

'PERSTARE ET PRAESTARE'

# Post 16 Course Content and Descriptions

2024-2026



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#### **BTEC Level 3 National Extended Certificate in Agriculture**

#### **Course Structure**

A BTEC Level 3 Extended Certificate in Agriculture is the equivalent of one A Level. The course is modular, with students taking four subjects over two years. The units cover a broad range of subjects and applications. Coursework includes practical and project work and assignments based on realistic workplace situations and activities.

#### Units

- Professional Working Responsibilities
- Farm Livestock Husbandry
- Managing Environmental Activities in Agriculture
- Applied Agricultural Farming Practice

#### **Course Delivery**

The course will be delivered Monday 11.15 - 12.45, Wednesday 1.30 - 3.25 and Thursday 9.00 - 10.25 in the Erne Campus.

#### **Key Features**

- Focus on a vocational context and on development of specific knowledge and skills for the land-based sector
- Resources include local case studies of diversified land-based production systems and businesses, a renewable farm associated with SouthWest College and renewable energy demonstration projects.
- Students also visit relevant DAERA Focus Farms to explore best-practice in the land-based sector
- Work experience with an employer in the sector.

#### **Assessment**

Each unit will be assessed and graded individually with an overall grade for the qualification awarded on completion. Assessment is by internally assessed coursework and externally assessed examination.

#### **Skills Developed**

- Livestock and grassland practical management skills
- Enterprise and business development
- Specific knowledge of diversified land-based activities

#### **Entry Requirements**

Minimum 4 GCSEs (grade C or above). A waiting list may be applied, subject to demand.

Student needs to check that the course meets entry requirements for any intended university.



# Art & Design

#### Overall view of the course

As a visual language, essential for communication and expression, Art & Design is as important as the development of written and verbal skills. The need to understand the world through visual means would seem more acute than ever; images transcend the barriers of language and enhance communications in an increasingly globalised world. Art and Design has creative, expressive, and educational value; it is fundamental in translating, changing, and analysing the world.

The course is comprised of four units: two at AS and two at A2 level. Students choose one of the titles below for study for each unit, and they can choose the same or different titles for AS and A-Level:

- Art, craft, and design (a broad-based course exploring practical and critical/contextual work through a range of 2D and/or 3D processes and media associated with two or more of the titles below)
- Fine art
- Graphic communication
- Textile design
- Three-dimensional design
- Photography

The below illustrates areas of study within the associated disciplines

Fine Art	Graphic Communication	Textile Design	Three- dimensional design	Photography
<ul> <li>drawing and painting</li> <li>Mixed media, including collage and assemblage</li> <li>Sculpture</li> <li>Installation</li> <li>Printmaking</li> <li>Moving image and photography</li> </ul>	<ul> <li>Advertising</li> <li>Illustration</li> <li>Communications and computer graphics</li> <li>Branding, packaging and/or signage design</li> <li>Multimedia</li> <li>Film and video</li> <li>Animation</li> <li>Typography</li> <li>Computer generated imagery (CGI), web design, app design, and/or computer aided design (CAD)</li> </ul>	<ul> <li>Expressive textiles</li> <li>Constructed textiles</li> <li>Printed textiles and surface design</li> <li>Textile installation</li> <li>Recycled or sustainable textiles</li> <li>Fashion design</li> <li>Costume design, including accessories</li> <li>Fashion accessories</li> <li>Textiles for interior design</li> <li>Textile-based millinery and shoe design</li> <li>Textiles heritage techniques</li> <li>Future textiles</li> <li>Textiles CAD</li> </ul>	<ul> <li>Domestic and utilitarian ceramics</li> <li>Decorative and aesthetic ceramics (functional or in response to a brief)</li> <li>Architectural design</li> <li>Furniture design</li> <li>Product design</li> <li>Stage and set design (TV, theatre, film, and gaming)</li> <li>Interior and landscape design</li> <li>Jewelry design and body adornment</li> <li>Sculptural commissions</li> <li>Assemblage</li> <li>Threedimensional CAD processes</li> </ul>	<ul> <li>Fine art photography</li> <li>Staged photography</li> <li>Portraiture</li> <li>Constructed image (still life, man-made objects, or nature-based stimuli)</li> <li>Landscape (sense of place, urban, rural, or coastal-based stimuli)</li> <li>Documentary photography, narrative and sequential photography and/or photojournalism</li> <li>Fashion photography</li> <li>Film and video</li> <li>Animation (stop motion)</li> <li>Video installation</li> </ul>

#### **Subject Content**

#### AS Component 1: Experimental Portfolio - 50% of AS, 20% of A Level

The contents of the portfolio will be determined by the nature of the course of study. Students should produce a collection of materials that exemplifies work carried out during the AS course. They can present this as sketchbooks, workbooks, journals, work mounted on sheets, test pieces, samples, storyboards, models, and maquettes. There is no restriction on the scale of work produced. Students should carefully select, organise, and present work to ensure that they provide evidence of meeting all three assessment objectives.

#### AS Component 2: Personal Response - 50% of AS, 20% of A Level

All four assessment objectives are assessed in this unit, but Assessment Objective 4 (Outcome) is weighted more heavily than the other three assessment objectives. Students develop a personal solution or design brief in response to the theme provided in the stimulus paper. They produce a Statement of Intent to mark the beginning of Unit AS 2. Students may carry out additional work or research as necessary, but assessment is weighted towards presenting an outcome. The outcome may be started at any time during this period and is brought to completion during a 10-hour controlled test.

#### A2 Component 1: Personal and Critical Investigation - 60% of A2, 36% of A Level

This unit includes both practical and written investigations and includes contextual research. We issue a theme in a stimulus paper at the beginning of the A2 course. Building on the skills and interests developed at AS level, students develop a personal investigation based loosely on an idea, issue, subject or concept inspired by this broad theme and including investigation into the work of other practitioners. They respond to the theme through their own contextual and practical research. Students present the written investigation as an A4 word-processed essay of 1000–2000 words.

#### A2 Component 2: Thematic Outcome - 40% of A2, 24% of A Level

Students respond to a theme that we issue in a stimulus paper at the beginning of the A2 course. Students develop a personal solution independently or create a design brief. They produce a Statement of Intent to mark the beginning of Unit A2 2. Students may carry out additional work or research as necessary, but assessment is weighted towards presenting an outcome. The outcome must be brought to completion during a 15-hour controlled test.

#### **Career Opportunities**

Art and Design provides career opportunities in a wide array of industries. Fine artists could progress to teaching, restoration, craftwork, painting, museum work, and art auctioneering. Graphic communication specialists find work in web and digital design, advertising and marketing, graphic design for print and packaging, and branding and multimedia. The textile design industry covers fashion design and textiles, domestic and interior design, industrial textile design, and costume and set design for film, television, and theatre. Three-dimensional designers progress into architecture and environmental design, product design, automotive design, ceramics and sculpture, jewelry, and 3D digital design and printing. Photographers can find work in fine art photography, journalism, advertising and marketing, film and television, and content creation.

# ANNIKITEN BOTAL GRAMMAR SCHOOL

# **Biology**

Biology is a challenging AS/A2 Level for those with an interest in the subject. Students learn about the building blocks of life, living organisms, biological concepts, and the value of biology in society. Through studying A Level Biology, students develop communication, information technology, numeric and problem-solving skills. They learn how to work in teams and through designing and carrying out investigations they develop their ability to draw conclusions and make decisions. This approach helps students to develop a questioning mind, self-confidence, and an ability to express opinions based on knowledge.

#### Aims of the course

Studying Biology encourages pupils to:

- Widen essential knowledge and understanding of key concepts;
- Develop an understanding of the scientific method, carry out practical tasks and present their findings in different formats;
- Demonstrate a deeper appreciation of, and an understanding of, how science works;
- Develop confidence in various skills, including independent learning, creative thinking, practical, mathematical and problem solving;
- Appreciate how society makes decisions about scientific issues;
- Be aware of the advances in technology relevant to Biology;
- Show knowledge and understanding of facts, principles and concepts from different areas of biology and how they relate to each other.
- Sustain and develop their enjoyment and interest in biology.

#### **Course content**

The course is demanding with a focus on technical terminology, molecular structure and a great emphasis on the application of detailed knowledge and understanding. The CCEA specification is followed and includes Northern Ireland perspectives, particularly with respect to biodiversity strategies. There are six assessment units, three units completed at AS Level and a further three at A2 Level.

#### **Course outline**

Unit	Topic	Assessment	Weighting
AS Unit 1	Molecules and Cells	External examination 1hr 30 minutes	37.5% (15% A Level)
AS Unit 2	Organisms and Biodiversity	External examination 1hr 30 minutes	37.5% (15% A Level)
AS Unit 3	Practical Skills in AS Biology	External examination 1hr 15 minutes Internal practical assessment	25% (10% A Level)

A2 Unit 1	Physiology, Co- ordination and Control, and Ecosystems	External examination 2hrs 15 minutes	24%
A2 Unit 2	Biochemistry, Genetics and Evolutionary Trends	External examination 2hrs 15 minutes	24%
A2 Unit 3	Practical Skills in Biology	External examination 1hr 15 minutes Internal practical assessment	12%
All modules re	•	istical knowledge, but more so at students also participate in a field	

#### **Career opportunities**

Biology is essential for many careers and courses in the Biological and Environmental Sciences. It is also highly recommended for careers in Medicine, Veterinary, Dentistry, Pharmacy, Physiotherapy, Microbiology, Research, Forensic Science, Clinical Science and many more. The skills gained from studying Biology are transferable and will be beneficial in non-biological pathways.



# **Business Studies**

#### Aims of the course

This qualification engages students in the study of a range of business topics impacting on today's society. Students will take a holistic approach to studying the diverse nature of business organisations. The qualification is underpinned by three core business issues: globalisation, digital technology, and stakeholder influence. The qualification will require students to develop decision making skills and engage in critical thinking and analysis of core business functions, which will equip them for further study and employment in business-related areas.

#### **Course content**

**Unit AS 1: Introduction to Business -** This unit introduces students to the business world. It begins, as many businesses do, with the entrepreneur and what motivates individuals to develop business enterprises. Students are expected to become familiar with different business ownership structures and the key stakeholder groups which may have an interest in how a business is managed. Students must acquire a critical understanding of the importance of quality and its significance in the competitive marketplace, including the production process, and the recruitment and training of a quality labour force. Students should appreciate the impact of management and leadership styles on employee motivation and business operations.

**Unit AS 2: Growing the Business** - Students will understand the role of technology in growing a business and how to assist with decision making. They must also understand the impact of competition on a business. Students also acquire a critical understanding of the marketing process, marketing strategy and the use of E-Business. Students will build an appreciation of the role of accounting and financial information in business decision making and financial control.

**Unit A2 1: Strategic Decision Making** - Students will be expected to identify business objectives and the potential for these to conflict with those of various stakeholder groups. Students will be able to analyse and evaluate stakeholder management strategies. Students will gain an insight into business planning and the need to manage risk and uncertainty when developing business strategies. They must also be able to analyse the importance of accounting and financial information in making strategic business decisions.

**Unit A2 2: The Competitive Business Environment** - This unit examines the macroeconomic framework within which businesses operate. Students are expected to evaluate the impact of globalisation on business activities. Students will develop an appreciation of the importance of ethics and sustainability on business decision making and culture. They will also evaluate the influence of stakeholders on business operations. The unit examines how businesses are affected by and react to change within the dynamic and technology driven business environment. Assessment for this unit consists of an external examination.

#### Specification at a glance

Content	Assessment	Weightings
<b>AS 1</b> : Introduction to Business	External written examination 1 hour 30 minutes 2 compulsory structured data responses (40 marks each)	50% of AS 20% of A level
<b>AS 2</b> : Growing the Business	External written examination 1 hour 30 minutes 2 compulsory structured data responses (40 marks each)	50% of AS 20% of A level
<b>A2 1</b> : Strategic Decision Making	External written examination 2 hours 5 compulsory structured data response (90 marks)	30% of A level
<b>A2 2</b> : The Competitive Business Environment	External written examination 2 hours 6 compulsory structured data response (90 marks)	30% of A level

## **Career opportunities**

Many students choose to continue studying Business Studies at university either in the pure form, or in combined courses. Courses ranging from Marketing, Economics, Management, Retailing, Enterprise, Finance and Accountancy all draw heavily on the concepts taught in A Level Business Studies. The subject is also proving increasingly popular as a subsidiary component of more specialist degrees ranging from Engineering to Foreign Languages (the latter also allowing for studying abroad). Overall Business Studies can be considered an ideal course to introduce students to the issues and problems businesses face in the real world, providing a useful basis to enter a wide range of occupations.



# Chemistry

#### Aims of the course

Chemistry is one of the principal sciences that make the world what it is today. Life as we know it wouldn't be the same without Chemistry. Some of the contributions of Chemistry to the modern world are as follows:

- Agriculture fertilizers, herbicides, pesticides etc.
- Medicine drug development, anaesthetics, antiseptics etc.
- **Food Industry** preservatives, flavourings etc.
- Materials synthetic fibres, plastics, cosmetics, dyes etc.

The A level course is divided into two parts.

- Year 13 AS Chemistry (40% of the A level qualification).
- Year 14 A2 Chemistry (60% of the A level qualification).

#### **Course content**

AS level Chemistry is completed during Year 13 and is an introduction to the foundations of Chemistry. AS-level Chemistry includes learning about atomic structure, bonding, the periodic table, some organic chemistry, energy in chemistry and chemical equilibrium, amongst others. You will also be assessed on your understanding of practical techniques carried out during the year. After Year 13 you will have a large degree of Chemistry knowledge. Having an AS-level in Chemistry broadens your career choice. Many universities see AS-level Chemistry as very desirable, particularly if you have a good range of A-level subjects. After successful completion of the AS course in Year 13 you may wish to continue with Chemistry studies in Year 14 and obtain the full A level. The A2 modules are much more demanding than those completed in Year 13 and include further organic chemistry and more detailed studies in kinetics, equilibrium, energetics, and redox systems. Although demanding, an A level in Chemistry is recognized as a major achievement. Potential employers value the analytical and conceptual skills that are developed during the study of Chemistry. Such skills, coupled with the ability to work in a meticulous and accurate manner, enable Chemistry students to pursue careers within, or outside, the vast area of science.

#### **Career opportunities**

Possible career and course options available to you and with your A-level Chemistry qualification include Medicine, Pharmacy, Veterinary Science, Chemistry, Biochemistry, Food Science/Nutrition, Forensic Science, Biological/Engineering careers, Optometry, Microbiology, Natural Sciences, Pharmacology and Physiology. Careers and courses that find Chemistry desirable include Food Technology, Nursing, Physiotherapy, Radiography, Paramedical courses, Law and Zoology.



# Digital Technology

#### Why study Digital Technology?

Digital Technology explores the future of information systems. The influence of Digital Technology is widely observable in all aspects of our lives, continuing to accelerate and has transformed how we communicate with each other, how we work and the ways we learn. It is hence essential that we can understand how this technology works to make proper use of it. With cyber security becoming an ever-popular branch of computing, it is also necessary to investigate and understand security issues before they arise to keep our data and information systems secure from hackers or to recover data in the event of a disaster.

This qualification is for students who are interested in current and emerging technologies and the impact they have on our business and social lives and who wish to utilise them effectively. It is likely to appeal to all, but particularly those students who enjoyed studying subjects including Digital Technology, Mathematics and further Mathematics, the Sciences or Technology and Design at GCSE.

#### **Course Content**

AS 1 Approaches to System Development. - In this unit you will learn about:

- The System Development Life Cycle, including design development and testing stages
- Alternative Development Approaches
- Software Projects
- Security Issues; and
- Programming Structure

#### AS 2 Fundamentals of Digital Technology - In this unit you will learn about:

- Data and Information
- Computer Architecture
- User Interface
- Software, including System, Application and Processing Systems
- Website Development

#### **A2.1 Information Systems** - In this unit you will learn about:

- Network Technologies and Data Transmission
- Databases
- Artificial Intelligence and Robotics
- Natural Language and Voice Recognition
- Mobile Technologies
- · Cloud Computing and Data Mining
- Expert Systems
- Individual, Social and Legal Considerations of Digital Technology

**A2.2 Application Development** - 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 Description	Weighting
. 13	AS 1 - Approaches to System Development	1 hour 30 minute external examination paper	50% of AS 20% of A level
Year	AS 2 - Fundamentals of Digital Technology	1 hour 30 minute external examination paper	50% of AS 20% of A level
Year 14	A2 1 - Information Systems	2 hour 30 minute external examination paper	40% of A level
Ye	A2 2 - Application Development	Internal assessment of a project	20% of A level

#### **Career opportunities**

There are a wide range of Digital Technology related courses available for further study at university. By completing the full GCE (both the AS and A2 courses) you will receive a good foundation to go on to further study at higher education. If you wish to pursue an IT career this A level in Digital Technology will help you identify areas of IT that you would like to pursue at university or as a career.

In fact, almost every organisation will use IT to conduct their daily operations. As a result, almost all organisations will value the knowledge, understanding and skills that GCE Digital Technology develops. Skills that you will acquire include research, investigation, analysis, communication, problem solving, time management and working with others. You will also develop practical skills about programming concepts.

The IT skills developed through studying Digital Technology are highly transferable across nearly every job, studying for a career involving problem solving or analysis would make this an excellent subject for you.

#### **Career Pathways**

Programmer | Computer Scientist | Games Developer | Forensic Analyst | Creative Media | Business Analyst | DevOps Engineer | Web Developer | Technical Sales | Cloud Architect | Electrical Engineer | Quality Assurance | Technician | System Analyst | Cyber Security



# **Economics**

#### What is Economics?

Economics deals with some of the major issues facing society today. Economic issues are often at the centre of local, national, and international news. Economics looks at how we make decisions about the ways in which we use our limited resources. This problem can be considered from the perspectives of individuals, businesses and organisations, communities, governments, and the global economy.

#### Aim of the course

Studying Economics will help to expand your knowledge and understanding of human behaviour in the world around you. You will be able to directly relate what you learn to current events and issues and understand their implications. For example:

- What is the market's role in providing for society's needs and wants?
- How can individuals and businesses manage their resources better?
- What are the possible solutions to environmental problems?
- How can economic development be sustained?
- How can all countries benefit from globalisation?

This course will help you to develop a variety of thinking and communication skills including investigating, analysing, evaluating, reasoning, drawing conclusions and making judgements. These skills will be invaluable in higher education and a variety of careers. Visit <a href="https://www.whystudyeconomics.ac.uk">www.whystudyeconomics.ac.uk</a> and <a href="https://www.economicsonline.co.uk">www.economicsonline.co.uk</a>

#### **Course content**

#### AS 1: Markets and Market Failure

In this unit, students consider how markets work. They examine how market forces of demand and supply interact to allocate resources in local, national, and international markets. Students also apply demand and supply analysis to factor markets, particularly the labour market. While investigating how markets work, students also examine market failure. They look at the nature, causes and consequences of different forms of market failure. They evaluate possible methods of government intervention to remedy market failures.

#### AS 2: Managing the National Economy

Students use the basic aggregate demand–aggregate supply model to analyse changes in the economy. They examine the use of demand-side and supply-side policies as a means of achieving macroeconomic objectives. They assess the likely impact and effectiveness of different government policies. Students evaluate different approaches that policymakers may use to address macroeconomic issues. They learn about key changes in the UK economy and government policy since 1990.

#### **A2 1: Business Economics**

In this unit, students examine how the number and size of businesses and the level of contestability affect the nature of competition between firms. Students consider how firms grow by examining organic growth, mergers, and takeovers. Students examine the rational assumption that firms are profit maximisers and consider alternative business objectives. They analyse revenues, costs, and profits in different market structures. They also analyse and evaluate firms' pricing and output decisions in different contexts and understand the role of competition in business decision-making. They analyse and evaluate the effect different market structures have on efficiency. Students learn about and understand the economic behaviour in competitive and non-competitive markets. They become aware of how social, institutional, technological, and environmental change can affect present and future economic behaviour.

#### A2 2: Managing the Economy in a Global World

Managing the Economy in a Global World This unit gives students the opportunity to understand the significance of globalisation, international trade, the balance of payments and exchange rates. Students analyse public finance, macroeconomic policies, and the role of the financial sector in a global context. They examine factors influencing the growth and development of developing countries. They also develop an understanding of trends in the global economy since 1990.

#### How will I be assessed?

Assessment for each unit consists of a written examination that involves short answer questions, a case study question, and an open response question.

#### **Career opportunities**

There are careers that use specific knowledge of economics, for example banks, insurance, accountancy firms, businesses and in government. These jobs may involve identifying financial risks or making decisions about where a company or a government should invest its resources in the future. There are also roles for economists in think tanks and consultancies that advise governments and companies on public policy, such as how to deal with the debt crisis. More broadly, Economics helps prepare you for careers that require numerical, analytical, and problem-solving skills – for example in business planning, marketing, research, and management. Economics helps you to think strategically and make decisions to optimise the outcome.





The Pearson BTEC Level 3 National Extended Certificate in Engineering is designed for learners who are interested in a career in the engineering sector and want to progress to further study in the sector. Learners will take a practical, applied engineering course as part of their Level 3 study programme, which gives them an introduction to the sector.

#### **BTEC Level 3 National Extended Certificate in Engineering**

This qualification brings together knowledge and understanding with practical and technical skills. This is achieved through learners performing vocational tasks that encourage the development of appropriate vocational behaviours and transferable skills. Transferable skills are those such as communication, teamwork, research, and analysis, which are valued in both higher education and the workplace. The proposed modules and assessment methods for Y13 and 14 displayed below.

This qualification has a focus on a broad range of engineering specialist areas. Learners taking this qualification will study mandatory content covering:

- engineering principles and mathematics
- health and safety, teamwork and interpreting and creating computer-aided engineering
- drawings
- design and manufacture of products.

#### **Course Structure & Assessment Methods:**

Extended Certificate (360 GLH)	601/7584/9
Year 13	Assessment
1 Engineering Principles (120)	Mandatory & External (June)
10 Computer Aided Design in Engineering	Internally Assessed

Extended Certificate (360 GLH)	601/7584/9
Year 14	Assessment
2 Delivery of Engineering Processes Safely as a Team	Mandatory Internally Assessed
3 Engineering Product Design and Manufacture (120)	Mandatory & External (May)

#### **Course Delivery:**

The course will be delivered at SWC Technology & Skills Centre on Monday 11.15-12.45, Wednesday 1.30-3.25 and Thursday 9.00-10.25.

Year 13 classes will continue until early June 2023 (to facilitate exam)

Year 14 classes will continue until end of May 2024 (to facilitate external assessment)

A recognised qualification can only be attained after successful completion of both years of the programme.

#### **Entry Requirements:**

Minimum 4 GCSEs at grade C or above which must include Maths and Double Award Science (both higher tier) **OR** 

Minimum 4 GCSEs at grade C which must include Maths minimum grade B and Single Award Science minimum grade B. If the course is oversubscribed additional entry criteria may be applied.

Student needs to check that the course meets entry requirements for any intended university.



# **English Literature**

#### Aims of the course

A level English Literature broadens your horizons and opens your mind to new perspectives and ideas. It allows you to construct well-supported arguments and appreciate alternative interpretations of texts.

The study of this course will enable you:

- To engage critically and creatively with literature
- To develop skills of literary analysis and evaluation
- To explore the contexts of the texts you are reading
- To carry out independent research
- To develop advanced study skills that help you prepare for third level education and for the workplace
- To nurture a lifelong interest in English Literature

#### **Course content**

Unit	Assessment Description	Weighting
AS 1 – The Study of Poetry 1900- Present and Drama 1900-Present	External written examination 2 hours Two questions, one from Section A and one from Section B Section A open book. Section B closed book	60% of AS 24% of A level
AS 2 – The Study of Prose Pre-1900	External written examination 1 hour One question Closed book	40% of AS 16% of A level
A2 1 – Shakespearean Genres	External written examination 1 hour 30 minutes One question Closed book	20% of A level
A2 2 - The Study of Poetry Pre-1900 and Unseen Poetry	External written examination 2 hours Two questions, one from Section A and the question from Section B Closed book	20% of A level
A2 3 – Internal Assessment Based on two novels linked thematically	Internal assessment One 2500 word essay	20% of A level

#### **Career opportunities**

English Literature at A level is a beneficial qualification for almost every career pathway due to the transferable literacy skills it develops. As a degree, English Literature can be studied as a single subject or a Joint Honours degree with a wide range of combinations such as Biology, French, German, History, Music, Media Studies, Philosophy and Psychology. English Literature as a degree is well respected by potential employers owing to the numerous transferable skills it demonstrates. It is a highly regarded qualification in the workplace. Pupils who study English Literature move into a wide variety of careers. Related careers include media, publishing and journalism, education, law, public relations, marketing, and the civil service.

# TANKSRILLEN ROTAL GRANALA SCHOOL

# French

#### Aim of the course

- · to build on knowledge and skills from GCSE and develop understanding
- to help develop enjoyment in, and enthusiasm for, learning and understanding the French language and French grammar
- to develop communication and translation skills in French
- to create a deeper awareness and understanding of French speaking countries and cultures
- to develop a wide range of skills which can be transferable to other subjects, courses and careers

#### What are the lessons like?

A wide range of teaching strategies and contemporary resources are employed to enhance teaching and learning, to promote independent study and to maximise pupil participation in class.

Structured study and practice of French grammar points ensure that pupils become proficient in accurate oral and written expression and in successful translating.

Speaking practice is also a regular feature of lessons so that students build up confidence for their oral examination and become increasingly capable of expressing themselves in a natural and spontaneous way.

The course is varied. Lessons often include activities such as debates, podcasts, games, video clips and songs. We consider it a priority to employ a French assistant. You will see the assistant on a weekly basis and this is an extremely important factor in helping you to improve your speaking skills and to find out about French society. In addition, the French assistant will help you with your examination preparation. Some lessons are held in the ICT suite and teachers share the names of some useful websites that you can access at home, so that you can practise French grammar and keep up to date with current affairs.

At AS the themes studied include relationships, culture, lifestyle and a French film

At A2 more complex issues are examined such as the media, prejudice, racism, poverty, politics and the environment. There is also a greater focus on French literature.

#### Course content

Content	Summary	Assessment	Weightings
AS			
AS 1: Speaking	Presentation (3 minutes)	Visiting examiner	30% of AS level
	Conversation (8 minutes)	Total: 11 minutes	12% of A level
AS 2: Listening &	Listening:	Listening	40% of AS level
Reading & Use of	Question 1: Answer in French	<b>Examination:</b>	16% of A level
Language	Question 2: Answer in English	40 minutes	
	Reading:	Reading Section:	
	Question 1: Answer in French	50 minutes	
	Question 2: Translate from Spanish to	Use of Language	
	English	Section:	
	Use of Language	30 minutes	
	Grammar exercises and a translating		
	sentences from English to French		

		Total for Reading & Use of Language Examination: 1 hour 20 minutes	
AS 3: Extended Writing	Students write one essay in French in response to a set film or literary text	Examination: 1 hour	30% of AS level 12% of A level
***************************************	response to a set inition interary text		AS: 40% of A level
A2			
A2 1: Speaking	Discussion on an individual research topic (6 minutes) Conversation (9 minutes)	Visiting examiner Total: 15 minutes	18% of A level
A2 2: Listening & Reading	Listening Question 1: Answer in French Question 2: Answer in English	Listening Examination: 45 minutes	24% of A level
	Reading Question 1: Answer in French Question 2: Translate from English into French	Reading Section: 2 hours	
<b>A2 3</b> : Extended Writing	Students write one essay in French in response to a set library text	Examination: 1 hour	18% of A level  A2: 60% of A level

#### **Career opportunities**

French can be studied at university alongside other Modern Languages, or can be combined with the study of accounting, economics, European Studies, engineering, medicine and many other degree pathways. Advanced skills in French can prove to be advantageous to those seeking employment in many different areas, not just the traditional fields of teaching, tourism, government and marketing, but also in areas such as financial services, IT, journalism, engineering, business, law, agriculture and the Armed Forces.

Studying a Modern Foreign Language at A-Level will also facilitate entry to The Russell Group representing the 24 Top UK Universities, whatever course you may want to pursue there. Many study French for the sheer pleasure of being able to communicate with and enjoy the Francophone cultures and traditions world-wide (whether in N. America, many parts of Africa, and the Far East, or closer to home in Belgium, Switzerland or France itself).



# **Further Mathematics**

Our GCE Further Mathematics specification aims to encourage deeper understanding of mathematics and mathematical processes. It assumes knowledge of Higher Tier GCSE Mathematics and GCE Mathematics.

Students explore pure mathematics, including further algebra and functions, complex numbers, matrices and vectors. They also investigate applied mathematics, including mechanics, statistics, and discrete and decision mathematics.

Studying GCE Further Mathematics gives students opportunities to extend their range of mathematical skills and techniques. They will be able to apply mathematics in other fields of study and develop awareness of how mathematics is relevant to the world of work. They will also use their mathematical skills to solve challenging problems. This qualification gives students a sound basis for progression to higher education and to employment.

#### Course content

GCE Further Mathematics has four externally assessed units. Students can take the AS course as a final qualification or the AS Units plus the two A2 Units for a full GCE A Level qualification.

The specification has four externally assessed units:

- AS 1: Pure Mathematics
- AS 2: Applied Mathematics
- A2 1: Pure Mathematics
- A2 2: Applied Mathematics.

The following modules will be studied in Year 13:

#### **AS 1: Pure Mathematics**

Further Algebra and Functions, Complex Numbers, Matrices, Vectors and Vectors.

#### AS 2: Applied Mathematics (choice of questions from two out of four sections)

Section A: Mechanics 1, Section B: Mechanics 2, Section C: Statistics and Section D: Discrete and Decision Mathematics.

A further two modules will then be studied in Year 14 for the award of an A Level in Mathematics.

#### **A2 1: Pure Mathematics**

Proof, Further Algebra and Functions, Complex Numbers, Further Calculus, Polar Co-ordinates, Hyperbolic Functions and Differential Equations.

#### A2 2: Applied Mathematics (choice of questions from two out of four sections)

Section A: Mechanics 1, Section B: Mechanics 2, Section C: Statistics and Section D: Discrete and Decision Mathematics.

#### **Methods of Assessment**

AS Mathematics equates to 40% of the full A Level.

- AS 1: Pure Mathematics will consist of a written exam 1hr 30mins (50% of AS, 20% of A Level)
- AS 2: Applied Mathematics will consist of a written exam 1hr 30 mins (50% of AS, 20% of A Level)
- A2 1: Pure Mathematics will consist of a written exam 2hrs 15mins (30% of A Level)
- A2 2: Applied Mathematics will consist of a written exam 2hrs 15 mins (30% of A Level)

#### **Career opportunities**

Further Mathematics is very useful (and perhaps essential) for those interested in studying Mathematics, Physics, Engineering, Economics or Geology. Any student wishing to study any of these subjects at a top university should seriously consider studying Further Mathematics to at least AS Level. It is now common for Further Mathematics to be required in offers from these universities. Most AS Further Mathematics students who continue to A2 Level do so as a fourth A Level.



# Geography

Geography offers students the opportunity to explore contemporary issues on a local, national and global scale. Through a range of teaching and learning strategies students will acquire skills which will be of benefit in higher education or when seeking employment. These skills include:

- Communication skills, written and spoken
- Numerical and graphical skills
- Problem solving and decision making skills
- Team work skills in class activities and through fieldwork
- ICT skills including experience in a range of on-line learning environments including the use of Geographical Information System (G.I.S.) applications

Module	Contents
AS 1	Physical Geography      Fluvial Environments,     Local and Global Ecosystems,     Processes that shape Weather and Climate
AS 2	<ul> <li>Human Geography</li> <li>Population data, structure and resources issues,</li> <li>Challenges for rural and urban environments,</li> <li>Issues of development</li> </ul>
AS 3	Fieldwork Skills and Techniques in Geography (2-night residential Field Trip to Magilligan Field Centre, County Derry/Londonderry,— a parental contribution of approximately £60-70 is requested for this).  Students carry out a piece of fieldwork (usually a river study) and will be required to present, analyse, interpret and evaluate their data and the techniques used to collect it. Students will also be expected to respond to quantitative and qualitative data from secondary sources.
A2-1	Physical Processes, Landforms and Management In this unit students choose two options from the four available (Currently taught in bold):  Plate Tectonics: Theory and Outcomes Tropical ecosystems: Nature and Sustainability Dynamic Coastal Environments Climate Change: Past and Present
A2-2	Processes and Issues in Human Geography In this unit students choose two options from the four available: (Currently taught in bold):  Cultural Geography Planning for Sustainable Settlements Ethnic Diversity Tourism
A2-3	Decision Making in Geography This unit enables students to develop decision-making skills in a real world scenario. They identify and analyse appropriate material, examine conflicting values and make and justify recommendations.  Assessment for this unit is a written examination based on a range of resource material. The examination takes the form of a report using the headings and sub-headings provided.

#### **Career opportunities**

The career opportunities for geographers are numerous and it is not possible to quote the range of careers that geographers can access. The advantage of studying Geography in Higher and Further Education is the range of transferable skills you will acquire, skills that are demanded in industries of all sectors. As a result, 90% of Geography graduates are among the least likely to be unemployed and more than 90% are employed in graduate employment within 6 months of graduating (Higher Education Statistics Agency).

Some examples of subject combinations are shown below but Geography is a complimentary subject for most other curriculum areas due to the broad nature of skills it includes. **Geography is a STEM subject and is accepted by universities as a science.** 

A Level Subjects		Employment/Further Study
Maths, Physics and Chemistry	+ GEOGRAPHY =	Environmental Science, Geology,
		Meteorology, Geophysics, Hydrology
Maths, Economics, Languages,	+ GEOGRAPHY =	Accountancy, Banking, Town and
ICT		Country Planning, Insurance, Tourism,
		Journalism
Biology, Chemistry, Home	+ GEOGRAPHY =	Environmental Health, Environmental
Economics		Science
English, Languages, History, RE	+ GEOGRAPHY =	Social Work, Law, Publishing, Journalism

# German



#### Aims of the course

- · to build on knowledge and skills from GCSE and develop understanding
- to help develop enjoyment in, and enthusiasm for, learning and understanding the German language and German grammar
- to develop communication and translation skills in German
- to create a deeper awareness and understanding of German speaking countries and cultures
- to develop a wide range of skills which can be transferable to other subjects, courses and careers

#### What are the lessons like?

A wide range of teaching strategies and contemporary resources are employed to enhance teaching and learning, to promote independent study and to maximise pupil participation in class. Structured study and practice of German grammar points ensure that pupils become proficient in accurate oral and written expression and in successful translating. Speaking practice is also a regular feature of lessons so that students build up confidence for their oral examination and become increasingly capable of expressing themselves in a natural and spontaneous way.

At AS the themes studied include relationships, culture, lifestyle and a German film. At A2 more complex issues are examined such as the media, prejudice, racism, poverty, politics and the environment. There is also a greater focus on German literature.

#### **Course content**

Content	Summary	Assessment	Weightings
AS			
AS 1: Speaking	Presentation (3 minutes)	Visiting examiner	30% of AS level
	Conversation (8 minutes)	Total: 11 minutes	12% of A level
AS 2: Listening & Reading &	Listening	Listening Examination: 40	40% of AS level
Use of Language	Question 1: Answer in German Question 2:	minutes	16% of A level
	Answer in English	Reading Section: 50 minutes	
	Reading		
	Question 1: Answer in	Use of Language Section:	
	German	30 minutes	
	Question 2: Translate from		
	German into English	Total for Reading & Use of Language Examination:	
	Use of Language	1 hour 20 minutes	
	Grammar exercises and a translating sentences from English to German		
AS 3: Extended writing	Students write one essay in German in response to a set film or literary text	Examination : 1 hour	30% of AS level 12% of A level
	set min or interdry text		AS:
			40% of A level

A2			
A2 1: Speaking	Discussion on an individual research topic (6 minutes) Conversation (9 minutes)	Visiting examiner Total : 15 minutes	18% of A level
A2 2: Listening & Reading	Listening Question 1: Answer in German Question 2: Answer in English	Listening Examination: 45 minutes	24% of A level
	Reading Question 1: Answer in German Question 2: Translate from English into German	Reading Section: 2 hours	
A2 3: Extended Writing	Students write one essay in German in response to a set literary text	Examination : 1 hour	18% of A level
	out interest y text		60% of A level

#### **Career opportunities**

Advanced skills in German can prove to be advantageous to those seeking employment in many different areas, not just the traditional fields of teaching, tourism, government and marketing, but also in areas such as financial services, IT, journalism, business, law, agriculture.

German can be studied at university alongside other Modern Languages or can be combined with the study of accounting, economics, European Studies, engineering, medicine and even with science.

If you study German at university, you will normally study abroad in Germany or a German Speaking country for one year of your course. This is an opportunity to meet new people and enjoy new experiences. It is also superb preparation for the world of work.

If you have proven yourself to be a capable employee with just the right job skills AND you speak a foreign language such as German, you are more likely to be employed than if you are monolingual and may also result in you earning a higher salary.

Internationally, people who speak German often have opportunities to work in diplomacy, interpretation, trade or business fields.

Many German graduates enter careers that seek students of any discipline but which offer ample opportunity to use their highly developed verbal, written, thinking and analytical skills, cultural awareness and adaptability, as well as IT proficiency and research.



# **Government & Politics**

#### **Course Content**

Few subjects are as relevant to our everyday lives as Government and Politics. This is a stimulating and rewarding subject that would suit any student who is interested in people, power, and fairness in society.

Studying Government and Politics gives students a real insight into the world in which they live. Students learn how the political decisions that affect our lives are made and who has the power and authority to make those decisions. They also develop analytical and evaluation skills as they debate topical and controversial issues, form their own political opinions, and study different ideological viewpoints.

At AS, students will have the opportunity to study the government and politics of Northern Ireland and the political processes of the UK Parliament. At A2, students will undertake a comparative study of the government and politics of the United States of America and the United Kingdom, as well as exploring different theories of political power.

#### **Course Structure**

AS1 (40% of AS; 16% of A2) – three source-based questions and one essay question – 1hr 15mins – sat in May/June of Year 13.

AS2 (60% of AS; 24% of A2) – a mixture of short questions, medium-length structured questions, and an essay question - 1hr 45mins – sat in May/June of Year 13.

**A2 1 (35% of A2)** – a mixture of short and medium length questions, a source-based question, a source-based essay, and a traditional style essay – 2hrs 15mins – sat in May/June of Year 14.

**A2 2 (25% of A2)** – a mixture of short questions, source-based questions, and a traditional style essay – 1hr 30mins – sat in May/June of Year 14.

- Both AS modules can be repeated in the summer term of Year 14.
- There is no coursework in A-Level Government and Politics.

#### **Career pathways**

Government and Politics encourages young people to become actively involved as citizens. The skills that it promotes are directly relevant to many vocational areas and are highly valued by employers. The subject also prepares young people for a wide variety of further and higher education courses. A degree in Government and Politics would be considered useful or essential for the following careers: Politics, Civil Service, Diplomatic Service, Journalism, Marketing, Human Resources, Teaching, Law.



# Health and Social Care

#### **Course content**

GCE Health and Social Care will appeal to those pupils who:

- Enjoy studying subjects relevant to their own lives and experiences.
- Want the opportunity to carry out practical work as well as class work.
- Are interested in learning about caring organisations and the clients they serve
- May want to progress to a related career or higher education course.

The GCE in Health and Social Care is made up of six units. In Year 13 the following three units are studied, leading to the award of AS GCE in Health and Social Care.

#### **Unit 1 Promoting Positive Care**

This unit gives students the opportunity to examine how legislation impacts upon the rights and responsibilities of service users and carers. It focuses on how practices within one health, social care or early years setting promote the positive care of service users and how staff in the chosen setting apply the principles of the care value base.

Students will learn about:

- Care value base
- Legislation that promotes positive care
- Health and safety
- Policies
- Impact of poor practice

#### Unit 2 Communication in Health, Social Care and Early Years Settings

This unit gives students the opportunity to learn and practise communication skills. They observe communication skills in a care setting and carry out two interactions. Students will learn about:

- Types of communication
- Factors affecting communication
- Barriers to communication
- Importance of communication when working in teams

#### Unit 3 Health and Wellbeing

This unit gives students the opportunity to learn about health and well-being and the factors which affect it.

Students will learn about:

- · Concepts of health and well-being
- · Factors affecting health and well-being
- Health promotion and the approaches used
- Organisations responsible for health and well-being
- Discrimination and anti-discriminatory practice.

In Year 14, three further units will be studied. These are:

#### **A2**

#### **Unit 5 Supporting the Family**

In this unit, students focus on changing and evolving family structures in today's society.

#### Students will learn about:

- develop an understanding of factors that influence family life.
- research the range of family structures and the functions of families.
- investigate the wide range of services available to families and the support that these services offer.
- produce a case study that describes their findings.
- investigate and produce a report on how statutory services and voluntary organisations support families with significant issues.

#### **Unit 9 Providing Services**

This unit gives students the opportunity to learn about the way in which health & social care and early years services are organised.

#### Students will learn about:

- The effects of legislation and policy on services
- The way in which needs are identified and met
- The roles of the various practitioners involved in the delivery of service provision.
- The importance of working in teams
- Quality assurance processes

#### **Unit 4 Health Promotion**

In this unit, students develop an understanding of local health improvement priorities and associated health promotion campaigns. They plan, implement and evaluate a small-scale health promotion activity either individually or in a group of no more than five. Their activity will be based on a Northern Ireland health promotion priority that has significance for a specific group, for example primary school children. The activity will use at least one health promotion approach and may make use of existing health promotion materials. Appropriate settings for the activity may include schools, residential homes and day centres.

#### Students will learn about:

- Local health improvement priorities
- How to plan, carry out and evaluate a health promotion activity

#### **Career progression**

This course is ideally suited to those students wishing to study any of the caring professions. However, the skills developed can also be applied to all career paths. Pupils have gone on to successfully study a wide variety of careers including Social Work, Primary / Post-primary Teaching, Biomedical Science, Nursing, Environmental Health/ Health Promotion and Human Resources to name a few.



# History

A-Level History examines the major European historic developments that shaped the modern World. At AS, students will have the opportunity to explore Weimar and Nazi Germany, and Liberal and Fascist Italy. At A2, students will study the remarkable reign of Elizabeth I, and the crucial seventeenth-century developments that took place between the Crown and Parliament.

#### What skills will I gain from studying History A-Level?

History provides students with a wide range of transferable skills. In particular, students develop the ability to gather, analyse, evaluate, and communicate complex issues and events to a high level of competence. Overall, the study of A-Level History equips students with the following marketable skills:

- the ability to research, scrutinise, and assess evidence;
- the ability to organise information in a logical, coherent, and concise manner;
- the ability to communicate ideas and arguments articulately in both written and oral mediums; and
- highly-developed problem-solving and decision-making skills.

#### What examinations do I have to take?

AS1 (50% of AS; 20% of A2) – one short essay, one source question, and one source-based long essay – 1hr 30mins – sat in May/June of Year 13

AS2 (50% of AS; 20% of A2) – two short and two long essays - 1hr 30mins – sat in May/June of Year 13

A2 1 (20% of A2) - one synoptic essay question - 1hr 15mins - sat in May/June of Year 14

**A2 2 (40% of A2)** – two source-based questions, a source-based essay, and a traditional-style essay – 2hrs 30mins – sat in May/June of Year 14

- Both AS modules can be repeated in the summer term of Year 14.
- There is no coursework in A-Level History.

#### Why is an Advanced Level History qualification useful to me?

According to the Russell Group of 20 leading universities in the United Kingdom, the study of History at Advanced Level is useful for entry into university courses, such as American Studies, Archaeology, Classical Studies, English, European Studies, French, German, History, History of Art, Italian, Law, Politics, Religious Studies/Theology, Spanish & Teacher Training, including Primary Teaching.

History is a highly respected, traditional academic subject. At Advanced Level, the Russell Group consider it to be one of the so-called 'facilitating subjects', which are "subjects that are required more often than others" for entry into their universities. The Russell Group also suggest that History is one of the 'hard' subjects, i.e. traditional and theoretical, whereas 'soft' subjects have a vocational or practical bias.

The transferable skills taught through History are highly valued in the workplace and by employers. Research undertaken by Professor David Nicholls of Manchester Metropolitan University has revealed that historians do, in fact, provide more directors of Britain's leading companies in proportion to the number of graduates than any other subject, outperforming law, science and engineering.

#### **Career pathways**

Although the transferable skills taught through the study of History are highly sought after by employers in a wide range of professions, more specifically a degree in History would be extremely useful or essential for the following careers:

- Academia
- Archaeology
- Architecture
- Archive work
- Broadcast/newspaper journalism
- Civil Service administration
- Heritage/conservation work
- · Historical consulting for film and media
- History teaching
- Law
- Museum/gallery curating
- Politics



# Life and Health Sciences

This new applied qualification responds to the needs of the growing life and health sciences sector in Northern Ireland, which generates sales worth about £800 million a year and growing.

It aims to develop students' advanced practical skills and knowledge, preparing them for employment or third-level study and a career in the life and health sciences. Students learn to appreciate how science contributes in a fundamental way to both economic success and the success of society. They explore how different scientific industries rely on one another in order to grow and develop. The course will also develop students' competence in a full range of key practical, mathematical and problem-solving skills.

For a full GCE Single Award qualification students must complete six units: three at AS level and three at A2.

#### **Subject Content**

This course has 16 units: six units are available at AS level and 10 units at A2. This section sets out the content and learning outcomes for each unit.

At AS level, all students must complete:

- Unit AS 1: Experimental Techniques;
- Unit AS 2: Human Body Systems; and
- Unit AS 3: Aspects of Physical Chemistry in Industrial Processes.

#### At A2, all students must complete:

- Unit A2 1: Scientific Method, Investigation, Analysis and Evaluation; and
- Unit A2 2: Organic Chemistry.

#### any one of these three optional units

- Unit A2 3: Medical Physics;
- Unit A2 4: Sound and Light; and/or
- Unit A2 5: Genetics, Stem Cell Research and Cloning.

Content	Assessment	Award Weightings
Unit AS 1: Experimental Techniques	Internal assessment	33.34% of AS 13.34% of A level
Unit AS 2: Human Body Systems	External written examination	33.33% of AS 13.33% of A level
Unit AS 3: Aspects of Physical Chemistry in Industrial Processes	External written examination	33.33% of AS 13.33% of A level
Unit A2 1: Scientific Method, Investigation, Analysis and Evaluation	Internal assessment Core unit	20% of A level

Unit A2 2: Organic Chemistry	External written Examination	20% of A level
Unit A2 3: Medical Physics	External written examination	20% of A level  (Single Award students take any <b>one</b> of these units.)
Unit A2 4: Sound and Light	Optional units	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Unit A2 5: Genetics, Stem Cell Research and Cloning		

#### **Career Pathways**

The course is suitable for those pupils who wish to follow an applied science course and may find the traditional core scientific pathways of Biology, Chemistry and Physics more challenging. Life and Health Sciences offers an Innovative applied science qualification developed with key industry partners to equip learners for a wide range of STEM careers and higher education pathways.



# **Mathematics**

#### Did you know that:

- A Level Mathematics students and graduates are in high demand by employers?
- People with Mathematics qualifications have some of the lowest unemployment rates?
- Students with A Level Mathematics earn on average around 10% more than those without?

The logical thinking skills you develop in Mathematics are important in a rapidly changing world?

#### Content and ways of working of the AS and A Level courses

In the study of Mathematics, we are constantly building on what we know already. The content of the course at AS and A Level allows pupils the opportunity to consolidate and extend the knowledge, skills and understanding gained in GCSE (particularly in the Further Mathematics course); in turn it will help build a suitable foundation for the study of Mathematics and other subjects in further and higher education. However, it will also provide a coherent, satisfying and worthwhile course of study for those who do not wish to progress to further study of the subject.

Students are expected to develop the correct understanding and use of mathematical language and to be able to construct and present mathematical arguments logically and precisely.

The new GCE Mathematics has four externally assessed units. Students can take the AS course as a final qualification or the AS Units plus the two A2 Units for a full GCE A Level qualification.

The specification has four externally assessed units:

- AS 1: Pure Mathematics
- AS 2: Applied Mathematics
- A2 1: Pure Mathematics
- A2 2: Applied Mathematics.

The following modules will be studied in Year 13:

#### AS 1: Pure Mathematics

Algebra and Functions, Coordinate Geometry, Sequences and Series, Trigonometry, Exponentials and Logarithms, Differentiation, Integration and Vectors.

#### **AS 2: Applied Mathematics**

Kinematics, Forces and Newton's Laws, Statistical Sampling, Data presentation and interpretation, Probability and Statistical Distributions.

A further two modules will then be studied in Year 14 for the award of an A Level in Mathematics.

#### **A2 1: Pure Mathematics**

Algebra and Functions, Coordinate Geometry, Sequences and Series, Trigonometry, Differentiation, Integration and Numerical Methods.

#### **A2 2: Applied Mathematics**

Kinematics, Moments, Impulse and Momentum, Probability, Statistical Distributions and Statistical Hypothesis Testing.

#### **Methods of Assessment**

AS Mathematics equates to 40% of the full A Level.

- AS 1: Pure Mathematics will consist of a written exam 1hr 45mins (60% of AS, 24% of A Level)
- AS 2: Applied Mathematics will consist of a written exam 1hr 15 mins (40% of AS, 16% of A Level)
- A2 1: Pure Mathematics will consist of a written exam 2hrs 30mins (36% of A Level)
- A2 2: Applied Mathematics will consist of a written exam 1hr 30 mins (24% of A Level)

#### Skills for life

In addition to developing mathematical skills, studying Mathematics also improves:

- Analytical skills clear thinking, attention to detail, ability to follow complex reasoning, ability to understand and construct logical arguments.
- Communication skills ability to answer questions clearly and communicate an argument precisely
  and logically, both orally and in written form.
- Investigative skills knowing where and how to find information.
- Learning skills ability to understand difficult concepts and apply them to a problem.
- Problem-solving skills being able to present a solution clearly, take a flexible approach, tackle a problem with confidence and appreciate when to seek help.
- Self-management through approaches to work, time management and determination.



# Moving Image Arts

#### Overall view of the course

Whether assessed through Cinema, Television, DVD or the Internet, Moving Images act as a primary source of information and knowledge about the world. The moving image is a key driver of the creative industries and the rapid growth of digital media technologies has made the creative industries increasingly accessible and attractive. The course is designed to enable students to develop their creative and critical abilities through handson learning in the craft of film making and/or animation. The subject is anchored in the students' creation of their own film or animation pieces, which should be informed and inspired by an exploration of the rich and diverse range of moving image products.

Moving Image Arts exploits the new Apple Mac digital technologies. Students have the opportunity to use professional editing software for both film and animation purposes.

#### **Subject content**

The course is divided into four units: two units at AS level and two units at A2. At both AS and A2, students choose to make their product as either:

- **Film**: live action, film or narrative; or
- Animation: rostrum, stop motion or CGI animated narrative

At both AS and A2, there are two key theoretical areas:

- Realism the Classical Hollywood Style or continuity style and the realist tradition in cinema history, including the documentary aesthetic, Italian Neo- Realism and the French New Wave; and
- **Formalism** the expressive use of the film medium in all its formal or technical elements such as lighting, shot composition, editing, music, set design and sound.

Underpinning AS and A2 is an understanding and subsequent application of the five core film language areas:

- camera;
- editing;
- sound;
- lighting/cinematography;
- mise-en-scène.

# AS Unit 1: Realist and Formalist Techniques and the Classical Hollywood Style: Foundation Portfolio - 24% of A level

In this unit, students create a film sequence that displays understanding of the following stylistic movements:

- Classical Hollywood Style;
- Realism and/or Formalism.

#### AS Unit 2: Critical Response - 16% of A level

This unit takes the form of an online examination which is divided into two sections:

Section A: Alfred Hitchcock and the Classical Hollywood Style

Section B: Formalism – Early European Cinema and American Expressionism

#### A2 Unit 1: Creative Production and Research: Advanced Portfolio - 36% of A level

In this unit, students extend their practical and theoretical skills to produce a complete narrative short film that demonstrates practical understanding of the stylistic approach of a selected practitioner.

Students write an illustrated essay, which gives them an opportunity to undertake independent and in depth study of a film practitioner known for a particular, individual stylistic approach.

#### A2 Unit 2: Advanced Critical Response - 24% of A level

This unit takes the form of an online examination. The examination is divided into three sections:

Section A: Realism: Narrative and Visual Style

Section B: Creative Exercise

**Section C:** Comparative Analysis

Units AS 1 and A2 1 are internally assessed and externally moderated. Units AS 2 and A2 2 are externally assessed.

#### **Career opportunities**

Students with this CCEA qualification will be well equipped with the critical and production skills needed in an ever-increasing number of employment contexts, such as: Broadcasting, Production, Advertising, Creative Writing, Performing Arts, Publishing and Printing.



# Music

Music is available for AS and further study at A2 level offering the CCEA Music course. Study of a range of styles throughout Music history will be explored from the Renaissance, Baroque, Classical and Romantic Eras through to Contemporary styles and Modern Music. AS/A2 Music builds on skills already developed at GCSE level and pupils have the opportunity to perform, compose and respond to music.

Unit	Assessment Format	Weightings
AS Music		
AS Unit 1	Solo performance	32.5% of AS
	Viva Voce	13% of AL
AS Unit 2	Composition Task	32.5% of AS
		13% of AL
Music students will be required to co	mpose their own pieces, one for AS	Level and one for A2 Level. Sibelius 6 and Logic
Pro X are available to produce MP3 recommentary.	ecordings of final compositions for so	ubmission to CCEA, along with written
AS Unit 3	Responding to music	35% of AS
		14% of AL
Test of Aural Perception (1 hour)		
Written Examination (2 hours)		
Areas of Study include:		
Music for Orchestra 1700-1900		
Sacred Vocal Music (Anthems)		
Secular Vocal Music (Musicals)		
A2 Music		
A2 Unit 1	Solo performance Viva Voce	19.5% of AL
A2 Unit 2	Composition Task	19.5% of AL
A2 Unit 3	Responding to music	21% of AL
Test of Aural Perception (1 hour 15 m	nins)	
Written Examination (2 hours)		
Areas of Study include:		
Music for Orchestra in the Twentieth	Century	
Sacred Vocal Music (Mass/Requiem N	•	
Secular Vocal Music, 1600 to the pres	sent day.	

### Who is suited to AS/A2 music study?

Music may be considered by all Musicians who have a bias towards either the Arts or Sciences or indeed students who are combining subjects across the Curriculum. Ideally pupils should have achieved at least a Grade B in GCSE Music. It is also beneficial to have keyboard skills of at least Grade 3 level to support Harmony work and development of Composition. Pupils should be working at Grade 5 level or above on their chosen instrument/voice for the performing unit.

#### **Career opportunities**

A wide range of students have successfully undertaken Music study at AS and A2 level in recent years. Often students choose this as a 'first choice' A Level subject leading directly to 3rd level 'Music' study e.g. to:

- Music
- Music Technology

- Music with Disability Studies
- Music with French
- Performing Arts
- Primary Education with Music as a main subject

Other students in recent years have combined their Music studies with a wide range of curricular subjects both from the Arts and Sciences. A2 Music students have gone on to study degree courses or to apprenticeships including e.g.:

- Dentistry
- Engineering
- Law
- Medicine
- Nursing
- Optometry
- Pharmacy
- Social Work
- Veterinary Science

At Enniskillen Royal Grammar School AS and A2 Music Students will have the opportunity to avail of individual instrumental lessons in either Brass, Strings (Upper and Lower) or Woodwind. (Lessons are also available to non-Music students in Years 13 and 14 at the standard Education Authority Music Service rate of payment). Music students have the opportunity to develop their independent learning skills with individual Aural Perception periods of study built into the weekly timetable.

AS/A2 Music will provide students with the opportunity to further develop skills in communication, organisation, self-discipline and motivation as well as independent learning. A fulfilling experience may be had developing further knowledge and understanding of the rich culture of Music throughout Europe and beyond over the last 500 years. With the opportunity to develop Recital Performance to a high level and to compose, students may express themselves through Music which they enjoy and be creative and imaginative in what they write.

#### **Extra-curricular music**

Extra-Curricular activities are also available in Choral Work, Instrumental Ensembles and Orchestra both in school and through the Education Authority Music Service:

- Choirs
- Senior & Junior Brass Ensembles
- Woodwind Ensembles
- School Orchestra
- Pipe Band
- Senior Youth Orchestra by audition post Grade 5, with Saturday rehearsals currently held at Strabane Academy
- Fermanagh Schools String Orchestra (Intermediate level) after school rehearsals currently held at Mount Lourdes Grammar School
- Fermanagh Schools Wind Bands (Junior and Intermediate levels) after school rehearsals currently held at Cooper Crescent Site.



# **Nutrition and Food Science**

"To lead healthy lives, we all need to know about food and nutrition".

## Did you know:

- Northern Ireland's agriculture and food processing sectors significantly benefit the economy, contributing towards over 113,000 jobs based on figures from 2021.
- Obtaining a degree relating to Food, Nutrition and Health has been shown to uphold significant levels
  of employment, with 98.4% of students gaining employment after graduating from university within
  the United Kingdom.

### The aims of the course

GCE Nutrition and Food Science (originally called Home Economics) upholds several aims, of which include:

- It allows students to focus on the inter-relationship between diet, lifestyle and health, of which can reduce the risk of chronic illness and promote overall health
- It allows students to develop skills needed by the growing food and food-related global industries
- It allows for the knowledge and understanding of how to manage resources to meet an identified human need, in a diverse and ever-changing society.
- It allows students to gain vast insight and direct experience into carrying out primary and secondary research
- It allows students to understand the ethical implications linked to food production

## Who is suited to studying Nutrition and Food Science?

Nutrition and Food Science is a broad subject, allowing for many individuals to be suited to studying this subject. It is greatly suited to those individuals who obtain a keen interest in the science of food, nutrition, health and how food directly impacts our bodies. It is also suited to those individuals who have an interest in agriculture and how food production can impact the local economy and environment.

#### What are the lessons like?

At both AS Level and A Level, lessons are diverse in nature, where pupils play a key role towards their individual learning. A wide range of teaching strategies are employed within the department, whereby pupils will have the opportunity to actively to engage in the subject and gain a real-life insight into the subject, through the use of outside speakers and potential Agri-Food tours where possible within Northern Ireland.

Lessons are very structured, whereby content and application is a central focus, symbolising the importance of regular attendance. Pupils will gain the opportunity to 'learn through example', where teachers will outline the importance of question and answering technique and regular feedback is of vital importance towards pupil improvement. Self-reflection and peer- reflection are also strategies which play a key role towards progression within Nutrition and Food Science.

## **Course Content**

GCE Nutrition and Food Science is divided into two levels, Advanced Subsidiary (AS Level) and Advanced (A2 Level) making an A Level in Nutrition and Food Science.

The AS Level consisting of two units builds on knowledge, understanding and skills developed within GCSE Food and Nutrition. The A2 section of the Advanced GCE, consisting of a further two units, builds upon the foundation of knowledge, understanding and skills acquired within the AS Level and provides the basis for further study in a diverse range of disciplines such as industry, commerce, education and health related careers.

AS qualifications are awarded on a five-grade scale from A to E while A level qualifications are awarded on a six-grade scale from A\* to E.

Content	Assessment	Weightings
AS 1: Principles of Nutrition	External written examination  1 hour 30 minutes	50% of AS Level 20% of A Level
AS 2: Diet, Lifestyle and Health	External written examination  1 hour 30 minutes	50% of AS Level 20% of A Level
A2 1: Option B: Selected - Food Safety and Quality	External written examination  2 hour 30 minutes	30% of A Level
A2 2: Research Project	Internal assessment.  Students complete a 4000-word research-based project. Teachers mark the projects and CCEA moderate the results.	30% of A Level

# **Career Opportunities**

Nutrition and Food Science is an excellent subject choice to allow you to gain entry into a diverse range of degree courses at university. As well as building upon knowledge and understanding of Nutrition, Diet and Lifestyle, Health and Food Quality and Safety, it provides the pupil with the skill of independent learning required in third level education. Through completion of the research project, pupils have the opportunity to reinforce and embed their research skills and those of analysis, justification and evaluation.

Previous A-level Nutrition and Food Science students have gone on to study: Education, Pharmacy, Medicine, Dentistry, Dietetics, Nursing, Radiography, Physiotherapy, Law as well as the wide range of disciplines associated with the ever growing Agri-Food industry.



# **Performing Arts**

This course has been developed to provide a broad educational basis for further training and education or for moving on to employment within the Performing Arts sector. You do not need to have studied GCSE Drama or Music prior to the course, as everyone starts by assessing their current skill level and developing ways to improve.

It is a practical course, combining an exploration of on and off stage roles and event management within a Performing Arts context. As such the course focuses on developing self-management and independent learning which incorporates a wide range of transferable skills for example; creative thinking, problem solving and decision making, working with others, budget and fi administration, and evaluation, self-reflection and promotion.

You may choose to explore a Performance pathway or a Production pathway through the course, choosing from

ONE of the following:
A Performance discipline
Drama OR Dance OR Music
OR
A Production discipline:
Direction of music or drama
OR
Choreography
OR
Design of costume or set
OR
Technical – sound or lighting
OR
Stage management
You then follow this one chosen discipline throughout AS and A2 study.

# AS areas of study:

#### Unit AS 1: Developing Skills and Repertoire - 60%

This unit is internally assessed through written coursework and DVD recordings of practical exploration of 2 extracts. In this unit you complete research tasks in your chosen discipline, so you gain a full understanding of the skills required and current professional practice. You then work to develop your skills by exploring two different extracts; one individually and the other working in a small group.

#### Unit AS 2: Planning and Realising a Performing Arts Event - 40%

This unit is externally examined through a controlled assessment piece of 2400 words and creation of a final performance/presentation for a visiting examiner, on a theme set by the CCEA. You will watch live and recorded theatre work to give you ideas to explore in your own performance. Previous AS performances have used existing material to create performances on the theme of Emotions, Time and Them and Us.

## A2 areas of study

#### Unit A2 1: Planning for Employment - 60%

This unit is internally assessed through a record of work, including a written report in three sections, promotional portfolio and evaluation. In this unit you will showcase your skills in your chosen discipline by completing an audition/presentation and interview, creating a CV, headshots and show reel/demo CD and researching employment pathways and opportunities

#### Unit A2 2 Performing to a Commission Brief - 40%

This is externally examined through a controlled assessment piece and creation of a final performance/ presentation for a visiting examiner, on an area of study set by CCEA.

In this unit you form a production company to create your performance in a group of 6 and take on an additional administration role as either front of house, education officer, budget and finance, marketing, publicity or press officer. You draw on research into two professional organisations/venues to help you understand your role. Previous A2 devised performances have explored the songs of Abba, the music of Queen and the impact of social media on young adults.

## **Assessment**

Each unit is assessed through a combination of written portfolio evidence and practical demonstration of skills developed and acquired. Assessment is continuous throughout the course and develops your skills, techniques and work attitudes to a standard that allows progression to further training and work. You will be given detailed guidance on how to complete each aspect of the work though course booklets, short focused tasks, exemplar coursework, whole class and individual feedback on your work. The course teaches you to apply working methods used by professionals as an individual and in teams as well as how to respond to audiences and commissioners. It encourages you to explore independently, through creative and reflective experimentation, how meaning is communicated and emphasises practical independence, self-management and improvement of performance over time.

# A Level and beyond

Performing Arts at A Level can assist you in gaining entry to further degree study of your choice. Within the Arts it can provide entry to a BA Hons Degree, but does not limit you to pursuing a course in Performing Arts. For example, previous students have gone on to read History at Oxford, study Pharmacy, Psychology, Business and ICT, become Primary Teachers, as well as complete degrees in Drama and Film. The process of performance is a complex activity requiring teamwork, creativity, diligence, research and application over long hours in a pressurised environment. Students who successfully complete this course will have mastered these skills, which are an advantage in all roles in life.

# PANISKILIN BOYAL GRAMMAR SCHOOL

# **Physics**

### Aims of the course

This specification aims to encourage students to:

- develop their interest in and enthusiasm for Physics, including developing an interest in further study and careers in the subject;
- appreciate how society makes decisions about scientific issues and how the sciences contribute to the success of the economy and society;
- develop competence in a range of practical, mathematical and problem solving skills;
- develop and demonstrate a deeper appreciation of the skills, knowledge and understanding of how science works;
- develop essential knowledge and understanding of different areas of the subject and how they relate to each other; and
- develop advanced study skills that help them prepare for third level education

Unit	Topic	Assessment	Weightings	
			AS Level	A Level
AS Unit 1	Forces, Energy and Electricity	External examination 1hour 45 minutes	40%	16%
AS Unit 2	Waves, Photons and Astronomy	External examination 1hour 45 minutes	40%	16%
AS Unit 3	Practical Techniques and Data Analysis	External examination two (1 hour) subcomponents	20%	8%
A2 Unit 1	Deformation of Solids, Thermal Physics, Circular Motion, Oscillations and Atomic and Nuclear Physics	External examination 2hours		24%
A2 Unit 2	Fields, Capacitors and Particle Physics	External examination 2hours		24%
A2 Unit 3	Practical Techniques and Data Analysis.	External examination two (1 hour) subcomponents		12%

Double Award Science provides a good base for the A Level Physics course but the A Level work is to a much greater depth, with a more rigorous mathematical approach being applied. Students must be competent mathematicians. The completion of the Further Mathematics course at CGSE would be advantageous and studying AS Mathematics would be beneficial as at GCSE level, applications to everyday life continue to play an important part.

You must have the ability to work on your own and be responsible for your own learning, using the teacher as a resource and to help with problems. The pace and volume of work covered is much

greater than at GCSE and it is essential to go over what is taught in class and consolidate after lessons. Independent learning requires self- discipline.

Assessment lays emphasis upon the use of knowledge in situations which may not have been met previously. Thus the ability to apply knowledge is important if a good grade is to be obtained. Practical work, planning and practical skills form an important element in A Level Physics, with special emphasis on the interpretation of experimental results and data analysis.

# **Career opportunities**

An A Level in Physics is essential for students wishing to follow a career in any branch of Engineering, e.g. Aeronautical, Civil, Electronic, Electrical or Mechanical, as well as careers in Radiography, Biophysics, Geophysics, Optics etc. It will also prove an advantage to those seeking admission to the Army, Navy or Air Force, and a wide range of other careers. Employers rate Physics qualifications very highly, especially at A Level or beyond.



# **Religious Studies**

## Content and ways of working

The content of A Level Religious Studies is divided into two main sections:

#### YEAR 13 AS LEVEL

- An Introduction to the Acts of the Apostles
- The Context of Acts
- The beginnings of the Church Growth and expansion of the church Paul the Apostle
- Other aspects of Human Experience
- Foundations of Ethics with special reference to Medical Ethics
- Moral Decision Making
- Approaches to Moral Decision Making
- Bio-ethics
- Life and Death Issues
- Other Aspects of Human Experience

#### YEAR 14 A2 LEVEL

- Themes in Selected Letters of St. Paul
- Paul's letter to the Galatians
- Paul's 1st letter to the Corinthians
- Paul's letters to the Ephesians
- Synoptic Assessment division & reconciliation
- Global Ethics
- Moral Theory Global Rights Global Issues
- Synoptic Assessment conscience, freedom & tolerance

The aims of A Level Religious Studies are to encourage pupils to:

- Develop an interest in, and enthusiasm for, the study of religion
- Treat the subject as an academic discipline
- Use a critical approach to the relevance of religion in today's society

As a result, students should become independent learners, who are well prepared for university life and particularly for an Arts or Humanities degree.

## **Methods of assessment**

Candidates will be assessed by means of external examinations, two for the AS students and an additional two A2 units for those taking the full Advanced GCE. Papers will be 1 hour 20 minutes in length at AS level and 2 hours in length at A2 level.

# **Career Opportunities**

RE is of benefit in everyday life, as it helps pupils to be open-minded and respect the views of others, especially when different from their own.

It is a subject that develops oral communication and literary skills and can lead pupils into a variety of careers such as Dietetics, Law, Nursing, Property Development and Teaching, to name but a few.



# Spanish

#### Aims of the course

- •to build on knowledge and skills from GCSE and develop understanding
- •to help develop enjoyment in, and enthusiasm for, learning and understanding the Spanish language and Spanish grammar
- •to develop communication and translation skills in Spanish
- •to create a deeper awareness and understanding of Spanish speaking countries and cultures
- •to develop a wide range of skills which can be transferable to other subjects, courses and careers.

#### What are the lessons like?

A wide range of teaching strategies and contemporary resources are employed to enhance teaching and learning, to promote independent study and to maximise pupil participation in class. Structured study and practice of Spanish grammar points ensure that pupils become proficient in accurate oral and written expression and in successful translating.

Speaking practice is also a regular feature of lessons so that students build up confidence for their oral examination and become increasingly capable of expressing themselves in a natural and spontaneous way. At AS the themes studied include relationships, culture, lifestyle and a Spanish film. At A2 more complex issues are examined such as the media, prejudice, racism, poverty, politics and the environment. There is also a greater focus on Spanish literature.

#### AS Course content

Content	Summary	Assessment	Weightings
AS 1:	Presentation (3 minutes)	Visiting examiner	30% of AS level
Speaking	Conversation (8 minutes)	Total: 11 minutes	12% of A level
AS 2:	Listening	Listening Examination:	40% of AS level
Listening & Reading & Use	Question 1: Answer in	40 minutes	16% of A level
of Language	Spanish	Reading Section:	
	Question 2: Answer in	50 minutes	
	English	Use of Language Section:	
	Reading	30 minutes	
	Question 1: Answer in		
	Spanish	Total for Reading & Use of	
	Question 2: Translate from	Language Examination:	
	Spanish into English	1 hour 20 minutes	
	Use of Language		
	Grammar exercises and a		
	translating sentences		
	from English to Spanish		
AS 3:	Students write one essess in	Examination :	30% of AS level
	Students write one essay in		
Extended Writing	Spanish in response to a set film or literary text	1 hour	12% of A level
witting	a set min of interary text		AS=40% of A level

#### **A2 Course content**

Content	Summary	Assessment	Weightings
A2 1: Speaking	Discussion on an individual research topic (6 minutes) Conversation (9 minutes)	Visiting examiner Total: 15 minutes	18% of A level
A2 2: Listening & Reading	Listening Question 1: Answer in Spanish Question 2: Answer in English Reading Question 1: Answer in Spanish Question 2: Translate from English into Spanish	Listening Examination: 45 minutes Reading Section: 2 hours	24% of A level
A2 3: Extended Writing	Students write one essay in Spanish in response to a set literary text	Examination : 1 hour	18% of A level A2=60% of A level

# **Career opportunities**

Spanish can be studied at university alongside other Modern Languages or can be combined with the study of English, Law, Accounting, Economics, European Studies, and many other degree pathways.

Learning a foreign language develops a whole set of mental, social, and cultural skills. This can be an advantage when it comes to picking up an additional language. Once Spanish has been learned to a proficient level, picking up a new language can be easier. The new languages studied, especially of European origin, tend to have a lot of recognizable, common elements that are more easily assimilated and expanded upon by tapping into previous language-learning experience.

Students of Spanish commonly go on to learn Italian, Catalan and Portuguese ab initio at university, although combinations such as Spanish with Arabic or Mandarin are popular also. If you study Spanish at university, you will normally study abroad in Spain or South America for one year of your course. This is an opportunity to meet new people and enjoy new experiences. It is also superb preparation for the world of work. If you have proven yourself to be a capable employee with just the right job skills AND you speak a foreign language such as Spanish, you are more likely to be employed than if you are monolingual. Indeed, just having a basic knowledge may be all it takes to separate yourself from the crowd of applicants for the job you are pursuing. Fluency in a second language may also result in you earning a higher salary.

Internationally, people who speak Spanish often have opportunities to work in diplomacy, interpretation, trade or business fields.



# Sports Science & Active Leisure Industry

By studying this course, you will develop an understanding of Sports Science and the Active Leisure Industry relating specifically to Sport and Recreation and Health and Fitness. Leisure is one of the fastest growing industries in the world today, with gym and indoor sports facility use becoming a way of life. More and more people are learning about the science of physical health and fitness.

## Why study Sports Science and the Active Leisure Industry?

This specification will encourage you to:

- Develop an interest in Sports Science and the Active Leisure Industry specific to Sport and Recreation and Health and Fitness;
- Acquire knowledge and understanding of Sports Science and the Active Leisure Industry through practical and theoretical contexts;
- Undertake practical activities which allow you to apply your knowledge, understanding and skills when exploring the subject;
- Develop skills that enable you to make an effective contribution, including research, evaluation and problem-solving skills in a work-related context;
- Develop knowledge about the importance of technology to sport and physical activity in the industry;
- Develop skills to help to prepare for third level education and/or employment in the industry; and
- Demonstrate your understanding and application of key concepts through assessments.

Unit	Areas of Study	Unit	Areas of Study
AS			
AS 1:	This unit will provide you with an	AS 2:	This unit will develop your
Internal	understanding of the components of	The Active Leisure	knowledge
	fitness, training methods, fitness	Industry: Health,	and understanding of an active
Assessment Fitness and	testing and first aid. You will plan,	Fitness and Lifestyle	lifestyle. It introduces you to key
Training for Sport	perform and evaluate a sport specific fitness programme.		concepts including health, fitness and lifestyle and explores the
Training for Sport	You will learn about:		relationships between these
	• Components of Fitness		concepts.
	Training methods		You will learn about:
	• Fitness Testing		•The Active Leisure Industry
	<ul> <li>Planning Fitness Programmes and</li> </ul>		<ul> <li>Lifestyle and Health</li> </ul>
	Leading Exercise Sessions		<ul> <li>Nutrition for Health and</li> </ul>
	•Safety and Risk Assessment		Exercise
	• First Aid		• Enhancing Fitness
			•The Need for Safety in the
			Active Leisure Industry
			Barriers to Participation     Health of the Nation and
			comparisons made to other
			European Countries
			1

Unit	Areas of Study	Unit	Areas of Study
A2			
A2 1:	This unit introduces you to the	A2 2:	This unit concentrates on the
Internal	Leisure Industry, which is one of	The Application of	examination of the structure of
Assessment	the fastest growing industries in the	Science to Sports	the respiratory, circulatory,
	UK and Europe. It helps you	Performance	muscular and skeletal systems
Event Management	prepare for employment in the		and how they function during and
in the Active	active leisure industry by giving you		after exercise, and at rest. You
Leisure Industry	the opportunity to develop the		will develop a knowledge and
	essential workplace business skills.		understanding of the short- term
	You will learn about:		responses and long-term
	•Introduction to the Key		adaptations of exercise associated
	Components of the Leisure Industry		with each system.
	<ul> <li>Choice of Active Leisure Event</li> </ul>		You will learn about:
	Linked to Key Components of		<ul> <li>Respiratory System</li> </ul>
	Leisure 'Sport'		<ul> <li>Cardiovascular System</li> </ul>
	<ul> <li>Feasibility of the Event</li> </ul>		<ul> <li>Skeletal System</li> </ul>
	<ul> <li>Teamwork</li> </ul>		<ul> <li>Muscular System</li> </ul>
	• The Event		<ul> <li>Effects of Exercise</li> </ul>
	<ul> <li>Evaluating the Event</li> </ul>		<ul> <li>Ethics in Sports Performance</li> </ul>
			<ul> <li>Skill Acquisition</li> </ul>
			<ul> <li>Understanding Learning and</li> </ul>
			Performance

Unit	Assessment Format	Unit Weightings
AS 1: Fitness and Training for Sport	You will produce a portfolio showing written evidence of training methods, fitness assessment and planning, leading and evaluating exercise sessions	60% of AS 30% of A Level
Internal assessment		
AS 2: The Active Leisure Industry: Health, Fitness and Lifestyle	You will respond to short and extended questions and stimulus response questions.	40% of AS 20% of A Level
External written examination 2 Hours		
A2 1: Event Management in the Active Leisure Industry	You will produce a portfolio showing written evidence of planning for an active leisure event and evaluation of outcome.	30% of A Level
Internal Assessment		
A2 2: The Application of Science to Sports Performance	You will respond to short and extended questions and stimulus response questions.	20% of A Level
External written examination 2 Hours		

# What can I do with a qualification in Sports Science and the Active Leisure Industry?

In this course you will develop your knowledge, understanding and skills in research, analysis, planning, time management, event management, problem-solving and communication as a coach or instructor. It can open up a wide range of opportunities in higher education or in a successful career, for example as a PE teacher, personal trainer, leisure centre manager or a sports therapist. Those who are interested in sports science can go on to enjoy careers in personal and fitness training, the leisure industry, event management, sports massage and therapy, physical education and teaching.



# Technology and Design

The world we live in is populated with products, some simple, some complex, which we make use of each day of our lives in a wide range of contexts. We use products to help us in our work, to relax, to communicate with each other and in practically every part of our existence.

All of these have had to be designed from an initial idea or developed from an existing idea or product. This specification promotes the concept of design allied with the application of scientific principles to realise solutions to real-life problems and everyday situations.

The AS units include a common core of design and materials and a specialised study of:

- systems and control (electronic and microelectronic systems); or
- product design.

Students also complete a product development task that is internally assessed.

Students who continue to A2 explore systems and control (electronic and microelectronic systems) or product design in greater detail than at AS level.

The A2 course includes an internally assessed design-and-make task.

Content	Assessment	Weightings
AS 1:	In this unit you will:	50% of AS
Compulsory: Design and Materials	Study a common core of design and materials; and study a specialised area of either Electronic and Microelectronic Systems or Product Design.	20% of A level
Option: Systems and Control or	One external written examination consisting of two papers:	
Product Design	• Paper 1: Core area of study	
	Students answer seven	
	questions from a common core paper.	
	• Paper 2: Specialist area of	
	Study	
	Students answer two questions that reflect the area of	
	technology they chose to	
	specialise in from the three	
	options available.	
	Option A: Electronic and	
	Microelectronic Control	
	Systems.	
	Option C: Product Design	
	Each paper is 1-hour long.	
	There will be a 20-minute break between papers.	
AS 2:	Internal assessment	50% of AS
Coursework:	In this unit you will: apply knowledge and skills covered in	
Product	Unit AS 1; and carry out a product development exercise on	20% of A level
Development		

	an existing product or an aspect of it involving the production of a design folder and a developed product outcome.	
	Students complete one task, producing a practical outcome with a design folder [10 - A3 Pages].	
	Teachers mark the task, and CCEA moderate the results.	
A2 1: Systems and Control or Product Design	External written examination In this unit you will: study in greater detail than at AS level a specialised area of either Electronic and Microelectronic Systems or Product Design.	30% of A level
	One 2-hour paper: Students answer two questions from either Section A, Section B or Section C.	
A2 2: Coursework: Product–System Design and Manufacture	Internal assessment In this unit you will: apply knowledge and skills covered in all units but your work must reflect the specialist area of study chosen in Unit A2 1; and carry out a design and make exercise involving the production of a design folder and a product outcome.	30% of A level
	Students complete one task, producing a practical outcome with a design folder.	
	Teachers mark the task, and CCEA moderate the results.	

# What can I do with a qualification in Technology and Design?

A qualification in Technology and Design can provide you with a basis for study in further or higher education in a wide range of disciplines such as engineering, product development and product design.

The qualification could also be used as an entry route into an apprenticeship in a career such as engineering.

The range of career options open to you is very wide due to the nature of GCE Technology and Design as it involves problem-solving, application of scientific principles to the design of products, the process of design itself and the use of materials and techniques such as computer-aided design. This can provide you with a useful basis for entry into careers such as product design, engineering, graphic design, teaching and architecture.