

FRIENDS' SCHOOL LISBURN KEY STAGE 4 CURRICULUM BOOKLET 2024-2026

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GENERAL INFORMATION

This booklet is designed to give information about the **Key Stage 4 Curriculum** offered at Friends' School. The structure for choosing **GCSE** subjects is set out and details are given in the following pages about each of the subjects offered at GCSE Level. Up to the end of Year 10, all pupils follow a broadly based common curriculum. At the beginning of Year 11 pupils embark upon GCSE courses, taking a reduced number of subjects, and decisions about subject choices now have to be made. At Friends' we aim to provide an education that is as widely based as possible, allowing all pupils to focus on their strengths whilst keeping options open for progression to A Level and beyond. We also aim to provide a curriculum that is valuable, relevant and challenging.

Key Stage 4 pupils will have access to the following Areas of Learning:

AREAS OF LEARNING	CONTRIBUTORY SUBJECTS
Language and Literacy	English Language
	English Literature
Mathematics and Numeracy	Mathematics
	Further Mathematics
Modern Languages	French
	German
	Spanish
The Arts	Art and Design
	Music
	Drama
Environment and Society	Agriculture
	Business Studies
	Geography
	History
	Food and Nutrition
Science and Technology	Biology
	Chemistry
	Physics
	Double Award Science
	Single Award Science
	Technology and Design
	Digital Technology
Physical Education	Physical Education (GCSE)
Religious Studies	Religious Studies

All pupils have one period per week of non-examination Physical Education and two periods of Games. There are also classes in **Learning for Life and Work** comprising elements of Citizenship, Employability and Personal Development. All pupils receive **Careers** guidance and have a **Study Skills** programme.

GCSE SUBJECT CHOICES 2024 KEY DATES			
7 February	19 February	20 – 22 February	23 February
GCSE Subject Choice Assembly	Parents' Meetings with Subject Teachers	Parents' Meetings with Careers Team	Any outstanding forms submitted by this date











STEP 1 COMPULSORY

Pupils study the following

- English
- English Literature
- Mathematics
- Religious Studies

STEP 2 MODERN LANGUAGE

Pupils choose one modern language

- French
- Spanish
- German

STEP 3 SCIENCE

Pupils choose one from

- Biology
- Chemistry
- · Physics

OR

- Double Award (2 GCSE Grades)
 OR
- Single Award*
 (1 GCSE Grade)

STEP 4 FINAL CHOICES

Pupils have a free choice from

- Art & Design
- Agriculture*
- Biology
- Business Studies
- Chemistry
- Digital Tech
- Drama*
- · Food & Nutrition
- French
- Further Maths
- Geography
- German
- History
- Music
- · Physical Education
- Physics
- Spanish
- Technology & Design

*denotes a new subject that will only be offered subject to class sizes as determined by the school

Please note, places in over-subscribed subjects will be allocated on teacher recommendation of pupil suitability.

The subjects listed below can be taken at A Level without GCSE. However, pupils are required to meet the minimum subject requirements set out for each subject in the Sixth Form Curriculum booklet.

- Business Studies
- Digital Technology
- Nutrition & Food Science
- Geography
- Government & Politics

- Health & Social Care
- Moving Image Arts
- Physical Education
- Software Systems Development



SUBJECT OVERVIEWS

AGRICULTURE & LAND USE

OVERVIEW

Over 60 percent of the population of Northern Ireland is classified as rural. Farming, along with land-based and environmental industries, makes a significant contribution to the local economy.

Unit 1: Soils, Crops and Habitats: In this unit students gain an appreciation of soil composition and its importance in producing plant crops. The unit also aims to raise student awareness of the diverse types of farming employed across Northern Ireland. Finally, students analyse the impact agricultural practices have on the natural environment and consider how modern farming can limit this impact, while enhancing biodiversity and promoting sustainability.

Unit 2: Animals on the Land: The unit focuses on the key aspects of cow, sheep, pig and poultry husbandry, including health, welfare and breeding. They learn how farming is responding to increasing environmental concerns about land use and consider aspects of sustainability at farm level, including farm diversification.

Unit 3: Controlled Assessment – Contemporary Issues in Agriculture and Land Use: In this unit students carry out a practical investigation (Task 1) and a research project (Task 2) into topics relevant to contemporary issues in Agriculture and Land Use.

Task 1 - Practical Investigation: Students carry out a practical investigation relating to a topic relevant to contemporary issues in Agriculture and Land Use.

Task 2 - Research Project: Students research a topic relating to a contemporary issue in Agriculture and Land Use.

ASSESSMENT

Unit 1: Soils, Crops and Habitats – 1 hour and 15 minutes, written examination paper - 25%

Unit 2: Animals on the Land – 1 hour and 15 minutes, written examination paper – 25%

Unit 3: Contemporary Issues in Agriculture and Land Use - Controlled assessment

Students complete two controlled assessment tasks: practical investigation task (20%); and a research project (30%) Teachers mark the tasks and CCEA moderate the results.

CAREER OPPORTUNITIES

This course enables students to broaden their Key Stage 4 education and provides a platform for study of land-based subjects at a higher level. Agriculture is a science GCSE and provides extra preparation for the study of Biology, Nutrition and Food Science at 'A' Level or onto Further Education colleges. It provides a great basis and grounding for those students wishing to study veterinary, agriculture, food science, geography, along with a host of other job opportunities.



ART & DESIGN

OVERVIEW

HEAD OF DEPARTMENT, MR R MURRAY

The GCSE Art and Design course builds on the skills and capabilities developed at Key Stage 3. Offering a broad and flexible content, it allows pupils opportunities to pursue a range of creative pathways. It places an emphasis on drawing and on understanding and applying the design process. In addition, students are encouraged to engage with the creative and cultural industries. "The creative industries are one of the UK's greatest success stories, with British musicians, artists, fashion brands and films immediately recognisable in nations across the globe. Growing at almost twice the rate of the wider economy and worth a staggering £84 billion a year, our Creative Industries are well and truly thriving and we are determined to ensure its continued growth and success." Minister for Culture Ed Vaizey, 2016.

	AREAS OF STUDY		
Component 1	Pupils will experiment in some of the following disciplines: Fine art – drawing and painting, Fine art –		
Part A:	sculpture, Fine art – printmaking, Textiles, Ceramics, Graphic design, Photography, Moving image or		
Exploratory	animation, Digital media and 3D design.		
Portfolio			
	Pupils must explore at least two disciplines. You will explore the processes and contexts of practitioners.		
	Throughout Part A you will learn how to use the formal visual elements of art and design, including: colour, line, shape, form, texture, tone and pattern.		
Part B: Investigating	Pupils will complete one practical task, set by the teacher. Pupils will build on the knowledge and skills gained in Part A.		
the Creative	Samos III varavii		
and Cultural Industries	Pupils will learn about the different roles and work practices used in the production of art, craft and design in the creative and cultural industries. This may include practical opportunities, for example workshops, museum visits, gallery visits or collaborating on a project.		
	You will document your research and use drawing to support the development of your work. You will produce an outcome.		

ASSESSMENT

	ASSESSMENT DESCRIPTION	WEIGHTING
Component 1 Part A: Exploratory Portfolio Part B: Investigating the Creative and Cultural Industries	 Controlled Assessment Portfolio of experimental work Teacher assessed, moderated by CCEA -50 marks (25%) Personal Outcome or Design Solution Teacher assessed, moderated by CCEA - 70 marks (35%) 	60%
Component 2: Externally Set Assignment	 Component 2: Externally Set Assignment Pupils will complete work in response to a stimulus paper CCEA release in the final year of their course. Pupils will complete at least 20 hours of preparatory work in response to the theme in the paper. Pupils will also produce and complete a final outcome based on their preparatory work within a set period of 10 hours under exam conditions. 	40%

CAREER OPPORTUNITIES

Pupils can progress to our A level qualifications in Art and Design or History of Art and other related courses. You may go on to become a practising artist, designer or architect and contribute to the economy as part of the fast-growing creative and cultural industries. Students of Art and Design develop valuable transferable skills, which are sought after by many colleges and universities, employers and industry leaders. These practical skills and the ability to solve problems and think creatively will be used throughout your life.



BUSINESS STUDIES

OVERVIEW

HEAD OF DEPARTMENT, MRS J GENOE

Business Studies provides students with a comprehensive understanding of key business concepts and practices. Covering areas such as marketing, finance and operations, the course equips students with skills for the dynamic world of business. Emphasising real-world applications, the GCSE course encourages practical problem-solving and critical thinking. Students will explore case studies, analyse business strategies and develop an appreciation for the ethical considerations in the business environment. With a focus on fostering an entrepreneurial spirit, the Business Studies GCSE prepares students for future academic pursuits and provides a solid foundation for those considering a career in the diverse field of business.

The subject gives pupils the opportunity to develop their knowledge and understanding of the business world through a wide range of topic areas:

Creating a Business: This section focuses on business start-up and the importance of the role of the entrepreneur. Here we also look at the different types of business organisations, their structures, aims and how they are viewed by different stakeholders. Business Operations: Aspects of the types of production and methods of manufacturing are studied. The importance of quality, and health and safety is also addressed.

Marketing: In this section, pupils will look at the marketing mix (product, price, promotion and placement of products and services). Elements of consumer law and the role of regulatory bodies are also addressed.

Finance: This includes basic financial documents and forecasting techniques.

Human Resources: This topic addresses the areas of management, recruitment and selection, motivation and training of employees. Students also look at Employment Law and relevant organisations in the area of Human Resources.

Business Growth: In studying this section, pupils will learn about business growth, the increasing reliance on e-commerce and the increasing trend of firms operating in international markets.

Business Planning: In this section, pupils learn about the content of business plans and the reasons for developing them. This brings all the topic areas together to show how they are interrelated and dependent on each other.

ASSESSMENT

CONTENT	AREA OF STUDY
Unit 1: Starting a Business	You will study how a business starts up, marketing methods and business operations. This unit is assessed in a 1 hour 30 minute written examination paper worth 40% of the overall GCSE qualification.
Unit 2:	You will study human resources, business growth and finance.
Developing a Business	This unit is assessed in a 1 hour 30 minute written examination paper worth 40% of the overall GCSE qualification.
Unit 3: Planning a Business	You will study and evaluate the different components of a business plan, carry out research and make recommendations based on your findings. This unit may examine any area of content from the specification. It is assessed through controlled assessment and worth 20% of the overall GCSE qualification.

CAREER OPPORTUNITIES

Pupils can take Business Studies at AS and A2 levels. A number of university courses offer Business Studies or combined business courses with Law, Modern Languages, ICT or business-related courses, such as Marketing or Accountancy. Studying Business Studies can lead on to a career in accounting, advertising, banking, retail, management consulting, marketing, research, human resources, a small business, or self- employment as an entrepreneur.



DIGITAL TECHNOLOGY

OVERVIEW

HEAD OF DEPARTMENT, MR E MARTIN

It's a good time to be working in IT and computing. Research by e-skills UK shows that the sector is one of the fastest-moving and most dynamic in the UK – currently employing 1 in 20 of us. It's estimated that over half a million new entrants will be needed to fill jobs in this sector over the next five years. There are opportunities for IT and computing graduates across all industries, including retail, financial services, telecommunications, broadcast media, digital media, manufacturing, transport, tourism, the public sector and healthcare – with strong growth and demand in cyber security, mobile development, cloud computing and the management of big data.

Course Aims

This specification aims to encourage students to:

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

ASSESSMENT

The tables below summarise the structure of this GCSE course.

Content		Assessment	Weightings
Compulsory Core	Unit 1: Digital Technology	External written examination 1 hour	30%
Programming Units	ogramming Units Unit 4: Digital Development Concepts		40%
	Unit 5: Digital Development Practice	Controlled assessment	30%

The qualification achieved is GCSE Digital Technology (Programming)

CAREER OPPORTUNITIES

The IT sector in Northern Ireland currently employs around 16,000 people [Source: DELNI]. This figure is set to increase dramatically over the coming years as the region further establishes itself as a hub of Technology enterprise and innovation. This could herald a new phase in inward investment particularly in the IT sector, already a source of huge inward investment in the Northern Irish economy.

E-Skills (UK) predict that employment in the IT sector will grow at an annual rate of around 2,300 up to 2021. This current rate of growth outstrips that found in almost every other sector of the economy. This has been fuelled primarily by expansion in existing large IT employers such as Citi, Allstate, Liberty IT and Kainos and a multitude of new start-ups.

Recent research by the University of Ulster has demonstrated that as a region we are not producing enough suitably qualified graduates to fuel this demand. GCSE Digital Technology provides some of the essential skills needed by students considering a career in IT, providing the ideal transition from Key Stage 3 towards more focused study at A-Level.



DRAMA

OVERVIEW

This new GCSE gives pupils the opportunity to engage with the study of Drama. Pupils will:

- develop a personal interest in drama and be motivated and inspired by a broad and coherent course of study;
- engage actively in studying drama so they develop as effective and independent learners and as critical and reflective thinkers with enquiring minds;
- work imaginatively and creatively in collaborative contexts, generating, developing and communicating ideas;
- analyse and evaluate their own work and the work of others;
- develop and demonstrate competence in a range of practical, creative and performance skills;
- develop skills that provide a basis for progression to employment or further study; and
- consider and explore the impact of social, historical and cultural influences on drama texts and activities.

Pupils opting for this course should have an interest in the performance element of drama and preferably have had some experience outside of the classroom.

ASSESSMENT

Content	Assessment	Weighting
Component 1	Controlled Assessment	25%
Devised Performance	In response to a stimulus, students will	
	devise and present a group	
	performance.	
Component 2	Controlled Assessment	35%
Scripted Performance	Using a published play script, students	
	will present a group performance.	
Component 3	External Written examination	40%
Knowledge and Understanding of		
Drama	1 hour 30 minutes	
	Students answer three questions using	
	one set text.	
	Open book	

CAREER OPPORTUNITIES

This course provides the opportunity to explore a range of practical, creative, analytical and performance skills. Most careers and further study pathways increasingly require the range of skills developed through the qualification: presentation, collaboration, confidence, evaluation and innovation. Studying GCSE Drama can lead to further study in performing arts, a career in acting or design, or a wide variety of other careers that use the skills described above. The Creative Arts is a healthy and growing sector in Northern Ireland and GCSE Drama is a very relevant qualification.



ENGLISH LANGUAGE

OVERVIEW

HEAD OF DEPARTMENT, MRS L HANNA

Studying English Language will help you to engage with spoken and written language, allow you to express opinions, and encourage you to challenge ideas.

ASSESSMENT

UNIT ASSESSMENT	AREAS OF STUDY
Unit 1: Writing for Purpose and Audience and Reading to Access Non-Fiction and Media Texts	This unit is assessed in a written examination lasting 1 hour 45 minutes, which is worth 30% of the overall GCSE qualification.
Unit 2: Speaking and Listening	You will complete an individual presentation and interaction, a discussion and a role play. This unit is assessed in three controlled assessment tasks, worth 20% of the overall GCSE qualification.
Unit 3: Studying Spoken and Written Language	You will study the impact of spoken language and demonstrate knowledge of characters, themes and genres in literary texts. This unit is assessed in two controlled assessment tasks worth 20% of the overall GCSE qualification.
Unit 4: Personal or Creative Writing and Reading Literary and Non-Fiction Texts	You will engage with writing and reading tasks based on non-fiction texts. This unit is assessed in a written examination lasting 1 hour 45 minutes, which is worth 30% of the overall GCSE qualification.



ENGLISH LITERATURE

OVERVIEW

HEAD OF DEPARTMENT, MRS L HANNA

English Literature enhances your ability to be critical and analytical. It opens up your mind and imagination, helping you to think independently and increase your knowledge and understanding of a variety of literature.

The course will develop your ability to write accurately and clearly. You will learn to research, plan and prepare your responses using your own ideas and interests. You will discover how to be creative when explaining themes, characters, settings and their influences through social, cultural and historical situations.

ASSESSMENT

UNIT ASSESSMENT	
	AREAS OF STUDY
Unit 1: The Study of Prose You will sit an examination lasting 1 hour 45 minutes. Section A: one question (closed book) Section B: one question This unit is worth 30%.	Section A: Novel You will study, explore and respond to a modern novel, demonstrating your knowledge and understanding of the text. Section B: Unseen Prose You will learn to analyse and evaluate an unseen nineteenth-century prose extract.
Unit 2: The Study of Drama and Poetry You will sit an examination lasting 2 hours. Section A: one question (open book) Section B: one question (open book) This unit is worth 50%.	Section A: Drama You will study, explore and respond to a play by a modern dramatist, demonstrating your knowledge and understanding of the script. Section B: Poetry You will study, explore and respond to a collection of poems
Unit 3: The Study of Shakespeare You will complete a controlled assessment task lasting 2 hours. This will be one extended writing task marked by your teacher and moderated by us. This task is worth 20%.	You will study, explore and respond to a Shakespeare play, demonstrating your knowledge and understanding of the work. This is an extended writing task based on a theme.

CAREER OPPORTUNITIES

Both subjects develop the use of written and face-to-face communication, as well as your ability to research, understand and respond to ideas. You can apply these skills in any field. Studying English allows you to develop the use of written and face-to-face communication, as well as your ability to research, understand and respond to ideas. You could apply these skills in further study or employment in the media industry including print, online, TV and radio. Journalism or publishing are other possible routes that English can lead to, for example editorial, proofreading and correcting books before they go to print. A job in advertising, public relations or the press is also an option. With further study, teaching is another profession open to you, or you could work for an arts organisation trying to secure funding or publishing material for a museum or a gallery. You could also go into sectors like law, business, social work or politics.



FOOD & NUTRITION:

OVERVIEW

HEAD OF DEPARTMENT, MRS J MCCARTHY

The subject content is divided into **TWO** components:

Component 1: Food and Nutrition

In this unit, pupils learn about the nutritional content of foods and how the specific nutritional and dietary needs of different of people can be met by modifying recipes, and planning, preparing and cooking meals and dishes that reflect current government nutritional guidelines. They also study how to be an effective consumer in relation to food choice, food safety and managing resources.

Component 2: Practical Food and Nutrition

In this unit, pupils carry out a task that develops unique transferrable skills. Pupils research the given task title and various viewpoints on it. They choose and justify a practical activity using a range of criteria. They complete the activity in a single session and evaluate all parts of the task.

ASSESSMENT

The course is assessed through **ONE Written Paper** and **ONE Controlled Assessment** task. The written paper is externally assessed and the Controlled Assessment task is internally assessed. The **Written Paper** accounts for **50%** of the overall marks and tests Food and Nutrition. It is comprised of short answer, structured and extended response questions. There is a **Single Tier of entry**

The Internally Assessed Controlled Task accounts for 50% of the overall marks. It involves researching the chosen title, justifying chosen dishes for the practical activity, planning for the practical activity (ingredients, shopping, equipment lists and time plan), carrying out the practical activity and evaluating all parts of the task.

A course based on this Specification provides a suitable basis for further study at Advanced Level by offering progression to academic and vocational subjects including AS/A2 Nutrition and Food Science and AS/A2 Health and Social Care. In addition, it provides a basis for those seeking employment in a wide range of careers such as Education, Marketing, Health Care, Nursing, Social Work, Occupational Therapy, Physiotherapy, Sports Nutrition and Dietetics.

CAREER OPPORTUNITIES

The course helps to prepare young people for adult life and independent living and also provides an excellent foundation for young people who wish to work in food-related industries and/or undertake further study in this area, for example progressing to our GCE Nutrition and Food Science or other related courses. As part of the course, pupils attend RUAS Balmoral Show to experience the food tent and watch cookery demonstrations. A presentation is given by a local Environmental Health Officer to outline their role and the protective role of legislation. At the end of the presentation, a time is set aside to talk about a career in Environmental Health and the qualifications needed to enter a relevant training course. There is also a cookery demonstration from the Livestock Meat Commission.



GEOGRAPHY

OVERVIEW

HEAD OF DEPARTMENT, MR D MCELHINNEY

Geography at GCSE aims to develop an understanding of the physical and human world around us. It provides pupils with a perspective from which they can place events on local, national and international scales. Through a varied scheme of work, geographical knowledge is acquired and at the same time, a wide range of practical skills, such as map reading and field work, is developed.

Geography is one of the most popular subjects in Higher Education. It is offered in around sixty institutions in the United Kingdom. The subject, whilst having its own special content, has traditionally been strongly linked with many others. It is allied to over twenty other degree subjects from African Studies to Travel and Tourism. Concerns about the environment and the issues surrounding globalisation give Geography a special place in the whole school curriculum.

ASSESSMENT

The CCEA syllabus in Geography is followed. It covers **EIGHT** themes:

Unit 1 (40% of final grade)

- River Environments
- Coastal Environments
- Our Changing Weather and Climate
- The Restless Earth

Unit 2 (40% of final grade)

- Population and Migration
- Changing Urban Areas
- Contrasts in World Development
- Managing Our Environment

Unit 3 (20% of final grade)

As well as the main themes mentioned above, pupils will be assessed on **fieldwork skills** and **geographical techniques** in an external written exam. The assessment will be centred on a piece of fieldwork carried out at the end of Year 11. All **Assessment** emphasises understanding. There is flexibility to allow major current events to be studied where they inform the Programme of Study, allowing Geography to remain a relevant subject in a rapidly changing world.

CAREER OPPORTUNITIES

This qualification will help you gain valuable transferable skills. Studying Geography can lead to a wide range of careers such as urban planning, cartography, GIS applications, climatology, hydrography, environmental management, weather forecasting, research, journalism, landscape architecture, surveying, aerial photography and teaching.



HISTORY

OVERVIEW

HEAD OF DEPARTMENT, MR M ROBINSON

GCSE History is a popular and engaging course with two examinations at the end of Year 12. The subject builds upon historical skills, such as source interpretation and essay writing, developed at Key Stage 3, and will allow pupils to study a diverse array of subjects from the Twentieth Century.

ASSESSMENT

Pupils will undertake two units of study:

- 1. The first unit is sub-divided into two different topic areas:
- Nazi Germany 1933-1945 Pupils will study 'Life in Nazi Germany' examining the rule of Hitler's dictatorship and its impact on the German people and those within occupied Europe.
- **Northern Ireland 1965-1998** This will involve a study of the origins of 'The Troubles' in the 1960s, the violence of the 1970s and the search for a political solution to the conflict, leading to the Good Friday Agreement in 1998.

Both Nazi Germany and Northern Ireland are assessed in one exam paper, which counts for 60% of the GCSE.

2. International relations 1945-2003 – This module is largely based around the rivalry between the USA and USSR during the Twentieth Century. It will also see pupils study the root causes of terrorism leading up to the 9/11 attacks and 'The War on Terror' in the early 2000s.

International Relations is assessed in a separate paper and is worth 40% of the overall GCSE.

CAREER OPPORTUNITIES

Studying History can lead to a diverse range of further study opportunities and careers. While many of these are not directly related to the content you learn in History, it is the skills you develop when you are 'thinking like a historian' that make History a well-respected and attractive subject to universities and employers. Law, politics, civil service, business, marketing, finance, accountancy, journalism, economics, teaching, academia, insurance, social research, crime investigation, social work, archaeology and heritage offer a snapshot of the many career avenues that studying History can lead you down.



MATHEMATICS

OVERVIEW

HEAD OF DEPARTMENT, MR J WILLIAMSON

All pupils in Years 11 and 12 study **Mathematics**. The syllabus is designed to develop confidence in, and mastery of, the subject. Pupils are encouraged to acquire skills such as reasoning and problem solving, in addition to the more traditional elements of the subject, and to appreciate the important role Mathematics plays in everyday life. The course provides a sound basis for further study of Mathematics and related subjects at a more advanced level.

ASSESSMENT

The course is assessed through TWO Units and it is expected that <u>all</u> pupils will be entered for Higher Tier.

Within **Higher Tier**, pupils will sit the **M3** or **M4** (**45%**) unit and the **M7** or **M8** (**55%**) unit, according to ability. In the M3 and M4 units a calculator is permitted. Units M7 and M8 include one paper in which the use of a calculator is not permitted, and one in which it is.

All GCSE units build on the foundation of Key Stage 3 Mathematics. The M3 and M4 units include work on Number and Algebra, Geometry and Measure, and Statistics, but the M4 unit includes more challenging work such as quadratic factorisation and formula, perpendicular lines, circle theorems and histograms. Units M7 and M8 both cover additional topics on Number and Algebra, Geometry and Measure, and Probability, but the M8 unit includes more challenging work such as exponential functions, the sine and cosine rules, the equation of a circle and tree diagrams.

At the end of Year 11 (May/June) **ALL** Further Mathematics pupils will sit their GCSE Mathematics examination, enabling them to focus on preparation for the Further Mathematics examination during Year 12.



FURTHER MATHEMATICS

OVERVIEW

HEAD OF DEPARTMENT, MR J WILLIAMSON

This course in **Pure Mathematics**, **Mechanics** and **Statistics** is a good basis from which to study A Level Mathematics. It is best suited to pupils who wish to extend their Mathematics beyond GCSE Higher Tier and who have aptitude and enthusiasm for Mathematics. Aspects of calculus, trigonometry and vector geometry, no longer contained within GCSE Mathematics, are introduced, as well as statistical concepts such as Spearman's Rank and bivariate analysis. Further Mathematics enables pupils to extend the foundation from which they may embark on higher studies in Mathematics.

Those pupils who do not choose Mathematics at A Level have found GCSE Further Mathematics a good foundation from which to progress to higher studies in subjects such as Science, Geography, Technology and Business, which contain significant requirements in Mathematics beyond GCSE.

ASSESSMENT

The **FINAL Examination** comprises **THREE** papers:

Unit 1

50% Pure Mathematics, 2 hours

Unit 2

25% Mechanics, 1 hour

Unit 3

25% Statistics, 1 hour

It is usually only pupils who consistently score above the year average in Maths tests and examinations, who cope well with the demands of the GCSE Further Maths course. If needed, the enrolment for GCSE Further Mathematics may be restricted, and the criteria for entry will be based on the Year 10 summer exam results.

CAREER OPPORTUNITIES

Mathematics is becoming increasingly important in both employment and higher education. Studying GCSE Further Mathematics helps you to build the knowledge and skills to progress to GCE Mathematics and GCE Further Mathematics. It also helps provide progression to other post-16 subjects such as STEM, Computing, Geography or Business Studies.



MODERN LANGUAGES

OVERVIEW

HEAD OF DEPARTMENT, MRS K ARCHBOLD

At GCSE level, pupils may choose either **one** or **two** Modern Languages from the languages they have been studying at KS 3. GCSE courses build on the knowledge and skills acquired at Key Stage 3. They offer pupils the opportunity to improve their knowledge of language and structures, to enhance their cultural awareness and to develop their communication skills. They will learn to express themselves using a range of vocabulary, syntax and structures and will acquire a good understanding of grammar. There are 3 main contexts which cover the following areas of learning:

- Myself and my family
- Relationships and choices
- Social Media
- New Technology
- Free time and leisure
- Daily routine
- Festivals and celebrations
- School life

- Part-time jobs
- Future plans
- Work and career choices and aspirations
- Local environment
- Social issues
- Global issues
- Travel and Tourism

Pupils will learn to **investigate, understand describe, discuss and give opinions** in relation to their own environment and in those countries where the Target Language is spoken, on the above topics.

ASSESSMENT

Pupils sit final exams at the end of Year 12 in all 4 components: Listening, Speaking, Reading and Writing. All skills are worth 25% of the overall grade.

Unit 1 Listening

1 paper: Foundation (35mins) or Higher Tier (45mins)

Pupils will respond to stimulus material that they hear in the Target Language and will complete a variety of questions. These will include: gap-fill, multiple choice, answering questions in English and answering questions in the TL.

Unit 2 Speaking

1 Speaking test. Single Tier of Entry (7-12 mins)

This test is facilitated by the pupil's class teacher but is externally marked by the examination body. All tests are recorded. Pupils will complete 2 role-play scenarios and will then sustain a conversation on 2 different topics from the contexts for learning. **One is chosen by the pupil in advance.** The pupils will have 10 minutes of supervised preparation time in order to prepare the role-plays.

Unit 3 Reading

1 paper: Foundation (50 mins) or Higher (60 mins)

Pupils will respond to stimulus in the TL and will complete a selection of questions. These will include: gap-fill, multiple choice, reading comprehension with answers in the TL, reading comprehension with answers in English and translations of sentences from TL into English.

Unit 4 Writing

1 paper. Single Tier of entry (1 hr 15 mins)

Pupils will be asked to write short phrases in the TL, make lists in the TL, complete a short translation from English into the TL and also complete an extended piece of writing in the TL. (This task is supported by 4 bullet points to aid the pupil).

CAREER OPPORTUNITIES

The study of Modern Languages is enriching and challenging. Employers have a high regard for candidates who are competent in one or more languages. Pupils who choose to study two languages will benefit from a similarity of approach and from the fact that the same skills are required in all languages. Those who are considering studying languages at university are advised to continue with two languages.



MUSIC

OVERVIEW

HEAD OF DEPARTMENT, MRS N BLAKEMAN

Entrance Requirements

A pupil wishing to commence the GCSE Music course should enjoy listening to and making music. Weekly lessons with a Performance Tutor are advisable for this course as pupils will be expected to perform at Grade 4/5.

Pupils who are already working at Grade 3/4 level when they commence study in Year 11 are in a distinctly positive position in terms of maximising their grade in GCSE Music. Skills developed through participation in choir, orchestra, jazz band or folk group are simply invaluable and music technology skills, built up in Year 8, 9 and 10, are also a particularly worthwhile aid for composition.

ASSESSMENT

The **GCSE Music** course is designed to make music personal and accessible to each pupil. This is achieved through a study of the following elements:

- I. Composing and Appraising 30% (TWO pieces.)
- II. Performing 35% (solo and ensemble, at a level equivalent to Grade 4/5 Standard)
- III. Listening and Appraising 35% (music from 1600 to the present day, including Folk, Jazz, Rock, Classical, Film Music).

These elements are studied under the following headings:

- 1. Western Classical Music 1600-1910
- 2. Film Music
- 3. Musical Traditions of Ireland
- 4. Popular Music 1980 present day.

CAREER OPPORTUNITIES

In recent years, Northern Ireland and the U.K. have seen revenue, new careers and employment opportunities in the creative sector outstrip other industries. Music is closely related to the fields of acoustics, electronics and creative digital technologies so many pupils combine Music at 'A' Level with Maths and Physics with the hope of entering these fields at university level. Others go on to study Law, Acoustic Design, Sound and Music Technology and Engineering, Pure Music, Performance, Teaching, Music Therapy, Physiotherapy, Civil Engineering and a host of other diverse courses.



PHYSICAL EDUCATION

OVERVIEW

HEAD OF DEPARTMENT MR I MONAGHAN

Pupils taking **Physical Education** at **GCSE** Level will have opportunities to:

- develop knowledge, skills and understanding for balanced, healthy lifestyles and participation in physical activities;
- understand the role of rules and conventions in selected activities;
- promote understanding of the health benefits and risks associated with taking part in physical activity;
- develop the skills necessary to analyse and improve performance;
- support personal and social development through different roles in selected activities which involve working with others.

ASSESSMENT

The course is assessed through a combination of **TWO External Written Examination Papers** and **Two Internal Controlled Assessments** of pupil performance.

Component 1 and 2 will consist of TWO, 75 minute written papers and will assess factors underpinning health and performance, and developing performance. Each paper will account for 25% of the total marks. (50%)

Component 3 consists of **Internal Assessment** and will be based on the candidate's individual performance in **THREE** physical activities, as well as the candidate's ability to analyse and improve his/her skilled performance in selected physical activities.

Both internal assessments, when combined, are worth 50% of the total marks.

It is expected that pupils opting for this subject will have been and will continue to be involved in a range of school-based activities and school teams. Pupils are eligible to be assessed in school-based activities or activities where staff have suitable experience/ qualifications. Pupils considering this GCSE PE should consult with the Head of PE to determine whether the subject is suitable for their needs.

CAREER OPPORTUNITIES

Studying Physical Education can lead to careers in leisure or recreation management, sports management, podiatry, physiotherapy, dietetics, sports coaching, professional sports, gym instruction, fitness instruction, personal training, lifeguarding, P.E. teacher, sports consultant, sports policy adviser, sports development officer, sports agent, sports journalism, sports marketing, events management, sports scientist, sports psychologist.



RELIGIOUS STUDIES

OVERVIEW

HEAD OF DEPARTMENT MRS S LEAKER

All pupils at Key Stage Four take Religious Studies to GCSE level. GCSE Religious Studies, aims to challenge pupils to examine their own life stances, as they identify the values and attitudes which influence them.

Pupils follow the full CCEA course and study **TWO** units as described below.

ASSESSMENT

Unit 1: An Introduction to Philosophy

This paper will be taken at the end of Year 11 and is worth 50% of the total GCSE score.

Unit 2: An Introduction to Christian Ethics

This paper will be taken at the end of Year 12 and is worth 50% of the total GCSE score.

Through these papers, pupils will be assessed on the following skills:

AO1: Describe, explain and analyse, using knowledge and understanding.

AO2: Use evidence and reasoned argument to express and evaluate personal responses, informed insights and differing viewpoints.

What is expected of a pupil?

Pupils should have an enquiring mind, a desire to see and study life at a deeper level, and sensitivity to the views of others. Religious Studies seeks to promote deeper understanding of the Christian faith and to allow students to see the relevance of it today. At the same time, it seeks to promote an awareness of and respect for the sincerely held beliefs of others.

CAREER OPPORTUNITIES

GCSE Religious Studies requires the ability to examine important questions with an open mind, to weigh up arguments and arrive at reasoned conclusions. Such skills as these, and the attitudes they promote, are relevant to many jobs which require an understanding of others, and the ability to relate to people of different backgrounds, such as law, medicine, teaching, journalism, caring professions, social work and nursing.



SCIENCE - GENERAL INFORMATION

You are being offered the following choices:

- 3 INDIVIDUAL Sciences or
- 2 INDIVIDUAL Sciences or
- 1 INDIVIDUAL Science or
- DOUBLE AWARD Science or
- SINGLE AWARD Science (in consultation with the school)

1. Individual Science Courses

- Each Science is studied independently of the other/s.
- The specification for each has more content than the Double Award Science specification.
- The period allocation is 4 periods in one academic year and 5 in the other academic year.
- 75% of each course is assessed by Examination. The other 25% is assessed by Practical Assessment.
- An Individual Science will lead to the award of 1 GCSE.

2. Double Award Science

- This is a combination of all 3 Sciences (Biology, Chemistry, Physics).
- The specification covers the same subject areas but contains less content than each of the Individual Sciences.
- Delivery is by 3 subject specialists. Allocation is 3 periods per week, per subject, each year.
- This course is worth 2 GCSEs. Each Science contributes 25% to the total. A practical exam and a written paper contribute to the practical skills component and makes up the final 25%.

3. Single Award Science

- Like Double Award, this covers areas of all three sciences, in 25% ratio with a fourth unit of practical skills.
- The specification covers some similar content areas, but in less detail.
- Pupils will have 9 periods across the two years of study.
- This course is worth 1 GCSE. Each Science contributes 25% to the total. A practical exam and a written paper contribute to the practical skills component and makes up the final 25%.

POINTS TO NOTE:

Looking Ahead to A Level

- 1. Studying either **2 or 3 Sciences** or **Double Award Science** provides a suitable foundation for the study of Science at A Level
- 2. In order to progress to **A Level Biology, Chemistry must be studied at GCSE** (either as part of Double Award or as an individual Science).
- 3. Pupils wishing to take **Physics at A Level** should be aware of the high mathematical content of the course and the fact that it is recommended that **Mathematics is studied as an AS or an A Level.**
- 4. Pupils thinking of applying to **Medicine should also note that they need to have a GCSE qualification in all three Sciences** (Biology, Chemistry & Physics) **either** through the Double Award route **or** through the three separate Sciences.



BIOLOGY

OVERVIEW

HEAD OF DEPARTMENT MR I MCCAUGHERTY

Biology is primarily concerned with the study of living organisms. The specification builds on the knowledge and understanding developed within the Key Stage 3 programme for Science and contributes to an understanding of moral, ethical and social issues. The subject content is set out in two modules – unit 1 is covered in Year 11 and unit 2 in Year 12.

Unit 1: Cells, Living Processes and Biodiversity

In this unit, pupils learn about cells, photosynthesis, nutrition and health, enzymes, breathing and respiration, the nervous system and hormones, and ecological relationships. Pupils begin by investigating the cell and its importance as the fundamental building block of life, and develop their understanding of the key processes that occur in plants and animals. Finally, they carry out fieldwork in a natural ecosystem to observe living specimens and explore how organisms are adapted to their environment.

Unit 2: Body Systems, Genetics, Microorganisms and Health

In this unit, pupils focus on osmosis and plant transport, the circulatory system, reproduction, fertility and contraception, genome, chromosomes, genes and DNA, cell division and genetics, variation and selection, microorganisms, defence mechanisms and cancer. Pupils develop their understanding of the processes involved in maintaining all life and investigate problems that arise due to genetic or environmental causes. Pupils also explore the issues associated with non-communicable diseases, such as heart attacks, strokes and cancer.

ASSESSMENT

Pupils will be examined by both the assessment of practical skills and THREE Examinations.

Unit 1 1 hour and 15 minutes, written examination paper 35%

Unit 2 1 hour and 30 minutes, written examination paper 40%

For both **unit 1** and **2** examinations, students also answer compulsory, structured questions that include short responses, extended writing and calculations.

Unit 3 which is worth **25**% of the total GCSE score, is based on **Practical Skills**. Pupils will carry out two pre-release practical tasks, each taking one hour for completion, in the final year of study and, in addition, sit a one-hour examination consisting of compulsory, structured questions that include short responses, extended writing and calculations, all set in a practical context.

CAREER OPPORTUNITIES

Pupils develop the ability to evaluate claims based on science, both qualitatively and quantitatively, by critically analysing the methodology, evidence and conclusions. GCSE Biology provides a thorough preparation for the study of Biology and related courses at 'A' Level. It also allows you to develop transferable skills that will be of benefit in vocational training and employment. Studying Biology can lead on to a variety of careers including medicine, dentistry, agriculture, ecology, sport and fitness, along with a host of other job opportunities.



CHEMISTRY

OVERVIEW

HEAD OF DEPARTMENT, MR R MCKAY

This CCEA Specification in GCSE Chemistry provides a broad, coherent and practical course that develops confidence in, and a positive view of, science. It encourages you to appreciate the value of chemistry and science in your life, and in the wider world. The Specification builds on the knowledge, understanding and skills developed within the Key Stage 3 Science programme and will help prepare pupils for the study of Chemistry and related subjects at a more advanced level. Chemistry can provide you with a whole range of useful skills that are highly valued by employers of all kinds, such as team working, analytical skills, problem solving, communication and numeracy skills. Chemistry is required if you want to study Medicine, Pharmacy, Veterinary or Dentistry at university. Details of current requirements can be found on the **UCAS website**.

Unit 1: Structures, Trends, Chemical Reactions, Quantitative Chemistry and Analysis

This unit introduces and explores safe practical and theoretical chemistry in terms of atomic structure, structure and bonding in traditional, new and nanoparticles, patterns in the Periodic Table, reactions of acids including preparation of pure, dry salts, solubility and chemical analysis. Pupils are expected to express themselves accurately in terms of formulae, ionic equations and balanced symbol equations. The section on quantitative chemistry includes calculations in terms of amounts in moles and percentage yield.

Unit 2: Further Chemical Reactions, Rates and Equilibrium, Calculations and Organic Chemistry

In this unit, pupils extend their knowledge of safe practical and theoretical chemistry further to include reactivity series, redox, rates of reaction, energy changes in chemical reactions and gas chemistry. Pupils are introduced to organic chemistry, equilibrium in chemical reactions and electrochemistry. They also continue to write more complex equations and carry out increasingly complex calculations of amounts in moles involving solution and gas chemistry.

Unit 3: Practical skills

Unit 3 which is worth **25**% of the total GCSE score, is based on **Practical Skills**. Pupils will carry out two pre-release practical tasks, each taking one hour for completion, in the final year of study and, in addition, sit a one-hour examination consisting of compulsory, structured questions that include short responses, extended writing and calculations, all set in a practical context.

ASSESSMENT

Pupils will be examined by both the assessment of practical skills and THREE Examinations.

Unit 1 1 hour and 30 minutes, written examination paper: 35%
Unit 2 1 hour and 30 minutes, written examination paper: 40%

Unit 3 Practical skills 25%

CAREER OPPORTUNITIES

Pupils develop the ability to evaluate claims based on chemistry, both qualitatively and quantitatively, by critically analysing the methodology, evidence and conclusions. They also develop their awareness of risk and the ability to assess potential risk and potential benefits. A variety of careers is available if you study Chemistry, including: Medicine, Dentistry, Veterinary, Pharmacy, Pharmacology, Biochemistry, Environmental Chemistry, Chemical Engineering, Material Science, Forensics, Metallurgy. Chemistry is helping us to cope with increasing pressures on energy, food, water and other natural resources. Chemistry is helping to improve and maintain human health through the development of new and improved pharmaceutical drugs and drug delivery systems.



PHYSICS

OVERVIEW

HEAD OF DEPARTMENT, MR D SWANN

Physics stimulates and excites pupils' curiosity and their interest in the world around them. Through their work in Physics, students begin to understand major scientific ideas, to appreciate how these develop and contribute to technological change. Physics offers pupils the opportunity to take part in a range of practical activities that allow them to link scientific theory to actual experience. This Specification builds on the knowledge, skills and understanding developed through the Northern Ireland curriculum for science at Key Stage 3. The course is divided into **2 units:**

Unit 1 Motion, Force, Density and Kinetic Theory, Energy, and Atomic and Nuclear Physics

Force and Motion: In this section, pupils investigate the relationship between force and motion. They meet Newton's first and second Laws of Motion and use the mathematical form of the second Law to carry out calculations. They study momentum and how momentum is considered when designing the safety features of cars.

Energy: Pupils examine the various forms of energy and the Principal of Conservation of Energy. They study the environmental impact of the use of various energy resources and are introduced to the concept.

Moments: Pupils meet the concept of centre of gravity and explore its effect on the stability of an object. They examine the Principle of Moments.

Radioactivity: In this section, students study the particle structure of both the atom and the nucleus. They examine radioactivity as a consequence of unstable nuclei and study the properties of alpha, beta and gamma radiation. They are introduced to the terms 'background' and 'half-life'. They discuss the damaging effect that nuclear radiations have on our bodies. They learn about fusion and fission as sources of energy.

Unit 2 Waves, Light, Electricity, Magnetism, Electromagnetism and Space Physics

Waves, Sound and Light: Pupils are introduced to the two main categories of waves, as well as the terms used to describe the various properties of waves. They study sound and its applications. They explore the electromagnetic spectrum and examine the use of the various types of electromagnetic wave. Students also study the reflection and refraction of light.

Electricity: Pupils study electrostatics and how it is applied in practical situations. They also investigate electrical circuits and draw them using the correct symbols. They examine series and parallel circuits and investigate the rule for currents and voltages in each type of circuit. They also study the transfer of electrical energy and electricity in the home.

The Earth and Universe: Pupils are introduced to the variety of objects that make up our Solar System. They understand how the objects move and the force that keeps them in orbit. The nebular model of the formation of the Solar System is outlined, The Big Bang and supporting evidence. The layered structure of the Earth and the concept of plate tectonics are also covered.

ASSESSMENT

Unit 3 which is worth **25**% of the total GCSE score, is based on **Practical Skills**. Pupils will carry out two pre-release practical tasks, each taking one hour for completion and sit a one-hour examination consisting of compulsory, structured questions that include short responses, extended writing and calculations, all set in a practical context.

Unit 1 1 hour and 15 minutes, written examination paper 35%
Unit 2 1 hour and 30 minutes, written examination paper 40%

CAREER OPPORTUNITIES

For those progressing directly into employment, a GCSE in Physics is relevant not only to the fields of science and engineering, but also to areas of commerce and public service that value problem-solving and practical skills. Physics taken beyond GCSE Level opens doors to a wide variety of careers including: Medicine, Dentistry, Pharmacy, Opthalmics, Nursing, Physiotherapy, Radiography, Law, Teaching, Geology, Meteorology, Pilot, Environmental Science, Engineering (Mechanical, Production, Electrical, Electronic, Civil, Chemical, Aeronautical), Computing, Design, Architecture, Industrial or Scientific Research, Marketing.



DOUBLE AWARD

This is a balanced programme of Science leading to **TWO GCSE awards**. It consists of SIX units and reflects the traditional division of Science into Biology, Chemistry and Physics, each of which will be taught by specialist teachers.

Pupils study the following topics:

OVERVIEW

TEACHER IN CHARGE, DR H PHILLIPS

BIOLOGY:

Unit 1 Cells, Living Processes and Biodiversity

Unit 2 Body Systems, Genetics, Microorganisms and Health

CHEMISTRY

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

Unit 2 Further Chemical Reactions, Rates and Equilibrium, Calculations and Organic Chemistry

PHYSICS:

Unit 1 Motion, Force, Moments, Energy, Density, Kinetic Theory, Radioactivity, Nuclear Fission and Fusion

Unit 2 Waves, Light, Electricity, Magnetism, Electromagnetism and Space Physics

ASSESSMENT

Pupils taking Double Award will be examined by both **practical tasks** and **examinations in each subject area.** Pupils will complete 3 practical tasks lasting 1 hour in each subject and a written paper on practical activities which covers all 3 sciences. **25%** of the total GCSE score is based on **Practical Skills.** The assessment tasks will be provided by CCEA.

Pupils will additionally sit TWO examinations in each Science:

Unit 1 1 hour, worth 11% of total GCSE Double Award Score.

Unit 2 1 hour and 15 minutes, worth 14% of the total GCSE Double Award Score.

Pupils will be awarded TWO GCSE grades from Double Award Science e.g. A*A*, AB, BB and so on.

CAREER OPPORTUNITIES

This course provides a thorough preparation for the study of sciences and related courses at GCE Advanced Subsidiary level and Advanced level. It also allows you to develop transferable skills that will benefit you in vocational training and employment. See careers sections – Biology, Chemistry and Physics.



SINGLE AWARD SCIENCE

OVERVIEW

This option leads to the award of one GCSE and in content consists of one-third of each of the full GCSE specification in Biology, Chemistry and Physics. Normally, one teacher will teach all three components. It is not normally possible to study 'A' Level Biology, Chemistry and Physics if this option is chosen.

Unit 1: Biology

- Cells
- Food and diet
- Chromosomes and genes
- Co-ordination and control
- Reproductive system
- Variation and adaptation
- Disease and body defences
- Ecological relationships

Unit 2: Chemistry

- Acids, bases and salts
- Elements, compounds, mixtures
- Atomic structure; periodic table
- Bonding
- Materials
- Symbols, formulae, equations
- Quantitative analysis
- Metals and reactivity series
- Rates of reaction
- Organic chemistry

Unit 3: Physics

- Electrical circuits
- Household electricity
- Energy
- Electricity generation
- Heat transfer
- Waves
- Road transport and safety
- Radioactivity
- Earth in space

Unit 4: Practical Skills (including Prescribed Practical)

• Planning an investigation; carrying out an experiment; analysing experimental data; drawing conclusions.

ASSESSMENT

Units 1-3 are assessed through examinations each 60 minutes in length. Examinations are available in the November and March series in these units.

Unit 4 is assessed through a prescribed practical and practical skills examination.

CAREER OPPORTUNITIES

This course provides a broad overview of key aspects of Chemistry, Biology and Physics and an introduction to scientific methodology and key practical skills. It allows you to develop transferable skills that will benefit you in vocational training and employment. Note that this subject should not be taken if you wish to study Biology, Chemistry or Physics at A Level.



TECHNOLOGY & DESIGN

OVERVIEW

HEAD OF DEPARTMENT, MR C WILSON

Technology and Design links naturally with, and complements, many other subjects. It makes a major contribution to the curriculum by providing pupils with opportunities to engage in practical activities, resulting in outcomes designed to meet specific requirements. The Technology and Design specification aims to encourage pupils to:

- Use imagination and develop skills of creativity and critical analysis through making links between existing solutions, technological knowledge and the principles of good design;
- Communicate design ideas and decisions using a range of media and techniques;
- Use a broad range of materials, components and technologies, as well as practical skills, to develop and produce high quality, imaginative and functional prototypes;
- Consider aesthetic, technical, economic, environmental, ethical and social dimensions when engaged in design and making;
- Consider the costs in the making and marketing of products;
- Be able to apply health and safety procedures to ensure safe working practices;
- Analyse and develop existing products and develop practical solutions to needs, wants and opportunities, recognising their impact on quality of life;
- Develop decision-making skills through individual and collaborative working;
- Apply appropriate technology and design terminology;
- Understand that designing and making reflect and influence cultures and societies, and that products have an impact on lifestyle; and
- Combine skills with knowledge and understanding in order to make quality products.

The specification requires pupils to take **THREE** units, over two years. **TWO** of these units are assessed through **Examination** and **ONE** through **Controlled Assessment**.

ASSESSMENT

Area	Information	Weighting
Unit 1	Study of systems and control, materials and manufacturing techniques.	25%
Technology &	Examination of 1 ½ hours at end of Year 12	
Design Core		
Unit 2	Electronic and Microelectronic Control Systems	25%
Systems &	Analogue and digital electronics.	
Controls	PIC Control.	
	Examination of 1 ½ hours at end of Year 12	
Unit 3	Pupils complete a design project comprising a design portfolio and an associated	50%
Design &	manufacturing task.	
Manufacturing	Controlled Assessment – Design Portfolio (10 pages) - 25%; Manufactured Product - 25%.	
Project	Time guidance of approximately 40 hours to complete both elements.	
	The Design and Manufacture Project is a substantial component of the GCSE course. Pupils	
	are expected to organise their time effectively during both class and in allocated homework	
	time. Those who achieve top grades in Technology and Design show the ability to plan tasks	
	effectively and work to clearly defined deadlines.	

CAREER OPPORTUNITIES

With this qualification you can progress to a GCE in Technology and Design or on to higher and further education, where you can complete many qualifications ranging from product design to mechanical, electrical, civil and aeronautical engineering. Other career areas include software engineering, graphics design, telecommunications, prosthetics, architecture and teaching.



SUMMARY OF ASSESSMENT REQUIREMENTS

SUBJECT LIST	CONTROLLED ASSESSMENT	EXAMINATION
Agriculture & Land Use	Controlled Assessment Task 1 20% Task 2 30%	Unit 1 Written Examination 25% Unit 2 Written Examination 25%
Art & Design	Portfolio 60% Portfolio 40%	
Business Studies	Controlled Assessment 20% Year 12	Unit 1+2 Final Examination 40% each
Digital Technology	Controlled Assessment 30%	Unit 1/2 Final Examination 30%/40%
Drama	Controlled Assessment Comp. 1 25% Controlled Assessment Comp. 2 35%	Comp. 3 Written Examination 40%
English Language	Controlled Assessment Speaking & Listening 20% Written Tasks 20%	Unit 1 Final Examination 30% Unit 2 Final Examination 30%
English Literature	Controlled Assessment Study of Shakespeare 20%	Unit 1 Final Examination 30% Unit 2 Final Examination 50%
Food and Nutrition	Controlled Assessment including research & food practical exam in Year 12 - 50%	Unit 1 Final Examination 50%
Geography		Unit 1 Final Examination 40% Unit 2 Final Examination 40% Unit 3 Final Examination 20%
History		Unit 1 Final Examination 60% Unit 2 Final Examination 40%
Mathematics		Modules M3/M4 45% Modules M7/M8 55%
Mathematics (Further)		Pure Mathematics Examination 50% Mechanics 25% Statistics 25%
Modern Languages		Listening 25% Reading 25% Writing 25% Speaking 25%
Music		Composing and Appraising 30% Performing 35% Listening and Appraising Examination 35%
Physical Education	Internal Assessment 3 Physical Activities 50%	Paper 1 Final Examination 25% Paper 2 Final Examination 25%
Religious Studies		Unit 1 End of Year 11 50% Unit 2 Final Examination 50%
Science (Single Award)	Practical Assessment 25%	Unit 1 – 3 25% each science area.
Science (Double Award)	Practical Assessment 25% overall	Unit 1 Final Examination 11% Unit 2 Final Examination 14% (2 units apply in all 3 sciences)
Individual Science	Practical Assessment 25%	Unit 1 Final Examination 35% Unit 2 Final Examination 40%
Technology and Design	Design and Manufacturing Project 50%	Unit 1 Final Examination 25% Unit 2 Final Examination 25%



QUALITY OF WRITTEN COMMUNICATION

In most GCSE Subjects, marks are allocated for the **Quality of Written Communication**. This means that it is essential that pupils continue to focus on producing the high quality of writing that they have been used to in the junior school.

At GCSE, this means that they need to:

- ensure that text is legible and that spelling, punctuation and grammar are accurate so that meaning is clear;
- select and use a form and style of writing that suits their purpose and complex subject matter; and
- organise information clearly and coherently, using specialist vocabulary where appropriate.

Quality of Written Communication is generally assessed in responses to questions and tasks that require extended writing, but in subjects such as Mathematics, there will be a specific question where candidates' written communication is assessed.

CAREERS INFORMATION ADVICE & GUIDANCE

In Years 8 and 9, pupils are introduced to Employability through the Learning for Life and Work Programme (LLW). In Year 10, pupils have one period per week, shared between LLW and Careers. In Employability lessons, pupils have the opportunity to identify:

- their skills
- their qualities
- what subjects they are good at
- what subjects they enjoy
- the job family that they are suited to
- requirements for certain jobs

The purpose of these learning opportunities is to help each pupil to make informed subject choices for GCSE and identify where their employability strengths lie.

To best support your child in this important transition period, we recommend that **you discuss their career plan with them, in making appropriate choices.**

To further assist you we have included information on:

- Key School Contacts
- STEM Information
- Labour Market Information
- Useful Websites
- Pupils should also use the information on UNIFROG to assist them in making their choices

Key School Contacts

This may be the first time that your child will have taken an important decision which will affect his/her future. It is important to know that he/she is not on his/her own: there is a wide range of people within the School with whom you, and your son/daughter, can discuss their career pathways and subject choices.

• The Head of Careers Mrs E Anderson

Form/Class/Collect Teacher

Year Teacher Mr A Forrest
 The Careers Adviser Ms D Brennan

Subject Teachers

• Leadership Team Mr S Moore, Mr S Alexander, Ms S Cochrane



The following information on STEM related subjects is based on current labour market information.

Despite this, it is <u>essential that pupils choose subjects based on their strengths and aptitudes,</u> whilst keeping open a broad range of subjects.

STEM (Science, Technology, Engineering and Maths)

The future prosperity of the UK is very much dependent upon young people choosing STEM-related subjects. Such subjects will play a key role in the country's future economic and social development.

Recent research has indicated that there has been a shortfall in the number of people choosing to study STEM subjects. The UK continues to require highly numerate, analytical people with STEM skills. Young people can cut themselves off from a whole range of careers by not continuing their STEM education.

Keeping Options Open:

The skills gained from studying STEM subjects can often open up immense opportunities. This is something that pupils often don't realise. Did you know:

- 75% of the fastest growing occupations rely upon important STEM skills;
- Studying a STEM subject frequently leads to improved job prospects, high earning potential, variety, challenges, opportunity to travel and a chance to make a real impact upon a sustainable future;
- STEM graduates are, and more importantly will continue to be, in high demand.

STEM related subjects offered at Friends' School include:

Biology Chemistry
Food and Nutrition Mathematics
Further Mathematics Digital Technology
Double Award Science Physics
Technology and Design

Labour Market Information (LMI)

In the current economic climate, it is more important than ever that young people make their career choices wisely. While it is important to study subjects that they enjoy, it is also prudent to be aware of the career opportunities which lie ahead. LMI is the data about jobs that can be used to support career decision making, leading to informed, appropriate and achievable career choices. It helps individuals determine which occupations suit their aptitudes and interests, where the jobs are and which occupations have the best prospects.

What does LMI cover?

- skills and entry requirements
- options with your subjects/qualifications
- how easy/difficult it is to enter an occupation
- the size and nature of industries within Northern Ireland
- employment trends
- occupational areas
- vacancies that employers find hard to fill
- where vacancies are advertised

One of the best sources of LMI is **Sector Skills Councils**. Sector Skills Councils (SSCs) are groups of employers representing their employment area. They provide information on future employment opportunities within their job sector. All students should identify which skill sector interests them most and whether any employment opportunities will arise in the near future. The websites for the SSCs are included in the "Useful Websites" section.

Pupils and parents may also wish to refer to the Russell Group's latest information about subject choices http://russellgroup.ac.uk/for-students/school-and-college-in-the-uk/subject-choices-at-school-and-college/ as there is a section about how some GCSE choices can have an impact on University subject choices, later on.

For current Labour Market Information visit: http://wheretheworkis.org/



JOB SECTOR SKILL AREA	USEFUL WEBSITES	
STEM	www.sectorcareersinfo.co.uk	www.futuremorph.org
5.2	www.careersserviceni.com	www.stemnet.org.uk
	www.activate.co.uk	www.mathscareers.org.uk
	www.e4s.co.uk	www.jobs.ac.uk
Leisure	www.leisurejobs.com	www.skillsactive.com
Plumbing & Electrical	www.summitskills.org.uk	www.pmst.co.uk
	www.ett-ni.org	www.ani.ac.uk
Business and IT	www.e-skills.com	www.momentumni.org
	www.bringitonni.info	
Construction Industry	www.constructionskillsni.org.uk	www.buildingservicejobs.co.uk
	www.bconstructive.co.uk	www.jobsinsurveying.co.uk
	www.citbni.org.uk	
Creative and Cultural	www.ccskills.org.uk	www.creative-choices.co.uk
Creative Media	www.skillset.org	www.bigambition.co.uk
Energy and Utility Skills	www.euskills.co.uk	
Environment and Land-Based	www.lantra.co.uk	www.enviromentaljobs.co.uk
	www.afuturein.com	www.environmentjob.co.uk
	www.animal-jobs.co.uk	www.greenjobs.co.uk
Facilities Management,	www.assetskills.org	www.cih.org
	www.rics.org	www.bifm.org.uk
Fashion and Textiles	www.skillfast-uk.org	www.canucutit.co.uk
Financial Services	www.fssc.org.uk	
Food and Drink Manufacturing	www.improve-skills.co.uk	www.caterer.com
Health Sector	www.hscni.net	www.stepintothenhs.nhs.uk
	www.skillsforhealth.org.uk	www.jobs.nhs.uk
	www.dhsspsni.gov.uk	
Hospitality, Travel and Tourism	www.people1st.co.uk	www.uksp.co.uk
Justice Sector	www.skillsforjustice.com/careers	www.irecruit.nicsrecruitment.gov.uk
Lifelong Learning	www.lluk.org	
Logistics Sector	www.skillsforlogistics.org	www.deliveringyourfurture.co.uk
Northern Ireland Civil Service	www.nicsrecruitment.gov.uk	www.direct.gov.uk
Passenger Transport	www.goskills.org	www.careersinpassangertransport.org
Process and Manufacturing	www.proskills.co.uk	www.prospect4u.co.uk
Retail	www.skillsmartretail.com	
Science Based Industries	www.cogent-ssc.com	www.etcni.org.uk
	www.semta.org.uk	
Social Care and Children	www.nisc.info/careers	www.egsa.org.uk
Automotive Skills	www.motor.org.uk/careers	



The subject choice form below will be completed in conjunction with a member of staff at your subject choice interview.



GCSE Subject Choice 2023-24

COMPULSORY	FURTHER SUBJECT		
CORE SUBJECTS	CHOICES You should now choose your remaining subjects. You should have 10 choices in total.		
All Pupils Choose:			
✓ English Language			
English Literature	Arts/Environment & Society	STEM	
Mathematics	/ Last Environment & Society	OTE.W	
Religious Studies	Art & Design	Agriculture & Land Use*	
	Business Studies	☐ Biology	
Choose one Modern Language from:	☐ Drama*	Chemistry	
☐ French	French	Digital Technology	
German	German	☐ Double Award 2	
☐ Spanish	☐ Geography	Food & Nutrition	
	☐ History	☐ Further Mathematics	
Choose one Science from:	☐ Music	Physical Education	
☐ Double Award 1	Spanish	☐ Physics	
You must also select Double Award 2		☐ Technology & Design	
☐ Single Award*	We make every effort to meet no	ipil choice, but due to timetable constraints ask	
OR one from:		iject that you would be happy to study if we are not	
Biology	able to. Place this in the box belo		
□ Chemistry	Reserve Choice:		
Physics		Name:	
		Collect:	
		Teacher:	

