities. The study of energetics in chemistry is of theoretical and practical importance. In this unit students learn to define, measure and calculate enthalpy changes. They will see how a study of enthalpy changes can help chemists to understand chemical bonding. The study of atomic structure introduces s, p, and d orbitals

and shows how a more detailed understanding of electron configurations can account for the arrangement of elements in the periodic table. The unit introduces the three types of strong chemical bonding (ionic, covalent and metallic). Organic chemistry is also introduced with students studying alkanes and alkenes.

Unit 2: Application of Core Principles of Chemistry

This unit develops the treatment of chemical bonding by introducing intermediate types of bonding and by exploring the nature and effects of intermolecular forces. Study of the periodic table is extended to cover the chemistry of groups 2 and 7. Ideas about redox reactions are applied, in particular, to the reactions of halogens and their compounds. The unit develops a largely qualitative understanding of the ways in which chemists can control the rate, direction and extent of chemical change. Organic chemistry in this unit covers alcohols and halogenoalkanes. The treatment is extended to explore the mechanisms of selected examples. Students have to use formulae and balance equations and have an understanding of chemical quantities. Aspects of green chemistry and climate change are also studied

Unit 3: Chemistry Laboratory Skills I

This unit contains practical assessments that cover the content of Units 1 and 2. There is no specific content for this unit. The practical assessments cover the areas of physical, organic and inorganic chemistry. The types of practicals that students must complete are qualitative observations, quantitative measurements and preparations.

Assessment:

Four separate activities testing students' laboratory skills in four different ways. The four activities must cover the areas of physical, organic and inorganic chemistry.

Requirements

A pass at A*- B in Chemistry and Maths at IGCSE level.

A Level Physics (AS)

What will I gain from this course?

The study of physics will encourage you to understand how the physical world works, and will prove useful if you are considering a career in engineering, electronics or computing. This course will help you establish links between theory and experiment, and will also help you:

- learn how scientific work is evaluated, published and verified by the scientific community
- gain an understanding of how physics has changed over time and is used in the modern world
- explore the properties of motion, nuclear physics, energy transfer and electricity
- develop a better awareness of how advances in science and technology affect the world

What is the course specification? (Edexcel 8PH01)

This course will prepare you to sit the AS Units for the Edexcel specification 8PH01. These units can be taken individually in the months indicated below (modular assessment) or altogether at the end of the full 'AS' level course (linear assessment).

AS Unit 1: 1 hour 20 minutes; 40% of the total AS marks; availability: January and June

AS Unit 2: 1 hour 20 minutes; 40% of the total AS marks; availability: January and June

AS Unit 3: Coursework; 20% of the total AS marks.

Topics include

- Unit 1: Physics on the go
- Unit 2: Physics at Work
- Unit 3: Exploring Physics

Unit 1: Physics on the go

This unit involved the study of mechanics (rectilinear motion, forces, energy and power) and materials (flow of liquids, viscosity, Stokes' Law, properties of materials, Young's' modulus and elastic strain energy).

Part of this topic may be taught using applications that relate to, for example, sports. The other part of this topic may be taught using, for example, a case study of the production of sweets and biscuits. It may also be taught using the physics associated with spare part surgery for joint replacements and lens implants.

Unit 2: Physics at Work

This unit involves the study of waves (including refraction, polarization, diffraction and standing (stationary) waves, electricity (current and resistance, Ohm's law and non-ohmic materials, potential dividers, emf and internal resistance of cells, and negative temperature coefficient thermistors) and the wave/particle nature of light.

Unit 3: Exploring Physics

This unit involves an experiment that is based on a physics-based visit or a case study of an application of physics.

Assessment:

This unit is assessed by means of an experiment that is founded on either a physics-based visit or a case study of an application of physics. Students write a report that is internally marked and externally moderated.

Requirements

A pass at A*-B in Physics and Maths at IGCSE level.

A Level Mathematics (AS)

What will I gain from this course?

If you are keen to sharpen your mind or improve your job prospects in many fields, including electronics, computing and engineering, studying for Maths 'A' level will help you on your way. All 'A' level Mathematics specifications consist of a number of units that build towards the AS and the full 'A' level award.

What is the course specification? (Edexcel 8371)

This course will prepare you to sit a combination of Units for the Edexcel specification. These units can be taken individually in the months indicated below (modular assessment) or altogether at the end of the course (linear assessment).

C1 (January and May/June); C2 (January and May/June); S1 (January and May/June) OR M1 (January and May/June)

What topics are covered by this course?

Core Maths 1

Algebra
Curve sketching
Inequalities and equations
Coordinate geometry
Sequences and series
Indices
Calculus

Core Maths 2

Algebra
Coordinate geometry
Sequences
Trigonometry
Exponentials and logarithms
Differentiation
Integration

Statistics 1

Mathematical models in statistics

Frequency distributions

Measures of location

Measures of dispersion

Probability

Correlation and regression

Discrete random variables

The normal distribution

Mechanics 1

Mathematical models in mechanics

Kinematics of a particle moving in a straight line

Dynamics of a particle moving in a straight line

Statics of a particle and motion on an inclined plane

Moments

Vectors in mechanics

Requirements

IGCSE Mathematics grade A or above only.

A Level Business Studies (AS)

What will I gain from this course?

The Business Studies syllabus enables students to understand and appreciate the nature and scope of business, and the role it plays in society. The syllabus covers economic, environmental, ethical, governmental, legal, social and technological issues, and encourages a critical understanding of organisations, the markets they serve and the process of adding value. Students examine the management of organisations and, in particular, the process of decision-making in a dynamic external environment.

What is the course specification? (Edexcel 8BS01)

This course will prepare you to sit the AS Units for the Edexcel specification 8BS01. These units can be taken individually in the months indicated below (modular assessment) or altogether at the end of the full 'AS' level course (linear assessment).

AS Unit 1: 1 hour 15 minutes; 50% of the total AS marks

AS Unit 2a: 1 hour 15 minutes; 50% of the total AS marks

What topics are covered by this course?

- Unit 1: Developing New Business Ideas
- Unit 2a: Managing the Business

Unit 1: Developing New Business Ideas

This unit covers the characteristics students would need to develop to be successful in business and how new or existing businesses generate their product or service ideas and test them through market research. Students should also consider the competition in the market; the economic climate; how the business might be financed and how much revenue the idea might generate

Unit 2a: Managing the Business

This unit covers key activities which students may be involved in if they were to set up and/or manage a business whether small, medium-sized or large. It also introduces students to some basic management tools and models which will be developed in the A2 qualifications

Requirements

A general education up to IGCSE level with a grade B or above in IGCSE Business Studies

Edexcel Advanced Subsidiary GCE in English Language (8EN01)

What will I gain from this course?

Students will study a wide range of spoken, written and multimodal texts viewed as part of a continuum of ways of constructing meanings through language. As observers, readers and writers, students will be inspired by learning about spoken and written language from real and imagined worlds and they will engage with the craft of writing to create their own texts.

At AS the focus on language today will provide a familiar and engaging area for study and enable the introduction of the main constituents of language in contexts that can be readily understood. There is also a practical emphasis placed upon finding out about language and using it effectively. Short-answer questions in response to data are required at AS, and at A2 data response questions are also a feature. Across the whole qualification there is clear progression from AS to A2.

At Advanced level, students will study areas of development, diversity and change and choose for themselves the subject of their investigation.

Coursework freedom of choice, to ensure engagement and achievement

The new requirement for compulsory coursework has been addressed to provide maximum freedom of choice for teachers and the maximum gain for students, recognising the time and care that coursework takes and acknowledging the merits of allowing independent study and creative response.

- **Unit 1: Language Today AS**

Externally assessed examination: 100 marks - 2 hours 15 minutes

For assessment, students will complete questions from two sections. The data will be selected from material received as written or received as spoken or received as electronic.

- **Unit 2: Exploring the Writing Process**

AS Internally assessed 80 marks coursework 2000-2500 words maximum

For assessment, students will submit a coursework folder comprising two pieces of their own writing: one for a reading audience and one for a listening audience, both accompanied by commentaries.

Requirements

Grades A*-B in IGCSE English.

A Level Applied ICT (AS)

What will I gain from this course?

Students following this syllabus will develop, and learn to apply, a broad range of ICT skills, while also gaining an understanding of the way ICT is used in the world of work. The syllabus introduces students to the structure and use of ICT systems within a wide range of organisations, including the use of a variety of computer networks. As a result, students learn about ICT system life cycles, and how these affect the workplace. They also gain an understanding of the wider impact of ICT on society in general.

What is the course specification? (Edexcel 8751)

This course will prepare you to sit the AS Units for the Edexcel specification 8751. These units can be taken individually in the months indicated below (modular assessment) or altogether at the end of the full 'AS' level course (linear assessment).

AS Unit 1: 33.3% of the total AS marks; availability May/June

AS Unit 2: 33.3% of the total AS marks; availability: May/June

AS Unit 3: 33.3% of the total AS marks; availability: January and May/June

What topics are covered by this course?

- Unit 1: The Information Age
- Unit 2: The Digital Economy
- Unit 3: The Knowledge Worker

Unit 1: The Information Age

In this unit you will learn about the information communication technologies that enable people to access and exchange information and to carry out transactions anytime, anywhere.

You will take a critical look at the impact that the internet has had on the way people conduct their personal and professional lives, explore the services it offers and gain 'hands-on' experience of using some of them.

Unit 2: The Digital Economy

Paperless transactions are hallmarks of the digital economy. In the global e-marketplace transactional websites are the interface between e-enabled customers and organisations, allowing them to do business with one another anytime, anywhere. Enhanced connectivity underpins the growth of the digital economy. The proliferation of internet enabled computers in the home and the use of credit cards to pay for goods are major factors in its evolution. E-consumers exercise greater autonomy and have more choice than is available to them offline in their own locality. They expect to receive a personalised service and an instant response.

In this unit, you will investigate how organisations are responding to the pressures of the e-marketplace by using transactional websites to:

- present their products and services
- gather information
- provide a personalised service.

As an informed ICT user, you need to be aware of the methods used by organisations to persuade their customers to reveal personal information about themselves and what it is used for.

Unit 3: The Knowledge Worker

In this Information Age computers and communications technology provide many of us with access to vast quantities of information. As ICT users, we need to make judgements about sources and accuracy of information and be able to select and manipulate information to support sound decision making.

People who work at the tasks of developing or using knowledge are known as knowledge workers – in the world of ICT this includes programmers, systems analysts, technical writers and – most importantly – users. In other words, you are a knowledge worker!

Knowledge workers are discerning consumers of information. They have the information-handling skills to turn information into knowledge.

In this unit you will learn about making informed decisions using the knowledge available to you. As you already know, not all information is current or accurate. You will learn how to select your sources and decide on how much credence you can place in them. You will learn that there are often many factors to consider when making a decision and that part of the process is to identify gaps in your knowledge. Decisions often have to be made within time constraints. You will learn how to manage your time effectively by prioritising tasks and setting interim deadlines.

Requirements

Grade A*-B in IGCSE ICT