

Newton International Academy, Barwa Secondary School

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SIXTH FORM HANDBOOK

Year 12 – 13

AS and A levels

2023-2024



Vision and Mission

Our Vision

An international community of learners striving for excellence and celebrating success.

Our Vision:

To be an international community of learners striving for excellence and celebrating success.

Our Mission:

We aim to provide the highest quality of education possible for students of all abilities. In doing so, we aim to positively encourage each student to achieve academic excellence, enjoy diversity, develop critical thinking skills and become lifelong learners and responsible citizens.

To achieve this, we will provide a diverse education in a safe, supportive environment that promotes self-discipline and motivation. We will provide and maintain a calm and caring atmosphere where teaching and learning are meaningful and developed. We will work in partnership with our staff, students, parents and the wider community to achieve our vision.

RESPECT	Self-respect, respect for students/ staff/ parents and respect for personal and community property
HONESTY	Honesty in all our actions
TRANSPARENT COMMUNICATION	Open and effective communication among students, staff and parents
EMPATHY	Understanding and appreciation of the feelings of others
SUPPORT	Support for the development of each individual to his/her fullest potential
DIVERSITY	Appreciation of all languages, traditions, religions and cultures
SOCIAL RESPONSIBILITY	Development of responsible citizens through community service
PERSONAL ACCOUNTABILITY	Highest personal commitment to taking responsibility for our actions
ENVIRONMENTAL AWARENESS	Respect for our environment



Sixth Form Mission:

The NIA Sixth Form aims to be an outstanding provider of full-time education for 17-18 year olds embracing diversity and creating excellent opportunities for all. Staff and students will participate fully in Teaching & Learning to maximise their collective potential, deliver successful educational outcomes for young people and promote individual achievement at the highest level.

Introduction

KS5 or Sixth Form life is very different to the school experience of a pupil in Years 7 to 11. Sixth Form is the final section of secondary education where you will be working towards your future academic development at universities and your future career. Therefore as a school, we aim to provide the opportunities for all students to reach their full potential academically, in sport and in extra-curricular activities. We are committed to providing the very best in terms of teaching and learning. We want you to be aware of your preferred learning style and we endeavour to tailor our lessons to cater for the learning styles of all, enabling all students to achieve their potential. NIA Sixth form aspires to be a friendly, stimulating and academic place to study. I am confident that the whole Sixth Form community including the staff and the students will work together well in order to raise the ambitions and achievements of every student.

Although achieving the best academic results possible is obviously one of our main aims, the Sixth Form at NIA also offers opportunities to develop the whole personality. There are chances to be innovative, exercise leadership and role modelling within our Prefect System and to take part in the wide variety of extra-curricular activities that are on offer. Sixth Form subjects were carefully selected in order to provide a balanced curriculum for our students. As a Sixth Form student you will be also helped with your university applications, which will be created in accordance with requirements of universities and alongside with the British UCAS guidelines.

At NIA we also offer clear and recorded target setting for all KS5 students which together with our mentoring program ensures that each one of you individually is well known, well understood and fully supported and advised throughout your Sixth Form career. As a Sixth Form student you will also have private study time, probably for the first time in your life. This can be spent in a variety of locations: the school library, which has Internet access, the IT rooms (subject to availability) or the Sixth Form areas (study rooms). Ensure that you spend your private study time wisely and as effectively as possible.

The next year at Newton International Academy will provide you with so many opportunities to explore your interests, to study independently and to develop your skills. Our wish is for you to leave Newton International Academy not only with the best possible A level results but with a sense of achievement, purpose and self-worth and a secure knowledge of your strengths and abilities. You will also strengthen existing friendships, make new ones and come to important decisions about your future, leaving us as capable and mature young adults who have the ability to rise to the challenges of life and to make a positive contribution to the wider society.

Dr. Tereza Woolgar

(Head of Secondary)



Our Programme

Outline

Our Sixth Form Programme is based around the first and second year of A-levels which we believe promote the best basis for higher education. Courses for Year 12 are known as AS (Advanced Subsidiary) or IAS (International Advanced Subsidiary) and Year 13 as A2.

In Year 12 you will be expected:

- to study **FOUR** subjects at AS Level. These will be completed in the Summer of Year 12. Each AS will count as being equivalent to half of a full A Level.
- to undertake a Professional Development Programme which will include Careers Guidance and a range of topics designed to broaden your education to increase your awareness and maturity. This will include the opportunity to develop personal responsibility and leadership.
- work independently at home and in school during Self study.

Some students may leave directly after Year 12 with their AS qualifications whilst others will continue.

In Year 13 you will be expected:

- to study TWO to THREE subjects at A2 Level (you may only select a subject which you studied and passed at AS Level. A2 Level will count as the other half of a full A level.
- to undertake a Professional Development Programme which will include Careers Guidance and a range of topics designed to broaden your education to increase your awareness and maturity. This will include the opportunity to develop personal responsibility and leadership.
- work independently at home and in school during Self study.

Choosing the correct Sixth Form courses is a very important educational step as it may determine a student's future career. Because the courses are far more intensive than IGCSE and because external examinations occur at the end of the first year, and in many subjects during it, it is difficult to change courses once they have started.

Year 12 (AS) Options 2023-24:

(select 1 subject in each block)

Block A	Block B	Block C	Block D
Biology	Global perspectives	Business	Mathematics
Arabic First Language (AS and A2)	Chemistry	Environmental Management	Geography/Art
Mathematics	IT	Physics	Economics/T&T
History	Computer Science	French	English Language



Year 13 (A2) Options 2023-24:

(select 1 subject in each block)

Block A	Block B	Block C	Block D
Biology	IT	Business	Mathematics
Mathematics	Chemistry	Physics	English
History	Computer Science		Geography/Economics
Self-study	Self-study	Self-study	Self-study

Students may also add any other suggested subjects which may be considered later into the options.

The school will provide much of this information and advice, but it is essential that the students talk to subject and careers staff about their suitability as A level students and their career aspirations. It is important that students choose AS and A2 courses that they can realistically hope to complete successfully.



Having a goal in mind in terms of a particular course at university or a chosen career path is a major motivating factor for any student. For entry to some careers you will need specific subjects at A level. If you know what you would like to study at university, you should check for specific requirements by logging on to some universities' websites.

By researching your future options you will be aware of what the university entry requirements are.



When selecting subjects to study in Year 12 consider a number of factors including:

- your own interests and preferences;
- your likely grades at IGCSE, AS and A level;
- your likely choice of course and/or employment after the Sixth Form.

This website will assist you in choosing the correct subjects and courses for your future career:
UCAS Universities and Colleges Admissions Service www.ucas.co.uk.

NIA is also affiliated to Connexions which will provide students with career and study support throughout Sixth Form.



Developing Personal Responsibility and Leadership

NIA PREFECT SYSTEM

At NIA Year 11, 12 and 13 students have the opportunity to become Senior Prefects. These positions will give our students the opportunity to contribute to the constant improvement of the school and everyday life of the school community at NIA. We encourage students to identify positions of responsibility that they would like to develop during their time in Year 12 and 13.

Structure:

Head boy and Head girl lead the Prefect system, cooperate with the SMT on weekly bases and assist with pastoral matters of the whole school. They initiate, lead and coordinate Projects which enrich the school curriculum; they also initiate and oversee fundraising which aims to improve the environment of the school. Head boy and Head girl represent the school outside of NIA and attempt to connect the school with the outside Doha community. Furthermore they are expected to write articles in the school newsletter and to be a part of the School Council.

Deputy Head assists with the administrative part of the Head boy and Head girl position; cooperates with the Head boy and Head girl on weekly bases, leads the school in the absence of Head boy or a Head girl and represents the school on regular basis. Deputy Head also cooperates with the PTA.

Head of Bell (male and female), Head of Curie (male and female), Head of Edison (male and female),

Head of Wright (male and female)

Heads of Houses assist their Housemasters to run their Houses effectively and organize all various House competitions (Science, Mathematics, English, Language week and House sport). In House assemblies the Heads of Houses stand next to the Housemaster and assist with handing out Merits or any other matter. They are also involved in the pastoral issues and detentions of the members of their House.

General Prefects allocated to various departments in school.

General duties and responsibilities for all Prefects:

- Weekly meetings with the Head of Sixth Form (discussing issues in the Sixth Form, the whole school community and beyond – projects, charities, other Prefects' initiatives).
- Break duties (reinforcing correct behaviour and school uniform policy).
- Assemblies – Prefects stand in the middle ensuring all students enter the hall in silence, sit in correct places and remain silent. Every two to three weeks Heads of Sport read a report about Sporting activities that took place at NIA and every four weeks Head boy and Head girl inform the school about the efforts of the Prefect System in general. Head boy and Head girl stand in front with the Head of school.
- Helping with the organization and smooth running of the Parents meetings.



- Helping to organise and run activities and all major school events e.g. Sports Day & the School Fair, School concert, Prize giving, Graduation.
- Writing articles for and helping to edit the NIA Newsletter.
- Becoming a peer mentor and role model for all students at all times.
- Strong positive presence throughout the school.

Qualities each Prefect should have:

- 1) Excellent leadership skills
- 2) Role models for students and exceptional behaviour when dealing with teachers and SMT
- 3) Outstanding commitment to the school and all academic matters
- 4) Good public speaking skills
- 5) Innovative with the ability to carry out successfully every task to the end
- 6) Creative
- 7) Motivated
- 8) Hard working
- 9) Good time management
- 10) Reliable
- 11) Good time management
- 12) Work well in a team
- 13) Good at problem solving

Timetable structure – Year 12

Option 1	7 periods
Option 2	7 periods
Option 3	7 periods
Option 4	7 periods
Self study/IELTS/PE	4 periods
Islamic/Study skills	2 periods
Tutor period	1 period

Timetable structure - Year 13

Option 1	8 periods
Option 2	8 periods
Option 3	8 periods
Option 4/Self study	8 periods
Islamic/Study skills	2 periods
Tutor period	1 period



The Sixth Form Day

The day begins at 7am. Classes begin at 7.10am. Lessons are 50 minutes each. The timetable consists of 35 periods in total. After Periods 1, 2, and 3 there is a 20 minute break. After Periods 4 and 5, there is a 20 minute break. Formal classes finish at 1.40pm and extracurricular activities are then held until 2.30pm. Most teaching staff are available until 2.30 pm.

The Sixth Form Uniform

In recognition of their different status, there is a difference to the usual Newton uniform for the Sixth Form students. This is as follows:

Boys: Navy blue trousers, Newton shirt, Newton tartan tie, formal black shoes. Blue blazers are also allowed.

Girls: Navy blue trousers or skirts (skirt length must be below the knees), Newton shirt, Newton tartan scarf, formal black shoes (no stiletto heels). Blue blazers are also allowed.

Monitoring and Target Setting

Each Sixth Form student is expected to develop a close working relationship with their tutors and subject teachers who will offer support and guidance throughout the course. Students are encouraged by their subject teachers to identify areas of concern and thus tackle problems positively. Progress will be discussed and a clear target in each subject (including a target grade) will be set and agreed upon twice a year by the subject teacher and the student. A mentor may be recommended who will have a full profile on the student and whose role it will be to assist the student. All students are also GL assessed for their reading age (NGRT) and cognitive ability (CAT4).

What is a target grade?

Target grades provide a best possible outcome and are intended to inspire, challenge and motivate students. Everyone needs a target to work towards and it informs students, parents and teachers about what they are aiming towards. Students' progress towards these target grades is closely monitored and support is given by subject teachers and form tutors.



How do we set target grades?

Targets for individual students are set and based upon the students expected performance in each course – IGCSE results are reviewed. The subject teacher then uses this information and their professional judgement in consultation with the individual student to arrive at a target grade.

Can target grades change?

Target grades are regularly reviewed and can move up and down. If the student can show to the teacher that he/she is capable of a higher grade than the target set, then there is no reason why this cannot be revised upwards. However, we would never revise the target grade to a level which is not challenging for the student given their level of ability.

**Courses in Sixth Form**

- General Certificate of Education at Advanced Subsidiary (AS) Level, or an international version of these – the IAS, is half way to a full A Level. Students usually take four subjects in Year 12. If students continue at A2 Level, the AS results count towards the final A Level award. Grades range from A to E.
- General Certificate of Education at Advanced Level. These are examinations which are internationally recognised as university entrance qualifications. Students usually take these examinations in Year 13, in three subjects. Grades range from A to E.

All courses offered at Newton International Academy - Secondary School are separated – there are no mixed gender classes.

Please Note: All subjects will be offered if there are sufficient numbers to make the course viable.

Subject Choices

ARABIC (EDEXCEL)

AS and A2 Level

Understanding Written Response in Arabic

Content summary:

This unit consists of **three** sections.

- Section A: Reading
- Section B: Translation
- Section C: Essay

Students are required to convey their understanding of written Arabic through a series of reading tasks. They also need to draw upon and apply their knowledge of Arabic language, grammar and lexis to produce a short translation from Arabic into English, as well as demonstrate an ability to manipulate Arabic language in continuous writing.

Students will be expected to recognise and use Arabic in a variety of contexts and in relation to the following general topic areas:

- Youth culture and concerns
- Lifestyle: health and fitness
- The world around us: travel, tourism, environmental issues and the Arabic-speaking world
- Education and employment.

Assessment:

2 hour 30 minute paper in **three** sections.

Section A: Students will need to understand, retrieve and convey information from a short series of different Arabic-language texts. They will be required to provide a mix of non-verbal and Arabic-language responses. In addition, marks will be given for vocalisation of text produced in response to one of the questions.

Section B: Students will be assessed on their ability to transfer meaning from Arabic into English. They will be required to apply their knowledge of Arabic language, grammar and lexis to produce a short translation from Arabic into English.

Section C: Students will write a 220-280 word essay, in Arabic, in response to a short Arabic-language stimulus and related bullet points. The assessment rewards learners for communicating relevant information effectively as well as for the quality of the Arabic language produced.



ART AND DESIGN (CIE)

AS AND A2 LEVEL

Entry Requirements:

You will need at least C grade in IGCSE Art and Design.

Am I suited to this course?

Entry requirements: Most students will have completed and passed IGCSE Art & Design. Alternatively you may apply for the course with a portfolio of artwork that displays some excellent drawing and painting skills.

What you will study?

AS Level - you must do components 1, 2

A Level - you must do components 1,2,3,4

COMPONENT 1 (Controlled test):

Minimum **three weeks** preparatory time + 15 hour Controlled Test

Total marks = 100

A Level weighting: 30% AS weighting: 60%

Externally set and assessed by CIE.

COMPONENT 2 (Coursework):

One project and up to four sheets of supporting work (max size A1).

Total marks = 100; **A Level weighting: 20% AS weighting: 40%**

Internally assessed by Centre.

COMPONENT 3 (Coursework):

Presentation of the study may take any appropriate format (max 3,500 words, max A1 size). Total marks = 100; **A Level weighting: 20%**

Externally assessed by CIE.

COMPONENT 4 (Personal Study):

Presentation of the study may take any appropriate format (max 3,500 words, max A1)

Externally set and assessed by CIE

What students can do after completion:

Students taking this course have:

- Taken Art Foundation and HND courses
- Applied to specialised degrees in art, craft or design
- Used the points to apply to UCAS
- Gone into the world of work

Because art is so diverse students are able to use these skills in a variety of areas: Graphics, Interior Design, Photography, Architecture, Product Design, Jewellery, Fashion, Textiles or Print, Fine Art, 3D or Sculpture, Computer or Digital Art or Animation, Film or Video, Advertising, Community Work, Theatre, Museum or Galleries, Teaching, or a job/course that requires a self motivated, problem solving, creative, imaginative and inquiring mind.



BIOLOGY (EDEXCEL)

IAS

The aims of the IAL in Biology are to enable students to:

- develop their 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.

Unit 1: Molecules, Diet, Transport and Health

Content summary:

- structure and function of water, carbohydrates, lipids, and proteins;; enzyme action
- importance of diet and the cardiovascular system
- 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.

Assessment:

Written examination of **1 hour and 30 minutes**, consisting of objective, structured and short-answer questions.

Unit 2: Development, Plants and the Environment Content summary:

- cell structure and ultrastructure of eukaryote and prokaryote cells; cell specialisation
- the role of meiosis and mitosis
- 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 and uses of plant products

Assessment:

Written examination of **1 hour and 30 minutes**, consisting of objective, structured and short-answer questions.

Unit 3: Practical Biology and Research Skills Content summary:

- Students are expected to develop experimental skills, and a knowledge and understanding of experimental techniques, by carrying out a range of practical experiments and investigations while they study Units 1 and 2.
- This unit will assess students' knowledge and understanding of experimental procedures and techniques that were developed throughout **Units 1 and 2**.

Assessment: Written examination of **1 hour and 20 minutes**, consisting of objective, structured and short answer questions.



BIOLOGY (EDEXCEL)

IA2

The aims of the IAL in Biology are to enable students to:

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

Unit 4: The Natural Environment and Species Survival Content summary:

- Photosynthesis and how ecosystems work
- Climate change, species extinction, and evolution by natural selection
- Global warming and its effects on plants and animals
- Analytical techniques to determine the identity of a person or other animal
- Bacteria, virus and their hosts
- Infections by pathogens

Assessment:

Written examination of **1 hour and 45 minutes**, consisting of objective, structured and short-answer questions.

Unit 5: Energy, Exercise and Coordination Content summary:

- Muscle contraction
- Biochemical requirements for respiration
- Homeostasis, muscle physiology and performance
- Medical technology in sports
- Eye and the nervous system
- Brain imaging, brains structuring, functioning, stimuli, the development of vision and learning
- Nervous' system diseases
- The Human Genome Project

Assessment:

Written examination of **1 hour and 45 minutes**, consisting of objective, structured and short-answer questions.

Unit 6: Practical Biology and Investigative Skills Content summary:

- Students are expected to develop experimental skills, and a knowledge and understanding of experimental techniques, by carrying out a range of practical experiments and investigations while they study Units 4 and 5.
- This unit will assess students' knowledge and understanding of experimental procedures and techniques that were developed throughout Units **1, 2, 4 and 5**.

Assessment: Written examination of **1 hour 20 minutes**, consisting of objective, structured and short answer questions.



BUSINESS (EDEXCEL)

IAS and IA2

THIS COURSE WILL HELP DEVELOP:

- Students' interest in, and enthusiasm for, the study of business in the modern world;
- Students' critical understanding of business activity and how well organisations meet the needs and wants of society;
- Students' awareness of the ethical dilemmas and responsibilities facing business organisations;
- Students' ability to make decisions, solve problems and challenge assumptions.

Y12	
UNIT 1 Students are introduced to the market, explore the marketing and people functions and investigate entrepreneurs and business start-up.	Unit 1: Marketing and people 80 marks, 2h 50% of the total IAS, 25% of the total IAL
UNIT 2 Students explore the finance and operations functions, and investigate external influences on business.	Unit 2: Managing business activities 80 marks, 2h 50% of the total IAS, 25% of the total IAL
Y13	
UNIT 3 Students develop understanding of the concepts introduced in Units 1 and 2, and explore influences on business strategy and decision making.	Unit 3: Business decisions and strategy 80 marks, 2h 50% of the total IA2, 25% of the total IAL
UNIT 4 Students develop understanding of the concepts introduced in Units 1, 2 and 3, and explore business activity in a global context.	Unit 4: Global business 80 marks, 2h 50% of the total IA2, 25% of the total IAL



CHEMISTRY (EDEXCEL)

IAS

The aims of the IAL in Chemistry are to develop:

- students' interest in, and enthusiasm, for chemistry, including developing an interest in further study and careers in chemistry.
- an appreciation of how society makes decisions about scientific issues and how the sciences contribute to the success of the economy and society.
- a deeper understanding of the skills, knowledge and understanding of How Science Works.
- essential knowledge and understanding of different areas of the subject.

Unit 1: Structure, Bonding and Introduction to Organic Chemistry Content Summary:

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.

Assessment:

Examination of **1 hour 30 minutes** in two sections:

Section A: objective test questions MCQ

Section B: mixture of short-answer and extended answer questions

Unit 2: Energetics, Group Chemistry, Halogenoalkenes Content Summary:

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.

Assessment:

Examination of **1 hour 30 minutes** in three sections:

Section A: objective test questions MCQ

Section B: mixture of short-answer and extended answer questions

Section C: contemporary context questions.

Unit 3: Practical Skills in Chemistry I Content Summary:

This unit contains a practical written examination that covers the content of Units 1 and 2. There is no specific content for this unit. The practical written examination covers the areas of physical, organic and inorganic chemistry and the following types of practicals: qualitative observations, quantitative measurements and preparations.

Assessment:

Examination of **1 hour 20 minutes** with one section.



CHEMISTRY (EDEXCEL)

IA2

The aims of the Edexcel Advanced Subsidiary IAL in Chemistry are to develop:

- e) students' interest in, and enthusiasm, for chemistry, including developing an interest in further study and careers in chemistry.
- f) an appreciation of how society makes decisions about scientific issues and how the sciences contribute to the success of the economy and society.
- g) a deeper understanding of the skills, knowledge and understanding of How Science Works.
- h) essential knowledge and understanding of different areas of the subject.

Unit 4: Rates, Equilibria and Further Organic Chemistry Content Summary:

- Kinetics
- Entropy and energetics
- Chemical equilibria
- Acid-base equilibria
- Organic chemistry: Carbonyls, Carboxylic Acids and Chirality

Assessment:

Examination of **1 hour 45 minutes** in two sections:

Section A: multiple choice questions

Section B: mixture of short-open, open-response, calculations and extended answer questions

Section C: data or calculation question

Unit 5: Transition Metals and Organic Nitrogen Chemistry Content Summary:

- Redox equilibria
- Transition Metals and their Chemistry
- Organic Chemistry: Arenes
- Organic Nitrogen Compounds: Amines, Amides, Amino Acids and Proteins

Assessment:

Examination of **1 hour 40 minutes** in three sections:

Section A: multiple choice questions

Section B: mixture of short-open, open-response, calculations and extended answer questions

Section C: contemporary context questions.

Unit 6: Practical Skills in Chemistry IAL Content Summary:

Students are expected to further develop the experimental skills and the knowledge and understanding of experimental techniques that they acquired in Units 1 and 2 by carrying out a range of practical experiments and investigations while they study in Units 4 and 5.

Assessment:

Examination of **1 hour 20 minutes** with one section.



ECONOMICS (EDEXCEL)

IAS & IA2

THIS COURSE WILL HELP DEVELOP:

- 📖 Students' interest in, and enthusiasm for, the study of Economics
- 📖 Students' ability to appreciate the contribution of economics to the understanding of the wider economic and social environment
- 📖 Students' understanding of a range of concepts and an ability to use those concepts in a variety of different contexts

Y12

Unit 1: Markets in action

80 marks, 1hr 45 minutes

50% of the total IAS, 25% of the total IAL

Unit 2: Macroeconomic performance and policy

80 marks, 1hr 45 minutes

50% of the total IAS, 25% of the total IAL

Y13

Unit 3: Business behaviour

80 marks, 2h

50% of the total IAS, 25% of the total IAL

Unit 4: Developments in the global economy

80 marks, 2h

50% of the total IAS, 25% of the total IAL

Availability: January, June and October

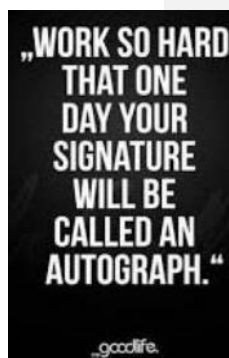
BRIEF DESCRIPTION

UNIT 1

Students are given an introduction to the nature of economics and examines how the price mechanism allocates resources in local, national and global markets.

UNIT 2

This unit introduces the key measures of economic performance and the main objectives and instruments of economic policy in an international context.



UNIT 3

This unit develops the content of Unit 1 and examines how pricing and the nature of competition between firms is affected by the number and size of market participants.

UNIT 4

This unit develops the knowledge and skills gained in Unit 2. The application, analysis and evaluation of economic models is required, as well as an ability to assess policies that might be used to deal with economic problems.

ENGLISH LANGUAGE (CIE)

AS Level

ENTRANCE REQUIREMENTS

Students must achieve a Level C in IGCSE English First Language and at least a Level A in IGCSE English Second Language

The course is a detailed study of English language – requiring students to be able to analyse text in depth and write in a detailed and skillful fashion in a variety of styles

ASSESSMENT AT A GLANCE:

All candidates sit two exam papers:

Paper 1 Reading; 2 hours and 15 Minutes, 50%
50 marks
A directed writing response to an unseen text (10 Marks)
A comparative analysis of form, language and structure of the unseen text with the candidates directed writing (15 Marks)
A second analysis of an unseen text – looking at form, structure and language (25 Marks)
Paper 2 Writing, 2 hours, 50%
50 marks
Writing a short text in response to a prompt (15 marks)
Writing a reflective commentary based on how the text produced in part (a) fulfils the brief (10 marks)
A written piece of one out of three questions. (25 Marks)
Each question corresponds to one of the three following categories:
• imaginative/descriptive
• discursive/argumentative
• review /critical.

- imaginative/descriptive
- discursive/argumentative
- review /critical.

Examples of the text types candidates may be required to analyse or produce include:

Advertisements, brochures, leaflets, editorials, news stories, articles, reviews, blogs, investigative journalism, letters, podcasts, (auto)biographies, travel writing, diaries, essays, scripted speech, narrative writing, and descriptive writing.



9093 English First Language - Examination Paper Breakdown

Reading	Writing
<p>1 Text 1 – Compulsory In Question 1(a), candidates are required to read a text of approximately 550–750 words, and write a directed response of 150–200 words, choosing their vocabulary, style and structure to fit a specific form, purpose and audience. This question assesses AO1 and AO2. In Question 1(b), candidates are required to:</p> <ul style="list-style-type: none"> • identify, analyse and compare characteristic features of the texts • relate these features to the purpose, audience and context of the texts. 	<p>1 Question 1 is in two parts: a) writing a short text in response to a prompt (15 marks) b) writing a reflective commentary based on how the text produced in part (a) fulfils the brief (10 marks) In Question 1(a), candidates are required to write a response of no more than 400 words to a prompt, choosing their vocabulary, style and structure to fit a specific form, purpose and audience. In Question 1(b), candidates are required to write a reflective commentary explaining how their linguistics choices have contributed to fulfilling the brief in part (a). Candidates are required to focus on their choices of form, structure and language, and to analyse how these stylistic choices relate to audience and shape meaning.</p>
<p>2 Text 2 - Compulsory In Question 2, candidates are required to read a text of approximately 550–750 words, and comment on the form, structure and language of the text. Candidates are required to:</p> <ul style="list-style-type: none"> • identify characteristic features of the text, relate them to the meaning, context and audience of the writing, and organise information in their answers • comment on aspects of form, structure and language • write in an appropriate style. 	<p>2 Section B: Extended writing Candidates choose to answer one out of three questions. Each question corresponds to one of the three following categories:</p> <ul style="list-style-type: none"> • imaginative/descriptive • discursive/argumentative • review/critical. <p>In each question, candidates are required to:</p> <ul style="list-style-type: none"> • produce a continuous piece of writing of 600–900 words • express their ideas clearly, coherently and accurately, using an appropriate range of language • develop their writing in a manner appropriate to the form, purpose and audience.



ENGLISH LANGUAGE (CIE)

A (A2) Level

ENTRANCE REQUIREMENTS

Students must achieve a Level E in 9093 AS English

The course continues a detailed study of English language – requiring students to be able to analyse text in depth and write in a detailed and skilful fashion in a variety of styles. The emphasis is on topics of research and study:

- Language Change Over Time
- Child Acquisition of Language
- Language in the World
- Language and the Self

Examples of the prose text types candidates may be required to analyse include advertisements, brochures, leaflets, editorials, news stories, articles, reviews, blogs, investigative journalism, letters, podcasts, (auto)biographies, travel writing, diaries, essays, scripted speech, narrative writing, and descriptive writing.

ASSESSMENT AT A GLANCE:

All candidates sit two exam papers:

Paper 3 Language Analysis; 2 hours and 15 Minutes, 50% 50 marks A question about language change (25 Marks) A question about child acquisition of language (25 Marks)
Paper 4 Language Topics, 2 hours 15 Minutes, 50% 50 marks A question about English in the world (25 Marks) A question about English and the self (25 Marks)

Examination Breakdown

Paper 3 Language Analysis

Written paper, 2 hours 15 minutes, 50 marks

This paper has two sections, Section A: Language change, and Section B: Child language acquisition. Each section is worth 25 marks.

Section A: Language change

In Question 1, candidates are required to respond to three texts:

- a prose text of approximately 300–400 words, written at any time from the Early Modern English period (beginning c.1500) to the present day
- two sources of quantitative language data: an n-gram graph and a word table of corpus data.



Candidates are required to analyse how the prose text exemplifies ways in which the English language has changed over time. They are required to support their response with reference to the two sources of quantitative language data provided, and also to their wider study of language change.

Section B: Child language acquisition

In Question 2, candidates are required to respond to a transcript featuring language spoken by a child or children between the ages of 0 and 8, possibly alongside other speakers.

Candidates are required to analyse ways in which the speakers in the transcript use language, referring to specific details from the transcription, and relating their observations to ideas and examples from their wider study of child language acquisition.

Paper 4 Language Topics

Written paper, 2 hours 15 minutes, 50 marks

This paper has two sections, Section A: English in the world, and Section B: Language and the self. Each section is worth 25 marks.

Candidates must answer both questions.

Section A: English in the world

In Question 1, candidates are required to respond to approximately 400–500 words of text on the topic of ‘English in the world’.

In their essay, candidates are required to discuss the most important issues the text raises in relation to a specified aspect of the role and status of the English language in the world. They are required to refer to specific details from the text, relating points in their discussion to ideas and examples from their wider study of the topic of English in the world.

Section B: Language and the self

In Question 2, candidates are required to respond to approximately 400–500 words of text on the topic of ‘Language and the self’.

In their essay, candidates are required to discuss the most important issues the text raises in relation to a specified aspect of the relationship between language and the self. They are required to refer to specific details from the text, relating points in their discussion to ideas and examples from their wider study of the topic of language and the self.



Environmental Management (CIE)

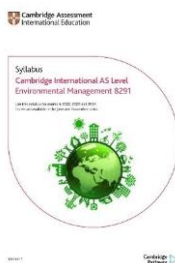
IAS

The aims of the Cambridge IAL in Environmental Management are to:

- acquire a knowledge of environmental processes and the impacts of societies in the environment
- the scientific principles that underpin issues of sustainability and environmental management
- the causes of key issues affecting the environment as well as possible ways of managing these
- the pressure which impact on the environment and potential solutions to these

The content of this syllabus is designed to encourage a broad, thought provoking study of the environment, focusing on key issues in its management for sustainability. It includes sections on:

- Environmental Research And Data Collection
- Managing human population
- Managing ecosystems and biodiversity
- Managing resources
- Managing water supplies
- Managing the atmosphere
- Managing climate change



Assessment

Y12 Environmental Management	
Paper 1 Principles of Environmental Management	80 marks, 1h30 min 50% of the IAS
Paper 2 Management in Context	80 marks, 1h30 min 50% of the IAS



TRAVEL & TOURISM (CIE)

IAS and IAL

Cambridge International A Level Travel and Tourism provides a suitable foundation for the study of Travel and Tourism or related courses in higher education. Equally it is suited for candidates intending to pursue careers or further study in travel and tourism, or as part of a course of general education.

AIMS OF THE COURSE

- To help develop an understanding of the scale and importance of the industry
- To help develop an appreciation of the importance of host destinations and communities to the industry
- To develop an understanding of the importance of sustainable development to the industry
- To develop the ability to recognise the positive and negative impacts the industry may have on people, the environment and the economy

WHY CHOOSE T&T?

The World of Travel and Tourism is fast becoming one of the world's hottest growth industries with new destinations opening up for visitors around the world offering a huge variety of employment opportunities for young people, ranging from a tour guide in an exotic location to marketing local and national attractions. If you want a flying start in life then a Travel & Tourism course could be for you. This exciting industry is the biggest in the world with an impressive variety of roles. Students are exposed to tourism environments and could follow a career in tourism.

IAS level topics:

1. Features of the travel and tourism industry
2. Principles of customer service in travel and tourism
3. Planning and managing a travel and tourism event

PAPER 1 THE INDUSTRY

This is a written paper testing the core content of the syllabus. There are four structured questions which require short and extended answers. Each question is based on original stimulus material. 100 marks, 2h30 minutes, 67% IAS

Paper 2 Planning and managing a travel and tourism event

This is a coursework project which involves planning and managing a travel and tourism event. Candidates work in a team but present their project individually. 50 marks, 33% IAS



FRENCH (EDEXCEL)

AS

Why choose the Edexcel Level 3 Advanced GCE in French?

We believe languages should appeal to all students. The new Pearson Edexcel Level 3 Advanced GCE in French has been developed to inspire all students who have an appreciation of the language, literature, film and culture of the French-speaking world.

Content and assessment overview

The Pearson Edexcel Level 3 Advanced GCE in French consists of two externally-examined papers assessing listening, reading and writing and a speaking assessment. The speaking assessment is externally set and conducted by a teacher-examiner*. All assessments are marked by Pearson.

Paper 1: Listening, reading and translation - 2hour exam, 40%

Content overview

This paper draws on vocabulary and structures across all four themes. Themes are based on the society and culture of the language being studied and are listed on *pages 8–9*.

Section A: Listening (30 marks)

A listening assessment based on a recording, featuring male and female French speakers. Students will respond to comprehension questions based on a variety of contexts and sources. The listening audio files for the sample assessment materials are available on our website.

Section B: Reading (30 marks)

A reading assessment based on a variety of text types and genres where students will have to respond to comprehension questions.

Section C: Translation into English (20 marks)

An unseen passage to be translated from French to English.

Paper 2: Written response to works and translation - : 2 hours and 40 minutes

30% of the qualification

Content overview

This paper draws on the study of two discrete French works: either two literary texts, or one literary text and one film. The works must be taken from the list provided in *Appendix 2: Prescribed literary texts and films*. The literary texts listed include a range of novels, plays and a series of short stories. All of the films are feature length.

Assessment overview

This paper includes a translation exercise and two essays on either two literary texts, **or** one literary text and one film (students must **not** answer questions on two films).

Students are not permitted access to a dictionary or any documentation relating to the works during the examination.

Section A: Translation (20 marks)

Students translate an unseen passage from English into French.

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Section B: Written response to works (literary texts) (50 marks)

Students must write an extended response on either one **or** two of the literary texts listed in *Appendix 2: Prescribed literary texts and films*.

Students select **one** question from a choice of two for each of their chosen literary text(s). If a student answers questions on two literary texts then they **do not** complete Section C.

Section C: Written response to works (films) (50 marks)

Students who answer only one question from a literary text in Section B must now write an extended response on **one** of the films listed in *Appendix 2: Prescribed literary texts and films*.

Students select **one** question from a choice of two for their chosen film.

Assessment overview

This paper includes a translation exercise and two essays on either two literary texts, **or** one literary text and one film (students must **not** answer questions on two films).

Students are not permitted access to a dictionary or any documentation relating to the works during the examination.

Section A: Translation (20 marks)

Students translate an unseen passage from English into French.

Section B: Written response to works (literary texts) (50 marks)

Students must write an extended response on either one **or** two of the literary texts listed in *Appendix 2: Prescribed literary texts and films*.

Students select **one** question from a choice of two for each of their chosen literary text(s). If a student answers questions on two literary texts then they **do not** complete Section C.

Section C: Written response to works (films) (50 marks)

Students who answer only one question from a literary text in Section B must now write an extended response on **one** of the films listed in *Appendix 2: Prescribed literary texts and films*.

Students select **one** question from a choice of two for their chosen film.

Paper 3: Speaking - 30% of the qualification

Content overview

Task 1 draws on vocabulary and structures across all four themes (listed on *pages 8–9*). Task 2 is based on independent research selected and carried out by the student. The research may be based on one of the themes or on the student's own subject of interest related to the society and culture of the language studied.



Students will be assessed on their ability to use a range of language accurately, communicate and interact effectively, summarise and analyse findings from written sources relating to their research subject, and show knowledge and understanding about the culture and society where the language is spoken.

Assessment overview

Students complete two tasks. Task 1 is worth 30 marks and Task 2 is worth 42 marks.

Task 1 (discussion on a Theme)

Students discuss one theme from the specification based on a stimulus containing two different statements.

Task 2, Part 1 (independent research presentation)

Students present a summary of at least two of the written sources they have used for their research and give a personal response to what they have read.

Task 2, Part 2 (discussion on independent research)

Students answer questions on their presentation and then have a wider discussion on their research.

Subject content

Theme 1: Les changements dans la société française

Theme 2: La culture politique et artistique dans les pays francophones

Theme 3: L'immigration et la société multiculturelle française

Theme 4: L'Occupation et la Résistance



GEOGRAPHY (EDEXCEL)

IAS and IA2

IAS Unit 1: Global Challenges

Topic 1- World at risk

Topic 2- Going Global

IAS Unit 2: Geographical Investigations

Topic 1- Crowded Coasts

Topic 2- Urban problems, planning and regeneration

IA2 Unit 3: Contested Planet

Section A – compulsory topics:

- Topic A1: Atmosphere and Weather Systems
 - Topic A2: Biodiversity Under Threat
- Section B – optional topics:
- Topic B1: Energy Security or Topic B2: Water Conflicts

Section C – optional topics:

- Topic C1: Superpower Geographies or Topic C2: Bridging the Development Gap

IA2 Unit 4: Researching Geography

- Option 1: Tectonic Activity and Hazards
- Option 2: Feeding the World's People
- Option 3: Cultural Diversity: People and Landscapes
- Option 4: Human Health and Disease

Unit	IAS or IA2	Assessment information	Number of raw marks allocated in the unit
Unit 1: Global Challenges	IAS	Written examination. The assessment is 1 hour and 45 minutes. The assessment consists of two Sections A and B. A Resource booklet is provided for both sections. Calculators may be used in the examination.* Students must answer all questions in Section A and one question in Section B. Section A consists of data response and short-answer questions. Section B makes use of students' own ideas and consists of a choice of Topic 1: World at Risk or Topic 2: Going Global longer/guided essay questions.	90 marks



Unit 2: Geographical Investigations	IAS	<p>Written examination.</p> <p>The assessment is 1 hour and 30 minutes.</p> <p>The assessment consists of Sections A, B and C.</p> <p>A Resource booklet is provided for Sections A and C.</p> <p>Calculators may be used in the examination.*</p> <p>Students must answer all questions in Sections A and B and one question in Section C.</p> <p>Section A consists of data response and short-answer questions on Topic 1: Crowded Coasts and Topic 2: Urban Problems, Planning and Regeneration.</p> <p>Section B consists compulsory short-answer questions on research and fieldwork investigation (familiar context).</p> <p>Section C consists of a choice of one unfamiliar context fieldwork question, broken down into short-answer questions, on either Topic 1: Crowded Coasts or Topic 2: Urban Problems, Planning and Regeneration.</p>	60 marks
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Unit	IAS or IA2	Assessment information	Number of raw marks allocated in the unit
Unit 3: Contested Planet	IA2	<p>Written examination.</p> <p>The assessment is 2 hours.</p> <p>The assessment consists of two Sections A, B and C.</p> <p>A Resource booklet is provided.</p> <p>Calculators may be used in the examination.*</p> <p>Section A consists of longer/guided essay questions and a synoptic question on Topic A1: Atmosphere and Weather Systems and Topic A2: Biodiversity Under Threat.</p> <p>In Section B, students have a choice of one data response/essay question from two topics: Topic B1: Energy Security or Topic B2: Water Conflicts</p> <p>In Section C, students have a choice of one data response/essay question from two topics: Topic C1: Superpower Geographies or Topic C2: Bridging the Development Gap.</p>	90 marks

Unit 4: Researching Geography	IA2	<p>Written examination.</p> <p>Students must answer one question out of a list of questions based on the four options they have studied.</p> <p>Students will be given pre-release material of research focus questions relating to each of the four options.</p>	60 marks
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Additional information:

- Students go on a variety of fieldwork trips.
- There is independent research which will help students to develop critical insight into the subject.



HISTORY (EDEXCEL)

IAS and IAL

Who can do it?

- Anybody who is interested in how today's world developed.
- Anybody who has an opinion
- Anybody who understands how to write PEEL paragraphs

Academic entry requirements:

Grade 4 or above at IGCSE in any of the following subjects:

- History
- English 1st Language
- English Literature

Do you need to have studied History at IGCSE to do A Level History?

It is helpful to have studied History at IGCSE, however it is not essential. Students who completed the IGCSE history course will have an advantage as they will be failure with some of the content and exam requirements.

How will studying history help me?

History qualifications, due to the skills developed and the academic respect the subject is held in by most educational institutions and employers, makes it an excellent choice.

Skills developed through studying history

- Analytical
- Investigative
- Communication
- Problem solving
- Debate
- Research

Employers who seek history qualifications

- Diplomatic service
- Government
- Journalism
- Law
- Medicine
- Business
- Finance
- Entertainment
- Education

Exam structure

Two exams

Paper 1: 2 hours where you answer 2 essay questions.



Paper 2: 2 hours where you answer 2 source questions and 1 essay question.

Exam Dates

Paper 1: January 2023

Paper 2: May / June 2023

Year 12 Structure

1st term

Interpretation depth study: Unit 1C: **Germany 1918 - 45**

Topics:

1. The democratic experiment 1918 - 29
2. The rise of the Nazis 1919 - 33
3. Nazi Germany 1933 - 39
4. Germany at war 1939 - 45



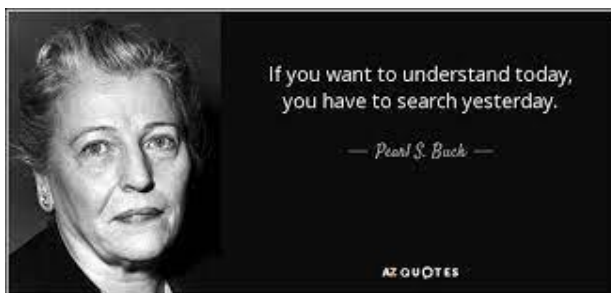
2nd & 3rd term

Paper 2: 2 hours where you answer 2 source questions and 1 essay question

Breath study with source evaluation: Unit 1C: **Russia 1917 - 91 From Lenin to Yeltsin**

Topics:

1. Communist government in the USSR 1917 - 91
2. Industrial and agricultural change 1917 - 91
3. Control of the people 1917 - 91
4. Social developments 1917 - 91



MATHEMATICS (EDEXCEL)

If you plan to do a degree in Mathematics, Statistics, Engineering, Accountancy, the Sciences or Economics then you will require Mathematics. This course is of a much higher level than iGCSE therefore only those students who achieve a 6 or above are eligible for entry.

IAS

AS is the first half of an A Level which consists of six units, three of which are taken in Year 12.

In Year 12 all students must take Pure Mathematics (2 units P1 and P2, separate examinations) with a choice of Statistics or Mechanics (1 unit). Students must be able to work independently as this demanding course requires a lot of time and dedication.

Unit 1: Pure Mathematics 1 (P1)

Topics include: Algebra and Functions; Coordinate Geometry in the (x, y); Trigonometry; Differentiation; Integration.

Exam: 1 hour 30 minutes

Unit 2: Pure Mathematics 2 (P2)

Topics include: Proof; Algebra and functions; Coordinate Geometry in the (x, y) plane; Exponentials and Logarithms; Trigonometry; Differentiation; Integration.

Exam: 1 hour 30 minutes

Options: Statistics 1 or Mechanics 1

Statistics topics include: Frequency tables & graphs, Random variables, Normal distribution, Probability.

Mechanics topics include: Kinematics, Dynamics, Moments and Vectors.

Exam: 1 hour 30 minutes

IAL (A2)

A2 is the second half of the full A Level in Mathematics. It is only for the most able as the content is very challenging and will rely on obtaining C and above in IAS.

Unit 3: Pure Mathematics 3 (P3)

Topics include: Algebra and Functions; trigonometry; exponentials and logarithms; differentiation; Integration; Numerical methods.

Exam: 1 hour 30 minutes

Unit 4: Pure Mathematics 4 (P4)

Topics include: Proof; Algebra and Functions; Coordinate Geometry in the (x, y) plane; Binomial Expansion; Differentiation; Integration; Vectors.

Exam: 1 hour 30 minutes

Options: Statistics 2 or Mechanics 2 (or the alternative from IAS Options including Decisions)

Both are extensions of content covered in year 12.

Exam: 1 hour 30 minutes

Assessments

In all of these units a calculator is allowed.

The P1, P2, P3 and P4 exams take place in January/June/October and we encourage students to sit Statistics or Mechanics in January to avoid future clashes. We allow more lessons to be allocated for these units during term one.

The overall grade is made up of equal percentages from each of the six units and is from E to A at AS Level and E to A* at A Level.



INFORMATION TECHNOLOGY (IT) – (CIE)

AS

In a world where information technology (IT) is constantly changing, individuals increasingly need technological and information literacy skills that include the ability to gather, process and manipulate data.

The impact of IT on society is enormous and as the percentage of businesses and households connected to communication networks such as the internet grows, so does the need for individuals who understand these new technologies.

Learners study the structure and use of IT systems within a wide range of organisations, including the use of a variety of computer networks. As a result, learners gain an understanding of IT system life cycles, and how these affect the workplace. They also learn about the wider impact of IT on society in general.

Units

Candidates for Cambridge International AS Information Technology study the following topics 1–10.

Theory

1. Data processing and information
2. Hardware and software
3. Monitoring and control
4. Algorithms and flow charts
5. eSecurity
6. The digital divide
7. Expert systems

Practical

8. Spreadsheets
9. Modelling
10. Database and file concepts
11. Sound and video editing

Assessment

Component	Weighting	Examination
Paper 1 Theory	50%	1 hour 45 minutes
Paper 2 Practical	50%	2 hour 30 minutes



INFORMATION TECHNOLOGY (IT) – (CIE)

A2

At A Level students delve deeper into different kinds of computer systems and the role that emerging technologies play in our lives. The syllabus also covers the process of building a new computer system through an understanding of the systems life cycle and introduces learners to the fundamentals of image editing, graphics creation and programming for the web using JavaScript.

This syllabus encourages learners to become effective and discerning users of IT. It helps them to develop a broad range of IT skills, knowledge and understanding.

Units

Theory:

- 12. IT in society
- 13. New and emerging technologies
- 14. Communications technology
- 15. Project management
- 16. System life cycle

Practical:

- 17. Mail merge
- 18. Graphics creation
- 19. Animation
- 20. Programming for the web

Assessment

Component	Weighting	Examination
Paper 1 Theory (AS)	25%	1 hour 45 mins
Paper 2 Practical (AS)	25%	2 hour 30 mins
Paper 3 Theory (AL)	25%	1 hour 45 mins
Paper 4 Practical (AL)	25%	2 hour 30 mins



COMPUTER SCIENCE (CIE)

AS AND A LEVEL

Cambridge International AS & A Level Computer Science encourages learners to meet the needs of higher education courses in computer science as well as twenty-first century digital employers. It encourages learners to think creatively, through applying practical programming solutions, demonstrating that they are effective users of technology.

Learners develop computational thinking & programming skills to solve computer science problems. Cambridge International AS and A Level Computer Science will help learners develop a range of skills such as thinking creatively, analytically, logically and critically. They will also be able to appreciate the ethical issues that arise with current and emerging computing technologies.

What will I learn

AS	A-Level
Paper 1	Paper 3
1. Information representation	Data representation
2. Communication	Communication and internet technologies
3. Hardware	Hardware and virtual machines
4. Processor fundamentals	System software
5. System Software	Security
6. Security, privacy and data integrity	Artificial Intelligence
7. Ethics and ownership	Computational thinking and problem solving
8. Databases	
Paper 2	Paper 4(Practical)
9. Algorithm Design and problem solving	Further programming
10. Data types and structures	
11. Programming	
12. Software development	

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How will I be assessed

	Paper 1 Theory fundamentals	Paper 2 Fundamental problem solving and programming skills
AS Level (Year 12)	Written paper 1h 30m 50% of AS 25% of A-Level	Written paper 1h 30m 50% of AS 25% of A-Level
	Paper 3 Advanced Theory	Paper 4 practical
A Level (Year 13)	Written paper 1h 30m 25% of A Level	Practical paper 2h 30m 25% of A Level



PHYSICS (EDEXCEL)

IAS

The aims of the Edexcel Advanced Subsidiary GCE in Physics are to:

- provide seamless progression from the Key Stage 4 programme of study and enable students to sustain and develop an enjoyment of, and interest in, physics and its applications.
- develop an understanding of the link between theory and experiment and foster the development of skills in the design and execution of experiments.
- develop essential knowledge and understanding in physics and, where appropriate, the applications of physics with an appreciation of their significance and the skills needed for the use of these in new and changing situations.
- demonstrate the importance of physics as a human endeavour that interacts with social, philosophical, economic and industrial matters.
- a suitable preparation for higher educational courses in physics and related courses.

Unit 1: Mechanics and Materials Content Summary:

This unit involves 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

Assessment:

This unit is assessed by means of a written examination paper of **1 hour 30 minutes** duration, which will consist of objective, short-answer and long-answer questions.

Unit 2: Waves and Electricity Content Summary:

This unit involves the study of waves (including refraction, polarisation, 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. Several different contexts may be used to teach parts of this unit including music, medical physics, technology in space, solar cells and an historical study of the nature of light.

Assessment:

This unit is assessed by means of a written examination paper of **1 hour 30 minutes** duration, which will consist of objective, short-answer and long-answer questions.

Unit 3: Practical Skills in Physics I Content Summary:

Students are expected to develop experimental skills, and a knowledge and understanding of experimental techniques, by carrying out a range of practical experiments and investigations while they study Units 1 and 2. This unit will assess students' knowledge and understanding of experimental procedures and techniques that were developed in **Units 1 and 2**.

Assessment:

This unit is assessed by means of a written examination paper of **1 hour 20 minutes** duration, which will consist of objective, short-answer and long-answer questions.



PHYSICS (EDEXCEL)

IA2

The aims of the Edexcel International Advanced Level in Physics are to enable students to:

- . Gain essential knowledge and understanding of different areas of the subject and how they relate to each other
- a. Develop a deep appreciation of the skills, knowledge and understanding of scientific methods
- b. Grow confidence in a variety of practical, mathematical and problem-solving skills
- c. Develop an interest in further study and careers associated with the subject

Unit 4: Further Mechanics, Fields and Particles

This unit involves the study of mechanics, electric and magnetic fields, and nuclear and particle physics

Assessment:

This unit is assessed by means of a written examination paper of **1 hour 45 minutes** duration, which will consist of objectives, short-answered and long answered questions.

Unit 5: Thermodynamics, Radiation, Oscillations and Cosmology

This unit involves the study of thermal energy, nuclear decay, oscillations, and astrophysics and cosmology

Assessment:

This unit is assessed by means of a written examination paper of **1 hour 45 minutes** duration, which will consist of objectives, short-answered and long answered questions.

Unit 6: Practical Skills in Physics II:

Students are expected to further develop the experimental skills they acquired in **Units 1 and 2**.

Students are expected to develop these skills, and a knowledge and understanding of experimental techniques, by carrying out a range of practical experiments and investigations while they study Units 4 and 5.

Assessment:

This unit is assessed by means of a written examination paper of **1 hour 20 minutes** duration, which will consist of objective, short-answer and long-answer questions.



General Conduct

Life in Year 12 and 13 is different from that in the rest of the school. Students in these years follow different courses, wear different uniforms and have greater freedom and privileges than those lower down the school. However, such freedom needs to be used constructively and with regard to the needs and sensitivities of others.

The secret to success in the Sixth Form is undoubtedly time management! All students will have study periods therefore they have to develop the self-discipline to work on their own, and to juggle the demands of academic work and all the other opportunities too. This is an essential prerequisite to surviving not just the Sixth Form but university and also the life of an employee.

Throughout the Sixth Form students also have the opportunity to continue to enjoy a number of sporting and other extra-curricular opportunities. Outside speakers will be also invited to talk to the Sixth Form on a wide range of topics and subject specific or general trips will be organised. Sixth Formers play a key role in many aspects of school life – the Sixth Form student body provides the School Head Boy and Girl and Sixth Formers fulfil the role of Senior Prefects.

The Sixth Form students are expected to be role models for all our younger students. All our younger students from Nursery to Year 11 will be looking up to the Sixth Formers and forming impressions about how to behave, dress, conduct themselves and treat others. It is essential that they show the maturity that comes with this role.

The Sixth Form at NIA aims to:

- provide students with a broad and balanced curriculum
- prepare students for the adult world
- give students the skills they need for lifelong learning
- make students more independent, self-disciplined and self-aware
- allow students to be critical thinkers and problem solvers
- give students a sense of respect for others and for themselves
- lay the foundations for success at university and beyond



IMPORTANT INFORMATION

Food and Drink

Healthy Eating Week is held early in the school year to educate students about the harmful effects of unhealthy food and drinks and to encourage a healthy lifestyle.

Lunches should be brought to school or can be purchased from the new school canteen. Food and should not be consumed within the school building and litter should be placed in the bins provided, in line with the school policy on environmental awareness. It is asked that parents ensure sufficient water is provided for the school day.

Fizzy drinks and chewing gum are not permitted in school.

Personal Items

It should be recognised that the school cannot take responsibility for personal items of value brought in to school. As such we recommend that items such as jewellery, iPods, mobile phones, laptops etc., should not be brought into school.

Such items will be confiscated and returned only at the end of the week.

Mobile Phones

Mobile phones are often a source of controversy in secondary schools. As such they should not be brought into school and we ask parents for their support in this matter. Should a student need to phone home on an urgent matter they can ask at the school office and a phone will be made available to them. Similarly should a parent need to contact a student we ask that they call the school office and a message will be passed on to the student concerned. Students often claim that they might need to be contacted in an emergency; it is felt that the school should be made aware of any such emergency prior to the student as they can then offer any advice or support required.

Mobile Phones will be confiscated and returned only at the end of the day.

Performance

The Study Commitment

Successful students are actively committed to all aspects of their studies and are prepared to invest sufficient time to turn that commitment into success. Teaching methods used at NIA are student-centred, with students being encouraged to exercise a considerable degree of responsibility for the organisation of their learning. This includes the making and maintaining of notes, meeting the clear deadlines that accompany all set work, constructive use of private study time and consultations with staff.



Each AS level students is allocated 50 minutes for private study work each day. Many valuable opportunities exist for the productive use of this time. Sometimes, members of staff are available for individual consultation – ensure you make an appointment with the required staff member.

Students should do at least 4 to 8 hours of private study work per subject each week. They cannot find all of this time within the confines of the school day and work at home is, therefore, essential.

Parents can help by:

- Ensuring that adequate facilities for quiet study are available at home.
- Raising, with the student and school, concerns about the amount of study (whether too little or too much) occurring at home.
- Contacting the school about any doubts they may have with regard to the student's approach and attainment.

Students must ensure that

- work is completed and submitted to deadlines set by staff;
- they work to the best of their ability in class work, homework, coursework, tests and examinations;
- they produce work that is their own, not copying or submitting work that has been produced by others;
- they behave appropriately at all times on the school premises and respect the authority of all staff. Behaviour that disrupts the learning of others will not be tolerated;

In order to progress into Year 13, students must demonstrate the ability and appropriate attitude to work and behaviour to enable them to achieve pass standards on their programmes.

Students are expected to produce their best piece of work for every task assigned to them. They should also recognise that, in most cases, poorly completed work cannot be repeated without major consequences for progress in other areas.

Student achievements, effort and attitude will be formally monitored against their targets and at regular interviews by reports and via discussions with teachers and tutors. These discussions will be crucial in helping students to plan ahead effectively and to become more reflective in their approach to work.



Sixth Form Admission

Newton International School has developed a Sixth Form curriculum which provides the opportunity for all students to be successful. We expect Sixth Form students to demonstrate a high level of motivation and have the capacity for hard work.

All Sixth Form students will have the opportunity to develop leadership skills as they become actively involved with our younger students and assist with the day to day organisation of the School.

An offer of a place at Newton International Academy is not a guarantee that a student will be admitted into the Sixth Form or that courses that were discussed at interviews or indicated on a student's application form will be available. NIA students must pass their iGCSE exams (at least 7 A*-C/9-4) in order to progress into Year 12. Students who obtain 7 A*-E (9-2) iGCSE grades may conditionally progress into Year 12 however subject to resit their exams and with a restricted subject choices and stricter contract conditions to ensure they are prepared not only to pass Year 12 but also succeed in their university application later on.

External applicants (Year 11 students from other Newton campuses or other schools) – an offer at NIA Sixth Form is subject to:

- a satisfactory reference being provided by the student's previous school or college.
- a successful interview with the Head of Sixth Form or Head of Secondary who will determine the students' suitability for the courses chosen.
- students achieving appropriate grades in the summer IGCSE exams to be eligible to study the courses that they have indicated on their application form and agreed at interview (**7 A*-C/9-4**).
- presentation of a School Leaving Certificate, certified by the previous school.

Admission by any applicant to the Sixth Form is based on IGCSE attainment of at least C or 4 Grade in 7 subjects.

Please note the following exceptions:

- Mathematics – A*-B (9-6) only at iGCSE
- Students who wish to apply for a course that they did not study at IGCSE level will need to provide evidence (e.g an Art portfolio) to do that course at AS level. Acceptance to this course is at the discretion of the course teacher.

Applicants may be required to sit an Entrance Test in each course they wish to pursue, if they are applying to come into the Sixth Form from a non-British curriculum. This decision is based on review of the application by the Head of Sixth Form and Head of Secondary.

It is highly recommended for students to have proficiency in English. The medium of instruction at Newton International Academy is English.

Students will be admitted into Sixth Form at the start of the Autumn Term (closing date **1st November**) in each school year although there may be some exceptions when students transfer during an academic year.

Initial acceptance of applicants is conditional, based on IGCSE Estimated Results. Final placement is given:

- once official IGCSE grades are produced
- after all entrance requirements outlined in the Entrance Procedure have been satisfied
- after the Sixth Form contract is signed by the student and parent. In this contract, issues concerning attitude, attendance, behaviour and academic performance are highlighted.



Time Management and the Study Environment

Private Study time is limited, but emphasis is given by subject staff to helping the student acquire good and effective study skills so that students can make the best use of their time. Many Sixth form students find it difficult to study effectively because of a lack of time management and a proper place to study. Often a student will do poorly in courses because not enough time has been spent studying outside of class. However the students who manage their time effectively achieve high scores and still find time for other extra-curricular activities such as MUN, Debating and Qatar Sports Olympic Programme.

For best results you should plan to spend at least an average of four to eight hours a week outside of class time working on each course. There is sufficient time in the week for this, but it does require time management. If you spend a few minutes early in the morning planning how the day is to be used and allow adequate time for studying, much more will be accomplished. Students who make efficient use of time find that they have plenty of time for recreation.

Ensure that your study area should be free from distractions - including friends who drop by to socialise. Much more will be accomplished if you really study during your designated study times.

Careers Guidance

Careers guidance aims to help students match their skills, interest, and abilities with plans that meet their educational and future goals. The objective is to challenge students at as high a level as they can in order to be successful and achieve their goals. It will help guide students through their exploration of academic, personal, social and career related activities that will develop and encourage personal awareness. Careers education forms part of the tutorial programme to help students to make decisions about what careers may be appropriate for them.

All Sixth Form students will get the opportunity to attain study support and career guidance from Connexions, a support service for young people. The goal of Connexions is to ensure success through learning and smooth the transition to adulthood and working life.

In Y12 and 13, students are able to gather a great deal of information by:

- discussing various courses in higher education with staff.
- taking part in higher education visits in order to get direct advice, experience the different environments and begin the planning and decision-making process.
- Taking part in Careers days and trips into various work places relevant to the group

Students will also be helped to complete CVs and Scholarship applications.

