BELFAST ROYAL ACADEMY

Subject Information

Key Stage 3 to GCSE

September 2021

Course Requirements

COURSE	Specific Subjects required at GCSE	Specific Subjects required at A-LEVEL	Tests required by some universities
ACCOUNTANCY	Maths B grade at English GCSE often required	Some require Maths	
ACTUARIAL STUDIES	Maths (A) English.	Maths Some recommend Further Maths.	
ARCHITECTURE	Maths Ability in Art (Portfolio essential) English Science*** subject may be required.	Some require Maths and Physics. Art is also desirable. (Sometimes a requirement)	
COMPUTING AND INFORMATION TECHNOLOGY	Maths	Any Computing Mathematical, Scientific or Technological subject.	
DENTISTRY*	English Maths Science*** A*/A/B stipulated in certain subjects.	Chemistry (A) **PLUS** Biology or other science subject.	
EDUCATION*	English Maths (+ English Lit. for Scottish Colleges) + Science*** subject.	Depends on "main" subject. Plus one or 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.
LAW	English Maths	None. Candidates offering Art and Music need to check if these are accepted.	

MEDICINE*	English Maths Science*** A good spread of science and non-science subjects will be required at high grades.	Chemistry + Maths or Physics or Biology. Most require Chemistry and two of these three. Most require Biology to at least AS level.	 CRB clearance required.
NURSING/ MIDWIFERY*	English Maths Science***	Science subjects required for some courses.	Occupational Health check. CRB clearance.
OCCUPATIONAL THERAPY	English Science*** Maths	In general, none. A social science subject is preferred.	Occupational Health check. CRB clearance.
OPTOMETRY	English Maths Science*** Good Grades.	2/3 Sciences Recommended – at least 2 (sometimes 3) of AS Maths, Physics, Chemistry, Biology.	
PHARMACY	Science*** Maths English	Chemistry and one or two other sciences (some specify Biology).	
PHYSIOTHERAPY	Science*** Maths English Many universities specify A/B grades in specific subjects.	2 Sciences preferred. Some require Biology.	Occupational Health check. CRB clearance.
PODIATRY	Maths Science***	Ulster University requires one Science subject. Some require, others prefer, a Science subject. Biology usually required C- preferred.	HqB Tuberculosii Tetanus immunisation. CRB clearance.
PRODUCT DESIGN	Maths Science (Physics preferred) Art and Design (Industrial Design, Interaction Design, Service Design)	Maths and at least one other from either a science, Technology and Design or Art and Design	

RADIOGRAPHY	English Maths Science***	Science (1 or 2) (Biology usually required or preferred.)	Visit to or Work Experience in Hospital imaging department.
SPEECH THERAPY	English Maths 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.	
VETERINARY MEDICINE**	English Maths (Min. Grade B) Science***	Chemistry Some also require Biology.	Health Checks.

***** **Extensive work experience required.**

****** **Extensive work experience required in both large and small breeds.**

***** The particular science(s) required will vary within individual universities; it is recommended that all three sciences are studied at GCSE level.**

Useful Websites:-

www.ucas.ac.uk and www.student.uk.com and www.ucas.com
www.unifrog.com
www.hotcourses.com
www.ukcoursefinder.com
www.unionview.com

(See Careers Section on the website for more useful links)

Labour Market Information

It is important to be aware of the future opportunities in the labour market. Information on a range of labour market issues including employment and unemployment, earnings, redundancies as well as information on businesses within the UK is available from the Department of Trade and Industry. http://www.detini.gov.uk/

Another useful source of information is the Alliance of Sector Skills. This is an organisation comprising all 25 licensed Sector Skills Councils (SSCs) in the UK. It provides links to the individual websites of the Sector Skills Councils who each provide their own research information pertinent to their particular sector. http://www.sscalliance.org/.

2020 NI 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.

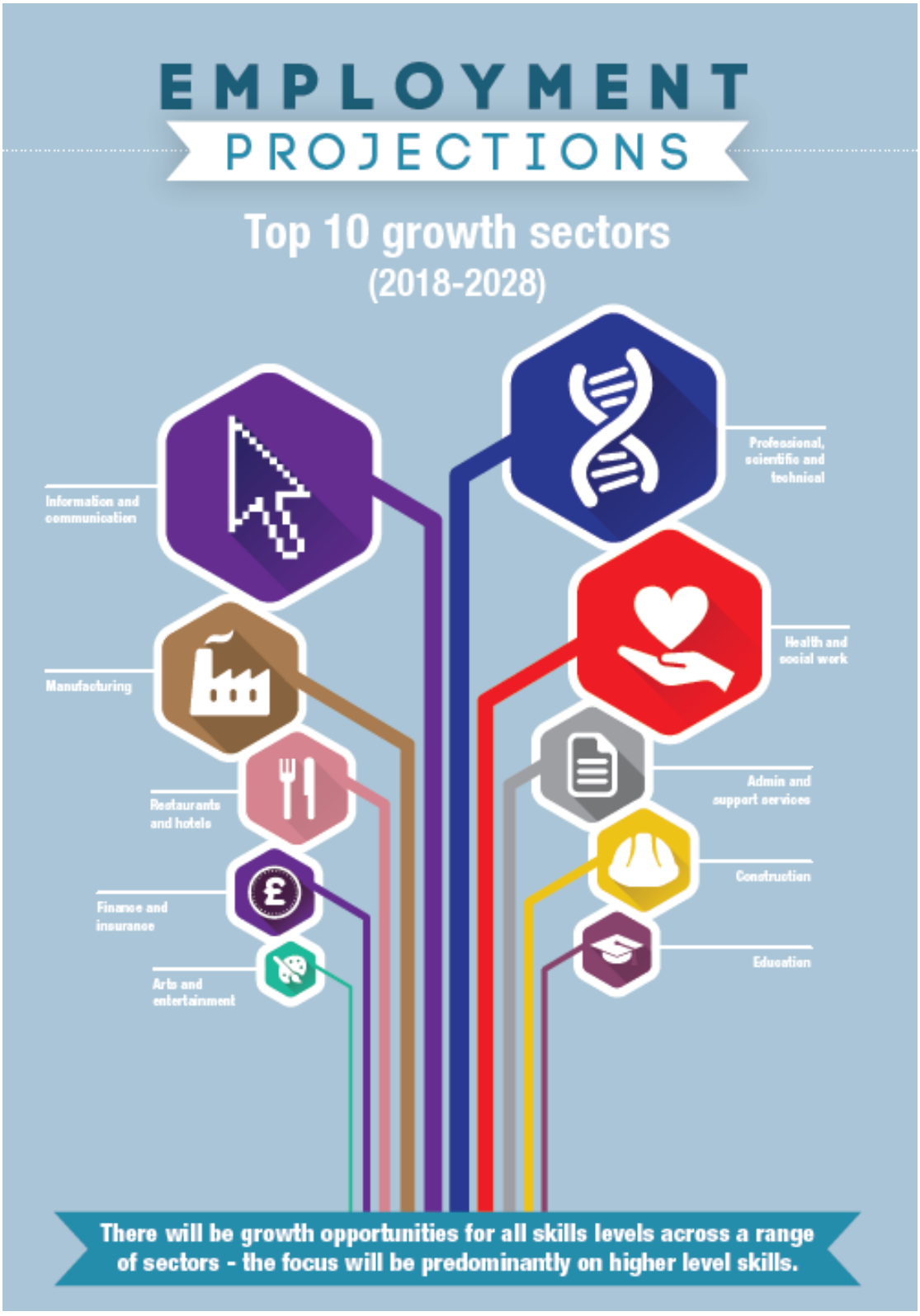
"Every job matters": A principle of "Every job matters" has been adopted for the Skills Barometer to reflect the contribution all jobs make to the economy. As the NI Executive endeavours to reduce levels of unemployment and economic inactivity, it is important society places a value on all employment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

Summary Report

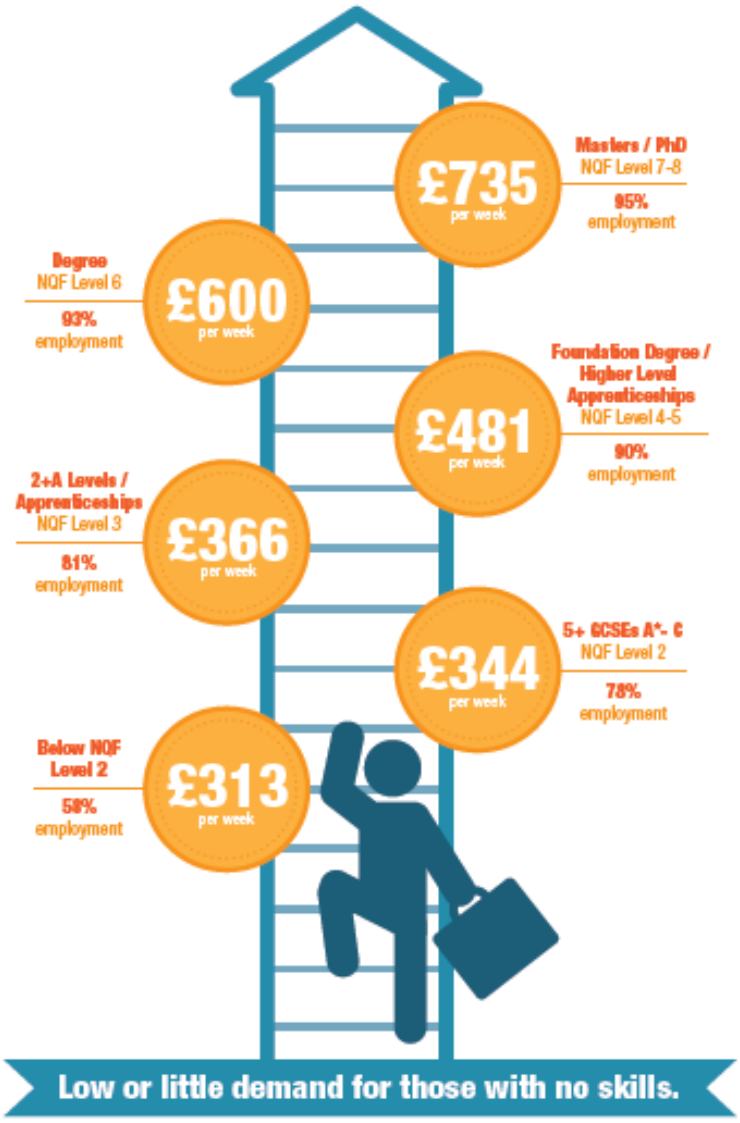
https://www.economy-ni.gov.uk/sites/default/files/publications/economy/Skills-Barometer-2019-Summary-Report.pdf


EMPLOYMENT
PROJECTIONS
Top 10 growth sectors
(2018-2028)
Information and communication
Professional, scientific and technical
Manufacturing
Health and social work
Restaurants and hotels
Admin and support services
Finance and insurance
Construction
Arts and entertainment
Education
There will be growth opportunities for all skills levels across a range of sectors - the focus will be predominantly on higher level skills.

IMPORTANCE OF SKILLS

The more you learn the more you earn

By continuing into further and higher level education you can greatly increase your earnings potential and employment prospects.



Low or little demand for those with no skills.

Art and Design

Structure and Brief Content of the Course

The Art and Design department follow the CCEA GCSE specification. This specification promotes continuity and coherence within the study of art, craft and design. It provides opportunities to build on the skills and capabilities developed through the delivery of the Key Stage 3 curriculum in Northern Ireland. It meets the needs of pupils who intend to continue their studies in Art and Design at GCE level.

It provides pupils who complete this course successfully with improved employment opportunities in related areas as well as relevant skills – based in knowledge and experience of the work practices of individuals and organisations.

Art gives us a way to be creative and express ourselves. It makes us more thoughtful and well-rounded human beings. Art consists of form and content. Form means the elements of art, the principles of design and the actual, physical materials that the artists has used. Content means what the artist meant to portray, what the artist actually did portray and how we react to what the artist created.

Craft is about making things. Craft is about objects, the artists who make them and the people who use them.

Design has a positive impact on people. Everything around us is designed, and design decisions impact on nearly every part of our lives. Design turns an idea into something that is desirable, viable, commercially successful and adds value to people's lives.

There are various disciplines within art, craft and design. We provide pupils with a variety of 2D and 3D media, processes, skills, techniques and new technologies.

The CCEA Art and Design specification is made up of two units:

- **Component 1:** The Coursework 60% – (Controlled Assessment)
  - Part A: Exploratory Portfolio (25% - 50 marks)
  - Part B: Investigating the Creative and Cultural Industries (35% - 70 marks)

- **Component 2:** The Externally Set Assignment (40%- 80 marks)

Both units are internally assessed and externally moderated.

Pupils must submit work for assessment in more than one discipline and meet the four assessment objectives. We recommend and promote visits to galleries, museums, universities and art college open days and their exhibitions. We request pupils to research independently with the use of libraries and the internet, information on local and international Artists/Craftsmen/Designers. The department provides the opportunity for all GCSE art and design pupils to attend the True Colours exhibition held by CCEA to give pupils an insight into how other pupils from other schools have incorporated the world of the Artists/Craftsmen/Designers into their work. Pupils are given the opportunity to develop ICT skills; their preferred learning styles; assess personal skills and identify their on-going achievements.

We invite past pupils, university lectures and external agencies to talk to pupils about Art and Design career routes and established job positions in the world of Art and Design.

What skills and qualities a pupil will gain by studying Art and Design?

- the ability to work independently
- creative problem-solving

- resourcefulness
- technical and expressive skills
- analytical and experimental skills
- aesthetic understanding and critical judgement
- decision making
- oral and written communication
- visual presentation, information and research skills
- self-motivation and self-management
- organisation and planning
- ICT skills, particularly creative software
- an appreciation of diversity
- critical awareness of self and external factors and the ability to be reflective
- interpersonal and social skills
- working effectively with others
- practical skills in the use of a range of 2D/3D materials, techniques/ processes, machinery and equipment

Possible Entry/Progression routes/ Success stories

The Art and Design CEAIG notice boards provide relevant entry and progression routes for Art and Design career paths. Pupils have access to a more extensive range of Art College/University prospectuses and Art and Design Career Job Profiles, available in ledger files in the Art and Design computer room. Pupils are encouraged to use the Art and Design computer room to search for Art and Design work experience and careers online. A Level Art and Design provides pupils with the opportunity to study a diverse range of Further and Higher Education courses that include GNVQ, ND, HND, BTEC, Art and Design Foundation courses, BA hons and BDes Degree courses. These could progress to Art and Design teaching Diplomas, MA and PHD qualifications.

Art and Design Career Paths include: Architect, Interior Designer, Set Designer, Display Designer/Visual Merchandiser, Colour Therapist, Costume Designer, Prop Designer, Sculptor, Fine Artist, Model Maker, Graphic Designer, Technical Illustrator, Freelance Ceramics Designer/Pottery Maker and Ceramic Industry Designer/Pottery Maker, Photographer, Illustrator, Animator, Careers in Art Galleries/Museums, Art Therapist, Fashion Designer, Florist, Furniture Designer,

Hairdresser, Product Designer, Landscape Designer, Make-up Artist, Packaging Designer, Painter and Decorator, Art and Design Teacher, Careers in Advertising, Web Designer, Author/Designer, Nursery School/Early Years Teacher, Sign Writer, Traditional Crafts Worker, Special/Visual Effects Designer, Games Designer, Textile Designer, Cartoonist, TV/Film Director, Medical illustrator, Art and Design technician, Art and Design tutor/lecturers with their specialised art and design disciplines.

Past Pupils Success Stories

Nicola Glass – Designer for Gucci and director at Kate Spade New York, Glenn Stewart – Director of McCadden Design (Graphic Design and Visual Communication Company N. Ireland), Kim Mawhinney – Art and Design Curator of the Ulster Museum, Katherine Tennant – Art and Design teacher, Suzanne Garuda – Owner of Garudadesign (Her past interior design commissions include interiors for the Sultan of Brunei's Palace and the Kremlin Moscow), Francis McCrory – Fine Artist, received awards for 'Best Emerging Artist', the Diageo Award in 2006 and again in 2007 with the prestigious KPMG Award for Best Emerging Artist at the Royal Ulster Academy Exhibition. He had sell out shows at Belfast's Belmont Tower, Emer Gallery and highly successful solo exhibitions at Gormley Fine Art Gallery. His work is included in a number of major private collections. Timothy Millen – Awarded 1st class MFA (Master of Fine Art), now freelance artist, photographer and designer (CD and promotional Graphic designer for the Music Group, 'Duke Special') Stephanie Clarke – Senior Textile Print Designer and Trend Forecaster for H&M (Hennes and Mauritz). Rebecca McClelland - lecturer/tutor at Ulster University Art College Belfast, Professor Paul Seawright and

Donovan Wylie - International Photographers and Photography lecturers, Mike McQueen – Course Director of Architecture at Ulster University Art College Belfast.

Biology

Course structure and content:

GCSE Biology consists of three Units of work:

Unit 1 - Cells, Living Processes and Biodiversity

This unit is worth **35%** of the total grade and can be examined in a 1 hour 15 minute paper in June of Form 4. It is a written examination with a number of compulsory structured questions that provide opportunities for short answers, extended writing and calculations.

Unit 2 (Form 5) – Body Systems, Genetics, Microorganisms and Health

This unit is worth **40%** of the total grade and examined in a 1 hour 30 minute paper in June of Form 5. Like Unit 1 it is a written examination with a number of compulsory structured questions that provide opportunities for short answers, extended writing and calculations.

Unit 3 (Form 4 & 5) - Practical skills

This unit is worth **25%** of the total grade. Booklet A (7.5%): students complete two externally marked pre-released practicals in the final year of study (2 hours). Booklet B (17.5%): Externally marked written examination (1 hour) including extended writing and calculations within a practical context.

Skills and qualities you will gain from studying this subject

Biology at GCSE encourages students to be inspired, motivated and challenged by a broad, coherent, practical, satisfying and worthwhile course of study. It will encourage you to develop curiosity about the living world and provide insight into and experience of how science works. We hope you will engage with biology in your everyday life and through studying this subject be able to make informed choices about further study in biology-related courses and about your career.

As a student of GCSE Biology you will develop your knowledge and understanding of this subject, understand how biology influences our society and appreciate the nature of science and the scientific process. In addition, practical skills will be expanded through the relationship between hypotheses, evidence, theory and explanations while having the opportunity to utilise and develop skills of enquiry, communication, mathematics and ICT within the context of biology.

What can you do with Biology?

In the past we have had many pupils pass through the doors of Biology. Some have taken up careers directly related to Biology such as Biological Sciences, Marine Biology, Biomedical Sciences, Medicine, Dentistry, Stratified Medicine, Veterinary Medicine, Physiotherapy and Nursing to name but a few and yet others have taken this subject for the enjoyment of learning about the human body and the world of living things even though not essential for their career progression.

Progression routes

GCSE Biology is a prerequisite of AS and A-Level Biology as well as AS and A2 Life and Health Science. Students wishing to study AS Biology must achieve at least an A grade in Biology and at least a B grade for Health and Life Science. You should carefully consider your potential career pathways since courses or jobs may require AS or A-Level Biology/ Life and Health and so you would need to pick up Biology at GCSE level. In addition universities and other institutions may look very closely at your GCSE grade profile and so every effort must be made to do well in this subject.

Business Studies

Course content:

Unit	What's covered	Assessment

Unit 1
Starting a business
	• **Creating a business**
	  ○ Entrepreneurs
	  ○ Business resources
	  ○ Business ownership
	  ○ Public sector
	  ○ Social enterprise
	  ○ Business location
	  ○ Business aims and objectives
	  ○ Stakeholders
	• **Production**
	  ○ Types of production
	  ○ Methods of manufacturing
	  ○ Quality assurance
	  ○ Health and Safety
	• **Marketing**
	  ○ Market research
	  ○ Marketing mix
	  ○ Competition
	  ○ Customer service
	  ○ International business
	  ○ E-business
	  ○ M-business
		One paper
		
		1hr 30 mins
		
		40%

Unit 2
Developing a business
	• **Human resources**
	  ○ Recruitment
	  ○ Selection
	  ○ Training
	  ○ Motivation
	  ○ Appraisal
	• **Business growth**
	  ○ Success and failure
	  ○ Business growth
	• **Finance**
	  ○ Sources of finance
	  ○ Financial statements
	  ○ Ratios
	  ○ Break even
	  ○ Cash flow forecasts
		One paper
		
		1hr 30 mins
		
		40%

Controlled assessment **Unit 3** **Planning a business**	**Business plan** <u>Booklet A Teacher led</u> 12 hrs support and research Followed by 1 hr written communication of findings	**Booklet B** 1 hr 20%

Business studies give you a broad overview of how the commercial world operates. It covers the whole range of functions to give a firm foundation which can be applied in any sector or industry. As well as developing the essential transferable or 'soft' skills that employers demand, you will build technical knowledge and skills that can be used in many aspects of life.

The strengths cultivated through Business Studies include:

- understanding organisational behaviour and structure;
- critical thinking and analytical skills, alongside familiarity with evaluative techniques;
- a creative problem-solving approach and sound, logical decision-making skills;
- effective and persuasive written and oral communication skills;
- numeracy and the ability to research, interpret and use business and financial data and information;
- self-reliance, initiative and the ability to manage time and projects;
- appreciation of the causes and effects of external changes.

These attributes are much sought after by employers, since they build commercial awareness and allow employees to start contributing to the organisation quickly.

Career options

Business Studies graduates are found in almost every employment sector but around 23% typically enter employment in commercial, industrial and public sector management. Commercial roles exist in all types of industry, including:

- retail
- distribution
- hospitality and leisure
- financial institutions
- sales
- marketing
- production management

Another 20% of Business Studies graduates enter employment in business and finance professional roles. Relevant opportunities include those in:

- professional services (chartered accountancy, business consultancy, law and tax)
- finance (banking, city markets, insurance)
- major industrial and manufacturing organisations.

Significant numbers of business graduates also head for the media sector and take up administrative positions.

Chemistry

The specification for this academic year builds on the broad objectives of the Northern Ireland Curriculum. It promotes continuity, coherence and progression within the study of Chemistry. A course based on this specification will help prepare students for the study of Chemistry at AS and A2 levels. For those progressing directly into employment, a GCSE in Chemistry is relevant not only in the field of science but also to areas of commerce and public service that value problem-solving and practical skills.

Course structure and content:

GCSE Chemistry consists of three units of work:

Unit 1 - Structures, Trends, Chemical Reactions/Quantitative and Chemistry Analysis

This unit is worth **35%** of the total GCSE grade and examined in a 1 hour 15 minute paper.

It is a written examination with a number of compulsory structured questions that provide opportunities for short responses, extended writing and calculations.

Unit 2 (Form V) – Further Chemical Reactions, Rates and Equilibrium, Calculations and Organic Chemistry

This unit is worth **40%** of the total GCSE grade and examined in a 1 hour 30 minute paper.

Like unit 1, it is a written examination with a number of compulsory structured questions that provide opportunities for short responses, extended writing and calculations.

Unit 3 (Forms V) – Practical Skills

This is divided into two sections:

Booklet A is worth **7.5%** of the total GCSE grade.

It consists of various practicals which are carried out in the school laboratories.

Booklet B is worth **17.5%** of the total GCSE grade.

It consists of a range of compulsory questions that require short responses, extended writing and calculations, all of which are set in a practical context.

Chemistry at GCSE encourages students to be inspired, motivated and challenged by a broad, coherent, practical, satisfying and worthwhile course of study. It will encourage you to develop your curiosity about the material and physical worlds and it provides you with an insight into and experience of how science works. We hope you will engage with Chemistry in your everyday life and make informed choices both about further study in Chemistry and related disciplines and about your career. Throughout this course you will develop your knowledge and understanding of Chemistry and understand how Chemistry affects our society. You will also develop your skills in communication, mathematics, ICT and expand your practical skills.

What are the career prospects with Chemistry?

Many pupils have studied Chemistry and taken up careers such as chemical engineering, dentistry, medicine, forensic scientist, biochemistry, pharmacy, research scientist and teaching to name but a few. Others have studied this subject because of their enjoyment of the practical aspects associated with Chemistry and have been able to develop transferable skills that will benefit them in vocational training and employment.

Progression Routes

The grade you obtain at GCSE will determine whether you can choose Chemistry for AS Level. GCSE Chemistry is a prerequisite of AS and A-Level Chemistry as well as AS and A2 Life and Health Science. Students wishing to study AS Chemistry must achieve at least an A grade in Chemistry and at least a B grade for Life and Health Science. Universities and other institutions may look very closely at your GCSE grade profile and so every effort must be made to do well in this subject. For pupils who intend to study Biology at AS level, GCSE Chemistry is recommended. In

addition to Chemistry being a pre-requisite for a significant number of courses (outlined within the introduction of this booklet and below), the transferrable skills obtained from AS Chemistry are applicable across a wide range of non-scientific disciplines and within employment.

Chemistry is currently mentioned as a necessary prerequisite by some or all universities in the following areas:

AGRICULTURE

ANATOMY – PHYSIOLOGY

BIOCHEMISTRY

BIOLOGICAL SCIENCES

BIOPHYSICS

BOTANY

CHEMISTRY - with 78 combinations

BIOLOGICAL SCIENCES

PHYSICAL AND MATHEMATICAL SCIENCES

ENGINEERING AND TECHNOLOGY

ARTS AND EDUCATION

CHEMICAL ENGINEERING

DIETETICS

DENTISTRY

ENVIRONMENTAL SCIENCES

FOOD SCIENCE

GENETICS - ECOLOGY - BIOTECHNOLOGY

GEOLOGY

HEALTH inc. Nursing

MATERIALS SCIENCE

MEDICINE

MICROBIOLOGY

PHARMACOLOGY

PHARMACY

VETERINARY SCIENCE

Computer Science

OCR GCSE Computer Science course gets students working with real-world, practical programming techniques that give them a good understanding of what makes technology work. Developed collaboratively with teachers, industry and the wider computer science community, OCR made sure that this GCSE has built-in progression to further studies and is recognised as developing the skills that industry values.

Computer Science is a very practical subject – students will be able to use the knowledge and skills they learn in the classroom on real-world problems. It's also a highly creative subject that calls on learners to be inventive. To help develop this engaging, modern qualification, OCR talked to companies like Microsoft, Google and Cisco; organisations like Computing At School (CAS) and also teachers and academics.

Why choose this subject?

Computing is of enormous importance to the economy, and the role of Computer Science as a discipline itself, as an 'underpinning' subject across science and engineering, is growing rapidly. Young people need to develop skills that will enable them to pursue a career in Computer Science if they so choose, and which will also help them gain valuable skills for life - for example, in innovation, reasoning, logic, resourcefulness, precision, problem solving and clarity. These skills will enable them to become authors of computational tools rather than simply users. As adult workers, young people will be applying for jobs that have not yet been invented. Technology changes but the principles and concepts upon which they are built remain constant. A good grounding in Computer Science will teach young people how to deal with change later in life and play an active and effective role in the digital world.

The growth in the use of mobile devices and web-related technologies has exploded, resulting in new challenges for employers and employees. For example, businesses today require an ever-increasing number of technologically-aware individuals. This is even more so in the gaming, mobile and web related industries and this specification has been designed with this in mind.

A course in Computer Science offers candidates a unique opportunity to gain an understanding of how computers work and to create and troubleshoot computer programs for real-life purposes relating to their own personal interests. Computer Science develops valuable programming and computational thinking skills, which are increasingly relevant to a wide variety of jobs. Employers want workers with an understanding of rigorous principles that can be applied to changing technologies.

This GCSE specification encourages candidates to explore how computers work and communicate in a variety of contexts. There is ample opportunity for them to apply and consolidate their knowledge of computer programming by carrying out practical tasks that will develop their capacity for imaginative, innovative thinking, creativity and independence. They will develop the skills of design and evaluation, and they will test.

The qualification is split into three components:

COMPUTER SYSTEMS COMPONENT 1
(50% of total GCSE)

This unit is assessed through the completion of a written paper (1 hour 30 minutes) and the topics include:

- study how processors work
- investigate computer memory and storage
- explore modern network layouts and how they function
- build skills in the ever important realm of cyber security

- investigate how types of software are used within computer systems
- stretch wider comprehension of how computers and computing affect ethical, legal, cultural and environmental issues

COMPUTATIONAL THINKING, ALGORITHMS AND PROGRAMMING COMPONENT 2
(50% of total GCSE)

This unit is assessed through the completion of a written paper (1 hour 30 minutes) and the topics include:

- study fundamental algorithms in computer science
- build a firm foundation in programming techniques
- produce programs through diagrams
- thoroughly test programs and make them resistant to misuse
- explore Boolean algebra (AND, OR, NOT)
- understand how we store data within computers in binary form A

PROGRAMMING PROJECT COMPONENT 3

This unit is assessed through the completion of a Non-Exam Assessment and the topics include:

- use new-found programming skills on an independent coding project by solving a real-world problem of their choice
- the project is carried out under exam-like conditions

Digital Technology

ICT has launched as a new subject, 'Digital Technology' and from September 2017 CCEA has offered a new, up-to-date course to prepare students with a wide range of digital skills. Completing this GCSE allows the students to gather a range of theoretical knowledge as well as a practical skills applicable to a number of prospective careers.

Structure and Brief Content of the Course

This qualification is available as a digital authoring qualification focusing on multimedia, GCSE Digital Technology (Multimedia)

- All students study Unit 1: Digital Technology.
- The content relates directly to current software development trends and the study of modern technology based systems.
- The specification develops practical skills using a range of generic software or in an object-oriented environment.

CONTENT		ASSESSMENT	WEIGHTING	AVAILABILITY
Compulsory core	Unit 1: Digital Technology	External written examination 1 hour	30%	Summer from 2018
Multimedia units	Unit 2: Digital Authoring Concepts	External written examination 1 hour 30 mins	40%	Summer from 2019
	Unit 3: Digital Authoring Practice	Controlled assessment	30%	Summer from 2019

Specification Summary

This specification aims to encourage students to:

- acquire and apply knowledge and understanding of digital technology in a range of contexts;
- acquire creative and technical digital technology skills and apply these in a range of contexts;
- develop and evaluate digital technology based solutions to solve problems;
- develop their understanding of current and emerging technologies and the social and commercial impact of these technologies;
- develop their understanding of the legal, social, economic, ethical and environmental impact of digital technology;
- recognise potential risks when using digital technology and develop safe, secure and responsible practice; and
- develop the skills needed to work collaboratively.

Why choose this subject?
It's a good time to be working in IT and computing. Research by e-skills UK shows that the sector is one of the fastest-moving and most dynamic in the UK – currently employing 1 in 20 of us. It's estimated that over half a million new entrants will be needed to fill jobs in this sector over the next five years.

There are opportunities for IT and computing graduates across all industries, including retail, financial services, telecommunications, broadcast media, digital media, manufacturing, transport, tourism, the public sector and healthcare – with strong growth and demand in cyber security, mobile development, cloud computing and the management of big data.

The specification develops practical skills using a range of generic software or in an object-oriented environment. It provides a sound basis for further study in both GCE Digital Technology and GCE Software Systems Development.

There are **three** units for this qualification:

Unit 1: Digital Technology (30% of total GCSE)
External written examination - 1 hour
In this unit, students explore a range of digital technologies available for data storage, manipulation, presentation and transfer. They also evaluate the importance of data security and data legislation. Topics include:

- Representing Data (data, information, storage units and data types)
- Representing Images (pixels, resolution, bitmap & vector images and streaming)
- Representing Sound (sample rate and analogue to digital conversion)
- Portability
- Software (system, utility and application software)
- Database Applications (database objects, structure, validation and data analytics)
- Spreadsheet Applications (spreadsheet key elements, data modelling, charts and macros)
- Computer Hardware
- Network Technologies (types of networks, WWW, network resources and topologies)
- Cyberspace, network security and data transfer
- Cloud Technology
- Ethical legal and environmental impact of digital technology on wider society
- Digital Applications (Gaming, E-commerce, online banking and online training)

Unit 2: Digital Authoring Concepts (40% of total GCSE)
External written examination - 1 hour 30 mins
In this unit, students gain an understanding of the concepts in the development of digital systems.
Topics include:

- Designing solutions (prototypes, documentation, storyboarding, data modelling)
- Digital development considerations (accessibility, cross platform compatibility)
- Multimedia applications (multimedia authoring, scripting, HTML, multimedia elements)
- Database development (structure, SQL, complex reports, mail merge, macros and data integrity)
- Significance of testing and developing of appropriate test plans
- Evaluation of digitally authored systems against a set of user requirements

Unit 3: Digital Authoring Practice (30% of total GCSE)
Controlled assessment
In this unit, students design, develop and test digital multimedia systems. Topics include:

- Designing solutions using appropriate tools
- Building a solution (multimedia application and data handling application)
- Testing a solution (test plan, test data, user testing)
- Evaluating a solution (reflecting on user requirements, results from testing, possible improvements)

Drama

The GCSE course is split into three components:

- Components 1 and 2 PRACTICAL WORK
- Component 3 WRITTEN EXAMINATION

The table below summarises the content of the GCSE Drama course:

Content	Assessment	Weighting
Component 1: Devised Performance	This unit is assessed by **controlled assessment** which is split into **two parts**. Part 1: **Devise and act** (for at least 5 minutes) in a group performance (30 marks) Part 2: Complete a **student log** (20 marks) Internally marked and externally moderated	Performance: **15%** Student Log: **10%**
Component 2: Scripted Performance	This unit is assessed by **controlled assessment.** Students select and interpret a published play script Act in a group performance Teachers mark tasks Externally moderated	**35%**
Component 3: Knowledge and Understanding of Drama	This unit is assessed by a **written examination**. **1 hour 30 minutes** You answer three questions using one set text. (You can bring an unmarked copy of the set text into the examination.)	40%

The two Controlled Assessment pieces involve developing the skills of teamwork, organisation and evaluating performance. Pupils will have regular practical classes and a variety of drama and rehearsal strategies are learnt.

Career paths include: Actor, Arts Administration, Choreographer, Composer, Creative Therapy, Dancer, Director, Costume Designer, Events Management, Lighting Technician, Make-up Artist, Musician, Producer, Props Maker, Radio/TV Broadcaster, Script Writer, Set Designer, Sound Technician, Special Effects Adviser, Stage Hand, Stage Manager, and Teacher.

Economics

Economics is the study of the how we decide what to make, who makes it and who gets to eat it!

Structure and Basic Content of the Course

Basic Economic Ideas	▪ Basic Economic Problem ▪ Resources and Goods ▪ Specialisation
Producing and Consuming	▪ Demand, Supply and Price Determination ▪ Competition and Growth ▪ Costs and Revenue ▪ Market Failure
Financial Capability	▪ Money and Financial Products ▪ Managing Personal Finances ▪ Business Finance ▪ Financial Services Industry
Managing the Economy	▪ Circular Flow of Income ▪ The Private and Public Sectors ▪ Government Economic Objectives ▪ Correcting Market Failure ▪ Economic Growth ▪ Unemployment ▪ Inflation ▪ Government Policy Instruments
Trade, Aid and Development	▪ Trade ▪ Globalisation ▪ Exchange Rates ▪ European Union

Assessment

Paper 1 lasts one hour and is worth 40 percent of the final award. Students write a structured report based on a pre-release case study. The case study is available to students from January in the year of the examination.

Paper 2 lasts two hours and is worth 60 percent of the final award. This exam has a range of different question types: short answer and data response questions (which are compulsory) and one essay from a choice of four.

An Ideal Economics Pupil

- **A Communicator** The majority of learning takes place through classroom discussion and those who benefit most from this will be those who take an active role.
- **A logical thinker** Much of Economics is logical and, typically, those pupils who are good at Mathematics are good at Economics, but there is no significant mathematical component to the course and writing skills are important.

Careers in Economics

- Three of the top five salaried jobs (on average) are economics based.
- Economics is the third highest average earning degree in the UK and has the top average earning course (Economics at Cambridge).
- The vast majority of careers are in a broadly business and economics field, the importance of a basic knowledge of economics is vital.

English Language

For **CCEA English Language** pupils will complete **two written assignments** for **Controlled Assessment**, **at least three speaking and listening** tasks, and **two exam papers**. Controlled Assessment is worth **40%** of the final mark, while the remaining **60%** will be made up of the external examination. The breakdown of assessment is as follows:

Unit 1 Writing for Purpose and Audience and Reading to Access Non-Fiction and Media Texts

External written examination

Untiered

1 hour 45 mins

Students respond to five tasks.

30%

Unit 2 Speaking and Listening Controlled assessment

Untiered

Teachers assess the tasks, and CCEA moderate the outcomes.

20%

Unit 3 Studying Spoken and Written Language Controlled assessment

Untiered

Teachers assess the tasks, and CCEA moderate the outcomes.

20%

Unit 4 Personal or Creative Writing and Reading Literary and Non-Fiction Texts

External written examination

Untiered

1 hour 45 mins

Students respond to four tasks

30%

Opportunities for discussion and activities relating to careers arise through the study of fiction, drama, ICT and media texts at this level. The Department CEAIG notice board provides up-to date and relevant CEAIG information

for pupils, outlining both traditional academic and alternative pathways to careers. Career Paths include: Journalism, Advertising, Creative Writing, Broadcasting, Marketing, The Legal Profession, Teaching, Bookseller, Public Relations, Copywriting, Library Work, Publishing.

English Literature

For **CCEA English Literature** pupils will complete **one** assignment for **Controlled Assessment**, and **two exam papers**. Controlled Assessment is worth **20%** of the final mark, while the remaining **80%** will be made up of external examinations. The breakdown of assessment is as follows:

INTERNAL CONTROLLED ASSESSMENT

The Study of Shakespeare	**20%**	

EXTERNAL EXAMINATIONS

1) Prose:	**30%**	1 hour 45mins
2) Drama and Poetry:	**50%**	2 hours

The controlled assessment tasks develop skills such as managing information, decision-making and self-management. **Opportunities for discussion and activities relating to careers arise through the study of fiction, drama, ICT and media texts at this level.** The Department CEAIG notice board provides up-to date and relevant CEAIG information for pupils, outlining both traditional academic and alternative pathways to careers.

Career Paths include: Journalism, Advertising, Creative Writing, Broadcasting, Marketing, The Legal Profession, TV/Theatre directing, Bookseller, Public Relations, Copywriting, Library Work, Publishing, Technical Writing, Office Administration, Translating, Editorial Work, Secretarial Work, Teaching, Marketing, Literary Agent, Archivist, Indexer.

French

Structure and content of the course

The GCSE French Course covers the topics of relationships, local environment, activities, health and lifestyle, social issues, travel and tourism, environmental issues, media and communications, celebrations, school life, part-time jobs and future plans. Pupils develop the four skills of Speaking, Listening, Reading and Writing in French and learn the basic grammar of the language, including present, future and past tenses.

The skills and qualities a pupil will develop by studying French

Pupils who study French primarily develop the skill of communicating in another language, as well as knowledge of the life and culture of another country.
Amongst the general skills they develop, which will interest employers, are those of good written and verbal communication, research and analytical skills, and cultural awareness. In addition they will develop the skills of improving their own learning and performance, working with others and using ICT.

Careers open to pupils who study French

The most obvious careers for those who study French are teaching, translating and interpreting.
Other careers in which languages would be useful include law, finance and business, where companies and institutions often operate internationally; the civil service and in particular the diplomatic service; careers with the European Commission; journalism and the broadcast media; transport and tourism, including work in hotel management, with airlines or cruise ships, or with travel agencies.
Languages also open doors in computing and engineering. In addition, work would be possible in any occupation in France or a French-speaking country.

Entry routes for these careers

To teach or follow a career in translation or as an interpreter, a degree in French, followed by a postgraduate qualification, would be necessary.
Those wishing to enter the law might be able to take a degree in Law and French. Financial institutions and businesses will recruit language graduates to work with overseas clients. It may be possible to take a degree in French and Business or an aspect of Business. Otherwise a postgraduate qualification in an aspect of finance or in sales and marketing might be useful, though financial institutions and businesses often provide their own training.
The civil service recruits from amongst graduates by competitive examination and interview, as does the European Commission. Those wishing to enter journalism or the broadcast media would require a degree in the language and a postgraduate qualification or training in journalism.
Careers in transport and tourism would be available to those with a language to A level or degree level, who then take a vocational diploma or degree.

German

Structure and content of the course

The GCSE German Course covers the topics of relationships, local environment, activities, health and lifestyle, social issues, travel and tourism, environmental issues, media and communications, celebrations, school life, part-time jobs and future plans. Pupils develop the four skills of Speaking, Listening, Reading and Writing in German and learn the basic grammar of the language, including present, future and past tenses.

The skills and qualities a pupil will develop by studying German

Pupils who study German primarily develop the skill of communicating in another language, as well as knowledge of the life and culture of another country.
Amongst the general skills they develop, which will interest employers, are those of good written and verbal communication, research and analytical skills, and cultural awareness. In addition they will develop the skills of improving their own learning and performance, working with others and using ICT.

Careers open to pupils who study German

The most obvious careers for those who study German are teaching, translating and interpreting.
Other careers in which languages would be useful include law, finance and business, where companies and institutions often operate internationally; the civil service and in particular the diplomatic service; careers with the European Commission; journalism and the broadcast media; transport and tourism, including work in hotel management, with airlines or cruise ships, or with travel agencies.
Languages also open doors in computing and engineering. In addition, work would be possible in any occupation in Germany.

Entry routes for these careers

To teach or follow a career in translation or as an interpreter a degree in German, followed by a postgraduate qualification, would be necessary.
Those wishing to enter the law might be able to take a degree in Law and German. Financial institutions and businesses will recruit language graduates to work with overseas clients. It may be possible to take a degree in German and Business or an aspect of Business. Otherwise a postgraduate qualification in an aspect of finance or in sales and marketing might be useful, though financial institutions and businesses often provide their own training.
The civil service recruits from amongst graduates by competitive examination and interview, as does the European Commission. Those wishing to enter journalism or the broadcast media would require a degree in the language and a postgraduate qualification or training in journalism.
Careers in transport and tourism would be available to those with a language to A level or degree level, who then take a vocational diploma or degree.

Geography

Course structure and content:

FORM 4 - Autumn Term: Earthquakes/ Weather; Spring Term: Climate / Rivers; Summer Term: Coasts / Settlement/ Fieldwork
FORM 5 **-** Autumn Term: Fieldwork skills/Settlement / Urbanisation; Spring Term: Population / Development; Summer Term: Managing our environment
Examinations: 100 %- The examinations will assess knowledge / understanding and skills connected with the above topics. (No Controlled Assessment)

Skills and qualities you will gain from studying Geography: We believe that you should take Geography because it helps you: **to** understand the environment at local and global level; **to** know your world through fieldwork; **to** make wise decisions balancing the environment and development concerns; **to** develop a wide range of skills such as presenting arguments or map skills; **to** use computers and other technology for analysis / presentation; **to** understand other cultures in the UK and throughout the world and **to** know where places in the world are.

What can you do with Geography? Geography will help you to be more aware of the everyday life and problems of the people who live around you, in other parts of the UK, and across the world. Geography is a highly topical subject, ever changing as world events unfold. When you see newspaper items or television reports, for example, about a controversial new runway extension for the George Best airport in Belfast, then your Geography course will help you make sense of what is going on. Geography will make you a more aware citizen. Choosing Geography with other subjects which you enjoy could lead to a more interesting future career. Some combinations are listed below along with the type of jobs for which you could expect to qualify:

GCSE GEOGRAPHY with…		**Potential Careers**
Biology, Chemistry, Physics	→	Medicine, Agriculture, Environmental Health, Estate Management, Nature Conservation
History	→	Law, Archaeology, Librarian, Museum Curation, Archivist, Publishing
Modern Foreign Languages	→	Business, Bilingual Secretary, Overseas Marketing, Leisure and Tourism.
Mathematics	→	Civil Engineering, Meteorology, Mining, Navigation, Photography
Art and Design, Technology	→	Advertising, Architecture, Cartography, Landscape Design
Various subjects	→	Leisure services, Sport and Recreation Management, Social and Youth Work, Surveying, Transport Services, Banking, Civil Service, Police Service, Health Service

Progression routes: Normally a grade B at GCSE is required to continue studying Geography at A Level. Many of our GCSE students continue with the subject with several continuing their study at university.

History

Subject knowledge

GCSE History consists of three taught modules (two Unit 1 modules and one Unit 2 module).

Unit	Topic	Year Studied
Unit 1: Section A	Life in Nazi Germany, 1933-1945 **OR** Life in the USA, 1920-1933	Form 4
Unit 1: Section B	Britain, Northern Ireland and Ireland, 1965-1998	Form 4 and Form 5
Unit 2	International Relations, 1945-2003	Form 5

Skills

The GCSE History programme builds on the broad areas of the Northern Ireland Curriculum. It involves students:

- studying historical content in various contexts;
- seeking to understand and explain issues; and
- working to develop a broad range of historical skills, including the evaluation of contemporary and later interpretations of aspects of the past.

The GCSE History programme:

- provides students with opportunities to explore key political, economic and social events that have helped shape today's institutions, governments and societies.
- contributes to the study of citizenship by offering opportunities for students to study and evaluate systems of government.
- contributes to students' understanding of spiritual, moral and cultural issues by providing them with opportunities to explore the values, attitudes, perceptions and ideologies that have shaped human behaviour, endeavour and achievement in the past.
- contributes to environmental education by providing opportunities to study how men and women in the past have interacted with their environments and how the environment has contributed to and shaped historical events.

Careers

The GCSE History programme prepares students for a range of careers, related to both the historical context and the wider employment context. It allows students to develop skills (e.g. communication and information management) that are transferable and highly valued by employers.

Progression routes

The GCSE History programme prepares students for the demands of studying History at Advanced Level. Over half of the pupils who study GCSE History at the Academy choose to study History at Advanced Subsidiary (AS) Level. Normally a grade B at GCSE is required to continue studying History at AS Level.

Home Economics (Food and Nutrition)

GCSE Home Economics: Food and Nutrition has two components:

Component 1: Food and Nutrition, 2 hour external examination, 120 marks

Component 2: Practical Food and Nutrition controlled assessment, practical activity and written report, internally marked, externally moderated, 120 marks

The course gives opportunities to learn about the science behind food – the nutritional content of foods, current nutritional guidelines and catering for the differing dietary needs of the people in today's society. Students will be expected to plan, prepare, cook and serve meals and dishes in accordance with the current guidelines. The controlled assessment will allow students to demonstrate practical skills they have acquired during the course.

Why study Food and Nutrition?

You will gain a knowledge and understanding of:

- The food we consume – where it comes from and how it is produced.
- The foods we should eat to maintain good health.
- The differing needs of various groups of people.
- Prominent health issues in today's society.
- How to shop effectively.
- Why people choose certain foods.
- Affordability when it comes to food and food choice.

You will also develop practical food preparation, cooking and presentation skills.

Areas of study

Food provenance	Food processing and production
Food and nutrition for good health	Energy and nutrients
Macronutrients	Micronutrients
Fibre	Water
Nutritional and dietary needs	Priority health issues
Food safety	Factors affecting food choice
Resource management	Being an effective consumer when food shopping

Career Paths include

Food related industries, Food Writer/Photographer, Health Promotion, Food Scientist, Environmental Health, Teaching, Health and Social Care, Leisure and Tourism, Nursing.

Latin

Structure and brief content of the course

Latin Language
Pupils will learn to:
● translate a passage of Latin prose into English accurately
● comprehend a passage of Latin and answer questions in English on it
● demonstrate knowledge of the derivation links between Latin and English
● translate short sentences from English into Latin using the prescribed DVL and the prescribed syntax and accidence
OR
● recognise, analyse and explain the prescribed syntax and accidence (as listed in Appendix B) within a short passage of Latin.

Latin Literature
Part 1
The pupils will read Latin sources on a theme (at the moment the theme is Superstition and Magic). They will have to:
● demonstrate knowledge of the prescribed passages and accompanying source material
● select, analyse and respond to aspects of literary style
● show awareness of the cultural and social context of the prescribed material.
● select and evaluate evidence from throughout the theme to respond to an extended evaluative question.
Part 2
The pupils will read, analyse and evaluate a passage or passages of Latin literature which form a narrative, together with a passage or passages of narrative in English which extend the storyline.
(at the moment the text is Pliny's account of the Eruption of Vesuvius).
They will have to:
● demonstrate knowledge of the prescribed passages in Latin and English
● select, analyse and respond to aspects of literary style
● show awareness of the cultural and social context of the prescribed material.
● select and evaluate evidence from throughout the narrative to respond to an extended evaluative question.

Accidence and Syntax Requirements
Accidence
Regular nouns of all five declensions
The forms of the irregular nouns listed in the Defined Vocabulary List
Regular verbs of all four conjugations:
present, future, imperfect, perfect and pluperfect indicative active
present, imperfect and perfect indicative passive and deponent, 3rd person singular and plural
imperfect and pluperfect subjunctive active
present infinitive active
present and perfect participles
imperative active: singular and plural
Irregular verbs
1. *sum, possum*:
present and imperfect indicative
present infinitive
imperfect subjunctive

2. *eo, fero, volo, nolo*:
present, imperfect, perfect and pluperfect indicative active
imperfect and pluperfect subjunctive active
present infinitive active
present participle
imperative active: singular and plural
Regular adjectives of all the standard types
Comparative and superlative forms of all the adjectives listed in the Defined Vocabulary List
Regular adverbs, including superlative forms but excluding comparatives
The forms of the pronouns and pronominal adjectives listed in the Defined Vocabulary List

Syntax

Standard uses of all cases
Expressions of time
The use of all prepositions listed in the Defined Vocabulary List
The use of the dative taken by verbs listed in the Defined Vocabulary List
Direct statements, questions and commands
Prohibitions with *noli*/*nolite*
Indirect statements, questions and commands
Uses of the present active participle and perfect passive and deponent participles, excluding the ablative absolute
Conditional sentences (present and past open only)
Relative clauses with the indicative
Purpose clauses introduced by *ut/ne*
Result clauses
Temporal clauses introduced by the conjunctions listed in the Defined Vocabulary List
Causal clauses introduced by *quod* and *cum*
Concessive clauses introduced by *quamquam*

What skills and qualities will the pupil gain?

- Developing an increased awareness of the Latin language;
- Developing greater literary understanding of Roman times through appreciation of the narrative illustrating the background topics,
- Developing deeper historical understanding of life and society in ancient times

What can a pupil do with the skills and qualities gained?

- Increased awareness of Latin grammar will be a helpful tool in studying other languages, and in particular other Romance languages studied, such as French and Spanish.
- The study of Latin is also very beneficial for the study of Law, Scientific Subjects, English and History.

Progression routes

GCSE Latin prepares students directly for studying Latin at Advanced Level. It is also a very helpful tool in studying other languages as well as Law, Scientific Subjects, English and History. This year one of our A-Level students gained a place to read Classics at Oxford and last year, one of our Latin A-Level students went to Cambridge to study Modern Languages.

Mathematics

Structure/Content

GCSE

The course is divided into 4 main areas: Shape Space & Measure, Algebra, Data Handling & Probability, and Number.

There are school examinations in accordance with the school policy.

All students are enrolled for the CCEA Higher GCSE course and both the public examinations are currently taken at the end of Form 5. There are different combinations taken, as outlined below, which are all called Higher Level papers. There is no controlled assessment.

M4, M8 Grades A* – C ***These papers have to be taken to study Mathematics A-level***
M4, M7 Grades A – D
M3, M7 Grades B – E
M3, M6 Grades B – E

Students will study most of M3 or M4 in Form 4.
About 30 students will study M3, based on their Form 3 mark, and then go on to study M7 in Form 5. (This decision is emailed to parents in June of Form 3.)
All other students will study M4 and then go on and study M7/8 based on their Form 4 mark.

Further Mathematics

This is an additional GCSE for those who have shown an aptitude for Mathematics as demonstrated by their Form 3 School Examinations. We normally have 2 classes of about 60 students in total. Most of the GCSE Mathematics course is studied in Form 4 and the Further Mathematics course is studied in Form 5. One GCSE paper may be taken before the Summer of Form 5 but this decision is taken in Form 5.

It is divided into two parts: Pure and Applied.

Pure Mathematics is the study of some of the fundamental areas of modern Mathematics including Calculus and Trigonometry.

Applied Mathematics is the study of Statistics and Mechanics. Mechanics is the application of Newtonian ideas to problems involving forces and movement. Statistics is an extension of Data Handling & Probability from the GCSE course.

Students who are taking the Further Mathematics course sit the public examinations at the end of Form 5.

Skills

Mathematics allows a student to develop logical reasoning and analytical skills. Skills in each of the above topic areas are also developed. Independent learning is encouraged alongside the skill of working with others.

Future careers

Mathematics is an important subject for many fields of work some of which are: Science, Engineering, Finance, Accountancy, Statistics and Medicine. General mathematics skills are needed for many other fields of work from analysis of data to number work involving percentages.

Progression

Students can progress to A-level Mathematics: there is no requirement to have studied GCSE Further Mathematics to do this however an A grade is required at GCSE. Some students study A-level Mathematics in one year (Double Mathematics): entry to this course is based on students' success in the Form 5 GCSE Examinations in Mathematics and Further Mathematics.

Music

Examination board: CCEA

Essential criteria
A good pass at Grade 3 or above in a Practical Music Exam of the Associated Board of the Royal Schools of Music, Trinity College of Music or London College of Music (any instrument or voice).

Desirable qualities
Music is a subject which is open to all pupils at the end of Form 3 but care should be taken in determining suitability. The following could serve as a guide:
(i) A good Grade (75% or above) in Form 3 Summer Music Exam.
(ii) Grade 2 or Grade 3 standard in Theory of Music.
(iii) A good pass at Grade 3 level or above in a Practical Music Exam (any instrument or voice).
If a pupil is likely to achieve 2 of the above attainments by the end of Form 3 then they could attempt GCSE Music and obtain a good grade with consistent effort.

Course content
1. Listening: listening critically to a range of set works as diverse as Handel's Messiah, Irish Folk Music, Film Music and Rock Music.
2. Performing: as a soloist and as a member of a group. Although candidates will rehearse their practical pieces in school, parents and pupils are reminded that instrumental/vocal lessons must be organised by themselves either within or outside school. Pupils should aim to perform pieces of Grade 4 standard or above by the end of Form V.
3. Composing: the final portfolio of two pieces should last about four minutes. One piece will be a free composition and pupils will be encouraged to compose in a musical genre of their choice. The other composition will be based on a given brief from CCEA. Both compositions will demonstrate evidence of harmonic knowledge.

Assessment
Composing 30% Performing 35% Listening 35%

Special points
It is expected that all candidates will become members of school music groups such as the Senior Orchestra, Band, Chamber Choir, Boys' Choir, Big Band etc. This will improve their standard of musicianship, ensemble music-making and enhance their performance in GCSE. All GCSE pupils are members of the Senior Choir. It is important to remember that this is compulsory and will complement the learning that takes place in class for GCSE Music. Any pupil who cannot make this commitment should not sign up for the subject.

Careers
These activities not only develop specific music skills but are also great social events for pupils and the public performances develop teamwork and self- confidence. Learning to play an instrument can be an outlet for emotional expression, influence our moods and be therapeutic. It can entertain and inspire. It enhances the impact of the other arts, much of what we see in television and in films and computer games. It can provide intellectual stimulation, the challenge of mastery and emotional fulfilment. Within a society, it provides a means of communicating which goes beyond words and provides us with shared, unspoken understandings. The music industry is estimated to be the second highest generator of income in Western Europe and learning to play an instrument or to sing is currently perceived as important in preparing individuals to work as performers, educators, composers and arrangers, music therapists, journalists, librarians, publishers, retailers, promoters, administrators and instrument manufacturers and repairers. It is also seen as making an important contribution to the education of those wishing to pursue careers in TV and radio, as producers, in the record business, advertising, sound engineering, film editing and acoustic research. A musician with GSCE Music will have acquired a range of skills attractive to employers: the ability to work independently, to evaluate the significance of evidence, to discriminate, and to present arguments clearly and persuasively. In addition, through your extra-curricular music activities you'll have developed skills in multi-tasking numerous priorities to deadlines, teamwork, project/concert management, marketing, leadership, problem solving, even budgeting and fundraising.

Physical Education

The examining board is CCEA and the course is divided into three components:

Component 1: Factors Underpinning Health and Performance

Component 2: Developing Performance

Component 3: Individual Performances in Physical Activities and Sports

Students study the following:

- Concepts of health, physical fitness and skilled performance;
- Key influences that impact on balanced, healthy lifestyles and participation in physical activities;
- The impact of exercise and training on balanced, healthy lifestyles and physical fitness;
- Types of exercise and methods of training;
- Principles for developing physical well-being and physical fitness;
- Assessing and monitoring the development of physical health/well-being and peak physical performance;
- The effects of exercise, training and physical activity on the body;
- Health and safety issues;
- Exercise and training sessions; and
- Exercise and training programmes.
- Event management
- Mental health
- Social health

Students must complete two written examinations for GCSE Physical Education.

The first exam tests pupils knowledge in **Component 1**: Factors Underpinning Health and Performance, this paper carries 25% of the overall mark. The second exam tests their knowledge in **Component 2**: Developing Performance, this also carries 25 % of the overall mark**.**

CCEA set and mark the exam. It is available in summer only.

The exam tests students' knowledge and understanding of factors that affect the development of health, peak physical fitness and skilled performance.

The paper contains short answer and multi-part questions. All questions are compulsory. Students must recall, explain and apply concepts, facts, terminology, methods and principles.

They must also analyse, interpret and evaluate information and material.

Component 3: Individual Performances in Physical Activities and Sports, carries 50% of the overall mark.

(a) The quality of analysis and evaluation of performances.
Students are assessed on their evidence of:

- evaluating performances to identify strengths and areas for improvement;
- deciding and prioritising actions to further improve their performance of the skills; and
- monitoring and evaluating the effectiveness of carrying out these actions and the effectiveness of these actions.

(b) Improving the quality, efficiency and effectiveness of individual performances in physical activities
Students' competence is assessed by evaluating the quality, efficiency and
effectiveness of their individual performances in **three** different physical activities from at least two of these categories:

- athletic-type activities;
- dance-type activities;
- games-type activities;
- gymnastic-type activities;
- outdoor adventure-type activities; and
- specialist activities.

For one physical activity, students may be assessed on their performance in managing an event.

The skills and qualities a pupil will develop by studying physical education

Pupils who study Physical Education develop a wide range of skills. These include research, leadership, written and practical skills. Pupils learn the skills of independent learning and the importance of working with others. There is no other subject that successfully merges theory with practical activity.

Careers open to pupils who study Physical Education

There a huge number of careers open to those that study Physical Education. Broadcasting, watersports instructor, community sports coach, competition manager, dance instructor, disability sports development manager, events manager, extreme sports instructor, fitness professional, football coach, groundsman / greenkeeper, gym instructor, health promotion officer, journalist, marketing, nutritionist, performance analyst, P.E teacher, photographer, physiotherapist, referee, school sports co-ordinator, sports massage therapist, strength and conditioning coach, travel and tourism manager, women' s sports development manager. The many skills acquired throughout the GCSE course enable pupils to work successfully as a team which is essential for many career opportunities.

Entry routes for these careers

There are many and varied routes into these careers. Many of our students study Sports Studies or Sports Science at University. Those that wish to become Physical Education teachers would also complete a Post Graduate Certificate in Education. There are a large number of students that now study sports management and tourism related degrees which maps a growing sector of our economy. There are also students who use the skills they have acquired through GCSE level study to study non sport related courses such as journalism.

CRITERIA FOR ENTRY TO GCSE PHYSICAL EDUCATION

Essential criteria

1. Participate in **at <u>least one competitive major</u>** school sport and **<u>regularly</u>** play on **<u>the A team</u>** or equivalent in Form III
2. Be able to swim at least 200m and be prepared to participate in personal survival swimming lessons.
3. Be prepared to participate and fund an outdoor education course .

Desirable Criteria

1. Due to the examination content it is desirable that pupils are studying GCSE Biology
2. Due to the practical nature of the subject it is desirable that pupils participate in more than one major competitive school sport.

Please note that, due to the nature of this course, the class size is limited to 20 pupils. In the event that the course is over-subscribed, <u>preference in the first instance will be given to pupils with a history of participation in more than one major competitive school sport during Forms 1 to 3.</u> Preference may then be given to pupils who participate in another sport at national level or above.

Physics

Physics is about the observation, understanding and prediction of natural systems. At GCSE level the course is split into three units:

Content	Assessment	Weighting
Unit 1: Motion, Force, Moments, Energy, Density, Kinetic Theory, Radioactivity, Nuclear Fission and Fusion	An externally assessed written examination at the end of Form 5	37.5%
Unit 2: Waves, Light, Electricity, Magnetism, Electromagnetism and Space Physics	An externally assessed written examination at the end of Form 5	37.5%
Unit 3: Practical Skills	Controlled assessment	25%

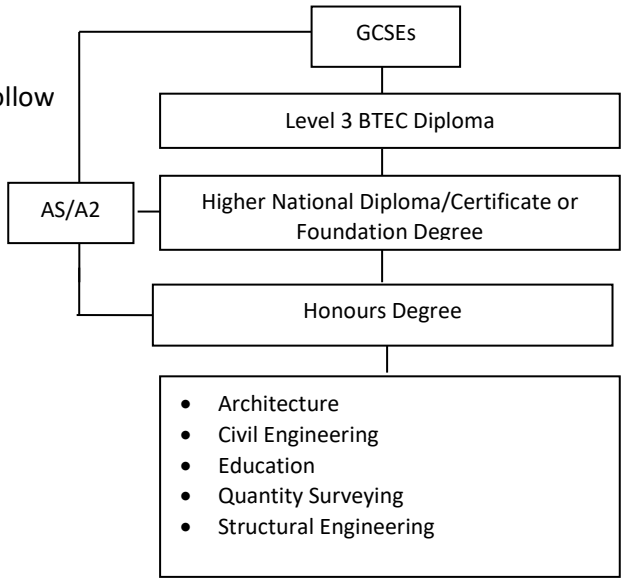
Studying Physics can help you develop a range of skills and personal capabilities that can be applied in many areas, including:

- Problem solving
- Reasoning
- Numeracy
- Communication
- Creativity
- Teamwork
- Resilience
- Self-management
- Decision making

These skills and capabilities are of great benefit in the following professions:

- Physicist
- Aeronautical engineer
- Architect
- Astronomer
- Astrophysicist
- Automobile engineer
- Building surveyor
- Civil engineer
- Electrical engineer
- Electrician
- Flight engineer
- Forensic scientist
- Geophysicist
- Laboratory technician
- Land Surveyor
- Materials scientist
- Medical physicist
- Meteorologist
- Mining engineer
- Motor mechanic
- Nuclear scientist
- Radiographer
- Structural engineer
- Physics teacher
- Optometrist
- Recording engineer

There are many possible routes you can follow in order to pursue one of the above professions, for example:



Religious Studies

Unit 1: St Mark's Gospel	1 hour 30 minutes written examination	50% of Full course GCSE (100% of Short course GCSE)	Form 4
Unit 2: Christianity: Ethics	1 hour 30 minutes written examination	50% of Full course GCSE (100% of Short course GCSE)	Form 5

Course Content

The Course of Study is CCEA Religious Studies.

Unit 1: Mark's Gospel is a study of the key events in the life of Jesus, considering the significance for Jesus, his disciples and for the Christian in the modern world. The examination at the end of **Form Four** results in a GCSE Short Course Award and 50% of the marks for a Full Course GCSE.

Unit 2: Christian Ethics involves the study of a number of key ethical questions e.g. the Right to Life, Medical Technology, Substance Abuse, The Environment, War and Punishment. Reasons for differing opinions and practices among Christians are discussed and other responses to these issues are considered. The examination at the end of Form Five provides 50% of the marks for the Full Course GCSE.

Development of Essential Skills

Both modules are designed to be relevant to life and provide opportunities for pupils to express their opinions on fundamental questions about faith and life. They help pupils become aware of issues of local, national and global concern and are consistent with the requirements of the Core Syllabus for Key Stage 4 Religious Studies.

Pupils will also have opportunities to develop important transferable skills. They will: research and manage information, think critically and flexibly, solve problems and make informed decisions, demonstrate creativity and initiative, work effectively with others, demonstrate self-management, evaluate their own performance and communicate effectively in oral, visual, written and ICT formats.

Progression

GCSE Religious Studies is a good foundation for further study of Religious Studies at A level and will help develop skills useful for other subjects including History, Government and Politics, Sociology, English Literature. Some of the issues raised in Unit 2 are also of interest to those wishing to study the Sciences or Geography.

Diverse Career Paths

Pupils who study A level Religious Studies progress to Careers in a wide variety of fields.

The Department CEIAG noticeboard illustrates the diversity of Career Paths followed by pupils who studied A level Religious Studies e.g. Law, Teaching, Business, Medicine, Dentistry, Pharmacy, Social Work, Nursing, Health and Social Care.

Spanish

Structure and content of the course

The GCSE Spanish Course covers the topics of relationships, local environment, activities, health and lifestyle, social issues, travel and tourism, environmental issues, media and communications, celebrations, school life, part-time jobs and future plans. Pupils develop the four skills of Speaking, Listening, Reading and Writing in Spanish and learn the basic grammar of the language, including present, future and past tenses.

The skills and qualities a pupil will develop by studying Spanish

Pupils who study Spanish primarily develop the skill of communicating in another language, as well as knowledge of the life and culture of another country.

Amongst the general skills they develop, which will interest employers, are those of good written and verbal communication, research and analytical skills, and cultural awareness. In addition, they will develop the skills of improving their own learning and performance, working with others and using ICT.

Careers open to pupils who study Spanish

The most obvious careers for those who study Spanish are teaching, translating and interpreting. Other careers in which languages would be useful include law, finance and business, where companies and institutions often operate internationally; the civil service and in particular the diplomatic service; careers with the European Commission; journalism and the broadcast media; transport and tourism, including work in hotel management, with airlines or cruise ships, or with travel agencies. Languages also open doors in computing and engineering. In addition, work would be possible in any occupation in Spain or a Spanish-speaking country.

Entry routes for these careers

To teach or follow a career in translation or as an interpreter a degree in Spanish, followed by a postgraduate qualification, would be necessary.

Those wishing to enter the law might be able to take a degree in Law and Spanish. Financial institutions and businesses will recruit language graduates to work with overseas clients. It may be possible to take a degree in Spanish and Business or an aspect of Business. Otherwise a postgraduate qualification in an aspect of finance or in sales and marketing might be useful, though financial institutions and businesses often provide their own training.

The civil service recruits from amongst graduates by competitive examination and interview, as does the European Commission. Those wishing to enter journalism or the broadcast media would require a degree in the language and a postgraduate qualification or training in journalism.

Careers in transport and tourism would be available to those with a language to A level or degree level, who then take a vocational diploma or degree.

Technology and Design

Structure & brief content of the course

GCSE Technology and Design is assessed as follows:

- Design & Manufacture Electronics Project (50%)
- Common Core Written Examination – 1 ½ hours (25%)
- Electronic and Microelectronic Control Systems Written Examination – 1 ½ hours (25%)

Much of the Common Core content has been covered in Form 3 so that this can be consolidated in Form 4.

Therefore, if you wish to study Technology at GCSE you **MUST** have studied Technology in Form 3.

Most of Form 5 is spent in the design and manufacture of a project and in the production of the design portfolio.

What skills and qualities will a pupil gain by studying this subject?

Pupils following this course must be able to work independently in the written and practical aspects of their coursework. A very wide range of **transferable skills** is developed e.g.:

- practical skills involving the safe use of a range of tools, machines and equipment, including a range of CAD / CAM – laser cutter, 3D printer and CNC router;
- researching and managing information effectively to investigate design issues;
- solving problems and making informed decisions;
- demonstrating creativity and initiative when developing ideas;
- working effectively with others;
- demonstrating self-management by working systematically, evaluating and improving own performance;
- demonstrating self-discipline by persisting with tasks;
- communicating effectively in graphic, written and ICT formats.

What can a pupil do with Technology and Design

Technology and Design is a STEM subject and so provides good support for a wide range of careers, particularly those involving Science, Technology, Engineering and Mathematics - indeed any occupation in which technology plays a part. The transferable skills are an asset to those pursuing careers in engineering, medical and technical areas. Anyone studying Technology and Design will develop sophisticated, transferable ICT skills through the use of a very wide range of software, facilitating careers in any area involving ICT. The creative aspects of the course will assist those considering a career in areas such as Product Design.

Progression routes

Studying Technology & Design at A Level provides an opportunity to study a surprisingly diverse range of Further and Higher Education courses. In the past few years, these courses have included: Aerospace, Civil, Electronic, Mechanical and Manufacturing Engineering, Biomedical Science, Interior and Environmental Design, Conservation Biology, Medicine, Architecture, Product Design, Computing and Information Technology.