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# A-LEVEL OPTIONS BOOKLET

# THE ROYAL SCHOOL ARMAGH

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A Level subject specifications are outlined in this booklet. Please note that all Examination Boards are in the process of updating their specifications, so the following information is accurate at the time of printing. For the most up-to-date details, refer to the website listed on each subject page.





# INTRODUCTION

Thank you for taking the time to read our Sixth Form booklet. The Royal School has a long and distinguished history but it is firmly focused on the future. We are very proud of what we can offer at post 16, and of what our Sixth Form pupils have achieved over the years. The majority of them, having completed their A-Level or equivalent studies, will go on to access some of the best courses in the best universities in the British Isles. Others will proceed to further training or employment.

Sixth Form is a special time, you will have the opportunity to develop your own academic interests by studying those subjects which you enjoy the most, to increase your independence through non directed study and to develop your character and leadership capacity through availing of the many extra and cocurricular opportunities which will be offered to you. Make the most of this time. SixthFormprovidesthe opportunity to develop different relationships with teachers as you work in smaller class settings. Every Year 14 pupil will be assigned a UCAS Advisor who will work with you as you navigate the university application process.

Our school is keen to welcome any aspirational young person who demonstrates a commitment to hard work and the drive to succeed. At the Royal School we believe that we can provide an extensive and tailored A-Level pathway which offers a range of both academic and more vocational qualifications.

This booklet, combined with specific advice from staff, will provide you with the opportunity to explore the options that are open to you Post 16 and hopefully will assure you that we provide the best option to help you achieve your ambitions. We look forward to welcoming you into our Sixth Form in September.

# **RSA SIXTH FORM**

for the best results you are capable of

for support through the challenges of Sixth Form study

for a sense of belonging

for dedicated teachers who are determined to know you as a learner

for opportunities to fulfil your potential

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for bespoke guidance through the university application process

for extra and co-curricular activities which will develop your character and give you "the edge" when it comes to the world of work

Choose

THE ROYAL SCHOOL ARMAGH



In September 2025, 26 subjects will be offered. All AS subjects can also be taken at A2 Level in Year 14. BTECs are generally courses that cover 2 years, Year 13 and 14.

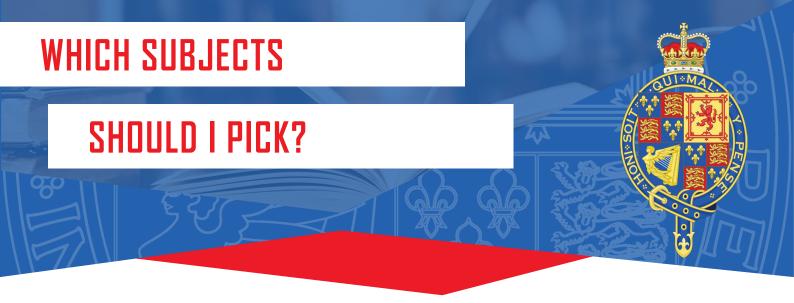
More details on subject choices given throughout the remainder of this booklet.

AGRICULTURE	HISTORY
ART & DESIGN	IRISH
BIOLOGY	MATHEMATICS AND FURTHER MATHEMATICS
(PROFESSIONAL BUSINESS SERVICES) BUSINESS STUDIES	MODERN LANGUAGES
CHEMISTRY	MUSIC
<b>CONSTRUCTION &amp; THE BUILT ENVIRONMENT</b>	NUTRITION AND FOOD SCIENCE
DIGITAL TECHNOLOGY	PHYSICS
DRAMA & THEATRE STUDIES	RELIGIOUS STUDIES
ENGINEERING	SOFTWARE SYSTEMS DEVELOPMENT
ENGLISH LITERATURE	SPORTS SCIENCE AND THE ACTIVE LEISURE INDUSTRY
GEOGRAPHY	TECHNOLOGY & DESIGN
<b>Government &amp; Politics</b>	TRAVEL & TOURISM
HEALTH & SOCIAL CARE	

STP\* = St Patrick's Grammar School STC\*= St Catherine's College

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Please be aware that subjects will be in option blocks which could potentially limit your choice.



There is no easy answer to this question. The ultimate object should be to find a pathway which is fulfilling and enables you to realise the maximum amount of success.

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# Ask yourself three questions.

# What do I enjoy doing most?

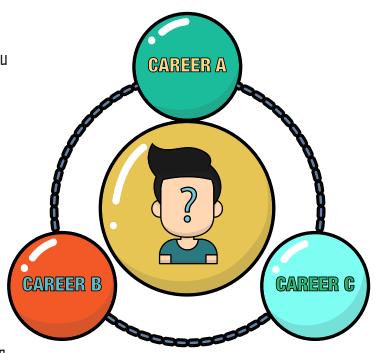
You need to enjoy what you are doing because you are going to spend a lot of time doing it. You are likely to realise better grades in subjects you enjoy.

# What am I best at?

Success gives you confidence. Success spurs you on. Success breeds success.

# What career am I aiming for?

Find out what subjects you need. If you don't know what you want to do, keep your options open.





# Will I be able to change an A Level subject if I find that it did not suit me?

Yes, this is possible if it is thought to be in your best interests. You should discuss this with your Subject teacher, your Year Head, and with Mr Aitken. Your new subject must be from an option column that fits with the rest of your subjects.

Any changes should be made before the October half term.

# Can GCSE subjects be repeated?

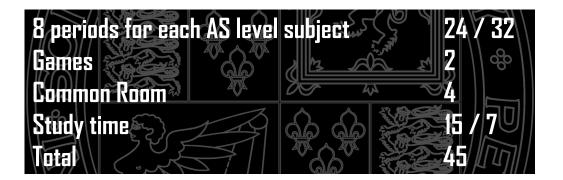
Those with a grade lower than a C in Mathematics or English would normally repeat these subjects.

# What sizes are Classes?

Class sizes typically range from 8 to 20 pupils, though some may have up to 25. Our focus is on providing you with the best opportunity to build strong working relationships with both your teachers and peers..

# How would I spend a typical week?

You would have a very busy time, with no time to get bored. Here is an approximate break down of your week.





# What careers guidance will I receive?

We provide a full range of Careers Education, information, advice and guidance to all pupils in Year 13 and Year 14.

Throughout this time we focus on preparation for your next step beyond school, for most, this will mean entry into Higher Education. In Year 13 you will focus on researching course and institution options. Following on from this in Year 14, you will concentrate on the actual application process itself.

You will be allocated a careers advisor who will interview you individually in support of your research and applications process.

An extensive range of course, institution and general careers information is available to all pupils. This is accessible in both electronic and hard copy formats.

All pupils are given the opportunity to take part in a period of work shadowing towards during Year 13. This often helps you to confirm or to rule out a career direction being considered.

Mock interviews are offered to year 14 pupils. In many cases this will be essential in preparation for interviews connected with Higher Education applications. Even if this is not the case, you will find this of great value in preparing for the inevitable interviews that await you in later life.

Additional individual practise interviews for pupils who are selected for interview by a university may be organised with the Headmaster.

We also arrange a wide and varied programme of focused talks and presentations through the year. These presentations are held both inside school and in various locations throughout the province.

Pupils are given the opportunity to visit and attend presentations from the main Higher Education providers. These include Queen's University Belfast, Ulster University, the main Scottish universities, Stranmillis University College, Trinity College Dublin and University College Dublin.

An information meeting is held for parents of Year 14 pupils. This is designed to assist parents understand the application process and to provide them with an update on the financial commitment required.

Finally when results are issued in August senior staff will be on hand to provide assistance and advice as may be required.

# CAREERS DEPARTMENT Subject combinations and Higher

# Education applications

# Subject combinations and Higher Education applications

This topic often sparks debate, though not always with accurate information.

A competitive application to a high-demand university is strongest when built on traditional, academically rigorous subjects that are primarily assessed through examinations.

The Russell Group, comprising the UK's top 24 research-focused universities (including Queen's University Belfast), offers guidance on subject choices:

#### www.russellgroup.ac.uk/informed-choices

The Russell Group highlights several 'facilitating subjects' that provide a strong academic foundation for many of their degree courses. Pupils aiming for a Russell Group university should ensure most of their A Levels are chosen from these subjects.

An increasing number of pupils now take BTEC courses, which include more coursework, to progress to their chosen universities. It is essential to select subjects that keep your options open while also aligning with your goals and allowing you to achieve top grades.

Most Russell Group universities accept pupils with two 'traditional' A Levels plus one BTEC or equivalent. If you have a specific course or university in mind, it is advisable to check their entry requirements before finalising your subject choices.

Your final subject combination should reflect your genuine interests, an honest assessment of your academic ability and commitment, and the likely requirements of your chosen Higher Education course or institution. Careful research is essential.

If you need guidance, Mr Cunningham and the careers team are available to help. You should also seek academic and subject-specific advice from your Year Head or subject teachers.

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Mr D. Cunningham (Head of Careers), Mr A. Boyd (C.E.I.A.G. Co-ordinator)

# **STUDY FACILITIES**

# AT THE ROYAL SCHOOL ARMAGH

# Use of the Study Hall

For the first time in your school career there will be a proportion of time which is untaught. The Study Hall is an essential part of Sixth Form. Much of the work in Sixth Form consists of private individual research and preparation. Without the active co-operation and respect of every Sixth Former the facility will not be fully effective.

You must establish a routine here. It will not replace the need to work at home, but it will assist you in your work and will allow school to assess your capacity to work independently and maturely.

You must adhere to the rules of the Study Hall.

All Sixth Form pupils face public examinations in the summer term. It is essential that you work in a consistent and methodical fashion so that you are properly prepared for those examinations. You should make every effort to successfully complete the AS level examinations in Lower Sixth. It is with these demands in mind that the following advice and guidelines have been devised.

# How do I study?

Experience shows that Sixth Form Pupils quite often fail to achieve their true potential because they do not know how to work effectively. This may be because:

- they cannot get started,
- they have no plan of the work they wish to do,
- they waste time on inefficient methods of study.

You will have developed your own skills for GCSE and these must be maintained and consolidated early in September. Individual subject teachers know what best suits their area of expertise. Some general hints are:

- a private place to study at home,
- an established routine,
- careful planning and good organisation,
- complete concentration and active participation in class, and
- determination and a hunger to succeed, remember the ultimate prize, success.

# **BEYOND THE CLASSROOM**

# AT THE ROYAL SCHOOL ARMAGH

Our newly designed Sixth Form common room offers a modern and comfortable space for pupils to unwind and enjoy a coffee. Year 13 pupils have access for three periods per week, while Year 14 pupils have four, with scheduling arranged in consultation with a Vice-Principal or Head of Year.

# What activities are there outside the classroom?

**SPORT** Rugby; Hockey; Tennis; Cricket; Netball; Modern Dance; Rowing; Taekwondo

**COMMUNITY SERVICE** Charity Committee; ASHA Foundation

**CULTURE** Choir; Orchestra; Scripture Union; Debating Society; Drama

**PEER TUTORING** Opportunity to help Junior School pupils

## OUTDOOR NON-SPORTING

Duke of Edinburgh Scheme; CCF

Kept in perspective, what is done outside the classroom can:

- build the skill of working with others
- contribute to a healthy lifestyle both now and in the future

- complement your CV for HE & job selectors
- give enjoyment.



# POINTS OF CONTACT

# AT THE ROYAL SCHOOL ARMAGH

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# Where can I get help?

#### Year Head

The Year Head is really your first point of contact. In Sixth Form, they are an indispensable source of advice. Don't wait for your subject teacher to identify your problems to the Year Head. Be proactive and enlist their support.

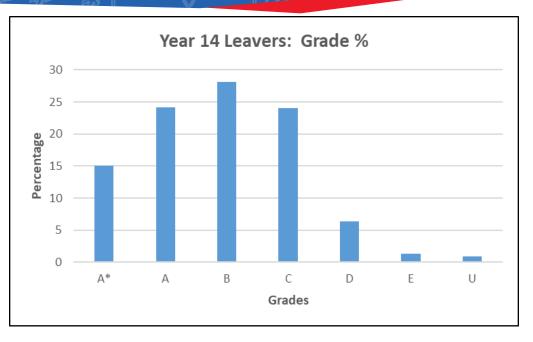
#### Subject Teacher

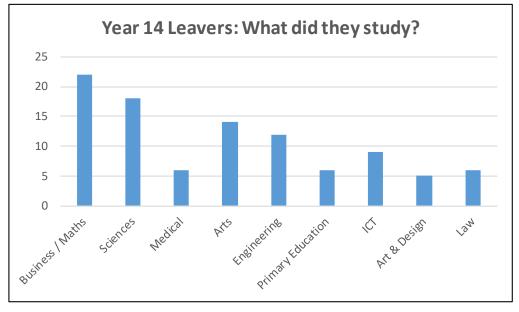
The relationship between pupil and teacher is quite different at 'A' Level. As success in each subject is important to your career options, subject problems should be sorted out as they arise. It is important that you give your undivided attention in class to the explanation of the subject content, and that when problems arise you ask your teacher for assistance as early as possible.

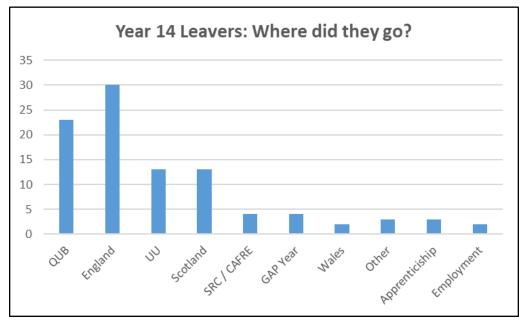
#### **Mrs Montgomery**

Mrs Montgomery is the designated teacher and will deal with any matter relating to safeguarding.









# Entrance Criteria for Sixth Form at the RSA September 2025

It is important that the school is able to offer a Sixth Form course of study which corresponds to the realistic aspirations of the applicant and is also accessible in terms of his or her academic ability. Entrance to the Sixth Form depends upon performance in normal timetabled GCSE. The advice below is designed to ensure that not only can a pupil gain a place in Sixth Form, but that they can embark on a course with a reasonable expectation of success.

Whether the applicant is from the Royal School or another school, the minimum requirement for entry in September 2025 will be:

At least FIVE subjects in GCSE (including Mathematics and English) with grade C or better, and which would allow for appropriate progression.

A minimum of 12 points where:  $A^* = 5$  points A = 4 points B = 3 points  $C^* = 2$  points C = 1 point

At least B grade level in any AS subject chosen, or in a related subject.

Normally, 20 GCSE points are required with a minimum of two As in Double Award GCSE Science in order to study two or more sciences to A Level.

In some subjects there may be sub-criteria which must be adhered to. These sub-criteria are designed to maximise a pupil's chances of success in the subject.

## **Pathways:**

Based on your GCSE performance a points total can be calculated. This allows for individual pathway guidance interviews to take place on results day. The aim of the pathways is not to prohibit choice, but to provide the best opportunity for your success.

<b>POST 16 PATHWAYS</b>			
GCSE	Pathway 1	Pathway 2	Pathway 3
Points	12 - 19	20 - 33	34+
A* - 5	2 BTECs &	3 A-Levels	4 A-Levels
A - 4	1 A-Level	OR	
B - 3		2 A-Levels &	
C - 1		1 BTEC	

# ADMISSIONS

# **ALL CRITERIA MUST BE SATISFIED**

**If the school is oversubscribed** then priority must be given to pupils already attending the school, providing they satisfy the above criteria.

**If a subject is oversubscribed** (as determined by DE guidelines or school management), the final places in a class for Year 13 will be given to those who have (i) higher 'Uniform Mark Scores' in the subject to be studied; (ii) higher overall points scores should UMS be equal irrespective of the school the pupil attended for GCSE.

# Variations:

An application from a p**upil outside the Northern Ireland system** will be assessed on the academic evidence provided, using whatever comparability formula is available.

If there are **special circumstances** which can be demonstrated to have affected performance in GCSE and have not been already identified by the relevant examination board, there may be a reduction in the basic requirement.

If there are **exceptional pastoral circumstances**, as determined by the school, e.g. illness, bereavement or 'learning needs' then the applicant may be allowed a reduction in the basic requirement. These should be notified to the school, in writing, on the day of application.

The **disciplinary and attendance records** will be considered for all pupils even if they have reached the academic criteria listed above. A period of suspension from school in Year 12 and/or an attendance rate below the EWD threshold of 85% will trigger such consideration.

The availability of a subject will be determined by RSA 'Curriculum Policy'.

# **COURSE ENTRY CRITERIA**

SUBJECT	Course Requirements All courses require minimum grade B unless specified otherwise below:
AGRICULTURE	Biology or Double Award Science. Students will also need access to a working farm.
ART & DESIGN	Art.
BIOLOGY	Biology or Double Award Science (an A in Biology in Double Award).
BUSINESS STUDIES (PROFESSIONAL BUSINESS SERVICES)	Can be taken without studying the GCSE but requires English/Maths.
CHEMISTRY	Chemistry or Double award science (an A in Double Award Science).
Construction & the built environment	Maths.
DIGITAL TECHNOLOGY	Can be taken without studying the GCSE but requires English and Maths.
DRAMA & THEATRE STUDIES	English.
ENGINEERING	Maths.
ENGLISH LITERATURE	English Literature is preferred. English language students must have an A grade.
GEDGRAPHY	B in English Language and Geography.
Government & Politics	Grade A English Language or Grade B History.
HEALTH & SOCIAL CARE	English.
HISTORY	B in History, or Grade A in English Language.
IRISH	Irish GCSE grade A.
MATHEMATICS AND FURTHER MATHEMATICS	A in Maths. A* in GCSE Further Maths.
MODERN LANGUAGES	A is preferred for both French and Spanish.
MUSIC	Music GCSE grade B minimum and a grade VI standard.
NUTRITION AND FOOD SCIENCE	Home Economics.
PHYSICS	Physics or Double Award Science (an A in Double Award Science).
Religious studies	Can be taken without studying the GCSE but requires English.
SOFTWARE SYSTEMS DEVELOPMENT	A in Maths or IT Programming.
SPORTS SCIENCE AND THE ACTIVE LEISURE INDUSTRY	PE, Biology or Double Award Science. Can be taken without GCSE PE.
TECHNOLOGY & DESIGN	Technology.
TRAVEL & TOURISM	B in Geography or English Language.

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# SUBJECT INFORMATION



## **AGRICULTURE - BTEC LEVEL 3 NATIONAL EXTENDED CERTIFICATE**

#### Why Study Agriculture?

The Pearson BTEC Level 3 National Extended Certificate in Agriculture offers an engaging programme for those who are clear about the area of employment that they wish to enter. This qualification offers an engaging programme to support learners who want to pursue a career in the agriculture sector. The qualification can prepare learners for a degree in the agriculture sector, animal science, animal nutritionists, veterinary nursing to name but a few or direct entry into the workplace to roles such as trainee agricultural technician or farm worker.

#### This course will enable you to:

- Develop transferable skills necessary for pursuing further education, degree, HLA or entering employment
- Prepare you for employment in the land-based technology industries.
- Give you a practical approach to the land-based technology sector.
- Gives you an introduction to a relevant body of information as well as developing your skill set to help you succeed in the industry.

A grade B in Science or a Merit in Applied Science and access to a working farm is required for the study of Agriculture.

#### Specification followed: Pearson

#### What will I Study and how will I be assessed?

AS Unit 1 Professional Working Responsibilities Externally assessed		Externally assessed
AS Unit 4 Work Experience in the Land-based Sectors Internally assessed		Internally assessed
A2 Unit 5 Estate Skills Internally assessed		Internally assessed
A2 Unit 28	Applied Agricultural Farming Practice	Internally assessed

\*It is important to note that the qualification for BTEC Agriculture is not awarded until the end of Year 14 and therefore it is not possible to obtain an AS level in this subject.

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#### Grading

(equivalent to A* at A Level)
(equivalent to A/B at A Level)
(equivalent to C at A Level)
(equivalent to E at A Level)

Teacher: Mrs L Quinn

## ART & DESIGN

#### Why study Art?

Art is a creative subject that lends itself to a wide variety of careers apart from the traditional practicing Artist. For some careers Art is essential but it can also be a very desirable subject to have studied for others. Architecture is an area that specifically requests a minimum of a GCSE in Art. The creative industry is the fastest growing industry in Northern Ireland especially within film, animation and gaming design. To pursue a career in any of these areas of design or fine art an A level in Art & Design will be essential. Advertising, marketing and media, illustration, arts administration, interactive media designer and product designer are just a few careers that could be an option for you. Many pupils over the years have gone on to study jewellery design, interior design, fine art, ceramic design, gaming design, fashion design, architecture, photography and advertising marketing media design.

The department has an excellent track record for pupils attaining top grades and gaining access to the best Art Colleges. Many pupils have received top awards and there has been work selected for the True Colours exhibition (best work in Northern Ireland).

Specification followed: CCEA specification <u>www.ccea.org.uk/artanddesign/</u>

CCEA have released a new specification for Art & Design that will have the first assessment in 2017 for AS level and 2018 for A2 level.

#### What will I study?

AS 1	Experimental Portfolio- CCEA will issue a paper at the beginning of the course in September. The paper will contain a set theme and suggested starting points. In this unit you are only expected to produce preparation work, the final outcome is produced for the exam (AS2). Pupils are to work in a wide range of different media in 2 & 3D. Pupils are strongly advised to take risks and experiment widely in different processes to produce creative and flamboyant work. Strong contextual links are essential to the successful of this unit. Work should be artist lead.
AS 2	Personal Response- This is an externally set stimulus paper that is issued at the beginning of the course. The paper will contain a range of suggested starting points that surround a set theme by CCEA. The preparation work will be completed for the coursework element with a 'statement of intent' being produced alongside a final outcome.
A2 1	Personal & Critical Investigation- Visual and written element. Wide and varied preparation work with a suitable final outcome. The Critical Investigation- this is a written investigation must be based on a credible and recognised artist/designer/craftsperson, theme or movement. It links to the practical work, informing and reflecting the pupils' learning as it progresses.
A2 2	Thematic Outcome-Pupils respond to a theme that CCEA issue in a stimulus paper at the beginning of the A2 course. This unit includes developing work into an outcome that stems from the personal investigation completed for Unit A2 1. Pupils produce a statement of intent and a final piece.



#### How will I be assessed?

All practical units are teacher assessed with CCEA external moderation. The Critical Investigation is externally assessed by CCEA.

Unit	Assessment Format	Duration	Weightings
AS 1	Experimental Portfolio	Sept- End of January	50% of AS
	Practical project		20% of A2
AS 2	Personal Response	1 <sup>st</sup> Feb- Mid May	50% of AS
			20% of A2
AZ 1	Personal & Critical Investigation-	Sept- End of January	60% of A2
	practical project & written		36% of A level
	investigation (1000-3000 words)		
A2 2	ESA Practical Exam Project	1 <sup>st</sup> Feb- mid May	40% of A2
			24% of A level

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Teachers: Ms R S J McDowell, Miss W Fleming

### BIOLOGY

#### Why study Biology?

Biology is an ideal choice for pupils with an interest and curiosity about the diversity and origins of the living world around them. It focuses on our interactions with the natural environment. The A-level Biology course aims to develop an in-depth knowledge and understanding of the ways in which biological organisms function.

Biology at AS and A2 level builds upon the knowledge, understanding and skills developed during GCSE. A 'B' grade in Biology or an A/B in Double Award Science is required with the A being in Biology. Single Award Science or Applied Science is not a suitable basis for the study of Biology at Advanced level. It is also advisable that pupils have a pass grade in GCSE Mathematics.

Additional information on the component units of each module can be obtained from the following website:

#### Specification followed: CCEA specification

www.ccea.org.uk/biology

#### What will I study?

AS 1	Molecules and Cells
AS 2	Organisms and Biodiversity
AS 3	Practical Skills in AS Biology
AZ 1	Physiology and Ecosystems
A2 2	Biochemistry, Genetics and Evolutionary Trends
AZ 3	Practical Skills on A2 Biology

#### How will I be assessed?

Unit	Assessment Format	Duration	Weightings
AS 1	Written Examination	1h 30m	37.5% of AS
	Externally assessed		15% of A level
AS 2	Written Examination	1h 30m	37.5% of AS
	Externally assessed		15% of A level
AS 3	Internal Practical Assessment	1h	25% of AS
	and External Written		10% of A level
	Examination		
AZ 1	Written Examination	2h	24 % of A level
	Externally assessed		
AZ 2	Written Examination	2h	24% of A level
	Externally assessed		
AZ 3	Internal practical Assessment	1h 15m	12% of A level
	and External Written		
	Examination		

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Teachers: Mr M Scott, Dr C Holland, Miss C Heatrick

## BUSINESS STUDIES (PROFESSIONAL BUSINESS SERVICES)

Business Studies A-level has changed name to the new and dynamic 'Professional Business Services'.

This syllabus has the backing of industry, the business community and Invest NI.

#### Aims of the specification:

This specification aims to encourage pupils to:

- develop their interest in and enthusiasm for professional business services, including developing an interest in further study and careers in the subject;
- develop and draw together different areas of knowledge, skills and understanding of different aspects of the subject;
- develop competence and confidence in a number of skills, including independent learning, creative thinking, practical, mathematical and problem-solving;
- carry out practical tasks and present their findings in different formats;
- appreciate the needs of business professionals operating in the marketplace of Northern Ireland and beyond; and
- progress to relevant higher education programmes

#### Key features:

The following are important features of this specification:

- It includes six assessment units. Four are externally assessed and two are internally assessed and externally moderated by CCEA.
- The topics in each unit are organised in a logical sequence, building on previous knowledge and understanding as appropriate.
- Key practical tasks and the skills required are clearly identified.
- Assessment at A2 includes more question types, more demanding evaluative tasks, extended writing, and synoptic assessment that encourages pupils to develop their understanding of the subject as a whole.

#### Prior knowledge:

Pupils do not need to have reached a particular level of attainment before beginning to study this specification. However, the AS specification builds on some of the knowledge, understanding and skills developed in GCSE Business Studies and other equivalent courses. Knowledge, understanding and skills developed in GCSE Mathematics are also relevant.

Content	Assessment	Weighting
Unit 1 AS	External Assessment	30% AS
Introduction to Professional Business	Written examination	12% A2
Services	1 hour 30mins 80 marks	
Unit 2 AS	Internal Assessment	40% AS
Human Resources Services	Portfolio based on Pre – released case study 100 marks	16% A2
Unit 3 AS	External Assessment	30% AS
Financial decision making	Written examination	12% A2
_	1 hour 30mins 80 marks	
Unit 1 A2	External Assessment	18% A2
Technology and Business	Written examination	
	2 hours 90 marks	
Unit 2 A2	External Assessment	18% A2
Leadership and management	Written examination	
	2 hours 90 marks	
Unit 3 A2	Internal Assessment Portfolio of evidence on a Management Task	24% A2
Management skills and processes	120 marks	

A full specification can be viewed at:

http://ccea.org.uk/sites/default/files/docs/qualifications/the\_revision/specs/unaccredited/GCE\_DRAFT\_Professional\_Services\_for\_Business\_Specification.pdf

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Teachers: Mr J A McCready, Mrs S Welshman

## CHEMISTRY

**Why study Chemistry?** Chemistry is the study of matter, focusing on molecules and atoms. Chemists examine the composition of substances, how they interact, and their roles in living organisms. It is a **necessary subject** for a wide range of scientific options at university, including the majority of the healthcare professions. It is an integral part of many courses such as medicine, dentistry, veterinary, pharmacy and chemical engineering to name a few . The chemical sciences workforce is projected to grow 30% faster than the overall UK labour market. Chemistry graduates will enjoy excellent employment prospects and earning potential. (<u>https://edu.rsc.org/future-in-chemistry/not-a-student/parents/information-about-careers-in-chemistry</u>)

**Skills:** You will develop many transferable and desirable skills such as application of numeracy, problem solving, observational skills, practical and analytical skills, logical thinking and working independently as well as part of a team.

**Entry:** Chemistry at AS and A2 level builds upon the knowledge, understanding and skills developed during GCSE. An 'A' grade in GCSE Chemistry is preferable but a student wishing to study with a 'B' grade will be considered on an individual basis. An 'AA/AB' in Double Award Science is required. Single Award Science or Applied Science is not a suitable basis for the study of Chemistry at Advanced level. It is also advisable that pupils have a B grade in GCSE Mathematics as there is a large component of mathematical content.

#### Specification followed: CCEA Specification

www.ccea.org.uk/chemistry

#### What will I study?

AS 1	Basic Concepts in Physical and Inorganic Chemistry
AS Z	Further Physical and Inorganic Chemistry and Introduction to Organic Chemistry
AS 3	Practical aspects and planning
A2 1	Further Physical and Organic Chemistry
A2 2	Analytical, Transition Metals, Electrochemistry and Organic Nitrogen Chemistry
A2 3	Practical aspects and planning

#### How will I be assessed?

Unit	Assessment Format	Duration	Weightings
AS 1:	A written paper consisting of multiple choice and	1h 30m	40% of AS
	structured questions.		16% of A Level
AS Z:	A written paper consisting of multiple choice and	1h 30m	40% of AS
	structured questions.		16% of A Level
AS 3:	A practical (1 hr 15 mins) and written theory of	A)-1 h 15m	20% of AS
	practical exam (1 hr 15 mins).	B)- 1h 15m	8% of A Level
		Total 2h 30m	
AZ 1:	A written paper consisting of multiple choice and	2h	40% of A2
	structured questions.		24% of A Level
AZ Z:	A written paper consisting of multiple choice and	2h	40% of A2
	structured questions.		24% of A Level
A2 3:	A practical (1 hr 15 mins) and written theory of	A)-1 h 15m	20% of A2
	practical exam (1 hr 15 mins).	B)- 1h 15m	12% of A Level
		Total 2h 30m	

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#### Teachers: Mrs K Buchanan, Miss G Nugent

#### CONSTRUCTION & THE BUILT ENVIRONMENT BTEC LEVEL 3 NATIONAL EXTENDED CERTIFICATE

#### **General Description:**

The <u>BTEC Level 3 National Extended Certificate in Construction and the Built Environment</u> provides a specialist work-related area of study which covers some of the key knowledge and practical skills required in the sector. This qualification introduces learners to the subject knowledge required for a range of technical and professional occupations within construction. It is designed to be taken as part of a programme of study that includes other appropriate BTEC Nationals or A Levels.

#### What will I Study and how will I be assessed?

Unit 1	Construction Principles (Externally Assessed)
Unit 2	Construction Design (Externally Assessed)
Unit 4	Construction Technology (Internally Assessed)
Unit 5	Health and Safety in Construction (Internally Assessed)

\* It is important to note that the qualification for BTEC Construction is not awarded until the end of Year 14 and therefore it is not possible to obtain an AS level in this subject.

#### **Course Requirements:**

Pupils require a minimum of Grade B at GCSE Maths and English Language. GCSE Geography or Construction are recommended.

#### Career Opportunities include:

Architectural Design, Architecture, Building Control, Town Planning, Quantity Surveying, Surveying, Land Survey, Site Engineer, Civil Engineering

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#### Awarding of Overall Grade:

#### Grading

Distinction*	(equivalent to A* at A level)
Distinction	(equivalent to A at A level)
Merit	(equivalent to C at A level)
Pass	(equivalent to E at A level)

Host School: St Patrick's College Armagh

## DIGITAL TECHNOLOGY

#### Why study Digital Technology?

Digital Technology incorporates aspects of computer science and information technology (IT). The subject explores how technology can be used to create, store, process, analyse and present information in a digital context.

The influence of digital technology in our lives continues to accelerate. Current and emerging technologies transform the way we communicate, how we work and the way we learn. As a result, almost all organisations will value the knowledge, understanding and skills that GCE Digital Technology develops.

This qualification is for pupils who are interested in current and emerging technologies, the impact they have and how to utilise them effectively.

- For AS, pupils learn about the system development process. This examines the stages in the development process and the key deliverables produced by each stage. Pupils learn about the range of approaches that can be utilised when developing systems. Pupils study a number of the fundamentals of digital technology such as data representation, computer architecture, software and the user interface.
- Pupils continuing to A2 explore a number of areas related to information systems, including computer networks, databases, artificial intelligence and expert systems. They also consider a number of additional applications of digital technology such as data mining and cloud computing.

There is no specific requirement for prior learning, but it is expected that pupils will have an interest in this area and are willing to study thoroughly.

#### Specification followed: CCEA Specification

http://www.ccea.org.uk/digital\_technology

#### What will I study?

WINGL WIN	i i aluuy:
AS 1	Study of the system development process with particular focus on the analysis, design and implementation
	stages; alternative development approaches, which will be compared; software projects; security issues; and
	programming concepts.
AS 2	Study of data representation; data and information; computer architecture; hardware and software components;
	processing systems; and web technology and multimedia.
AZ 1	Study of networks; databases; expert systems; applications of digital technology; mobile technologies; cloud
	computing; and individual, social and legal considerations.
A2 2	In this unit you will complete a detailed project. The project brief will be provided annually by CCEA. You will
	identify and research a realistic problem. You will then design a solution, implement and test your solution, and
	document and evaluate your solution.



#### How will I be assessed?

Unit	Assessment Format	Duration	Weightings
AS 1	External written examination	1hr 30mins	50% of AS
			20% of A Level
AS 2	External written examination	1hr 30mins	50% of AS
			20% of A Level
AZ 1	External written examination	2hrs 30mins	40% of A Level
A2 2	Internal Assessment (Case Study)		20% of A Level

Teachers: Dr P Addis, Mr L Forrest



## **DRAMA & THEATRE STUDIES**

#### Why study Drama and Theatre Studies?

Studying drama requires emotional maturity and gives pupils a deep understanding of themselves. As it involves using not only their voices and bodies, but also emotions and creativity, it is able to engender a deep sense of self-esteem. It is also a subject that requires a great deal of peer trust, and so it plays an important role in teaching communication, listening and empathy skills. Studying drama is demanding, and teaches pupils that success only comes from hard work.

The skills that are learnt by studying drama are invaluable in later life. For example, being able to speak and present confidently in front of people, and the skill of planning that is required in any production, are useful in many careers. Drama can be a good basis for a career not only in the theatre, but in medicine, law, advertising, the film industry and even in events planning, among many others.

#### Summary

The course has been designed for pupils who enjoy reading and watching plays and taking part in drama, as a performer, director or designer. The structure of the specification at each level, AS and A2, is one written unit (60%) and one practical unit (40%).

At AS, the written unit consists of the study of one set play, in terms of its performance potential, and of live productions seen during the course. At A2, the written unit requires the study of a further two set plays.

In the practical units, both AS and A2, pupils present a performance, working in a group.

Specifications followed: AQA specification <a href="http://www.aqa.org.uk/subjects/drama-and-performing-arts/gcse/">www.aqa.org.uk/subjects/drama-and-performing-arts/gcse/</a>

#### What will I study?

The written units are externally set and marked. The practical units are internally assessed by the teacher and externally moderated by a visiting moderator.

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AS outline

- Unit 1: Live Theatre Production Seen and Prescribed Play
- Unit 2: Presentation of an Extract from a Play Practical.

#### A2 outline

- Unit 3: Further Prescribed Plays including Pre-Twentieth Century
- Unit 4: Presentation of Devised Drama Practical.

Host School: St Catherine's College, Armagh

## **ENGINEERING - BTEC LEVEL 3 NATIONAL CERTIFICATE**

#### **General Description:**

The course provides a specialist theoretical and practical programme of study covering some of the key knowledge and skills required in the engineering sector. Students are introduced to a range of topics relevant to engineering including mathematics, physics and technology.

#### What will I study:

The course is equivalent to one A Level. There are three mandatory units and one optional unit. The mandatory units represent 83% of the course. There will be two mandatory units studied in Year 13 and one mandatory and one optional unit studied in Year 14. The mandatory units and a brief description of each can be seen below:

- Engineering principals Students will apply mathematical and physical science principles to solve electrical, and mechanical based engineering problems.
- Delivery of engineering processes safely as a team Students will explore how processes are undertaken by teams to create engineered products or to deliver engineering services safely.
- Engineering product design and manufacture Students will explore engineering product design and manufacturing processes and will complete activities that consider function, sustainability, materials, form and other factors.
- 4. Work experience in the Engineering Sector Students will complete a 10 day work placement in an engineering company of their choosing, taking this opportunity to experience the ins and outs of an engineering company.

#### **Course Requirements:**

Students require a minimum of a Grade B in GCSE mathematics. If a student is considering an engineering course at university, it is strongly recommended that they pursue mathematics at A Level as the engineering course on its own may not be enough to gain entry to a suitable engineering based degree course. The course spans 2 years.

#### Awarding of Overall Grade:

The assessment of the course is based on 67% of the marks awarded via external assessment and 33% via internal assessment tasks set by Edexcel and completed under supervised conditions. The final grade is based on the 3 mandatory components and 1 optional component. The grading is as follows:

Distinction*	(equivalent to A* at A Level)
Distinction	(equivalent to A at A Level)
Merit	(equivalent to C at A Level)
Pass	(equivalent to E at A Level)

Teachers: Mr P McClure, Mr A Irvine

## **ENGLISH LITERATURE**

#### Why study English Literature?

A Level English Literature enables you to engage critically and creatively with a substantial body of texts and gives you a variety of ways to respond to them. Across a wide range of novels, plays and poems, you will deepen your understanding of the changing traditions of literature. Through independent research and critical reading, you will develop your interest and enjoyment of English literature and become an accomplished, discerning reader with advanced study skills that prepare you for third level education.

A Level English Literature broadens your horizons and opens your minds to new perspectives and ideas. It allows you to construct well supported arguments and appreciate alternative interpretations. The course itself covers a wide range of engaging literature. You can use your own ideas and creativity when responding to each text and the course invites in-depth discussion and reflection at every opportunity. The coursework element allows for independent study, wider reading and a sense of personal achievement. If you enjoy reading a wide range of literature and analysing associated ideas, then this will be an ideal course for you. An A Level in English Literature develops your skills in written and face-to-face communication, as well as your capacity for research and your ability to understand complex ideas and theories. With this set of skills, you can access jobs in the media industry which includes print, online, TV and radio, journalism and publishing, advertising and PR, public relation, teaching or any arts organisation. Students of English Literature often go into sectors like law, business, social work or politics but can access any academic pathway including Medicine, Veterinary Science and Engineering.

#### Specification followed: CCEA specification

www.ccea.org.uk/english

AS 1	The Study of Poetry 1900-Present and Drama 1900-Present
AS 2	The Study of Prose Pre-1900
A2 1	Shakespearean Genres
A2 2	The Study of Poetry Pre-1900 and Unseen Poetry and The Study of Drama (Shakespeare and Heaney)
A2 3	Internal assessment

#### How will I be assessed?

Unit	Assessment Format	Duration	Weightings
AS 1	External written examination. Students answer two questions, one from section A (open book) and one from Section B (closed book).	2 hrs	60% (24% overall)
AS Z	External written examination. Students answer one question (closed book).	1hr	40% (16% overall)
AZ 1	External written examination. Students answer one question (closed book).	1hr 30 mins	20%
A2 2	External written examination. Students will answer two questions, one from section A and the question set in Section B (closed book).	2 hrs	20%
A2 3	Internal assessment. Students complete a 2500-word essay.		20%

#### **Course requirements:**

- It is strongly recommended that students of A level English Literature have studied English Literature at GCSE level.
- It is strongly recommended that students of A level English Literature have an A or A\* in GCSE English Language.

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Teachers: Mrs L. Montgomery, Mrs N. McCrory, Mrs L McConnell, Miss K. Bayle

#### GEOGRAPHY

#### Why study Geography?

Geography encourages pupils to acquire and apply knowledge and understanding of physical and human processes, their interactions and outcomes over space and time, through the study of places and environments. It allows pupils to clarify and develop their own values and attitudes in relation to geographical issues and questions. Pupils wishing to choose the subject must have studied it to GCSE level. The minimum requirement is a grade B in Geography and a C\* grade in English Language. There is an essential skills component and to this effect, pupils in both AS and A2 will complete field trips.

Specifi	cation followed: CCEA specification	www.ccea.org.uk/geography/
AS 1	Physical Geography	
AS 2	Human Geography	
AS 3	Fieldwork Skills and Techniques in Geography	
A2 1	Physical Processes, Landforms and Management	
A2 2	Processes and Issues in Human Geography	
A2 3	Decision Making in Geography	

Unit	Assessment Format	Duration	Weightings
AS 1	External examination	1h 15m	40% of AS
	Section A: Three short structured questions, one on each theme.		16% of A Level
	Section B: Two extended writing questions		
AS 2	External examination	1h 15m	40% of AS
	Section A: Three short structured questions, one on each theme.		16% of A Level
	Section B: Two extended writing questions		
AS 3	External examination	1 hour	20% of AS
	Pupils bring a table of data and a summary statement of fieldwork aims into the		8% of A level
	exam.		
	Section 1: Present, analyse, interpret and evaluate their fieldwork data and		
	methods.		
	Section 2: Response questions to quantitative and qualitative data from		
	secondary sources.		
A2 1	External examination paper	1h 30m	24% of A Level
	Two questions to be answered from two different options		
A2 2	External examination paper	1h 30m	24% of A Level
	Two questions to be answered from two different options		
A2 3	External examination paper	1h 30m	12% of A level
	Compulsory decision making exercise in the form of a case study		

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Teachers: Miss A Murdock, Mr C Parker, Miss S Hughes

## **GOVERNMENT & POLITICS**

#### Why study Government & Politics?

If you have an interest in finding out more about political systems and ideas and how political changes are brought about, then this course can help you achieve this. Through studying Government & Politics you can develop your knowledge and understanding and relate this to current events reported in the media.

#### Would this course suit me?

You should have obtained at least a **Grade A in GCSE English or Grade B in GCSE History** as this will help you with the extended writing required or. You should also have an interest in politics and current affairs and want to understand more about how government works.

Specification followed: CCEA specification

www.ccea.org.uk/government

#### What will I study?

-	i bludy i		
AS 1	•	Arrangements for Northern Ireland government:	
	٠	Assembly; Executive Committee	
	•	Strategies, policies & electoral support of the main <b>NI political parties</b> since <b>1998</b>	
AS 2	•	How <b>Britain</b> is governed:	
	•	Parliament; Executive; the British Judiciary	
	•	Pressure & Interest Groups in UK	
AZ 1	٠	Comparative government of <b>UK &amp; USA</b>	
	•	The legislative and executive processes	
AZ 2	٠	Political Power:-	
	•	Factors involved in exercising power	
	•	Theories of political Power	

#### How will I be assessed? No coursework; all examination

Unit	Type of Assessment	Duration	Weightings
AS 1:	One source 3 questions	1h 15m	40% of AS 16% of A Level
AS Z:	5 questions	1h 45m	60% of AS 24% of A Level
AZ 1:	One source 5 questions	2h 15m	30% of A Level
A2 2:	One source 3 questions	1h 30m	20% of A Level

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Teachers: Mr P Graham, Mr O Millar

## HEALTH & SOCIAL CARE (SINGLE AWARD)

#### Why study Health and Social Care?

Health & Social Care is the study of health and well-being. You will learn about the key stages of physical and emotional development and begin to understand the profound influence relationships and life events can have on an individual's health. It is designed to give you a broad introduction to the health, social care and early year's sectors and the opportunity to research key issues affecting those sectors.

You will get the opportunity to attend a two-day work placement in a chosen care setting of your choice to fulfil coursework requirements in Year 13.

Pupils wishing to choose the subject must have a B grade in English Language.

Specification followed: CCEA specification

www.ccea.org.uk/hsc

#### What will I study?

AS Unit 1	Promoting Quality Care	
AS Unit 2	Communication in Care Settings	
AS Unit 3	Health and Wellbeing	
A2 Unit 3	Providing Services	
A2 Unit 4	Public Health and Health Promotion	
A2 Unit 12	Supporting the Family	

#### How will I be assessed?

Unit	Assessment Format	Weightings
AS Unit 1	Internal Assessment- Students produce a written report based on a two-day	25% of AS/ 10% of A Level
	work placement in a health, social care or early years setting.	
AS Unit 2	Internal Assessment- Students produce a written report on communication in a health, social care or early years setting.	25% of AS/ 10% of A Level
AS Unit 3	External Assessment- 2 hour written examination, consisting of three questions.	50% of AS/ 20% of A Level
A2 Unit 3	External Assessment- 2 hour written examination based on pre-release material, consisting of three compulsory questions.	30% of A Level
A2 Unit 4	Internal Assessment- Students produce a report on public health issues and how they are being addressed in Northern Ireland, undertake a health promotion activity and report their findings.	15% of A Level
A2 Unit 5	Internal Assessment- Students produce a review of changes to family structure, a case study and a report on services for families experiencing issues.	15% of A Level

Teachers: Miss J McBride, Miss H Logan

## HISTORY

#### Why study History?

History involves the systematic study of events, individuals, issues and societies of the past. You will be able to build upon knowledge and understanding of past events and the impact of those events on our world to-day.

The study will involve the analysis and evaluation of historical evidence, and development of how and why the past is open to different judgements and interpretations. It is intended to help you develop and deploy a range of skills such as collecting and evaluating information, independent thought, weighing up the arguments and an ability to support your judgements.

A minimum of a **grade B in GCSE History or a grade A in English Language** is essential. The assessment units require pupils to be able to demonstrate a significant standard of written communication. There is no coursework.

#### Specification followed: CCEA Specification

https://ccea.org.uk/post-16/gce/subjects/gce-history-2019

#### What will I study?

AS 1	Germany 1919–45 (Option 5)
AS 2	Russia 1914–41 (Option 5)
A2 1	The American Presidency 1901–2000 (Option 4)
A2 2	Partition of Ireland 1900-1925 (Option 4)

#### How will I be assessed?

Unit	Assessment Format	Duration	Weightings
AS 1	An external examination consisting of a short essay from choice of	1h 30m	50% of AS
	two, source analysis and full essay using sources		20 % of A2
AS 2	An external examination consisting of two structured essays from a choice of four	1h 30m	50% of AS 20 % of A2
AZ 1	An external examination consisting of one essay question out of two choices	1h 15m	20% of A2
A2 2	An external examination consisting of one compulsory source based question and one essay out of a choice of two.	2h 30m	40% of A2

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Teachers: Mr S Maclaine, Mr P Graham, Mr O Millar

## MATHEMATICS AND FURTHER MATHEMATICS

#### Why study Mathematics?

Mathematics is a popular A level subject as it leads on to a wide variety of careers such as Actuarial Science, Accountancy, Engineering, Acoustics, Medical Statistics, Sports Science, Banking, Architecture, Investment Analysis and Teaching. In Year 13 pupils will have classes in Core Mathematics, Mechanics and Statistics. The subject is "learned by doing"; in the sense that it is a practical subject which benefits from substantial teacher-pupil contact. To this end the Mathematics Department encourages pupils to liaise with their teachers during study periods, to complement the normal class time.

Clearly ability in Mathematics is essential and this may be obvious in a pupil who has obtained a C grade or better in Further Mathematics. However, it is acceptable to have only pursued GCSE Mathematics provided the capacity and motivation is present and progress is carefully monitored. It is strongly advised to have attained an A grade or above in GCSE Mathematics if the pupil has not studied Further Mathematics, having completed modules M4 and M8.

#### Specification followed: CCEA Specification

https://ccea.org.uk/mathematics/

#### What will I study?

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AS 1	Algebra and functions, coordinate geometry in the ( $x$ , $y$ ) plane, sequences and series, differentiation, integration, trigonometry, exponentials and logarithms and vectors.
AS Z	Quantities and units, kinematics, forces and Newton's laws, statistical sampling, data presentation and probability.
AZ 1	Algebra and functions, coordinate geometry in the (x, $\gamma$ ) plane, sequences and series, trigonometry, differentiation, integration and Numerical Methods
A2 2	Kinematics, moments, impulse and momentum, probability, statistical distributions, statistical hypothesis testing

#### How will I be assessed?

Unit	Assessment Format	Duration	Weightings
AS 1	Pure Mathematics	1h 45m	60% of AS 24% of A2
AS 2	Applied Mathematics	1h 15m	40% of AS 16% of A2
AZ 1	Pure Mathematics	2h 30m	36% of A2
A2 2	Applied Mathematics	1h 30m	24% of A2

#### Further Mathematics

Further Mathematics is available to study at AS and A2 Level. This should only be chosen by those pupils intending to commence a degree where Mathematics is a significant component.

If interested in Further Mathematics, please speak to the Head of Department.

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Mr N McConnell

## MODERN LANGUAGES

## Why study Modern Languages?

Knowledge of a foreign language will significantly improve your employability in an increasingly global economy. However, this does not limit your options to language-based career pathways (such as teaching, interpreting and translating): the knowledge and skills acquired by studying a foreign language to A-level and beyond will also prepare you for a range of other career options. The oral exam encompasses skills of communication, critical thinking and spontaneity of responsiveness. Experience of this particular exam environment is one of the reasons why pupils of languages often have the edge in interviews and other selection procedures.

Graduates with foreign language skills can expect to earn at least 10% more than those without and recent surveys have shown that the three business languages which are most in demand are French. Spanish and German. People who can speak more than one language have skills which help them in life and which employers want. Remember: 94% of the world's population does not speak English as their first language. 75% do not speak English at all. It's a multilingual world and UK and Irish companies are now realizing that they need foreign languages to compete when trading internationally. Languages improve the quality of your life and your understanding of how other people live and think. You can travel more and meet new people. Languages also go really well with a wide range of subjects; languages can work for you whatever your ambitions.

## Specification followed: CCEA Specification www.ccea.org.uk

#### What will I study?

AS 1 + 2	Relationships, Culture and Lifestyle
A21+2	Young People in Society and Our Place in a Changing World

Unit	Assessment Format	Duration	Weightings
AS 1	Speaking	11 mins	AS 30%
	Q1: Presentation		A2 12%
	Q2: Conversation		
AS 2	Listening	Total time:	AS: 40%
	Reading	2 hours	A2: 16%
	Use of language		
AS 3	Extended Writing	1 hour	AS: 30%
			A2: 12%
AZ 1	Speaking	15 mins	A2: 18%
	Q1: Discussion based on societal theme		
	Q2: Conversation		
A2 2	Listening	Total time:	A2: 24%
	Reading + Translation	2 hours 45 mins	
A2 3	Extended Writing	1 hour	A2: 18%

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#### How will I be assessed?

Teachers: Miss & Hamilton, Mrs H Kerr, Mr S Butler, Mrs E Weir, Mrs R Belshaw

## MUSIC

#### Why study Music?

The music course incorporates the three fundamental musical activities of *composing*, *performing*, and *listening and appraising* as in GCSE. The course aims to provide you with a worthwhile and complete field of study that broadens your musical experience, develops your imagination, fosters your creativity and promotes your personal, social and cultural development.

The specification is designed in such a way as to help a pupil develop:

- The skills, knowledge and understanding needed to communicate through music and to take part in music making
- Appreciation of the diverse and dynamic heritage of music in order to promote their spiritual and cultural development
- Particular strengths and interests to encourage lifelong learning and provide access to music related and other careers. Please
  note that Music offers a range of transferable skills to many diverse career paths.
- Recognition of the interdependence of musical skills, knowledge and understanding and the links between performing, composing and appraising.

Specification followed: CCEA specification

www.ccea.org.uk/music

#### What will I study?

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AS 1	Performing – Solo performance
AS 2	Composing – Composition task
AS 3	Responding to Music – Two external written examinations
AZ 1	Performing – Solo performance
AZ 2	Composing – Composition task
AZ 3	Responding to Music – Two external written examinations

#### How will I be assessed?

Unit	Assessment Format	Duration	Weightings
AS 1	Solo performance Viva Voce	5-8 minutes (minimum 2 pieces)	32.5% of AS 13% of A level
AS 2	Composition task <u>Or</u> Composition with technology task Written commentary	1.5-2.5 minutes	32.5% of AS 13% of A level
AS 3	Test of aural perception Written examination	1 hour 2 hours	35% of AS 14% of A level
A2 1	Solo performance Viva Voce	8-10 minutes (minimum 2 pieces)	19.5% of A level
A2 2	Composition task <u>Or</u> Composition with technology task Written commentary	2-3 minutes	19.5% of A level
AZ 3	Test of aural perception Written examination	1 hour 15 mins 2 hours	21% of A level

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Teachers:

Mr A Boyd, Mrs C Phillips

# NUTRITION AND FOOD SCIENCE

## Why study Nutrition and Food Science?

Nutrition and Food Science includes the study of two important topical elements:

- 1. Principles of Nutrition in relation to Diet, Lifestyle and Health
- 2. Food Security and Sustainability or Food Safety and Quality

Nutrition & Food Science is a subject which provides pupils with a wide range of career opportunities. These include employment within the Food Industry (e.g. Product Development, Quality Assurance, Production Management), Consumer Education and Protection, Health and Social Care, Community Services and Nutrition (e.g. Public Health, Dietetics, Sports Nutritionist Etc.).

Pupils wishing to study the subject should have obtained at least a Grade B in GCSE Home Economics

Specification followed: CCEA specification

https://ccea.org.uk/nutrition-and-food-science

#### What will I study?

AS 1	Principles of Nutrition	
AS 2	Diet, Lifestyle and Health	
A2 1	Option A: Food Security and Sustainability <b>or</b> Option B: Food Safety and Quality	
	We currently deliver Option B: Food Safety and Quality	
A2 2	Research based assignment	

#### How will I be assessed?

Unit	Assessment Format	Duration	Weightings
AS 1	External examination Section A - short answer questions Section B - two extended writing questions from a choice of three.	1h 30m	50% of AS 20% of A Level
AS Z	External examination Section A - short answer questions Section B -answer three extended writing questions from a choice of four.	1h 30m	50% of AS 20% of A Level
A2 1	External examination Section A - answer a compulsory structured question Section B - answer three extended writing questions from a choice of four.	2h 30m	30% of A Level
A2 2	Internal assessment. Pupils complete a 4000-word research based assignment. This is assessed by the teacher and externally moderated.		30% of A Level

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Teachers: Miss J McBride and Miss H Logan

## PHYSICS

## Why study Physics?

The course to be followed has been designed to provide a seamless transition to A level for pupils from their previous studies of **Physics or Double Award Science** at GCSE level. The aim of the course will be to introduce new and exciting areas of Physics as well as to develop essential knowledge and understanding of the key principles of the subject.

The department will follow the CCEA Physics AS/A2 Specification. Details can be obtained at <u>www.ccea.org.uk/physics</u> This specification aims to encourage pupils to:

- develop their interest in and enthusiasm for physics;
- begin to understand how society makes decisions about scientific issues and how the sciences contribute to the success of the economy and society;
- develop and demonstrate a deeper appreciation of the skills, knowledge and understanding of how science works; and
- develop essential knowledge and understanding of different areas of physics and how they relate to each other.
- GCE Physics is comprised of two levels: AS and A2. The AS can be taken as a 'stand-alone' qualification without
  progression to A2. However, to obtain the Advanced GCE qualification, pupils must complete both the AS and A2 levels.
  The specification has a modular structure and pupils are required to study three modules at each

#### What will I study?

AS 1	Forces, Energy and Electricity
AS 2	Waves, Photons and Medical Physics
AS 3	Practical Techniques Planning, Implementing ,Analysis, Evaluation, Communication
AZ 1	Momentum, Thermal Physics, Circular Motion, Oscillations and Atomic and Nuclear Physics
A2 2	Fields and their Applications
A2 3	Practical Techniques Planning, Implementing ,Analysis, Evaluation, Communication

#### How will I be assessed?

Unit	Assessment	Duration	Weightings
AS 1	Written examination, externally assessed Maximum raw marks = 75	1 h 30m	37% of AS 18.5% of A Level
AS Z	Written examination, externally assessed Maximum raw marks = 75	1 h 30m	37% of AS 18.5% of A Level
AS 3	Practical tests, Externally assessed Maximum raw marks = 50	1 h 30m	26% of AS 13% of A Level
AZ 1	Written examination, externally assessed	2 h	37% of A2 18.5% of A Level
A2 2	Written examination, externally assessed	2 h	37% of A2 18.5% of A Level
A2 3	Practical skills, externally assessed	1 h 30m	26% of A2 13% of A Level

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Teachers: Mr S Thompson, Mr W Fowles, Mrs C Kingston

## RELIGIOUS STUDIES (Philosophy of Religion and Ethics)

## Why study Religious Studies?

Religious Studies is an academic discipline which explores various aspects of religion, philosophy and ethics using an enquiring, critical and empathetic approach. It involves a study of Philosophy of Religion and Religious Ethics. Pupils will discuss philosophical arguments surrounding the problem of evil, arguments for the existence of God and religious experience. They will learn key ethical theories and debate important topics in bioethics including abortion and euthanasia. Religious Studies may be taken up as a new subject and no special GCSE subjects are required. It would, however, be necessary for those choosing the subject to have a genuine interest in, and critical approach to, the study of Religion and Ethics. A grade B in GCSE English is desirable given the substantial amount of written communication and essay writing required in this subject.

RS is a subject which develops the ability to examine important questions and issues with an open mind, to weigh up arguments and reach reasoned conclusions. Universities and employers value the skills an A level in Religious Studies offers. Pupils who have studied A Level RS have gone on to pursue a wide variety of careers in business, teaching, science, technology, and social work, to name but a few. The specification has been designed to be as free as possible from religious, political or other forms of bias and can be studied by those of any religious/denominational persuasion and none.

#### Specification followed: CCEA Specification

www.ccea.org.uk/religious\_studies

#### What will I study?

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AS 7	Foundations of Ethics
AS 8	Introduction to the Philosophy of Religion
A2 7	Global Ethics
AZ 8	Themes in Philosophy of Religion

#### How will I be assessed?

Unit	Assessment Format	Duration	Weightings
AS 7	A written examination paper consisting of two extended essays from a choice of four.	1h 20m	50% of AS 20 % of A Level
AS 8	A written examination paper consisting of two extended essays from a choice of four.	1h 20m	50% of AS 20 % of A Level
A2 7	A written examination paper consisting of two extended essays and one synoptic assessment essay.	2h	50% of A2 30% of A Level
A2 8	A written examination paper consisting of two extended essays and one synoptic assessment essay.	Zh	50% of A2 30% of A Level

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Teacher: Mrs S McDonald, Mr R Moore, and Mr A Sweeney

## SOFTWARE SYSTEMS DEVELOPMENT

#### Why study Software Systems Development?

The AS and A2 GCE Advanced level specifications should encourage students to:

- develop a genuine interest in software systems development with a focus on programming
- develop an understanding of systems approaches and modelling techniques to support software development
- develop software development skills that will prepare them for work in today's software industry

This should form a basis for progression into further learning, including progression from AS to A2 and/or employment. Students should have a sound knowledge of GCSE Information and Communications Technology (or equivalent). It is imperative that prospective students have a high degree of computing experience and possess a keen interest in programming and software development.

Career prospects for those with Software Programming / Development are excellent. A Software Systems Development qualification can lead to a wide range of careers including computer programming, app design, software design, games design, CAM engineering, CAD design and IT related posts in many other career sectors.

Specification followed: CCEA Specification

http://www.ccea.org.uk/software\_systems\_development/

#### What will I study?

TTHE T			
AS 1	Introduction to Object Oriented Development In this unit you will learn about the principles of object oriented programming		
	which assists students to appreciate the benefits of developing applications in this environment.		
AS 2	Event Driven Programming In this unit you will have the opportunity to implement and develop object oriented technologies in		
	an event driven environment. This unit is internally assessed.		
AZ 1	Systems Approaches and Database Concepts In this unit you will learn about the reasons for systems development,		
	fundamental systems analysis and design concepts, design methodologies, project management concepts and testing strategies		
	that assist the systems development process.		
A2 2	Implementing Solutions In this unit you will have the opportunity to: design and implement a solution to a given problem using		
	the skills acquired in previous modules. Your solution will implement an RDMS through an event driven programming		
	environment. This unit is internally assessed with a pre-release case study.		

#### How will I be assessed?

Unit	Assessment Format	Duration	Weightings
AS 1	External	2hrs	50% of AS
	examination paper		20% of A Level
AS 2	Internal Assessment of a project		50% of AS
			20% of A Level
AZ 1	External examination paper	Zhrs	30% of A Level
A2 2	Internal Assessment of a project		30% of A Level

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Teachers: Dr P Addis, Mr L Forrest

## SPORTS SCIENCE AND THE ACTIVE LEISURE INDUSTRY

#### Why study Sports Science?

This is an academic course with some practical application, providing an excellent foundation for pupils wishing to take a degree in Sports Science or pursue a career in Physiotherapy or as a teacher of Physical Education.

The Active Leisure Industry covers the following five subsectors: Sport and Recreation, Health and Fitness, Playwork, the Outdoors and Caravans. However, this specification concentrates on only two subsectors: Sport and Recreation and Health and Fitness.

For entry to the course Grade A in GCSE Physical Education is recommended. Alternatively, at least Grade B in Biology or Grade BB in Double Award, together with a genuine interest in sport/ fitness (entrants must presently be playing competitive sport on a regular basis) will be acceptable.

#### **Specification followed:**

www.ccea.org.uk/sports\_science/

#### What will I study?

	Unit 1: Fitness and Training for Sport
AS 2	Unit 2: The Active Leisure Industry: Health, Fitness and Lifestyle
AZ 1	Unit 3: Event Management in the Active Leisure Industry
AZ 2	Unit 4: The Application of Science to Sports Performance

#### How will I be assessed?

Unit	Assessment Format	Duration	Weightings
AS 1	Internal Assessment		24% of total A Level marks
AS 2	Written Paper	2 hours	16% of total A Level marks
A2 1	Internal Assessment		36% of total A Level marks
A2 2	Written Paper	2 hours	24% of total A Level marks

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Teachers: Mr G Beggs and Mr G Thompson

# **TECHNOLOGY & DESIGN**

## Why study Technology & Design?

Technology and Design offers pupils the opportunity to:

- develop and sustain their own creativity to investigate and analyse problems and propose design solutions;
- develop a critical understanding of the influences of the processes and products of design and technological activity;
- apply knowledge, understanding and the skills of design production processes to a range of technology activities and develop an understanding of industrial practices;
- use ICT to enhance their design and technological capability.
- Technology and Design provides a solid foundation for study at a higher level in a range of engineering and industrial design areas of practice. It is strongly advised that pupils who wish to study this subject should have achieved a B grade or higher at GCSE Technology and Design (CCEA Electronic Systems specialism) and be proficient at freehand drawing and CAD.

There are two assessment objectives, Design and Making, which are contained within the teaching and learning units.

#### Specification followed: CCEA Specification

www.ccea.org.uk/technology

#### What will I study?

AS 1	Design and Materials
	Electronic and Microelectronic Control Systems
AS 2	Product development (Coursework)
A2 1	Electronic and Microelectronic Control Systems
A2 2	System Design and Manufacture (Coursework)

#### How will I be assessed?

Unit	Assessment Format	Duration	Weightings
AS 1	Design and Materials	2 x 1 hour external examinations	50% of AS
	Electronic and Microelectronic	Both sat on the same day	20% of Advanced GCE
	Control Systems		
AS 2	Product Development (Coursework)	45 hour coursework	50% of AS
		Internally assessed and externally moderated	20% of Advanced GCE
A2 1	Electronic and Microelectronic	2 hour examination	30% of Advanced GCE
	Control Systems		
A2 2	System Design and Manufacture	60 hour coursework	30% of Advanced GCE
	(Coursework)	Internally assessed and externally moderated	

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Teachers: Mrs L Shufflebottom & Mr A Irvine

## **TRAVEL & TOURISM - BTEC LEVEL 3 NATIONAL EXTENDED CERTIFICATE**

The <u>BTEC Level 3 National Extended Certificate in Travel & Tourism</u> is designed to support learners who are interested in learning about the travel and tourism industry alongside other fields of study, with a view to progressing to a wide range of higher education courses, not necessarily in travel and tourism-related subjects. It is a broad course encompassing a wide variety of topics, some of which are mandatory and others optional. Career Pathways include Air Hostess, Marketing in Travel & Tourism, Retail Management, Retail Travel Consultant and Teaching.

#### What skills and attributes do I need to be successful in this subject?

To be successful in Travel and Tourism you need to be organised as you will have assignments to complete to specific deadlines. You will develop skills such as problem solving, communication, teamwork and presentation skills.

#### **Course Components / Assessment**

The assessment of the course is currently assessed through a combination of coursework and external examinations.

Specification followed: Pearson

https://qualifications.pearson.com

#### What will I study and how will I be assessed:

Unit 1	The World of Travel and Tourism (External Examination 25%)
Unit 3	Principles of Marketing in Travel and Tourism (Internal Coursework 25%)
Unit 2	Global Destinations (Externally Assessed Assessment 33%)
Unit 9	Visitor Attractions (Internal coursework 17%)

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#### Grading

Distinction*	(equivalent to A* at A level)
Distinction	(equivalent to A at A level)
Merit	(equivalent to C at A level)
Pass	(equivalent to E at A level)

Teachers: Miss S Hughes, Miss A Murdock

## Additional BTEC Information & Options Timetable

Information on all the BTEC courses can be found at the following web addresses. In all cases, the BTEC offered will be at Level 3 and equivalent to an A level. BTEC grading differs from A level grading. In BTEC there are 4 categories of grade: Distinction\* (A\* grade, A level), Distinction (A grade, A level), Merit (C grade, A level) and Pass (E grade A level).

## BTEC Level 3 National Extended Certificate in Engineering

https://qualifications.pearson.com/content/dam/pdf/BTEC-Nationals/Engineering/2016/specification-and-sampleassessments/spec-btec-nat-eng-extcert.pdf

#### **BTEC Level 3 National Extended Certificate in Travel and Tourism**

https://qualifications.pearson.com/content/dam/pdf/BTEC-Nationals/Travel-and-Tourism/2019/Specification/btec-13-natext-cert-in-travel-and-tourism.pdf

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## BTEC Level 3 National Extended Certificate in Agriculture

https://qualifications.pearson.com/content/dam/pdf/BTEC-Nationals/Agriculture/2017/Specification%20and%20Sample%20assessment%20material/btec-13-nat-diploma-inagriculture-specification.pdf

## BTEC Level 3 National Extended Certificate in Construction and the Built Environment

https://qualifications.pearson.com/content/dam/pdf/BTEC-Nationals/Construction-and-the-Built-Environment/2017/specification/btec-I3-nat-ext-cert-in-const-and-the-built-environ-spec.pdf

# **Options Timetable**

# Current Royal School, Armagh Pupils

January/February:	Information presentation to pupils
26th February:	Information evening for pupils and parents
2nd April:	Parents and pupils meet with a member of staff to discuss the subject options available and to identify what further information is required in order to finalise A Level choices.
3rd April:	Deadline for submission of Options Form
August:	Issue of all GCSE results followed by confirmation of options choices

There will be an opportunity for small amendments to be made to your choices in the light of GCSE results.

# New Pupils Entering Royal School, Armagh

Potential pupils should visit the school as early as possible on results day, when we can confirm a place, discuss your options, and agree the best pathway for you.

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For more information, please contact Mr David Cunningham, Head of Careers.

#### Email address: dcunningham148@c2kni.net



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