

# **CARRICKFERGUS GRAMMAR SCHOOL**

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**SENIOR SCHOOL BOOKLET  
ENTERING THE SIXTH FORM, SEPTEMBER 2023  
For AS/A2 courses 2023-2025**

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# INTRODUCTION



Welcome to the Carrickfergus Grammar School option advice booklet for pupils who are progressing from GCSE to Advanced Level study. After a broad and balanced curriculum at Key Stages 3 and 4, you are now facing some important choices to best prepare you for your future university courses and careers.

The aim of post-16 'A' Level study is to enhance your subject knowledge in curriculum areas which may be of relevance to you for future career aspirations and ambitions. In subjects which you have studied previously you will continue further the journey from novice to expert, developing powerful knowledge which - in turn - will deepen your domain-specific skills. This will be invaluable for future career options and, with good grades at A Level, will hopefully open the doors to many Higher Education courses and degree qualifications for you.

You may also have the opportunity to take up a new subject at A Level, should you wish. This may be a subject which you feel will be of relevant to your future career, or a subject which interests you. You should research carefully, reading the information in this booklet carefully and by speaking with relevant staff, before making any conclusive decisions on the study of a new subject. This means that you are making reasoned judgements regarding the benefits of studying that subject.

It is our aim at Carrickfergus Grammar School to prepare you to compete in the complex and competitive global market with other young people from all over the world. We seek to do this in a number of ways.

## 1:

We provide for our pupils' academic needs through the following range of GCE A levels: Accounting, Art and Design, Biology, Business Studies, Chemistry, Digital Technology, English Literature, Environmental Technology, French, Geography, Government and Politics, Health and Social Care, History, Mathematics, Further Mathematics, Music, Nutrition and Food Science, Physical Education, Physics, Religious Studies, Spanish, Technology and Design.

The School also offers Cambridge Technical (Applied) ICT as an A Level equivalent, and a range of other A Level and equivalent subjects through the CLC (Carrickfergus Learning Community) Partnership. Pupils may only choose one CLC subject to study. Further details of subjects offered via CLC will be made available in due course.

**2:**

The school is in the process of prioritising a knowledge-rich curriculum. You will already be familiar with elements of this, including knowledge organisers, spaced retrieval and self-quizzing. The relevance of this is to ensure that powerful knowledge embeds in long-term memory, thus ensuring that you have the edge in later life.

**3:**

We also offer a range of enrichment courses and opportunities within the Sixth Form linked to career aspiration. These include: work experience, UCAS preparation, Careers Education Information Advice and Guidance lessons, interview skills days and Oxbridge / Cambridge preparation programmes. These activities allow you to develop further your academic, personal and inter-personal skills, while simultaneously giving you the opportunity, with professional help, to look closely at tertiary education and the world of work.

**4:**

We provide a wide range of extra-curricular activities within school. We see participation in these activities as both fundamental to the ethos of the school, and essential for your social, cultural and spiritual development. Full details of all the activities offered are available on the school website: [www.carrickfergusgrammar.com](http://www.carrickfergusgrammar.com).

This booklet outlines the structure and course content, skills and qualities, career paths and progression routes for each of our courses offered at A Level. The final availability of subjects rests with the school, taking into account numbers wishing to study a particular subject, the staffing and accommodation available, timetabling constraints and Department of Education regulations.

Pupils who have remaining questions regarding subject choices should not hesitate to ask a member of staff for further information or advice.

## UNIVERSITY COURSE REQUIREMENTS

The table below and overleaf provides information on potential 'A' Level requirements (and preceding GCSE requirements) for a small number of popular University courses and degree qualifications. A larger list of higher level courses and essential / useful 'A' Level qualifications can be found in Appendix 1. Information on such courses is fluid and at the discretion of individual higher education institutions. Therefore, the information provided in the table and in Appendix 1 is meant only as a general, broad steer, and it is the responsibility of pupils to research and satisfy themselves about the specific entrance criteria for Universities of choice.

COURSES	GCSE REQUIREMENTS	A LEVEL SUBJECTS REQUIRED	OTHER TESTS REQUIRED by SOME UNIVERSITIES
Accountancy	Maths / English. (at least 'B' grades often required)	Some require Maths. CGS also offers Accounting specifically	
Actuarial Studies	Maths (at least 'A' grade often required). English.	Maths. Some require Further Maths.	
Architecture	Maths. English. Ability in Art (portfolio essential). A Science*** may be required.	Some require Maths and Physics. Art is also desirable, and for some courses a requirement.	
Computing and Information Technology	Maths.	Any Computing Mathematical, Scientific or Technological subject.	
Dentistry*	English. Maths. Science***. (A*/A/B stipulated in some subjects)	Chemistry ('A' grade) Biology or another Science subject.	YES
Education*	English. Maths. (+ English Literature for Scottish Colleges). Science*** subject.	Depends on 'main' subject for teaching. At least two other subjects.	CRB Enhanced level clearance and health checks required.
ENGINEERING	English. Maths. Science***.	Maths and / or Physics or another Science subject or Technology and Design.	Cambridge may use STEP as part of conditional offer.

COURSES	GCSE REQUIREMENTS	A LEVEL SUBJECTS REQUIRED	OTHER TESTS REQUIRED by SOME UNIVERSITIES
Law	English. Maths.	None specific, although some courses may require English Literature. Candidates offering Art and Music need to check if these are accepted.	
Medicine*	English. Maths. Science***. A good range of Science and non-Science subjects will be required with very high grades	Chemistry. Maths, Physics or Biology.  Most courses requires Chemistry and at least two of the other subjects mentioned above. Most require Biology to at least AS Level.	YES  CRB clearance also required.
Nursing / Midwifery*	English. Maths. Science***.	Science subjects required for some courses.	Occupational Health check.  CRB clearance also required.
Occupational Therapy	English. Maths. Science***.	None specific, in general. A Social Science qualification is preferred.	Occupational Health check.  CRB clearance also required.
Optometry	English. Maths. Science***. Good grades required.	2/3 Sciences recommended. At least 2 (sometimes 3) of AS Maths, Physics, Chemistry, Biology.	
Pharmacy	English. Maths. Science***.	Chemistry. At least one or two other Science qualifications. Some courses specify Biology.	

COURSES	GCSE REQUIREMENTS	A LEVEL SUBJECTS REQUIRED	OTHER TESTS REQUIRED by SOME UNIVERSITIES
Physiotherapy	English. Maths. Science***. Many Universities specify A*-B grades in specific subjects.	2 Sciences preferred. Some courses require Biology.	Occupational Health check. CRB clearance also required.
Podiatry	English. Maths. Science***.	Ulster University requires one Science subject. Some require and / or prefer a Science subject, such as Biology.	HqB Tuberculosis Tetanus Immunisation. CRB clearance also required.
Product Design	Maths. English. Science (Physics preferred). Art and Design / Technology and Design.	Maths and at least one other from either a Science, Technology or Art and Design	
Radiography	English. Maths. Science***.	At least one or two Science qualifications. (Biology often required or preferred)	Visit to or Work Experience in a hospital imaging department.
Speech Therapy	English. Maths. A Modern Language. Science***.	At least one science - Biology may be stipulated. English Language preferred by some. University of Ulster requires one from English, Maths, Modern Language or a Science.	YES
Veterinary Medicine**	English. Maths (at least grade 'B'). Science***. A good range of Science and non-Science subjects will be required with high grades	Chemistry. Some courses also require Biology.	Health checks.

\* Relevant work experience required.

\*\* Relevant work experience required (large and small breeds)

\*\*\* The particular Science(s) required will vary within individual universities; it is recommended for some courses that all three Sciences are studied at GCSE level.

USEFUL WEBSITES:

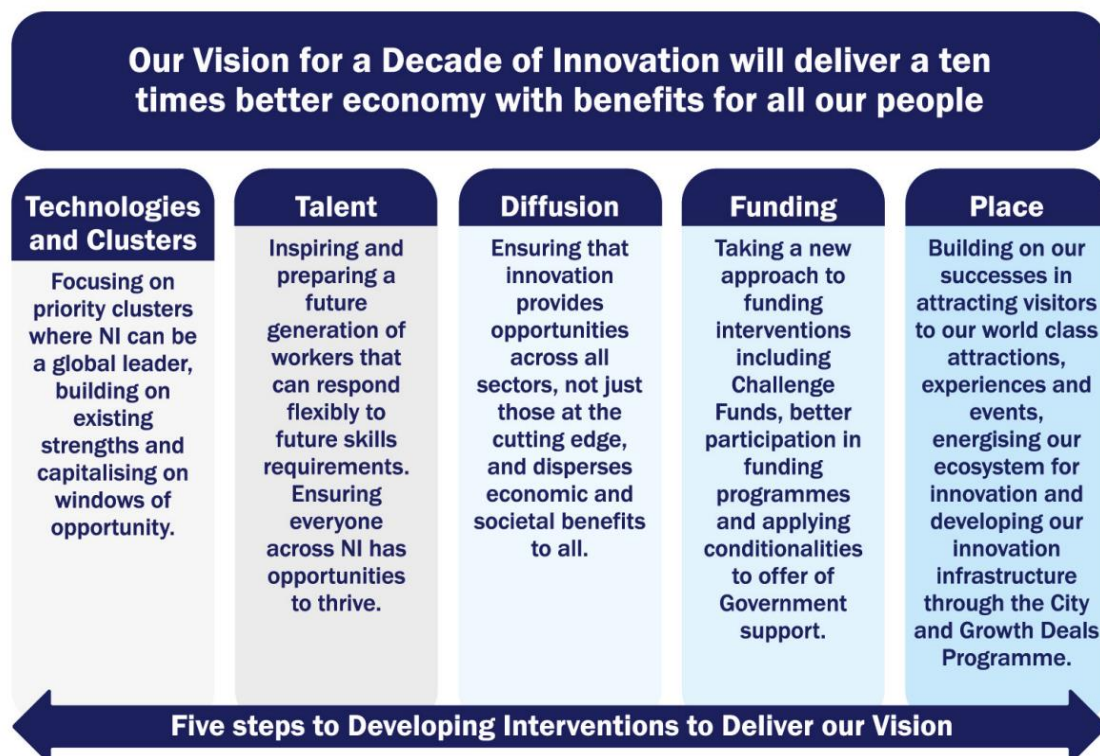
[www.prospects.ac.uk](http://www.prospects.ac.uk); [www.ucas.ac.uk](http://www.ucas.ac.uk);

# LABOUR MARKET TRENDS

In 2021, the Department for the Economy in Northern Ireland published its 'Skills Strategy for Northern Ireland: A Consultation'.

<https://consultations.nidirect.gov.uk/dfe/skills-strategy-for-northern-ireland/>

This document sets out the vision for delivering an economy that is ten times stronger, more prosperous, more resilient and more successful in a post-COVID context.



It will require transformation in our skills system. In an economy with limited natural resource, the skills of our people are the primary driver of our success.

## 2019 Northern Ireland Skills Barometer

The 'Skills Barometer' seeks to forecast both the supply and demand for skills over the next ten years and identify the areas where supply gaps are likely to occur.

"Every job matters": A principle of "Every job matters" has been adopted for the Skills Barometer to reflect the contribution all jobs make to the economy. As the NI Executive endeavours to reduce levels of unemployment and economic inactivity, it is important society places a value on all employment opportunities.



**Advice for Young People:** The Skills Barometer should help young people (and their parents and careers advisors) when making career decisions and may encourage more to study in an under-supplied subject area. However, young people should always study a subject which plays to their strengths and for which they have a strong interest. In some instances, pupils drift into a subject area in which they have no strong desire to find subsequent employment, as a consequence they are less likely to be successful both academically and professionally in that area.

The aim is for young people to make well informed decisions based on the likely employment outcomes of different subject courses. For further information, please see this link. <https://www.economy-ni.gov.uk/sites/default/files/publications/economy/Skills-Barometer-2019-Summary-Report.pdf>

## GENERAL ENTRANCE CRITERIA

The table below shows the entrance requirements (based on GCSE results) that must be satisfied before any subject is studied at A level at Carrickfergus Grammar School.

- For admission to Sixth Form you must attain a minimum of **36 points** whereby an A\*= 9 points, A= 7 points, B= 6 points, C\*= 5 points and C= 4 points.

GCSE Grade (CCEA)	GCSE Grade (non-CCEA)	Return Points
A*	9	9
A	8/7	7
B	6	6
C*	5	5
C	4	4

- The criteria of 36 points outlined above must include a minimum of 3 B grades.
- An A\*-C grade in English Language and Mathematics is essential for entry into Sixth Form at Carrickfergus Grammar School.

Pupils who achieve 32-35 points may be considered for entry to Sixth Form if there are spaces available within the year group, at a subject level if criteria in the table below and overleaf have been met, and following a meeting with the Principal/Vice-Principal.

Pupils wishing to enter Sixth Form must also have:

- a good behaviour record;
- a good attendance record at Key Stage 4 (in line with or above the school average of 95%, unless there are extenuating circumstances);

Where very exceptional circumstances apply, entrance to Sixth Form may be granted at the discretion of school leadership.

### Alternative Entry Qualifications

Those applicants to Year 13 who have followed alternative qualifications shall be considered on the merits of those courses and their results profile.

Subject	Entrance Criteria (based on GCSE performance)	Head of Department
Accounting	B or better in GCSE Maths	Mr S. Martin
Art and Design	6 or better in GCSE Art and Design.	Mr K. Hamilton
Biology	B or better in GCSE Biology	Mrs. S.A. Simms
Business Studies *	B or better in GCSE Business Studies B or better in GCSE English Language	Mr P. McKittrick
Chemistry	A or better in GCSE Chemistry	Mr K. Crooks
Digital Technology*	B or better in Digital Technology B or better in GCSE Maths	Mr L. Morrow
English Literature	B or better in GCSE English Literature	Mrs C. Reid
Environmental Technology *	B or better in GCSE English Language	TBC
French	B or better in GCSE French and Higher Tier in all components	Mrs S. Murray
Geography *	B or better in GCSE Geography B or better in GCSE English Language	Mr N. Massey
Government and Politics *	B or better in GCSE History B or better in GCSE English Language	Miss F. McKinley
Health and Social Care *	B or better in GCSE Health and Social Care B or better in GCSE English Language	Miss W. Lemon
History	B or better in GCSE History	Mrs B. McMaw
Mathematics	B or better in GCSE Further Maths / A or better in GCSE M4/M8 Maths (if Further Maths not studied)	Mr K. Marshall
Further Maths	B or better in GCSE Further Maths	Mr K. Marshall
Music *	B or better in GCSE Music Musicianship to Grade 5 standard	Mr E. Craig
Nutrition and Food Science *	B or better in GCSE Nutrition and Food Science B or better in GCSE Biology	Mrs V. Ross
Physical Education *	B or better in GCSE PE B or better in GCSE Biology	Mr N. Kennedy / Mrs J. Botha
Photography *	6 or better in GCSE Art and Design (advised)	Mr K. Hamilton
Physics	A or better in GCSE Physics	Miss S. Patterson
Religious Studies	B or better in GCSE Full Course Religious Studies	Mrs L. Best
Spanish	B or better in GCSE Spanish and Higher Tier in all components	Ms B. Claver
Technology and Design	B or better in GCSE Technology and Design	Mr R. McMorris

Subjects which are asterisked and highlighted in blue are subjects which can be taken up at 'A' Level, without first having been studied at GCSE. **At least one of the entrance criteria must be met for access to the subject at Sixth Form.** If you have studied the subject at GCSE level, you should have received at least a 'B' grade in it.

## **A Level Sciences**

For those who have studied Double Award— At AS Level, Science is studied as 3 separate subjects: Biology, Chemistry and Physics. Choosing and being accepted for an AS Science class will be limited to those pupils who achieved an AB or better, with an A in Double Award Science in their subject of choice for A Level.

Those studying Single Award Science will not have the option to study a Science at A Level.

## **A Level Religious Studies**

Pupils wishing to access A Level Religious Studies and who have studied Short Course, must obtain an A grade in Short Course Religious Studies at GCSE.

### **The following additional details apply to entry to AS Classes in September 2023:**

#### **Class size**

1. AS/A2 Level classes will usually be no larger than 22 pupils. If a class is oversubscribed, pupils will be chosen on the basis of their GCSE performance in that subject or, if not studied at GCSE, performance in allied subject(s) as listed on Page 11. In each subject, if a tie exists after relevant criteria are employed, pupils with the highest % attendance in Year 12 will be admitted before those with lower and in the exceptionally unlikely event that a tie still exists, random selection will be employed through a randomised number being allocated in Microsoft Excel, with the higher-ranking number gaining admission.
2. If a class is undersubscribed, it may not be offered.

## **Moving on to A2 Courses for Year 14**

AS results mark the end of Year 13 studies after which most pupils will have two options: -

1. Leave school with their AS grades;
2. Continue to A2 if the AS grades are appropriate.

Any pupil with the equivalent of 3 'D' grades or less will not be permitted to continue without being interviewed. The purpose of such interviews will be to ascertain the appropriate next steps. Continuing to study a subject in which an 'E' grade (or below) has been achieved may not be permitted.

Relevant decisions will be confirmed during interviews with senior staff in mid-August after the results are available.

# ACCOUNTING

*AS/A2 Examining Board: AQA*

*Length of Course: 2 Years*

‘Money makes the world go round’... Even the best business ideas get nowhere without sound financial management. Whether you want to work for big business, be the next Richard Branson or have your own small business, a knowledge of financial management is vital.

This Accounting course equips you with the necessary knowledge and skills to be able to assess the performance of all types of business organisations. It will enable you to effectively analyse and evaluate financial data so that you can make judgements, decisions and recommendations about how businesses can manage their financial affairs.

NOTE... the Accounting course is LINEAR - this means it is a 2 year course with no externally assessed AS exam. Only the 2 exams at the end of Year 14 contribute towards the A-level result. However, a school produced grade will still be awarded solely to determine the suitability of continuing to A2 study in Accounting. This grade will be based on an **internally assessed** Accounting paper during the summer exam period (May/June).

## **Year 13 content**

1. An introduction to the role of the accountant.
2. Types of business organisation
3. Double entry bookkeeping
4. Verification of accounting records
5. Accounting concepts
6. Financial statements of sole traders
7. Limited company accounts
8. Ratio analysis
9. Budgeting
10. Marginal costing

Whilst the Accounting course is now **LINEAR** you will still sit an ‘AS’ exam at the end of Year 13. This is to give you experience of an A-level Accounting examination, and it will also allow us to ensure that those progressing to A2 study are capable of doing so.

1 Written paper: 3 hours / 0% of A level

## **Year 14 content**

11. Standard costing and variance analysis
12. Absorption and activity based costing
13. Capital investment appraisal
14. Incomplete records
15. Partnership accounts
16. Accounting for limited companies
17. Interpretation, analysis and communication of accounting information
18. The impact of ethical considerations

2 written examinations - each paper is 3 hours and worth 50% of the A-level.  
There is no coursework in this subject.

## **Careers:**

If you are focused on further study or a career in accounting, finance, business or banking this course is a great choice. But even if you plan on becoming a professional musician or technical wizard, it’s good to know about accounting. That way you’ll be able to control your own finances and understand the implications of business propositions.

# ART and DESIGN

*Examining Board: EDEXCEL*

*Length of Course: 2 Years*

At A level all pupils will follow a programme of study to further develop and refine their skills acquired at GCSE. The coursework is completed through a process of investigation and experimentation led by the individual pupil to complete a final outcome which could take the form of a Fine Art or Design Piece. The externally set project is a piece of work with a common starting point. Each pupil will interpret a theme in their own individual way concluding in one final outcome.

## **Exam Structure**

Students taking the **A level examination** in Art and Design are required to submit

**Unit 1** - Coursework study - 50% of 'A' Level Internally set and marked.  
Externally moderated

**Unit 2** - Externally Set Assignment - Externally set Internally Marked.  
Externally moderated 12 hr timed exam

## **Careers**

Studying Art and Design can lead to a career in: Fashion design, Product design, textile design, Graphic design, Architecture, Interior Design, Jewellery Design & Teaching

# BIOLOGY

Examining Board CCEA

Length of Course: 2 years

This Biology specification enables pupils to study living organisms, including their structure, functioning, origin, evolution, classification, interrelationships and distribution. Pupils will also address the spiritual, moral, ethical, environmental, social and cultural issues which arise from this study and which are met in certain parts of the specification.

Pupils will develop skills in investigational and practical problem solving, in application of number, in team work, in interpreting data, in using ICT and in communication

Content	Assessment	Weightings
AS 1: Molecules and Cells External	External written examination 1 hour 30 mins Students answer six to eight structured questions and write an essay	37.5% of AS 15% of A level
AS 2: Organisms and Biodiversity	External written examination 1 hour 30 mins Students answer six to eight structured questions and write an essay.	37.5% of AS 15% of A level
AS 3: Practical Skills in AS Biology	External written examination assessing practical skills 1 hour and internal practical assessment	25% of AS 10% of A level
A2 1: Physiology, Co-ordination and Control, and Ecosystems	External written examination 2 hours 15 mins Students answer six to nine structured questions and write an essay.	24% of A level
A2 2: Biochemistry, Genetics and Evolutionary Trends	External written examination 2 hours 15 mins Students answer six to nine structured questions and write an essay	24% of A level
A2 3: Practical Skills in Biology	External written examination assessing practical skills 1 hour 15 mins and internal practical assessment	12% of A level

## CAREERS:

This subject allows pupils to obtain a prerequisite qualification to gain entry to Higher Education in the field of Biology, or prepare for direct employment in the fields of science, engineering, medicine, communication, education etc.

# BUSINESS STUDIES

*Examining Board: CCEA*

*Length of Course: 1/2 years*

A Level Business Studies students gain a holistic understanding of business and the international marketplace; generate enterprising and creative solutions to business problems; understand the ethical dilemmas faced by business decision makers, and; develop advanced study skills that help them prepare for third level education.

## YEAR 13

### **AS 1: Introduction to Business (20% of A-Level)**

Students are introduced to entrepreneurs. They will become familiar with ownership structures and understand the importance of quality in the competitive marketplace, including recruiting, training, motivating and leading a quality labour force.

**Two compulsory structured questions - 80 marks, 90 min exam**

### **AS 2: Growing the Business (20% of A-Level)**

Students explore the role of technology in decision making in a growing business. They develop their understanding of marketing strategy and accounting and financial control.

**Two compulsory structured questions - 80 marks, 90 min exam**

## YEAR 14

### **A2 1: Strategic Decision Making (30% of A-Level)**

Candidates will be expected to recognise potential conflict between the objectives of different stakeholder groups and analyse the importance of accounting information in making strategic business decisions.

**5 compulsory structured data response questions - 90 marks, 2hr exam**

### **A2 2: The Competitive Business Environment (30% of A-Level)**

This unit examines the macroeconomic and international framework within which businesses operate and the unique culture and ethics of each organisation.

**6 compulsory structured data response questions - 90 marks, 2 hr exam**

### **Additional Information**

Students do not have to have studied GCSE Business Studies. Performance in GCSE English is considered to give some indication of the potential to perform at a good level in this subject. The Business Studies department has helped many students achieve excellent results and has seen a high proportion of its students go on to take business-related degree courses at university. This in itself gives an indication of how useful and enjoyable past pupils have found the subject. A-Level Business Studies has also proven a useful preparation for pupils who have gone on to study courses as diverse as law, engineering and biomedical science at the country's top universities.



# CHEMISTRY

Examining Board: CCEA

Length of Course: 2 years

A GCE in Chemistry allows you to develop a range of generic skills requested by both employers and universities. It is a challenging subject because it involves a lot of abstract concepts. To solve many problems in Chemistry these concepts have to be understood and linked together in a particular order. This is a skill that you have to learn and develop and for this reason 'A' level Chemistry is quite different to GCSE Chemistry.

Chemistry is taught in a logical sequence of topics. The table below summaries the teaching units, assessment method and weighting.

Unit number	Description	Duration	AS	A2
<b>Unit AS 1</b> Basic Concepts in Physical and Inorganic Chemistry	Written paper	1 hour 30 min	40%	16%
<b>Unit AS 2</b> Further Physical and Inorganic Chemistry and Introduction to Organic Chemistry	Written paper	1 hour 30 min	40%	16%
<b>Unit AS 3</b> Practical Assessment	Practical booklet A 1 hour 15 min Practical booklet B 1 hour 15 minutes		20%	8%
<b>Unit A2 1</b> Periodic Trends and Further Organic, Physical and Inorganic Chemistry	Written paper	2 hours		24%
<b>Unit A2 2</b> Analytical, Transition Metals, Electrochemistry and Further Organic Chemistry	Written paper	2 hours		24%
<b>Unit A2 3</b> Practical Assessment	Practical booklet A 1 hour 15 min Practical booklet B 1 hour 15 minutes			12%

If you would like to study Chemistry you need to be willing to learn new skills and new ways of thinking. It is vital that you have the determination to succeed and have the desire for academic success.

## Careers:

Chemistry, Environmental Law, Patent Law, Pharmaceuticals, Software design, Space Exploration, Forensic Science, Military Systems, Dentistry, Engineering, Teaching, Research and Development, Biotechnology.

# DIGITAL TECHNOLOGY

AS/A2 Examining Board: WJEC

Length of Course: 2 Years

## Requirements/Student Suitability:

Whilst it is not essential to have studied GCSE Digital Technology, it may be beneficial. Students who have GCSE Digital Technology or Design & Technology will find it much easier to take up an IT qualification at this level.

## What will I study?

The subject content and assessment requirements are designed to ensure learners develop an appropriate breadth and depth of knowledge, understanding and skills in digital technology. The subject content is presented in four units, each sub-divided into clear and distinct topic areas.

Content	Assessment	Weightings
AS Unit 1 - Innovation in Digital Technology	On-screen examination 2 hours	50% of AS / 20% of A level
AS Unit 2 - Creative Digital Practices	Non-exam assessment (NEA): approximately 45 hours	50% of AS / 20% of A level
A2 Unit 3 - Connected Systems	On-screen examination: 2 hours 30 minutes	30% of A level
A2 Unit 4 - Digital Solutions	Non-exam assessment (NEA): approximately 45 hours	30% of A level

**AS Unit 1: Innovation in Digital Technology** - This unit examines content related to connected digital systems and smart devices, the development of Artificial Intelligence, digital technology development life cycles, user experience and human computer interaction in digital systems development and the functions, purposes and uses of social media by individuals and organisations.

**AS Unit 2: Creative Digital Practices** - Candidates will complete a coursework project focussing on the end-to-end creation of a game. Candidates will investigate, plan, design, create, test, and review a game of their choice.

**A2 Unit 3: Connected Systems** - This unit examines content related to collecting, storing, analysing, and using data, cyber security, and digital technology networks.

**A2 Unit 4: Digital Solutions** - Candidates will complete a coursework project focussing on the creation of a transactional website linked to a server-based RDBMS. Candidates will plan, design, create, develop, review, test and refine a transactional website of their choice.

## Career Opportunities:

IT professionals are not only employed in the IT sector but also across all other sectors, as IT is used by almost all businesses to reach more customers. ICT skills are also increasingly necessary for HND/HNC/Degree Computing Courses and modules within other degree subjects.

**Pupils should note that in regard to university applications, Queen's University Belfast and the University of Ulster accept this course but do not accept it as a subject for a reduced offer for computing courses.**

# ENGLISH LITERATURE

Examining Board: **CCEA**

Length of Course: **2 years**

Students will read widely and independently both set texts and others they have selected for themselves; engage with a wide variety of texts; develop literary analysis; explore the contexts of the texts they are reading and deepen their understanding of the changing traditions of literature in English.

## AS UNIT 1

The Study of Poetry 1900-Present and Drama 1900-present: External written examination 2 hours, Section A is Poetry and Section B is Drama

(a) Poetry: *Seamus Heaney and Robert Frost*

(b) Brian Friel, *Translations* [closed book]

## AS UNIT 2

The Study of Prose Pre 1900: External written examination 1 hour

Mary Shelley's, *Frankenstein* [closed book]

## A2 UNIT 1

Shakespearean Genres (Closed book)

ASSESSMENT: External examination 1.5 hours, 1 question 20% of A2 marks

## A2 UNIT 2

The Study of Poetry Pre 1900 and Unseen Poetry

ASSESSMENT: External examination 2 hours, 2 questions 20% of A2 marks

## A2 UNIT 3

Internal assessment. Students complete a 2500-word essay based on the study of 21st century and 20th century prose

ASSESSMENT: Internal assessment 20% of A2 marks

## Careers:

The study of English Literature firstly provides intrinsic pleasure, as well as providing an invaluable foundation for any personal or academic study and directly feeds a myriad of career paths including: Journalism, Law, Teaching, PR, Politics and Marketing/Sales.

# ENVIRONMENTAL TECHNOLOGY

Examining Board: CCEA

Length of Course: 2 years

## Exam Structure

### Unit AS 1 - The Earth's Capacity to Support Human Activity

Assessment:  
External Written Exam: 1hr 30 mins  
50% AS (20% A Level)

### Unit AS 2 – Renewable Energy Technologies

Assessment:  
Internal Assessment. Students produce a technical report based on a realistic scenario relating to the use of renewable technologies.

**50% AS (20% A Level)**

### Unit A2 1–Building and Managing a Sustainable Future

Assessment:  
External Written Exam: 2 hrs  
30% of A Level

### Unit A2 2 – Environmental Building Performance and Measurement

Assessment:  
Internal Assessment. Students produce a technical report relating to the environmental performance of local building.

**30% of A Level**

## Additional Information

This science-based specification focuses on technological solutions to the energy and environmental problems facing the world today. It highlights the need to manage our planet's resources more effectively and explores how our society will make the transition to a more sustainable way of living.

The A Level award provides a sound basis for study in Further and Higher Education either in a design or a technical area. It also develops planning, problem solving and independent study skills that are highly valued in the world of work.

Environmental Technology is an applied qualification in which students develop knowledge, understanding and skills through practical demonstration and/or in a context related to employability.

# FRENCH

Examining Board: CCEA

Length of Course: 2 years

The French course introduces a range of topics of interest to young people including Relationships, Culture and Lifestyle, as well as Young People and Society and Our Place in a Changing World. It aims to develop their confidence and competence in listening, speaking, reading and writing skills and seeks to promote a critical awareness and a positive attitude towards the society and culture of the target language country and French-speaking countries or communities.

This course provides students with a basis for further study at degree level by preparing them to use the language in both social and professional situations.

UK Language graduates work in Business services, Health/Community/Social Services, Public Administration, International organisations, Manufacturing, Wholesale/Retail Sales, Banking/Finance, Education, Hotels and Restaurants.

## AS EXAM STRUCTURE

**Context 1** - Relationships - Family Life and Influences

**Context 2** - Culture and Lifestyle - Physical well-being, Mental well-being, Interests and Holidays.

**Culture** - Study of a novel or film chosen from prescribed lists

## ASSESSMENT

**Paper 1** - Speaking Exam, 11mn (Presentation & Conversation) - 30% of AS & 12% of A2

**Paper 2** - Listening, Reading & Use of Language Exam, 2hrs (Listening, reading, translation into English, grammar) - 40% of AS & 16% of A2

**Paper 3** - Extended writing Exam, 1hr (1 essay response on set film or novel) - 30% of AS

## A2 EXAM STRUCTURE

**Context 1** - Young People in Society - Education and Career Planning, Citizenship & Globalisation.

**Context 2** - Our Place in a Changing World - Equality, Multi-cultural Society, Democracy & Conflict, Sustainable Living.

**Culture** - Study of a novel and a societal theme chosen from prescribed lists.

## ASSESSMENT

**Paper 1** - Speaking Exam, 15mn (Discussion & Conversation) - 18% of A2 .

**Paper 2** - Listening and reading Exam, 2h45mn (Listening, reading, summary into English and translation into French) - 24% of A2.

**Paper 3** - Extended writing Exam, 1hr (1 essay response on set novel) - 18% of A2.

### Additional Information

We strive to offer pupils the opportunity to develop further their speaking skills and oral confidence by providing sessions with a French assistant.

# FURTHER MATHEMATICS

Examining Board: CCEA

Length of Course: 2 years

GCE Further Mathematics is of a similar level to many first year university Mathematics courses. Further Mathematics builds on the skills, knowledge and understanding that students have developed in their previous study of GCSE Further mathematics. It is essential pupils have studied Further Mathematics and recommended they have achieved a high standard (B or above).

## Overview

At AS and A2 Level pupils will study 2 equally weighted modules, one in Pure Mathematics and one in Applied Mathematics.

<p><b>AS 1: Pure Mathematics is assessed by a 1hr 30min written examination which constitutes 50% of the AS and 20% of the A2 award. Topics include</b></p> <ul style="list-style-type: none"><li>• Further algebra and functions</li><li>• Complex Numbers</li><li>• Matrices</li><li>• Vectors</li></ul>	<p><b>A2 1: Pure Mathematics is assessed by a 2hr 15min written examination which constitutes 30% of the A2 award. Topics include</b></p> <ul style="list-style-type: none"><li>• Proof</li><li>• Further algebra and functions</li><li>• Complex Numbers</li><li>• Further Calculus</li><li>• Polar Coordinates</li><li>• Hyperbolic functions</li><li>• Differential Equations</li></ul>
<p><b>AS 2: Applied Mathematics is assessed by a 1hr 30min written examination which constitutes 50% of the AS and 20% of the A2 award. Topics include</b></p> <ul style="list-style-type: none"><li>• Hooke's Law</li><li>• Work, Energy &amp; Power</li><li>• Circular Motion</li><li>• Further Equilibrium</li><li>• Resultant and relative velocity</li><li>• Further Circular Motion</li><li>• Gravitation</li><li>• Dimensions</li></ul>	<p><b>A2 2: Applied Mathematics is assessed by a 2hr 15min written examination which constitutes 30% of the A2 award. Topics include</b></p> <ul style="list-style-type: none"><li>• SHM</li><li>• Damped Oscillations</li><li>• Centre of Mass</li><li>• Frameworks</li><li>• Further Circular motion</li><li>• Kinematics</li><li>• Systems of forces</li><li>• Restitution</li></ul>

## Careers:

The study of Further Mathematics can develop a host of skills that are essential to students continuing in their studies as well entering the workplace. These include problem-solving, logic and reasoning, and attention to detail. Further Mathematics can also lead to careers in Engineering, Finance, Business, I.T. and Teaching, among others.

# GEOGRAPHY

Examining Board: CCEA

Length of Course: 2 years

By studying GCE Geography you will learn about geographical concepts and processes, interactions between people and their environment, the challenges of sustainability and the importance of attitudes and values. You will then be able to relate what you have studied to the world around you.

The AS course can be taken as a final qualification or as the first half of the A Level qualification. If you wish to obtain a full A Level qualification, you must complete the second half of the course referred to as A2.

## What do I need to be able to take this course?

You should have successfully completed GCSE Geography at Higher Tier before enrolling for this course.

## How can this course help me?

This course can help you to develop a wide range of skills that are attractive to employers. For example, it can help to develop your skills in investigating, collating and evaluating information and being able to contribute to important debates on the current issues facing our world today. You may just wish to study Geography for your own personal interest, but if you wish to continue the study of Geography at degree level, you will need to complete the full A Level course.

AS LEVEL		A2 LEVEL	
AS 1:	Physical Geography - 1 h 15min exam	A2 1:	Physical Processes, Landforms and Management - 1h 30m exam
AS 2:	Human Geography - 1 h 15min exam	A2 2:	Processes and Issues in Human Geography - 1h 30m exam
AS 3:	Fieldwork Skills		

## Careers

Many Geography students go on to have successful and interesting careers such as Civil Engineering, Urban Planners, cartographers, GIS specialists, Climatologists, Weather forecasters, Researchers Teachers etc.

# GOVERNMENT and POLITICS

Examining Board: CCEA

Length of Course: 2 years

The study of Government and Politics provides pupils with relevant and stimulating material aimed at developing their skills and critical awareness of political ideas, institutions and processes, including a particular emphasis on Northern Irish politics. The course encourages students to explore and examine their own values, beliefs, attitudes and perceptions, making judgements and ultimately reaching decisions regarding the society in which they live.

## Course Structure:

All papers are a combination of short, structured answers and more extended writing

AS MODULES	Length of Exam	Marks
1. The Government and Politics of Northern Ireland	1hr 15 mins	40% AS (16% A2)
2. The British Political Process	1hr 45 mins	60% AS (24% A2)

AS MODULES	Length of Exam	Marks
1. Comparative Government UK/USA	2hr 15 mins	35% A2
2. Political Power	1hr 30 mins	25% A2

## What do I need to know before taking the courses?

You do not need to have studied Politics for GCSE in order to take an AS or A2 level in the subject. It is more important to have an enquiring and lively mind, along with an interest in politics and current affairs, a desire to explore new ideas and an ability to communicate your ideas effectively.

## What kind of student is this course suitable for?

This course will appeal to those students who:

- Enjoy voicing their opinions, debating current affairs and political issues
- Like doing a subject that affects their everyday lives
- Have a keen appreciation of the need to participate in society
- Aren't afraid of dealing with controversial matters.

## What does the course lead to?

**Skills:** Aside from preparing students for specific fields of employment Government and Politics teaches many vital transferable academic skills such as the ability to properly formulate and communicate effective argument, along with the capacity to solve problems, think analytically, critically and logically.

**Careers:** Obviously, anyone who would like to study Politics further should be taking the subject for 'A' level. Anyone interested in careers such as Law, Journalism, the media, Social Work or any kind of public administration should consider studying Government and Politics.



# HEALTH and SOCIAL CARE

*Examining Board: CCEA*

*Length of Course: 2 years*

## Why study Health and Social Care?

Health and Social Care is an interesting and diverse subject. Short placements are an essential feature of the course, as they allow students to experience the reality of health and social care and early years' settings. Students will have the opportunity to apply their knowledge and understanding of key issues within these settings through the coursework element of the course. Students are encouraged to keep up-to-date with current issues in the Health and Social Care sector, which leads to stimulating class discussions and debates.

Being able to provide extended responses and show evidence of quality of written communication is **essential** for coursework and examination questions. You must be prepared to carry out extensive **research** and meet **coursework deadlines** at AS and A2.

The aptitudes and values developed alongside the essential knowledge and understanding are relevant to degrees in health professions, social work, social sciences and early years.

**Unit AS 1: Promoting Quality Care (25% of AS)** Students undertake one placement block visit on which two units of coursework are based. They also have ongoing visits to their placement setting throughout the year. The first unit of coursework focuses on the promotion of quality care in a health or social care, or early years setting. Students will cover issues within this unit that include the promotion of values of care, legislation, health and safety and policies and write up their reports based on various tasks.

**Unit AS 2: Communication in Health, Social Care and Early Years Settings (25% of AS)** This unit of coursework explores the importance of communication in health and social care and early years' settings. The focus is on how staff communicate with service users, health professionals and families.

**Unit AS 3: Health and Well-Being (50% of AS)** This is an exam based unit in which students will learn about key concepts of health and wellbeing, and how various factors impact the health of individuals.

**Unit A2 3: Providing Services (30% of A level)** This unit is a compulsory written examination, based on pre-release material focusing on one service user group, for example children and families, older people, people with physical/mental disabilities.

**Unit A2 4: Public health and Health Promotion (15% of A level)** In this unit, students develop an understanding of public health issues and how they are being addressed in Northern Ireland. They carry out an investigation of 3 public health issues. They also investigate one current health promotion campaign run by the Public Health Agency. Pupils plan, implement and evaluate a small-scale health promotion activity. This unit is internally assessed.

**Unit A2 5: Supporting the Family (15% of A level)** In this unit, students will focus on the changing and evolving family structures in today's society, and how they have changed since the end of WW2. Issues to be discussed and researched may include children with behavioural problems, domestic violence, poverty, racism and child abuse. This unit will be internally assessed by coursework.

# HISTORY

Examining Board: CCEA

Length of Course: 2 years

History AS/A2 Level consists of 4 Units all focused within the 20<sup>th</sup> century. The first 2 Units are studied in Year 13 and are tested by two examinations at the end of that year. A Level History provides pupils with opportunities to develop skills of comprehension, translation, interpretation, analysis and evaluation. Pupils will engage with contemporary source material, analysing their context and validity and will also learn to critique the main interpretations and debates within Nazi (AS) and Irish (A2) Historiography.

## AS Course Structure:

<p><b>AS1: <u>Germany 1919 - 1945</u></b></p> <ul style="list-style-type: none"> <li>· The Weimar Republic 1919-1929</li> <li>· The Decline of the Weimar Republic and the Rise of the Nazis</li> <li>· Developments in Nazi Germany 1933-1945</li> </ul>	<p>1 hour 30 min exam Source and Interpretations paper</p> <p><b>50% AS (20% A Level)</b></p>
<p><b>AS2: <u>Revolutionary change in Russia 1914 - 1941</u></b></p> <ul style="list-style-type: none"> <li>· The Revolutions of February and October 1917</li> <li>· Lenin's Russia 1917-1924</li> <li>· Stalin's Rise to Power and Dictatorship 1924-1941</li> <li>· The Economy 1924-1941</li> </ul>	<p>1 hour 30 min exam</p> <p>Structured essays</p> <p><b>50% AS (20% A Level)</b></p>

## A2 Course Structure:

<p><b>A21: <u>Clash of Ideologies in Europe 1900 - 2000</u></b></p> <ul style="list-style-type: none"> <li>· The foreign policy of Tsarist Russia</li> <li>· The relationship between Soviet Union and Western governments from October Revolution 1917 to WWII</li> <li>· Soviet Foreign Policy during the Cold War and response of Western governments</li> </ul>	<p>1 hour 15 min exam</p> <p>One Overview Synoptic Essay</p> <p><b>(20% A Level)</b></p>
<p><b>A22: <u>Partition of Ireland 1900 - 1925</u></b></p> <ul style="list-style-type: none"> <li>· The crisis over the 3rd Home Rule Bill up to September 1914</li> <li>· Political Events 1914-1918</li> <li>· Developments 1919-1923</li> <li>· Events in N. Ireland 1921-1925</li> </ul>	<p>2 hours 30 min exam</p> <p>Source and Interpretations paper</p> <p><b>(40% A Level)</b></p>

## Career opportunities

Given the range of these skills, career pathways of all kinds are open to History 'A' Level students. Law, journalism, publishing and broadcasting are commonly pursued as a result. However, many other job opportunities include education, archivists, management, consultancy, the arts and branches of public life such as the Civil Service.

# MATHEMATICS

*Examining Board: CCEA*

*Length of Course: 1/2 years*

Mathematics is all around us. It exists in the proportions of artistic works, in the scores of our favourite songs and in the physical structures we live and work in daily. It is also the bedrock of many other subjects including the Sciences, Economics and Engineering and is extremely relevant to subjects like Psychology and Design.

## **Overview:**

The content of AS & A2 Mathematics builds on the knowledge, skills and understanding established throughout GCSE. At AS and A2 level pupils will study modules both Pure Mathematics & Applied Mathematics. The Applied Mathematics papers will be split equally into the study of Statistics and Mechanics. The A2 Level award is based 40% on the results of the AS level modules and 60% on the results of the A2 Level modules.

### **AS - Pure Mathematics (60% of AS or 24% of A2 level):**

- Algebra
- Geometry
- Trigonometry
- Calculus

### **AS - Applied Mathematics (40% of AS or 16% of A2 level):**

- Mechanics
- Statistics

#### **ASSESSMENT:**

Pure Mathematics examined by a 1 hr 45 min written paper.  
Applied Mathematics examined by a 1 hr 15 min written paper.

### **A2 - Pure Mathematics (36% of A2 level):**

- Algebra
- Geometry
- Trigonometry
- Calculus

### **AS - Applied Mathematics (24% of A2 level):**

- Mechanics
- Statistics

#### **ASSESSMENT:**

Pure Mathematics examined by a 2 hr 30 min written paper.  
Applied Mathematics examined by a 1 hr 30 min written paper.

## **Careers:**

The study of Mathematics can develop a host of skills that are essential to students continuing in their studies as well as those currently in or entering the workplace. These include problem-solving, logic and reasoning, and attention to detail. Mathematics can also lead to careers in Engineering, Finance, Business, I.T. and Teaching, amongst others.

# MUSIC

*Examining Board: CCEA*

*Length of Course: 2 years*

If you have been developing your skills and talents in Music for several years now, why not put them to use in an A-Level, helping you secure your future with the skills you already have? If you know the career path you wish to follow, it is crucial that you seek advice about the A-Levels you need and not what is generally thought you need: Music is an A-Level that shows a huge range of written and performance skills. You may of course have no idea what you want to do, and therefore you should simply focus on getting the best grades to give you the most options. Simply put, choose to study Music because you want to.

A-Level Music is such a wonderful subject, full of so many different strands and skills from standing up confidently to speak and perform to composing creatively for yourself and others and how to write succinctly and analytically. A-Level Music will prepare you for things in later life that you may not even be thinking of yet!

## **AS 1 - Performing (32.5% of AS; 13% of A level)**

Create a balanced 5 to 7 minute performance, grade 5+ standard, which will be externally assessed.

## **AS 2 - Composing (32,5% of AS; 13% of A level)**

Compose one piece of music lasting between 1½ and 2½ minutes, which will be internally marked and externally moderated. They may choose their own brief, compositional style and resources. An audio recording of the composition must be submitted and accompanied by a written commentary.

## **AS 3 - Responding to Music (35% of AS; 14% of A level)**

Music for Orchestra, 1700 - 1900; Sacred Vocal Music (The Anthem); Secular Vocal Music (The Musical)

Candidates will be assessed in their listening skills by way of a 1-hour examination of aural perception and a 2 hour written examination. They should develop knowledge and understanding of music for orchestra from 1700 - 1900 and Vocal Music through a study of representative works.

## **A2 1 - Performing (19.5% of A level)**

Create a balanced 8 to 10 minute performance, grade 6+ standard, which will be externally assessed.

## **A2 2 - Composing (19.5% A level)**

Compose one piece of music lasting between 2 and 3 minutes, which will be internally marked and externally moderated. They may choose their own brief, compositional style and resources. An audio recording of the composition must be submitted and accompanied by a written commentary.

## **A2 3 - Responding to Music (21% of A level)**

Music for Orchestra, 1900 to present day; Sacred Vocal Music (The Mass and Requiem Mass); Secular Vocal Music, 1600 to present day.

Pupils will be assessed in their listening skills by way of a 75-minute examination of aural perception and a 2 hour written examination. Pupils should develop knowledge and understanding of Twentieth-century orchestral music and Vocal Music through a study of representative works. The examinations will test the students' ability to make critical judgements about unfamiliar music: through musical elements, structures and resources across a range of styles and genres.

**Careers:** The Creative Industry is the fastest growing in the UK, with Northern Ireland being an essential part of this. An academic course of study in Music develops key skills which are useful for further study and employment in many of the career paths in this direction and many other disciplines.

# NUTRITION and FOOD SCIENCE

*Examining Board: CCEA*

*Length of Course: 2 years*

A stimulating course which allows the development of a detailed understanding of nutrition and food science.

In the AS units, students will explore the Principles of Nutrition, and Diet, Lifestyle and Health. They will develop knowledge and understanding of the key nutrients and their requirements through the life cycle. They will have the opportunity to explore dietary-related disorders and how they impact on health. Students who continue to A2 explore Food Safety & Quality, developing an understanding of the importance of securing a safe food supply. All A2 students will select an area of personal interest to study for a research project, which will allow the development of advanced study skills such as critical thinking, problem-solving, designing research tools and analytical aptitude to help preparation for higher education or the world of work.

## AS COURSE STRUCTURE

### Unit 1 - Principles of Nutrition

- The study of the macro and micro nutrients and other dietary constituents.
- Protein, Fat, Carbohydrate, NSP, Water.
- Nutritional requirements and current dietary recommendations across the lifespan.

**ASSESSMENT: Exam 1hr 30 mins 50% AS (20% A2)**

### Unit 2 - Diet, Lifestyle and Health

- The study of current research in relation eating patterns and dietary disorders.
- The concept of energy balance.
- Cardiovascular disease, Obesity, Diabetes, Cancer and Physical Activity.

**ASSESSMENT: Exam 1hr 30 mins 50% AS (20% A2)**

## A2 COURSE STRUCTURE

### Unit 1 - Food Safety and Quality

- Food safety as a public health priority.
- Food contamination by chemicals and micro-organisms.
- Food Additives, allergens
- The legislation and controls in place to protect consumers

**ASSESSMENT: Exam 2 hrs 30 mins (30% A2)**

### Unit 2 - Research Based Assignment

- A report on a research based activity (4,000 words)

**ASSESSMENT - Coursework (30% A2)**

## Careers Opportunities

The course provides a solid foundation for Higher Education. Graduates can follow careers in Nutrition & Dietetics, Education, Food Design and Nutrition, Food Management & Marketing, Health Promotion, Journalism, Retail Management, Consumer Business Management, Environmental Health, Sports Nutrition, Nursing, Occupational Therapy, Pharmacy, Radiotherapy. The health aspects of the course are useful to those wishing to enter various sectors of the medical profession.

# PHOTOGRAPHY

*Examining Board: Edexcel*

*Length of Course: 2 years*

At A level all pupils will follow a programme of study to further develop and refine their skills acquired at GCSE Art. The coursework is completed through a process of investigation and experimentation led by the individual pupil to complete a final outcome which could take the form of camera and computer software composition. This area of study builds up the pupils' technical awareness of the subject in a number of key areas, the use of the SLR Camera, Darkroom practice and the use of computer software. Each unit will have a distinct goal, giving each pupil the opportunity to display their own creative response and understanding of the subject area.

The externally set project is a piece of work with a common starting point. Each pupil will interpret a theme in their own individual way concluding in one final outcome.

## **Exam Structure**

Students taking the A level examination in Photography are required to submit

Unit 1- Coursework study - 60% of 'A' Level Internally set and marked.

Externally moderated

Unit 2 - Externally Set Assignment -40 % of A level. Externally set Internally Marked.

Externally moderated 12 hr timed exam

## **Careers**

Studying Photography can lead to a career in: Graphic communication, Film making, Multi media design

# PHYSICAL EDUCATION

*Examining Board: WJEC*

*Length of Course: 2 years*

## **Exam Structure - AS Level**

### **3 compulsory components.**

One written paper - 1 hour 45 mins

Performance and its Improvement through Critical Analysis

AS Theory Content: 60% AS

1. Anatomy and Physiology
2. Skill Acquisition and Psychology
3. Sport and Society

AS Practical (coursework) 40% AS

Candidates are assessed in one chosen activity-20%

Coaching or officiating in the same chosen practical activity - 10%

Personal Performance Portfolio -10%

## **Exam Structure - A2 Level**

### **3 compulsory components.**

One written paper - 2 hours.

The improvements of effective performance and critical evaluation of practical activities with synoptic assessment.

A2 Theory Content 36%

1. Exercise and Sport Physiology
2. Sport and Society
3. Psychology and Skill Acquisition

A2 Practical (coursework) 24%

Candidates are assessed in one chosen activity, from the activity profile.

1. Practical performance as performer, coach or official
2. Investigative research

### **Specialist Careers**

Areas of specialization for Physical Education specialists include: Physical Education Teacher, Athlete, Fitness Instructor, Outdoor Adventure Leader, Teacher - Primary or Secondary, Physiotherapist, Recreation Officer, Sports Coach, Sports Scientist and Recreation Therapist.

# PHYSICS

Examining Board: CCEA

Length of Course: 2 years

## AS

### Unit AS.1 - Forces, energy and electricity

Assessment:

Written Exam: 1hr 45 mins  
40% AS (16% A Level)

### Unit AS.2 – Waves, Photons & Astronomy

Assessment:

Written Exam: 1hr 45 mins  
40% AS (16% A Level)

### Unit AS.3 - Practical Techniques & Data Analysis

Assessment:

A test of practical skills comprising of 4 short tasks, and a separate paper requiring the analysis of experimental results.

2 (1 hour) components  
20% AS (8% A Level)

## A2

### Unit A2.1 - Deformation of Solids, Thermal Physics, Circular Motion, Oscillations and Atomic & Nuclear Physics

Written Exam: 2 hrs  
24% A Level

### Unit A2.2 - Fields, Capacitors and Particle Physics

Written Exam: 2 hrs  
24% A Level

### Unit A2.3 - Practical Techniques & Data Analysis

Assessment:

A test of practical skills comprising of 2 experimental tests and a separate paper requiring the analysis of experimental results.

2 (1 hour) components  
12% A Level

## Additional Information

Physics is necessary or helpful for many careers, including Engineering, Architecture, Forensics, Radiography, Medicine and Optometry. Physicists find employment in many other fields to include Education, Business, Computing and Accounting to name but a few. This course provides a knowledge and understanding of the principles and applications of Physics, which contribute to our technologically based society and our understanding of nature.

Candidates will be required to have a high standard of Mathematical Skill.



# RELIGIOUS STUDIES

Examining Board: CCEA

Length of Course: 2 years

Year	Module	Focus	Nature of assessment	Assessment weighing
Year 13 AS	AS 2	<p><b>An Introduction to the Acts of the Apostles</b> This module includes a study of the background to Acts, the beginnings of the Christian Church, Growth and expansion of early Christianity as well as a study of Paul the apostle and the broader themes of faith and witness in Acts</p>	1hr 20 min External Exam	50% of AS 20% of A Level
	AS 7	<p><b>Foundations of Ethics with Special Reference to Medical Ethics</b> This unit will explore a number of themes and principles that are foundational to religious ethics: ethical foundations, natural law, situation ethics, utilitarianism, developments in bioethics and life and death issues. These issues will be considered in light of wider aspects of human experience and example.</p>	1hr 20 min External Exam	50% of AS 20% of A Level
Year 14 A2	A2 2	<p><b>Themes in Selected Letters of St Paul</b> This will include Paul's Letters to the Galatians, Corinthians and Ephesians. Pupils will examine the theme: Controversy, Division and Reconciliation in relation to religion and secular society.</p>	2 hour External Exam	50% of A2 30% of A Level
	A2 7	<p><b>Global Ethics</b> This unit explores the contrasts and similarities between religious and non-religious ethics across a range of issues: freewill and determinism, sexual identity, gender justice, war and peace and justice, law and punishment.</p> <p>Pupils will examine the theme: Conscience, Freedom and Tolerance. They will critically evaluate issues pertaining to moral duty, the role of the state and the capacity of religion to promote tolerance and intolerance</p>	2 hour External Exam	50% of A2 30% of A Level

**Careers:** R.S. can lead to careers within the fields of Law, Teaching, working for an NGO, Social work, Pastoral work, Youth Work and the Ministry. Much of the Ethics component is suited to working in various medical professions.

# SPANISH

Examining Board: CCEA

Length of Course: 2 years

The Spanish course introduces a range of topics of interest to young people including Relationships. Culture and Lifestyle, as well as Young People and Society and Our Place in a Changing World. It aims to develop their confidence and competence in listening, speaking, reading and writing skills and seeks to promote a critical awareness and a positive attitude towards the society and culture of the target language country. This course provides students with a basis for further study at degree level by preparing them to use the language in both social and professional situations.

## AS EXAM STRUCTURE

**Context 1** -  
Relationships - Family Life and Influences

**Context 2** -  
Culture and Lifestyle - Physical well-being, Mental well-being and Interests and Holidays.

**Culture** - Study of a novel or a film

## A2 EXAM STRUCTURE

**Context 1** - Young People in Society - Education and Career Planning, Citizenship and Globalisation.

**Context 2** - Our Place in a Changing World- Equality, Multi-cultural Society, Democracy and Conflict, Sustainable Living.

**Culture** - Study of a novel and a societal theme chosen from prescribed lists.

## ASSESSMENT

**Paper 1**  
Speaking Exam, 11mn  
30% of AS and 12% of A2  
Presentation and Conversation

**Paper 2**  
Listening, Reading & Use of Language Exam 2hrs  
40% of AS & 16% of A2  
Listening, reading, grammar, translations into Spanish.

**Paper 3**  
Extended writing Exam, 1hr -  
30% of AS & 12% of A2  
1 essay response on a set film

## ASSESSMENT

**Paper 1**  
Speaking Exam, 15mn - 18% of A2  
Discussion & Conversation

**Paper 2**  
Listening and reading Exam 2h45mn  
24% of A2  
Listening, reading, summary and translation into Spanish

**Paper 3**  
Extended writing Exam, 1hr - 18% of A2  
1 essay response on set novel

**Careers:** UK Language graduates work in Business services, Health/Community/Social Services, Public Administration, International organisations, Manufacturing, Wholesale/Retail Sales, Banking/Finance, Education, Hotels and Restaurants.

# TECHNOLOGY

Examining Board: CCEA

Length of Course: 1/2 years

Design and Technology at this level builds upon the experience gained at GCSE. The course provides students with the opportunity to develop their understanding and awareness of Engineering and Design in the world we live.

Major theory and coursework elements are completed each year with focus on key areas such as electronic systems and control, quality of manufacture, materials processing and innovative design thinking.

## AS and A-level Specifications

### AS 1

Design and Materials with Systems and Control

### AS 2

Coursework: Product Development, Redesigning and making an aspect of an existing product

### A2 1

Systems and Control -  
The design of Electronic and Micro-Electronic Control Systems

### A2 2

Coursework: Product - System, Design and Manufacture. Candidates identify a problem or need and design and make a technological product or system to solve the problem or satisfy the need.

### Assessment

AS 1 - 2 hrs external exam paper  
50% AS and 20% of A-level

AS 2 - Coursework 45 hrs -  
Internally assessed and  
externally moderated  
50% of AS and 20% of A-level

A2 1 - 2 hrs external exam paper  
30% of A-level

A2 2 - Coursework 60 hrs -  
Internally assessed and  
externally moderated  
30% of A-level externally

If you would like to study Chemistry you need to be willing to learn new skills and new ways of thinking. It is vital that you have the determination to succeed and have the desire for academic success.

**Careers:** Chemistry, Environmental Law, Patent Law, Pharmaceuticals, Software design, Space Exploration, Forensic Science, Military Systems, Dentistry, Engineering, Teaching, Research and Development, Biotechnology.

## 3 or 4 'A' Levels in Year 13?

Should you study three or four A-levels in Year 13?

Why choose THREE?	Why choose FOUR?
<ul style="list-style-type: none"><li>• Most university courses in the UK and beyond only require three strong A levels for admission and offers are made based on three grades.</li><li>• You run the risk of 'diluting' your grades overall.</li><li>• You will be allocated plenty of study time to allow you to stay on top of your work.</li><li>• Taking on four AS-levels is a lot of work. You will have less private study time in school, and a greater workload outside the classroom.</li><li>• Some pupils with a mixed set of results at GCSE find that they excel when the scope of learning is narrowed.</li></ul>	<ul style="list-style-type: none"><li>• For some competitive university courses, an extra AS-level will be an advantage. Medicine and Engineering (where Further Mathematics is an advantage) are the most obvious examples.</li><li>• You may find it difficult to narrow your choices to three. AS-levels are a good time to find out what you are really good at and enjoy.</li><li>• You may be unsure about your career path. Taking a combination of science and arts subjects keeps your options open.</li></ul>

## APPENDIX 1

We have set out below some subjects considered useful for particular degree areas at University.

**ENTRANCE REQUIREMENTS FOR INDIVIDUAL UNIVERSITIES AND COURSES VARY. YOU ARE THEREFORE ADVISED TO USE THIS GUIDE IN CONJUNCTION WITH UNIVERSITY WEBSITES FOR SPECIFIC ENTRANCE REQUIREMENTS.**

### Accountancy (also Banking/Finance)

**ESSENTIAL ADVANCED LEVEL QUALIFICATIONS - Mathematics**

**USEFUL ADVANCED LEVEL QUALIFICATIONS - Further Mathematics, Business Studies**

### Actuarial Science/Studies

**ESSENTIAL ADVANCED LEVEL QUALIFICATIONS - Mathematics**

**USEFUL ADVANCED LEVEL QUALIFICATIONS - Further Mathematics, Business Studies**

### Aeronautical Engineering

**ESSENTIAL ADVANCED LEVEL QUALIFICATIONS - Mathematics and usually Physics**

**USEFUL ADVANCED LEVEL QUALIFICATIONS - Further Mathematics, Design and Technology, Computer Science**

### Anthropology

**ESSENTIAL ADVANCED LEVEL QUALIFICATIONS - None**

**USEFUL ADVANCED LEVEL QUALIFICATIONS - A small number of courses like a science AS level such as Psychology, Geography or Biology.**

### Architecture

**ESSENTIAL ADVANCED LEVEL QUALIFICATIONS - Some courses say they want an arts/science mix. Some may require Art. Check specific courses.**

**USEFUL ADVANCED LEVEL QUALIFICATIONS - Art, Mathematics, Design and Technology and Physics. A portfolio of drawings may be asked for.**

### Art and Design

**ESSENTIAL ADVANCED LEVEL QUALIFICATIONS - Art or Design and Technology**

**USEFUL ADVANCED LEVEL QUALIFICATIONS - Design and Technology. Most courses require a one year Art Foundation Course after A level.**

## Biochemistry

**ESSENTIAL ADVANCED LEVEL QUALIFICATIONS** - Always Chemistry- some universities will require Biology as well, while others will say Chemistry plus one from Mathematics/Physics/Biology.

**USEFUL ADVANCED LEVEL QUALIFICATIONS** - Biology, Chemistry, Further Mathematics, Physics, Computer Science.

## Biology

**ESSENTIAL ADVANCED LEVEL QUALIFICATIONS** - Biology, usually Chemistry.

**USEFUL ADVANCED LEVEL QUALIFICATIONS** - Mathematics or Physics.

## Biomedical Science

**ESSENTIAL ADVANCED LEVEL QUALIFICATIONS** - Normally two from Biology, Chemistry, Mathematics and Physics. Chemistry is essential at some universities.

**USEFUL ADVANCED LEVEL QUALIFICATIONS** - Mathematics, Biology, Chemistry, Physics.

## Business Studies

**ESSENTIAL ADVANCED LEVEL QUALIFICATIONS** - None

**USEFUL ADVANCED LEVEL QUALIFICATIONS** - Mathematics / Business Studies

## Chemical Engineering

**ESSENTIAL ADVANCED LEVEL QUALIFICATIONS** - Mathematics, Chemistry and sometimes Physics as well.

**USEFUL ADVANCED LEVEL QUALIFICATIONS** - Physics, Biology, Further Mathematics, Computer Science

## Chemistry

**ESSENTIAL ADVANCED LEVEL QUALIFICATIONS** - Chemistry and occasionally Mathematics. Some courses have another science course as a requirement/ desirable.

**USEFUL ADVANCED LEVEL QUALIFICATIONS** - Mathematics, Further Mathematics, Physics, Biology, Computer Science.

## Civil Engineering

**ESSENTIAL ADVANCED LEVEL QUALIFICATIONS** - Mathematics, in many cases Physics.

**USEFUL ADVANCED LEVEL QUALIFICATIONS** - Further Mathematics, Chemistry, Biology, Computer Science, Design and Technology, Geography.

## Computer Science

**ESSENTIAL ADVANCED LEVEL QUALIFICATIONS** - For some courses, Mathematics. For some courses, Computer Science.

**USEFUL ADVANCED LEVEL QUALIFICATIONS** - Mathematics, Further Mathematics, Computer Science, Physics, ICT.

## Dentistry

**ESSENTIAL ADVANCED LEVEL QUALIFICATIONS** - Chemistry and Biology for most courses.

**USEFUL ADVANCED LEVEL QUALIFICATIONS** - Mathematics, Physics, Further Mathematics.

## Dietetics

**ESSENTIAL ADVANCED LEVEL QUALIFICATIONS** - Chemistry, Biology - some universities provide some flexibility with other sciences

**USEFUL ADVANCED LEVEL QUALIFICATIONS** - Mathematics

## Drama

**ESSENTIAL ADVANCED LEVEL QUALIFICATIONS** - A few courses require English Literature

**USEFUL ADVANCED LEVEL QUALIFICATIONS** - English Literature, Drama

## Economics

**ESSENTIAL ADVANCED LEVEL QUALIFICATIONS** - Usually Mathematics

**USEFUL ADVANCED LEVEL QUALIFICATIONS** - Computer Science, History, Business Studies

## Electrical/Electronic Engineering

**ESSENTIAL ADVANCED LEVEL QUALIFICATIONS** - Mathematics, usually Physics

**USEFUL ADVANCED LEVEL QUALIFICATIONS** - Further Mathematics, ICT, Design and Technology, Computer Science.

## English

**ESSENTIAL ADVANCED LEVEL QUALIFICATIONS** - English Literature

**USEFUL ADVANCED LEVEL QUALIFICATIONS** - History, Religious Studies, a foreign language.

## Environmental Science

**ESSENTIAL ADVANCED LEVEL QUALIFICATIONS** - Many courses will ask for two from: Biology, Chemistry, Geography, Mathematics and Physics.

## European Studies

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS - A Modern Foreign Language

USEFUL ADVANCED LEVEL QUALIFICATIONS - Another Modern Foreign Language, English Literature, History, Politics.

## French

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS - French

USEFUL ADVANCED LEVEL QUALIFICATIONS - Another Modern Language, English Literature, History, Politics.

## Geography

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS- Geography

USEFUL ADVANCED LEVEL QUALIFICATIONS - Mathematics or a Science

## History

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS - History

USEFUL ADVANCED LEVEL QUALIFICATIONS - English Literature, Modern Foreign Language, Politics, Religious Studies.

## History of Art

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS - None

USEFUL ADVANCED LEVEL QUALIFICATIONS - Art, English Literature, History, Religious Studies, a Modern Foreign Language.

## Law

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS - None, although a few universities require English Literature

USEFUL ADVANCED LEVEL QUALIFICATIONS - English Literature, History, Politics.

## Mathematics

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS - Mathematics.

USEFUL ADVANCED LEVEL QUALIFICATIONS - Further Mathematics, Physics, Computer Science.

## Mechanical Engineering

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS - Mathematics, usually Physics.

USEFUL ADVANCED LEVEL QUALIFICATIONS - Further Mathematics, Design and Technology, Computer Science.

## Medicine

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS - If you do Chemistry, Biology and one from Mathematics or Physics you keep all medical schools open to you. With Chemistry and Biology, you keep the vast majority open.



## Music

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS - Music and Grade 7 or 8 - some universities will consider candidates without A level Music

## Nursing and Midwifery

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS - Sometimes Biology or an alternative (Health and Social Care, Life and Health Sciences)

USEFUL ADVANCED LEVEL QUALIFICATIONS - Biology, Psychology.

## Optometry

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS - Two from Biology, Chemistry, Mathematics or Physics (some courses prefer Biology)

## Orthoptics

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS - Biology

USEFUL ADVANCED LEVEL QUALIFICATIONS - Chemistry, Mathematics, Physics.

## Philosophy

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS - None

USEFUL ADVANCED LEVEL QUALIFICATIONS - Mathematics, Religious Studies.

## Physics

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS - Mathematics, Physics

USEFUL ADVANCED LEVEL QUALIFICATIONS - Further Mathematics, Chemistry, Computer Science.

## Physiotherapy

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS - Biology - some allow alternatives

USEFUL ADVANCED LEVEL QUALIFICATIONS - Chemistry, Mathematics, Physics, Psychology.

## Planning

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS - Sometimes Geography

USEFUL ADVANCED LEVEL QUALIFICATIONS - Mathematics.

## Politics

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS - Usually none.

USEFUL ADVANCED LEVEL QUALIFICATIONS - Government and Politics, History, English Literature, Religious Studies, Business Studies.

## Psychology

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS - Usually none. A few courses ask for Mathematics or a science.

USEFUL ADVANCED LEVEL QUALIFICATIONS - Biology, Mathematics, Psychology.

## Theology

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS - None

USEFUL ADVANCED LEVEL QUALIFICATIONS - Religious Studies, English Literature, History.

## Sociology

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS - None

USEFUL ADVANCED LEVEL QUALIFICATIONS - Psychology, Geography, Politics.

## Spanish

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS - Spanish

USEFUL ADVANCED LEVEL QUALIFICATIONS - Another Modern Language, English Literature, History, Politics.

## Speech Therapy

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS - Some universities ask for a science. Some ask for English. Some have no specific requirements.

USEFUL ADVANCED LEVEL QUALIFICATIONS - A Modern Foreign Language, English Literature, Psychology.

## Sports Science

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS - Some courses require a Science and/or Sports Studies

USEFUL ADVANCED LEVEL QUALIFICATIONS - Biology, Psychology.

## Teacher Training

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS - At least one from core curriculum subjects (at Primary level, they must be core curriculum subjects on the Primary Curriculum - Modern Foreign Languages do not count for example).

USEFUL ADVANCED LEVEL QUALIFICATIONS - A second core curriculum subject.

## Veterinary Science

ESSENTIAL ADVANCED LEVEL QUALIFICATIONS - Chemistry and Biology and one from Mathematics/Physics



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