GCSE OPTIONS 2021 - 2023

CAMBRIDGE HOUSE GRAMMAR SCHOOL

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Subject choices for **Key Stage 4**

INFORMATION FOR YEAR 10 PUPILS AND PARENTS

This booklet has been produced to provide you with information and advice to help you make informed decisions about your future studies. It contains information about the options available at Key Stage 4 and details about each of the courses.

In Cambridge House Grammar School we aim to provide a broad and balanced curriculum, offering a range of general and applied courses at GCSE level to suit all our young people, while meeting the statutory requirements of the Northern Ireland Curriculum.

CHOOSING YOUR SUBJECTS

In this decision making process you should ask yourself some questions:

- **What subjects am I best at?**
- **What subjects do I like best?**
- **Do I have a career in mind?**
- **Are certain subjects essential at GCSE for study at A Level?**
  Where possible you should select subjects which you intend to study in Sixth Form.

In coming to your decision you should discuss all the issues with your parents/guardians, your class teachers and your careers advisor.

CONCLUSION

Making decisions regarding subject choices has never been an easy task and, while there will be a minority of pupils who have a very clear idea about their future career, the vast majority will quite naturally be undecided - it is for this reason that we advise that the choices made be broad and balanced and as far as possible be subjects you enjoy.

The school will make every effort to meet the needs of each pupil. In some instances staff will consider it wise to advise strongly on suitability for some courses. When numbers opting for some courses are so few that it would not be educationally or economically viable to offer them, School reserves the right to withdraw the option. When courses are oversubscribed, selection may be on the basis of attainment to date. In all cases it is essential that a reserve subject is identified when requested.

Applications for changes to initial requests will be considered in line with the GCSE Options Curriculum Protocol as published in this booklet.

Agriculture and Land Use

GCSE

INTRODUCTION

Northern Ireland has a strong rural tradition. Almost 75 percent of land here is used for agricultural purposes. Agri-food is one of the most successful industries in Northern Ireland. It has a proven track record for growth with sales of over £4bn per year and accounts for around 10 per cent of our private sector employment.

THE COURSE – WHY CHOOSE AGRICULTURE AND LAND USE?

Students develop their scientific knowledge in relevant, enjoyable and work-related contexts. They also have the opportunity to design and plan an experimental investigation based on realistic scenarios.
Through studying this course, pupils:

- appreciate how knowledge of science can enhance productivity in the land-based and agricultural sector;
- develop awareness of complex relationships between humans and the environment in which they engage in agricultural activity;
- acquire core knowledge about the land-based and agricultural sector and the skills needed to work in it;
- develop a critical and analytical approach to problem solving in the context of work-related scenarios; and
- make informed decisions about further learning opportunities and career choices in the land-based and agricultural sector.

CAREERS FOCUS - WHAT CAN I DO WITH A QUALIFICATION IN AGRICULTURE AND LAND USE?

This applied qualification will appeal to young people from the changing agricultural sector and to those who are interested in working in the wider land-based and environmental industries.

GCSE Agriculture and Land Use is not a pre-requisite for studying Agriculture at a higher level. It is a Science GCSE so it will help those students who are pursuing a career in Science.

The topics covered will strongly complement Biology, Food and Nutrition, and Geography. Pupils may find the knowledge gained useful if they are considering studying Veterinary science, Environmental or Agricultural Sciences.

ENTRY REQUIREMENTS

You don't need any previous experience in agriculture, but you may find such experience useful.

Agriculture and Land Use

GCSE

GCSE AGRICULTURE AND LAND USE COURSE DESIGN

You will study 3 units

1. Unit 1: Soils, Crops and Habitats
2. Unit 2: Animals on the Land
3. Unit 3: Controlled Assessment Contemporary Issues in Agriculture and Land Use

SUBJECT CONTENT

Year 11	Year 12
Unit 1: Soils, Crops and Habitats • You will gain an understanding of plants and recognise their key role in the food chain. • You will also explore the diverse types of farming employed across Northern Ireland and the impact that a range of factors has on the production systems used. • Finally, you will 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. • You will be able to apply your knowledge and understanding to a realistic context through practical work	**Unit 2: Animals on the Land** • This unit focuses on the key aspects of cow, sheep, pig and poultry husbandry, including health, welfare and breeding. • You will explore how decisions, for example about breeding and feeding, affect farm profitability. • You will learn how farming is responding to increasing environmental concerns about land use and consider aspects of sustainability at farm level, including farm diversification. • Through practical work, you will be able to apply your knowledge and understanding to a realistic context. **Unit 3 Controlled Assessment Contemporary Issues in Agriculture and Land Use** In this unit, you will carry out two tasks. • Task 1 is a practical investigation. • Task 2 is a research project into topics relevant to contemporary issues in Agriculture and Land Use.

ASSESSMENT

Unit	Assessment Format	Weighting	Duration	Assessment Taken
Unit 1	written external examination	Worth 25% of the final GCSE grade	1 hour 15 mins	Summer Year 11
Unit 2	written external examination	Worth 25% of the final GCSE grade	1 hour 15 mins	Summer Year 12
Unit 3	Controlled Assessment	Worth 50% of the final GCSE grade	Completed in class over several weeks	Winter/Spring Year 12

Art and Design

GCSE

INTRODUCTION

This course encourages pupils to investigate topics which are of personal interest to them through the production of Art and Design work, helping them to develop their personal creativity and other skills and knowledge which are relevant to a very wide range of career options. The content of the course is very broad and flexible; pupils will learn how to develop their creative abilities and understanding through a range of investigative, analytical and experimental skills and finding out how professional artists and designers work. They then develop and refine their own work and ideas with increasing independence.

THE COURSE – WHY CHOOSE ART AND DESIGN?

The GCSE Art and Design course is a very exciting and enjoyable programme of study, which provides a broad range of experiences, helping you to discover your own unique abilities and allowing you to focus increasingly on these as you pursue your own creative pathway. As your work develops, you will be given the freedom to choose your own subject matter and create very personal artwork.

Initially, you will be encouraged to experiment with a wide range of materials and processes, with very clear guidance and support from your teacher. The emphasis is very much on practical experience, with no theory or written exams, although we will teach you how to thoughtfully annotate your work and develop a critical interest in what other artists and designers do. We aim to create an atmosphere in the art rooms that is busy, yet informal, where pupils have the chance to move around and chat to their peers as they work. You will go on at least one trip in each year of the course, visiting the Ulster Museum and MAC Gallery, and you will have the opportunity to enter Art/Design competitions, such as the Junk Kouture fashion competition (which has big prize money).

Because you are assessed on the work you have done, your teachers are able to give you a very clear and accurate picture of what grade you are sitting on at each tracking assessment and explain what you need to do to maintain or improve that grade. Final end of course assessment is done at the beginning of May in Year 12, so you will have one less subject to worry about when you go off on study leave to revise for your other exams. This department continually achieves excellent results above the NI Average.

Through studying Art and Design, pupils:

- Develop creative, imaginative and intuitive abilities and confidence while exploring and creating art work
- Develop knowledge and understanding of art, craft and design in historical and contemporary contexts, societies and cultures (seeing how other artists' methods can help your own work)
- Develop and refine ideas, plans, personal outcomes and solutions with increasing independence

CAREERS FOCUS - WHAT CAN I DO WITH A QUALIFICATION IN ART AND DESIGN?

The study of Art and design helps to develop an incredibly wide range of skills, such as resourcefulness, problem-solving, resilience, visual awareness, dexterity and self-confidence. These skills are relevant to almost every type of career. Also, the Art and Design industry is vast and hugely diverse, employing a massive amount of people worldwide.

Art and Design

GCSE

Possible careers include advertising, architecture, art curation, craft, jewellery, fashion design, car design, film, costume design, special effects, make-up, photography, graphic design, set design, furniture design, interior design, animation, performing arts, publishing, software design, toys and games design. A wide range of STEM careers such as engineering now also require creative, artistic and design skills. If you are contemplating a career with any element of design, visual presentation, display or the ability to make creative decisions, then GCSE Art is the right option.

ENTRY REQUIREMENTS

Pupils will normally be achieving Grade B or higher in this subject through Year 10. If you ask your teacher, he or she will provide you with an honest assessment of your suitability for this course.

GCSE ART AND DESIGN COURSE STRUCTURE

You will study 2 units

1. Component 1: This unit has 2 parts:
   Part A: Exploratory Portfolio, Part B: Investigating the Creative and Cultural Industries
2. Component 2: Externally Set Assignment

SUBJECT CONTENT

Year 11	Year 12
Component 1 **Part A: Exploratory Portfolio** • Practical experimentation in, and use of, the formal visual elements of Art and Design, including: line, tone, texture, form, shape, pattern and colour • Exploration in at least two of the following areas: drawing and painting; printmaking; sculpture; textiles; ceramics; graphic design; photography; digital media; animation; 3D Design **Part B: Investigating the creative and cultural industries** • Pupils learn about the different roles and work practices used in the production of art, craft and design in the creative and cultural industries (through practical application) • Pupils choose a theme or design task with teacher guidance and develop prep work and a final outcome (you select the type of art or design work that you want to produce)	**Component 2** **Externally Set Assignment** • Pupils complete work in response to a broad theme set by CCEA (you will be able to develop this in a way which suits your personal interests and abilities) • Pupils spend approximately 10 weeks completing preparatory work for the theme (showing how you have developed your ideas) • Produce and complete a final outcome or design solution based on your preparatory work within a set period of 10 hours under exam conditions (this takes place over 3 or 4 separate sessions) All work completed by end of April

ASSESSMENT

Unit	Assessment Format	Weighting	Duration	Assessment Taken
Unit 1	Teacher assessed, moderated by CCEA	Worth 60% of the final GCSE grade (Part A = 25% Part B =35%)	Throughout Year 11 & Term 1 of Year 12	Summer (early May) - Year 12
Unit 2	Teacher assessed, moderated by CCEA	Worth 40% of the final GCSE grade	From January – April of Year 12	Summer (early May) - Year 12

Business and Communication Systems

GCSE

INTRODUCTION

The CCEA GCSE Business and Communication Systems specification introduces pupils to the business world. They also explore the changing role of digital technology in business today and are given the opportunity to develop lifelong practical business IT skills including: the use of spreadsheets, databases, websites and the production of business documentation.

THE COURSE – WHY CHOOSE BUSINESS AND COMMUNICATION SYSTEMS?

Studying Business and Communication Systems will engage you in the study of business and digital technology and develop your practical skills in using software applications. You will have the opportunity to explore the changing role of digital technology in business and economic activities.

This specification will help you to develop a lifelong interest in and enjoyment of business subjects, while being inspired by following an exciting, enjoyable and worthwhile course.

Through studying GCSE Business and Communication Systems, pupils:

- understand the changing role of digital technologies in business and economic activities
- have the opportunity to develop valuable practical software application skills in a business context
- gain an understanding of how software applications are used to enhance business activities, particularly through e-commerce and e-business
- recognise that their knowledge of business and the use of software applications will provide a sound basis for a future role as employee or employer
- develop skills and understanding in the use of software applications and how to apply them to enhance business through digital solutions
- use software applications to develop digital solutions to enhance business activities
- develop a lifelong interest in and enjoyment of business subjects that could potentially lead to related further study and employment

CAREER FOCUS - WHAT CAN I DO WITH A QUALIFICATION IN BCS?

Studying this subject will provide you with the knowledge of business and the use of software applications that will give you a sound basis as a future employee or employer. It can lead to further study or a career, for example in a business environment or IT.

The combination of two key competencies required by employers: business literacy and IT in one subject, makes it a good career choice for pupils. Those who study GCSE Business and Communication Systems not only learn how to use software applications but also how they are correctly applied in a business context.

The production of key business documents is a key feature of the course and this skill is directly transferable to world of work. Studying GCSE Business and Communication Systems will equip you with important knowledge and skills, providing sound preparation for progression to A Level study as well as future employment opportunities.

Business and Communication Systems

GCSE

ENTRY REQUIREMENTS

You should have developed competence in Literacy and Numeracy.

GCSE BUSINESS AND COMMUNICATION SYSTEMS COURSE DESIGN

You will study three units:

1. Unit 1 – Software Applications for Business
2. Unit 2 – The Business Environment
3. Unit 3 – Developing Digital Solutions

SUBJECT CONTENT

Year 11	Year 12
Unit 1 Software Applications for Business • Word Processing Software • Spreadsheet Software • Database Software • Presentation Software • Creating a Business • Web Authoring Software • Web Browsing Software • Internet Searching • Email Software	**Unit 2The Business Environment** • Types of Business Ownership • Stakeholders • Communication • Digital Trading • Recruitment • Selection • Training • Implications of digital technology for business and customers • Marketing • Market Research • Marketing Mix **Unit 3 – Developing Digital Solutions** • Create a Gantt Chart • Complete research to plan a digital solution • Use software to develop a digital solution • Evaluate the digital solution developed and own performance

ASSESSMENT

Unit	Assessment Format	Weighting	Duration	Assessment Taken
Unit 1	External Computer-Based Examination	Worth 40% of the final GCSE grade	2 hours	Summer Year 11
Unit 2	External examination	Worth 35% of the final GCSE grade	1 hour	Summer Year 12
Unit 3	Controlled Assessment	Worth 25% of the final GCSE grade	Completed in class over several weeks	Winter/Spring Year 12

Business Studies

GCSE

INTRODUCTION

The CCEA GCSE Business Studies specification encourage pupils to investigate how businesses start up. The explore the resources, marketing and finance that businesses need and the challenges they face.

THE COURSE – WHY CHOOSE BUSINESS STUDIES?

One of the key competencies requested by employers is commercial awareness. Business Studies will provide you with an insight into the world of business, enabling you to develop sound business acumen, thereby making you highly employable. Regardless of the career path you choose, studying GCSE Business Studies will equip you with important knowledge and skills, providing excellent preparation for progression to A Level study as well as future employment opportunities. Through both theoretical and practical methods, you will discover how businesses operate and learn about their key elements and essential business functions. As a Year 11 Business Studies pupil you will work as part of a team to set up and run your own business, through The Young Enterprise QuickStart Programme.

The Business Studies Department in Cambridge House Grammar School adds value to pupil performance and works effectively with pupils to achieve very good outcomes, consistently achieving results above the NI average for grammar schools.

The GCSE Business Studies course will help you to:

- develop a lifelong interest in and enjoyment of business
- use an enquiring, critical approach to distinguish facts and opinions, to form arguments and make informed judgements
- develop and apply your knowledge, understanding and skills to understand today's business issues in local, national and global contexts
- appreciate the perspectives of different stakeholders in business-related activities
- consider the extent to which business activity can be ethical and sustainable
- understand the changing use of technology in business.

CAREERS FOCUS - WHAT CAN I DO WITH A QUALIFICATION IN BUSINESS STUDIES?

Put simply, GCSE Business Studies is an excellent career choice. When you consider that everyone is involved with business as an owner, employee or a customer, then having knowledge of how businesses function can only be beneficial to your future career.

Business Studies is a highly relevant course and as a result links to a broad range of career areas in both the private and public sectors. Industries as diverse as chemicals, utilities, fashion, health, retail and construction all require functional managers with a clear understanding of systems, efficiency and operational issues.

Business Studies offers an excellent foundation for those wishing to pursue careers in Accounting, Actuarial Science, Banking and Finance, Consultancy, Engineering, Health-Related Professions, Human Resources, Management, Marketing, Retailing and Sales.

Business Studies

GCSE

ENTRY REQUIREMENTS

You should have developed competence in Literacy and Numeracy.

GCSE BUSINESS STUDIES COURSE DESIGN

You will study 3 units

1. Unit 1 - Starting a Business
2. Unit 2 - Developing a Business
3. Unit 3 - Planning a Business

SUBJECT CONTENT

Year 11	Year 12
Unit 1: Starting a Business **Creating a Business** • Entrepreneurs • Business Resources • Business Ownership • Public Sector • Social Enterprise • Business Location • Business Aims and Objectives • Stakeholders **Marketing** • Marketing and Market Research • Marketing Mix • Competition • Customer Service • International Business • E-business • M-business **Business Operations** • Types of Production • Methods of Manufacturing • Quality Assurance • Health and Safety	**Unit 2: Developing a Business** **Human Resources** • Recruitment • Selection • Appraisal • Training • Motivation **Business Growth** • Business Success or Failure • Business Growth **Finance** • Sources of Finance • Cash Flow Forecasts • Financial Statements • Ratios • Break-Even **Unit 3: Planning a Business** • Business Plan

ASSESSMENT

Unit	Assessment Format	Weighting	Duration	Assessment Taken
Unit 1	External Examination	Worth 40% of the final GCSE grade	1 hour 30 minutes	Summer Year 11
Unit 2	External Examination	Worth 40% of the final GCSE grade	1 hour 30 minutes	Summer Year 12
Unit 3	Controlled Assessment	Worth 20% of the final GCSE grade	1 hour	Winter/Spring Year 12

Child Development

GCSE

INTRODUCTION

Child Development specification is a broad, coherent course on the development of babies and small children (0–5 years).

THE COURSE – WHY CHOOSE CHILD DEVELOPMENT?

Child Development encourages students to develop knowledge, understanding and skills, including practical skills, by focusing on these key areas:

- pregnancy, childbirth and caring for a newborn baby;
- the responsibilities involved in parenting and other family roles; and
- the social, physical, intellectual, communication and emotional development of small children, including their dietary, health and educational needs.

Students develop subject-specific skills such as evaluating feeding options for a baby. They also learn about relevant scientific and technological developments. This course prepares students for further study in child health or education, or the world of work.

Through studying Child Development, pupils:

- develop the knowledge, understanding and skills (including practical skills) required for working in the area of child development;
- understand pregnancy, parental responsibilities and young children's overall needs;
- understand how important it is to maintain a healthy lifestyle;
- develop their knowledge and understanding of human needs in a multicultural society;
- increase their knowledge and understanding of relevant technological and scientific developments;
- develop a critical and analytical approach to decision making and problem solving;
- examine issues that affect the quality of human life, including an appreciation of diversity;
- evaluate decisions so that they develop as informed and discerning consumers;
- make informed decisions about further learning opportunities and career choices; and
- engage actively in studying child development to develop as effective and independent students.

CAREERS FOCUS - WHAT CAN I DO WITH A QUALIFICATION IN CHILD DEVELOPMENT?

Studying Child Development can help prepare you for the following careers:

- midwife
- children's nurse
- teaching assistant
- nursery/preschool teacher
- primary school teacher
- social worker
- nanny/au pair
- health visitor
- play therapist
- counsellor
- playgroup leader
- child psychologist
- paediatrician

Child Development

GCSE

ENTRY REQUIREMENTS

Students do not need to have reached a particular level of attainment before beginning to study this specification.

GCSE CHILD DEVELOPMENT COURSE DESIGN

You will study 3 units

1. Unit 1- Pregnancy, Parenthood and the Newborn Baby
2. Unit 2- The Development of the Child (0-5 years)
3. Unit 3- Investigation Task (Controlled Assessment)

SUBJECT CONTENT

Year 11	Year 12
Unit 1 Pregnancy, Parenthood and the Newborn Baby The family and parental responsibilities Reproduction Pregnancy Diet and lifestyle during pregnancy Birth The newborn baby Feeding the newborn baby	**Unit 2 The Development of the Child (0-5 years)** Dietary needs of the child (0-5 years) Child health and education Child development Social development Physical development Intellectual development Communication development Emotional development **Unit 3 Investigation Task (Controlled Assessment)** Analysis and Justification Secondary research and analysis of own viewpoints Conclusions and evaluation of Parts A&B Planning and outcome Evaluation of planning and outcome

ASSESSMENT

Unit	Assessment Format	Weighting	Duration	Assessment Taken
Unit 1	External written examination	Worth 30% of the final GCSE grade	1 hour 15 minutes	Summer Year 11
Unit 2	External written examination	Worth 30% of the final GCSE grade	1 hour 15 minutes	Summer Year 12
Unit 3	Controlled Assessment	Worth 40% of the final GCSE grade	Completed in class over several weeks	Winter/Spring Year 12

Construction and The Built Environment

GCSE

INTRODUCTION

Construction is an applied GCSE and is directly linked to the world of work. There are many trades and professions directly linked to the construction industry such as Architecture, Engineering and Surveying.

THE COURSE – WHY CONSTRUCTION & THE BUILT ENVIRONMENT?

This specification aims to encourage students to:

- develop a broad background knowledge and core knowledge of the construction industry;
- apply their developing knowledge in relevant, enjoyable and work-related contexts for craft products and computer aided design (CAD) projects;
- investigate opportunities to progress into further education, training or employment in the construction industry;
- experience success when applying their knowledge in work-related contexts;
- develop and practise the key transferable skills that are important in working life;
- develop knowledge of the materials and sustainable methods used in domestic and commercial construction.

The following are important features of this specification.

- It offers opportunities to build on the skills and capabilities developed through the delivery of the Northern Ireland Curriculum at Key Stage 3.
- It encourages students to develop and practise key transferable skills and to have a positive attitude towards sustainable construction techniques.
- It helps raise achievement in a wide range of learners due to its high practical content.
- It offers students an extensive knowledge of the construction industry.
- It encourages students to develop craft skills, CAD skills and technical skills, and knowledge and understanding of the construction industry.
- It encourages a student-centred approach to learning and enables students to apply their developing knowledge in enjoyable and work-related contexts.

CAREERS FOCUS - WHAT CAN I DO WITH A QUALIFICATION IN CONSTRUCTION?

The course we provide in year 10 comprises the basic knowledge needed, to undertake construction industry and the building environment at GCSE level. This would be an appropriate subject to select with the following career paths in mind: Building surveyor, engineering, estimator, project managers, health and safety advisor

Construction and The Built Environment

GCSE

GCSE CONSTRUCTION & THE BUILT ENVIRONMENT COURSE DESIGN

You will study 4 units

1. Introduction to the Built Environment Unit 1(external examination)
2. Sustainable Construction Unit 2(external examination)
3. Construction Craft Project Unit 3 (controlled assessment)
4. Computer Aided Design in Construction Unit 4(controlled assessment)

SUBJECT CONTENT

Year 11	Year 12
Unit 1: Introduction to the Built Environment • Employment in the Construction Industry • Resource Considerations • Health & Safety	**Unit 2: Sustainable Construction** • Technical Skills, sketching skills and interpreting drawings • Sustainable Construction and Renewable Energy • Construction Technology
Unit 3 Construction Craft Project A suitable craft project is given to all centres. It is the role of the pupils to create the product within a given tolerance to demonstrate their skills and expertise in the workshop.	**Unit 4 Computer Aided Design in Construction** • Use of CAD to create 2D construction drawings • Use the modification commands in an industry standard package. • Retrieve and plot drawings to scale

ASSESSMENT

Unit	Assessment Format	Weighting	Duration	Assessment Taken
Unit 1	External Examination	Worth 20% of the final GCSE grade	1 hour	Summer Year 11
Unit 2	External examination	Worth 30% of the final GCSE grade	1 hour 30 minutes	Summer Year 12
Unit 3	Controlled Assessment	Worth 25% of the final GCSE grade	Completed in class over several weeks	Winter/Spring Year 11
Unit 4	Controlled Assessment	Worth 25% of the final GCSE grade	Completed in class over several weeks	Winter/Spring Year 12

Digital Technology

GCSE

INTRODUCTION

Digital Technology represents the convergence of computers, video, music, gaming and telecommunication systems. The GCSE Digital Technology qualification allows students to acquire and apply knowledge, skills and understanding of digital technology in a range of contexts in order to become independent and discerning users of digital technology. Students are encouraged to use their creativity and technical skills when designing and developing digital multimedia systems.

THE COURSE – WHY CHOOSE DIGITAL TECHNOLOGY?

GCSE Digital Technology will provide relevant knowledge, skills and understanding required to live, learn and work in the 21st century. In this modern age ICT is an essential 'life skill'.

Currently, the study of GCSE Digital Technology is necessary to continue study of Digital Technology at AS and A2. Through studying Digital Technology, pupils:

- 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;
- develop the skills needed to work collaboratively.

CAREERS FOCUS – WHAT CAN I DO WITH A QUALIFICATION IN DIGITAL TECHNOLOGY?

Currently, the study of GCSE Digital Technology is necessary to continue study of Digital Technology at AS and A2.

Further study of IT or computing disciplines at university level can lead to high end professional careers in computer programming, systems development, website design, cyber security and many more.

The IT industry in Northern Ireland is currently booming with many multinational companies choosing to base their IT systems here. This means that there are a large number of job opportunities for IT graduates in a wide variety of disciplines right on our doorstep.

For further information on IT careers, **bringitonni.info** and **e-skills.com** are useful websites.

Digital Technology

GCSE

ENTRY REQUIREMENTS

There are no entry requirements for this subject, however, a willingness to work, good time management and good attendance are essential for you to be successful.

GCSE DIGITAL TECHNOLOGY COURSE DESIGN

You will study 3 units

1. Digital Technology
2. Digital Authoring Concepts
3. Digital Authoring Practice (Controlled Assessment)

SUBJECT CONTENT

Year 11	Year 12
Unit 1: Digital Technology • Digital data • Software • Database applications • Spreadsheet applications • Computer hardware • Network technologies • Cyberspace, network security and data transfer • Cloud technology • Ethical, legal and environmental impact of digital technology on wider society • Digital applications	**Unit 2: Digital Authoring Concepts** • Designing solutions • Digital development considerations • Multimedia applications • Multimedia authoring • Database development • Significance of testing and developing appropriate test plans • Evaluation of digitally authored systems against a set of user requirements **Unit 3: Digital Authoring Practice** • Designing solutions using appropriate tools • Building a solution • Testing a solution • Evaluating a solution

ASSESSMENT

Unit	Assessment Format	Weighting	Duration	Assessment Taken
Unit 1	External Examination	Worth 30% of the final GCSE grade	1 hour	Summer Year 11
Unit 2	External Examination	Worth 40% of the final GCSE grade	1 hour 30 minutes	Summer Year 12
Unit 3	Controlled Assessment	Worth 30% of the final GCSE grade	Completed in class over several weeks	Winter/Spring Year 12

Drama

GCSE

INTRODUCTION

The CCEA GCSE Drama specification motivates and inspires students to build and showcase their competence in a range of creative, practical and performance skills.

This comprehensive and innovative course encourages students to develop a personal interest in drama. Students choose one of two pathways – performance (acting), or design (costume, lighting, multimedia, set or sound). They work creatively with others, generating, developing and communicating their ideas for a devised performance and for a scripted performance. They also explore social, historical and cultural influences on drama texts and activities.

Both the theoretical and practical elements of the course help students to become critical thinkers with enquiring minds, confident communicators, and independent learners.

THE COURSE – WHY CHOOSE DRAMA?

- You will have a choice of two pathways – performing (acting) or design (costume, lighting, multimedia, set or sound).
- You will have an opportunity, as part of a group, to devise your own performance.
- You will also, as part of a group, investigate, create and develop a scripted performance (based on an existing script).

Through studying Drama, pupils:

- 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;
- consider and explore the impact of social, historical and cultural influences on drama texts and activities.

CAREERS FOCUS - WHAT CAN I DO WITH A QUALIFICATION IN DRAMA?

This course gives you the opportunity to explore a range of practical, creative, analytical and performance skills. The majority of 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 the 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.

Drama

GCSE

ENTRY REQUIREMENTS

An interest in performance or design. You do not need experience, just a dedication and willingness to perform.

This is a collaborative subject so good school attendance is essential.

GCSE DRAMA COURSE DESIGN

You will study 3 units

1. Devised Performance
2. Scripted Performance
3. Knowledge and Understanding of Drama

SUBJECT CONTENT

Year 11	Year 12
Unit 1: Devised Performance • Devise and act (for at least 5 minutes) in a group performance or • Devise, present and realise your design concept in a group performance (30 marks) • Complete a student log (20 marks) • Teachers mark the task and we moderate the results.	**Unit 2: Scripted Performance** • Select and interpret a published play script • Act in a group performance or • Present and realise your design concept in a group performance (60 marks) • Teachers mark the task and CCEA moderate the results. **Unit 3: Knowledge and Understanding of Drama** • External written examination (1 hour 30 minutes) • You answer three questions using one set text: Blood Brother by Willy Russell. You can bring an unmarked copy of the set text into the examination. (80 marks)

ASSESSMENT

Unit	Assessment Format	Weighting	Duration	Assessment Taken
Unit 1	Controlled assessment performance and 2000 word portfolio (externally moderated as a recording)	Worth 25% of the final GCSE grade	Completed in class over several weeks	Summer Year 11
Unit 2	Controlled assessment live performance (externally moderated by external moderator)	Worth 35% of the final GCSE grade	Completed in class over several weeks	Spring Year 12
Unit 3	Exam	Worth 40% of the final GCSE grade	90 minutes	Summer Year 12

English Language

GCSE

INTRODUCTION

The CCEA GCSE English Language specification encourages students to explore and respond, both imaginatively and critically, to a variety of texts.

THE COURSE – WHY CHOOSE ENGLISH LANGUAGE?

Students use reading to improve their writing and spoken language skills. They also enhance their understanding of how language variations relate to identity and cultural diversity.

This specification develops key transferable skills, such as selecting and adapting speech and writing to suit different situations and audiences.

Through studying English Language, pupils:

- demonstrate skills in speaking, listening, reading and writing necessary to
- communicate with others confidently, effectively, precisely and appropriately;
- express themselves creatively and imaginatively;
- become critical readers of a range of texts, including multi-modal texts;
- use reading to develop their own skills as writers;
- understand the patterns, structures and conventions of written and spoken English;
- understand the impact of variations in spoken and written language and how they
- relate to identity and cultural diversity; and
- select and adapt speech and writing to different situations and audiences.

CAREERS FOCUS - WHAT CAN I DO WITH A QUALIFICATION IN ENGLISH?

GCSE English Language provides a sound basis for progression to further study, higher education or employment. It is a prerequisite for many courses and career paths.

ENTRY REQUIREMENTS

All Cambridge House Grammar School pupils will study GCSE English Language.

English Language

GCSE

GCSE ENGLISH LANGUAGE DESIGN

You will study 4 units

1. Unit 1: Writing for Purpose and Audience and Reading to Access Non-fiction and Media Texts
2. Unit 2: Speaking and Listening
3. Unit 3: Studying Spoken and Written Language
4. Unit 4: Personal or Creative Writing and Reading Literary and Non-fiction Texts.

SUBJECT CONTENT

Year 11	Year 12
Unit 1: Personal or Creative Writing and Reading Literary and Non-fiction Texts Examination • Persuasive writing • Reading and responding to Non-Fiction Texts • Reading and responding to Multi-Modal Texts	**Unit 4: Personal or Creative Writing and Reading Literary and Non-fiction Texts Examination** • Creative Writing • Personal Writing • Comparing Fiction Texts • Analysing Non-Fiction
Unit 2: Speaking and Listening • Over the course of the two years, pupils will engage and be assessed in the following Speaking and Listening scenarios: • Individual Presentations • Group Discussions • Role-Plays	**Unit 2: Speaking and Listening** • Over the course of the two years, pupils will engage and be assessed in the following Speaking and Listening scenarios: • Individual Presentations • Group Discussions • Role-Plays
Unit 3: Studying Spoken and Written Language • In Year 11, pupils will complete a Controlled Assessment: 'Studying Written Language' on a Fiction text.	**Unit 3: Studying Spoken and Written Language** • In Year 12, pupils will complete a Controlled Assessment: 'Studying Spoken Language'. The specified topic for 2023 submission is Political Speeches

ASSESSMENT

Unit	Assessment Format	Weighting	Duration	Assessment Taken
Unit 1	Examination	30%	1 hour 45 minutes	Year 11
Unit 2	Internally assessed; externally moderated.	20%	n/a	Ongoing throughout Year 11 and Year 12
Unit 3	2 Pieces of Controlled Assessment	20%	1 hour each	One Controlled Assessment is completed in Year 11; one in Year 12
Unit 4	Examination	(10% each)	1 hour 45 minutes	Year 12

English Literature

GCSE

INTRODUCTION

The CCEA GCSE English Literature specification encourages students to be enthusiastic, independent, imaginative, critical and analytical readers. It aims to increase their enjoyment of reading, helping to nurture a lifelong love of literature.

THE COURSE – WHY CHOOSE ENGLISH LITERATURE?

The study of English Literature at GCSE deepens students' knowledge and understanding of a range of poetry, prose and drama, including texts by local and modern writers. Students explore the impact of language, structure and form in the texts. Connecting the texts' ideas, themes and issues is another key focus.

Students also learn how to explain settings, characters and themes creatively through social, cultural and historical contexts. They develop their ability to research, plan and prepare their responses using their own ideas and interests, as well as critical reading.

Through studying English Literature, pupils:

- become critical readers of prose, drama and poetry;
- develop the ability to analyse the impact of language, structure and form in a range of texts;
- connect ideas, themes and issues in a range of texts;
- explore contexts and experience different times, cultures, viewpoints and situations in texts;
- read for enjoyment and nurture a lifelong love of literature.

CAREERS FOCUS - WHAT CAN I DO WITH A QUALIFICATION IN ENGLISH LITERATURE?

GCSE English Literature prepares students for many further studies and career opportunities, including:

- A-Level English Literature
- Primary and Post-Primary Teaching
- Journalism
- Law

ENTRY REQUIREMENTS

Pupils choosing to study English Literature should enjoy reading. They should - through Key Stage 3 – have demonstrated a good ability to read, interpret and analyse a range of fiction and non-fiction texts.

English Literature

GCSE

GCSE ENGLISH LITERATURE DESIGN

You will study 3 units

1. Unit 1: The Study of Prose
2. Unit 2: The Study of Drama and Poetry
3. Unit 3: The Study of Shakespeare.

SUBJECT CONTENT

Year 11	Year 12
Unit 1: The Study of Prose • One novel • Unseen C19th Prose	**Unit 2: The Study of Drama and Poetry** • 15 poems from a CCEA-specified anthology • One C20th play **Unit 3: The Study of Shakespeare** • One Shakespeare play

ASSESSMENT

Unit	Assessment Format	Weighting	Duration	Assessment Taken
Unit 1	Examination	30%	1 hour 45 minutes	Summer Year 11
Unit 2	External examination	50%	2 hours	Summer Year 12
Unit 3	Controlled Assessment	20%	Completed in class over several weeks	Autumn Year 12

Food and Nutrition

GCSE

INTRODUCTION

The CCEA GCSE Home Economics: Food and Nutrition specification encourages students to develop knowledge and understanding of the science behind food. The specification includes topics such as food provenance, food processing and production, macronutrients and micronutrients, government nutritional guidelines and food safety. Students develop practical skills in food preparation, cooking and presentation.

THE COURSE – WHY CHOOSE FOOD AND NUTRITION?

Students will learn about the nutritional content of foods and how to meet the specific nutritional and dietary needs of different groups of people. To do this, they modify recipes and plan, prepare and cook meals and dishes that reflect current government nutritional guidelines. They also study how to be an effective consumer in food choices, food safety and managing resources.

This specification is a linear qualification: students take all the assessment at the end of the course.

Through studying Food and Nutrition, pupils:

- follow a broad, coherent and worthwhile course of study;
- develop the knowledge, understanding and skills (including practical skills) required for Home Economics: Food and Nutrition;
- develop their knowledge and understanding of human needs in a multicultural society;
- increase their knowledge and understanding of relevant technological and scientific developments;
- develop a critical and analytical approach to decision making and problem solving;
- examine issues that affect the quality of human life, including an appreciation of diversity;
- evaluate decisions so that they develop as informed and discerning consumers;
- develop an interest in and appreciation of the diverse range of food now available; and
- actively engage in studying food and nutrition to develop as effective and independent students.

CAREERS FOCUS - WHAT CAN I DO WITH A QUALIFICATION IN FOOD AND NUTRITION?

Careers in the food and nutrition industries are wide-ranging and can entail many different job responsibilities and work environments. Studying Food and Nutrition will help prepare you for the following careers:

- Dietitian
- Teacher
- Food Product Developer
- Nutritionist
- Professional Chef
- Health Promotion Officer
- Food Technologist
- Consumer Adviser
- Food Writer
- Dietary Manager
- Home Economist

Food and Nutrition

GCSE

ENTRY REQUIREMENTS

Students do not need to have reached a particular level of attainment before beginning to study this specification.

GCSE FOOD AND NUTRITION COURSE DESIGN

You will study 2 units

1. Component 1: Food and Nutrition
2. Component 2: Practical Food and Nutrition (Controlled Assessment)

SUBJECT CONTENT

Year 11 and 12	Year 12
Component 1: Food and Nutrition • Food provenance • Food processing and production • Food and nutrition for good health • Energy and nutrients • Macronutrients • Micronutrients • Fibre • Water • Nutritional and dietary needs • Priority health issues • Being an effective consumer when shopping for food • Factors affecting food choice • Food safety • Resource management • Food preparation, cooking and presentation skills	**Component 2: Practical Food and Nutrition (Controlled assessment)** **Task title provided by CCEA- students research title, choose and justify a practical activity, complete the practical activity and evaluate it. The following tasks will be completed:** • Research and viewpoints • Justification of choice • Planning • Practical activity • Evaluation

ASSESSMENT

Unit	Assessment Format	Weighting	Duration	Assessment Taken
Component 1	External written examination	Worth 50% of the final GCSE grade	2 hours	Summer Year 12
Component 2	Controlled assessment	Worth 50% of the final GCSE grade	n/a	Term 1 Year 12

Further Mathematics

GCSE

INTRODUCTION

The CCEA GCSE Further Mathematics specification encourages students to extend their mathematical skills, knowledge and understanding. It gives them opportunities to select and apply mathematical techniques and methods to everyday situations. It challenges and stretches students to broaden their mathematical knowledge to a more advanced level.

THE COURSE – WHY CHOOSE FURTHER MATHEMATICS?

The GCSE Further Mathematics specification has the following features:
It offers opportunities to build on the skills and capabilities developed through the delivery of the Northern Ireland Curriculum at Key Stage 3.

- It caters for students who require knowledge of mathematics beyond GCSE Higher Tier Mathematics and who are capable of working beyond the limits of the GCSE Mathematics specification.
- It is designed to broaden the experience of students whose mathematical ability is above average and who would like to:
  - » study mathematical courses at AS/A level;
  - » study other courses at AS/A level that require mathematics beyond GCSE Higher Tier; or
  - » extend their knowledge of mathematics.
- It gives students the appropriate mathematical skills, knowledge and understanding to help them progress to further education and vocational study and to employment.

Studying Further Mathematics, students are encouraged to:

- develop further their mathematical knowledge, skills and understanding;
- select and apply mathematical techniques and methods to mathematical, everyday and real-world situations;
- reason mathematically, interpret and communicate mathematical information, make deductions and inferences, and draw conclusions;
- extend their base in mathematics from which they can progress to:
  - » higher studies in mathematics; and/or
  - » studies such as science, geography, technology or business, which contain a significant requirement in mathematics beyond Higher Tier GCSE Mathematics; and
- design and develop mathematical models that allow them to use problem-solving strategies and apply a broader range of mathematics to a variety of situations.

CAREERS FOCUS - WHAT CAN I DO WITH A QUALIFICATION IN FURTHER MATHEMATICS?

Career prospects in this area are extremely rich, with opportunities for employment in:

Accountancy | Aerospace | Automotive | Business support services | Chemicals | Construction
Consultancies | Education | Engineering | Environment | Financial Services | Food & Drink
Government | Healthcare | Insurance | IT & Computing | Manufacturing | Metals & Minerals
Pharmaceuticals | Academic Research | Science | Telecoms Transport | Utilities.

Further Mathematics

GCSE

ENTRY REQUIREMENTS

Students taking the CCEA GCSE Further Mathematics specification should normally have covered all the content in the CCEA GCSE Mathematics specification at Higher Tier, including all of the content of units M4 and M8. Please consult with the mathematics teacher or the Head of Mathematics Department regarding the choice of this subject for study at GCSE.

GCSE FURTHER MATHEMATICS COURSE DESIGN

You will study 3 units

1. Unit 1 Pure Mathematics
2. Unit 2 Mechanics
3. Unit 3 Statistics

SUBJECT CONTENT

Year 11	Year 12
Unit 1: Pure Mathematics • Algebraic fractions • Algebraic manipulation • Completing the square • Simultaneous equations • Quadratic inequalities • Trigonometric equations • Differentiation • Integration • Logarithms • Matrices	**Unit 2: Mechanics** • Kinematics • Vectors • Forces • Newton's laws of motion • Moments **Unit 3: Statistics** • Central tendency and dispersion • Probability • Binomial distribution • Normal distribution • Bivariate analysis

ASSESSMENT

Unit	Assessment Format	Weighting	Duration	Assessment Taken
Unit 1 Pure Mathematics	External written examination in the form of a single question-and-answer booklet that includes a formula sheet	Worth 50% of the final GCSE grade	2 hours	Summer Year 11
Unit 2 Mechanics	External written examination in the form of a single question-and-answer booklet that includes a formula sheet	Worth 25% of the final GCSE grade	1 hour	Summer Year 12
Unit 3 Statistics	External written examination in the form of a single question-and-answer booklet that includes a formula sheet	Worth 25% of the final GCSE grade	1 hour	Summer Year 12

Geography

GCSE

INTRODUCTION

Geography is not only up-to-date and relevant, it is one of the most exciting, adventurous and valuable subjects to study today. So many of the world's current problems boil down to geography, and need the geographers of the future to help us understand them. Global warming, sustainable food production, natural disasters such as earthquakes and tsunamis, the spread of disease, the reasons for migration and the future of energy resources are just some of the great challenges facing the next generation of geographers.

There is a close link between what you will study in Geography and what is going on in the world around you. Turn on your TV almost any day and you will see coverage of events such as flooding, storms or earthquakes and hear about issues such as migration and global warming. These events and issues are at the very heart of Geography. By studying Geography you will gain an awareness of your own responsibilities and how you can contribute to a future that is sustainable and inclusive.

THE COURSE – WHY CHOOSE GEOGRAPHY?

The world we live in is changing. Geography allows you to see why and how it is changing. It is an extremely relevant and flexible STEM subject. Through studying GCSE Geography you will develop a wide range of skills including:

- The ability to work as a team
- Good communication skills
- The ability to manage your work
- Numeracy and literacy
- Problem solving and logical reasoning
- Computer literacy
- Spatial awareness

Geography is an important bridging subject. This means that that by studying Geography you are keeping your career path open. Studying Geography allows the science specialist to develop important literacy skills and the arts specialist to develop important numeric and graphical skills.

CAREERS FOCUS - WHAT CAN I DO WITH A QUALIFICATION IN GEOGRAPHY?

Studying geography develops your analytical and communication skills and your ability to evaluate data, all strengths that are in demand in the job market. Studying geography opens a wide variety of career paths. Currently, there are many opportunities in the areas of environmental management, environmental engineering and renewable energies.

Other job opportunities include: Cartographer, Environmental Consultant, Geography Teacher, Geologist, GIS Manager, Landscape Architect, Nature Conservation Manager, Surveyor, Tourist Information Officer, Town and Country Planner, Transportation Planner, Travel Agent, Water Conservation Officer.

Geography

GCSE

GCSE GEOGRAPHY COURSE DESIGN

You will study 3 units

1. Understanding our natural world
2. Living in our world
3. Fieldwork

SUBJECT CONTENT

Year 11	Year 12
Unit 1: Understanding our natural world This unit contains 4 themes: • Theme A: River Environments • Theme B: Coastal Environments • Theme C: Our Changing Weather and Climate • Theme D: The Restless Earth	**Unit 2: Living in our world** This unit contains 4 themes: • Theme A: Population and Migration • Theme B: Changing Urban Areas • Theme C: Contrasts in World Development • Theme D: Managing Our Environment **Unit 3 Fieldwork** In this unit you will take part in a fieldwork investigation and collect primary data. You will then write a short fieldwork statement and prepare a table of results. Both of these are available for use during the examination

ASSESSMENT

Unit	Assessment Format	Weighting	Duration	Assessment Taken
Unit 1	External examination	Worth 40% of the final GCSE grade	1 hour 30 minutes	Summer Year 11
Unit 2	External examination	Worth 40% of the final GCSE grade	1 hour 30 minutes	Summer Year 12
Unit 3	External examination	Worth 20% of the final GCSE grade	1 hour	Summer Year 12

History

GCSE

INTRODUCTION

History is who we are and why we are the way we are. History is not just the past – History is the present.

Aims of History:

- Investigate the impact of significant events in the past on our world today e.g., The Second World War & Superpower Relations;
- Develop individual skills of research & handling of information: E.g., Investigative Study in class based on the publicity techniques of the Nazis;
- To understand how individuals have shaped history e.g., Hitler, Stalin, Kennedy, Bin Laden;
- Develop an ability to challenge stereotypical & biased opinions;
- To be able to relate to events more vividly by visiting an area of historical significance in continental Europe e.g., the Netherlands or Auschwitz-Birkenau are possibilities for 2018/19.

THE COURSE – WHY CHOOSE HISTORY?

Employers will value your History skills because they mean you can:

- Work on your own & make independent decisions;
- Offer a variety of solutions to a problem;
- Communicate your ideas clearly & argue a case well;
- Handle & interpret information when carrying out investigative work;
- Analyse situations & write reports which are concise, relevant & well supported;
- Understand & appreciate different points of view.

CAREERS FOCUS - WHAT CAN I DO WITH A QUALIFICATION IN HISTORY?

History means employability:
Law, Journalism, Conservation, Personnel, Banking, Retail Management, Social Work, Civil Services, Industrial Management, Accountancy, Teaching, Marketing, Advertising

History

GCSE

GCSE HISTORY COURSE DESIGN

You will study 3 units

1. Outline Study: International Relations, 1945 - 2003
2. Modern World: Life Under Nazi Dictatorship, 1933 - 1945
3. Local Study: Changing Relations: Northern Ireland & its Neighbours, 1920 – 1949

SUBJECT CONTENT

Year 11	Year 12
Unit 1: International Relations, 1945 - 2003 • End of World War Two & start of the Cold War • Emerging superpower rivalry & its consequences, 1945 – 1949 • Flashpoints in Europe & the impact on international relations e.g. Berlin Wall • Flashpoints outside Europe e.g. Vietnam War • The end of the Cold War • The War on Terror e.g. September 11th	**Unit 2: Life Under Nazi Dictatorship, 1933 - 1945** • Hitler takes political control, 1933 – 34 • Control & Opposition • Life for workers in Nazi Germany • Life for women & the family in Nazi Germany • Life for young people in Nazi Germany • Life for the Jewish community & minorities in Nazi Germany • Germany at war (including plots against Hitler & the Holocaust) **Unit 3: Changing Relations: Northern Ireland & its Neighbours, 1920 - 1949** • The partitioning of Ireland • De Valera & the Irish Free State • Economic tension with Britain • Northern Ireland & World War II • The Blitz & Battle of Britain • Northern Ireland 1945 – 1949 • Welfare State e.g. setting up the NHS

ASSESSMENT

Unit	Assessment Format	Weighting	Duration	Assessment Taken
Unit 1	1 Document Investigation with 4 questions based on interpretation & evaluation of source material. 1 Essay Question (from a choice of 2)	Worth 40% of the final GCSE grade	1 hour 15 mins	Summer Year 11
Unit 2	Mixture of short & medium length structured questions	Worth 30% of the final GCSE grade	1st half of Paper 1 1 hour 45 mins	Summer Year 12
Unit 3	Mixture of structured questions & source-based questions	Worth 30% of the final GCSE grade	2nd half of Paper 1	Summer Year 12

Mathematics

GCSE

INTRODUCTION

"If I were again beginning my studies, I would follow the advice of Plato and start with mathematics." (Galileo). It relies on both logic and creativity and is pursued for a variety of practical purposes and its intrinsic interest. The reason why so many employers highly value mathematics qualifications is that mathematics students become better at thinking logically and analytically. Through solving problems you develop resilience and are able to think creatively and strategically. The writing of structured solutions, proof and justification of results help you to formulate reasoned arguments, and importantly you will have excellent numeracy skills and the ability to process and interpret data. The mathematical skills you learn are of great benefit in other subjects such as physics, chemistry, biology, computing, geography and business studies.

THE COURSE – WHY CHOOSE MATHEMATICS?

Students will follow the CCEA GCSE Mathematics specification which will provide opportunities to build on the skills and capabilities developed through their studies at Key Stage 3. This course provides a strong foundation for progression to GCSE Further Mathematics and/or AS level Mathematics and for other subjects where understanding and application of mathematics are essential.

Studying Mathematics, students are encouraged to:

- develop fluent knowledge, skills and understanding of mathematical methods and concepts;
- acquire, select and apply mathematical techniques to solve problems;
- reason mathematically, make deductions and inferences and draw conclusions; and
- comprehend, interpret and communicate mathematical information in a variety of forms appropriate to the information and context.

CAREERS FOCUS - WHAT CAN I DO WITH A QUALIFICATION IN MATHEMATICS?

Mathematics qualifications are well-respected by employers and are seen as "facilitating" subjects for entry to higher education. Careers with good mathematics skills and qualifications are not only well paid, but they are also often interesting and rewarding. Students of Mathematics have wide and varied employment opportunities available to them. These include:

Accountancy | Aerospace & Defence | Automotive | Biosciences | Business Services | Chemicals| Construction | Consultancies | Education | Engineering | Environment | Exploration Geophysics | Financial Services | Food & Drink | Healthcare | Insurance | IT & Computing | Manufacturing | Metals & Minerals | Operational Research | Pharmaceuticals | Academic Research | Telecoms | Transport

ENTRY REQUIREMENTS

Compulsory subject.

Mathematics

GCSE

GCSE MATHEMATICS COURSE DESIGN

Students will study 2 units. Unit 1: M2, M3 or M4 Unit 2: M6, M7 or M8

SUBJECT CONTENT

Year 11	Year 12
Unit M2 target grades C*, C, D, E, F and G **Unit M3 target grades B, C*, C, D and E** **Unit M4 target grades A*, A, B, C* and C** • Structure and Calculation • Indices • Definitions and Terms • Decimals/Fractions/Percentages • Equivalences • Financial Capability • Upper and Lower Bounds • Algebraic Expressions/Formulae/Fractions and Equations • Coordinates and Graphs • Properties and constructions • Units and measurement • Perimeter, Area and Volume • Triangle Mensuration • Circle Theorems • Handling Data Cycle • Planning and Collecting Data • Analysing, Presenting and Interpreting Data • Bivariate Data	**Unit M6 target grades C*, C, D, E, F and G** **Unit M7 target grades B, C*, C, D and E** **Unit M8 target grades A*, A, B, C* and C** • Structure and Calculation • Number Systems • Indices/Surds/Estimation/Ratio • Algebraic Equations/Inequalities and Formulae • Sequences • Graphs • Circle/Variation • Units and measurement • Maps and scale drawings • Polygons • Triangle Mensuration • Transformations • Similarity and Congruence • Constructions and Loci • Vocabulary of Probability • Scale and Sample Spaces • Calculating probabilities • Expectation and relative frequency • Tree diagrams

ASSESSMENT

Unit	Assessment Format	Weighting	Duration	Assessment Taken
M2	External written examination with calculator	Worth 45% of the final GCSE grade	1 hour 45 minutes	Summer Year 11
M6	External written examinations: Paper 1 without calculator Paper 2 with calculator	Worth 55% of the final GCSE grade	Paper 1: 1 hour Paper 2: 1 hour	Summer Year 12
M3	External written examination with calculator	Worth 45% of the final GCSE grade	2 hours	Summer Year 11
M7	External written examinations: Paper 1 without calculator Paper 2 with calculator	Worth 55% of the final GCSE grade	Paper 1: 1 hour 15 minutes Paper 2: hour 15 minutes	Summer Year 12
M4	External written examination with calculator	Worth 45% of the final GCSE grade	2 hours	Summer Year 11
M8	External written examinations: Paper 1 without calculator Paper 2 with calculator	Worth 55% of the final GCSE grade	Paper 1: 1 hour 15 minutes Paper 2: 1 hour 15 minutes	Summer Year 12

Media Studies

GCSE

INTRODUCTION

Learners study a range of media forms in terms of a theoretical framework which consists of media language, representation, media industries and audiences. The following forms are studied in depth through applying all areas of the framework: newspapers, television, music video and online, social and participatory media. Advertising and marketing, film, video games, radio and magazines are studied in relation to selected areas of the framework.

THE COURSE – WHY CHOOSE MEDIA STUDIES?

Our pupils enjoy the practical nature of this course as well as the theoretical elements which are contemporary and relevant to their own media consumption. All we ask for from our prospective pupils is a good standard of English, an interest in the media industry and the motivation to succeed in this very successful subject area.

Through studying Media Studies, we focus on several key areas including:

- Magazines
- Advertising
- Film and Film Marketing
- Newspapers
- Radio
- Television: Sit Coms and Crime Drama
- Music: Music artists, social media and websites

Will I get to produce any of my own media products?

Absolutely! You will complete a practical production in Year 12 which will involve you creating your own media texts. Past pupils have created:

Music Magazines

Photo stories

DVD and CD covers

Short films

Advertisements

CAREERS FOCUS - WHAT CAN I DO WITH A QUALIFICATION IN MEDIA STUDIES?

According to the Office of National Statistics 2020 report, people with a degree in media have the second highest employment rate in the UK.

Past pupils of the school have established careers in Events Management, Public Relations, Business and Marketing and Interactive Digital Media Arts.

Media Studies

GCSE

GCSE MEDIA STUDIES COURSE DESIGN

You will study 3 units

1. Component 1: Exploring the Media
2. Component 2: Understanding Media Forms and Products
3. Component 3: Non-Exam Assessment – Creating Media Products

SUBJECT CONTENT

Year 11	Year 12
Unit 1: Exploring the Media • Magazines • Film Posters • Advertisements • Newspapers and Online News • The Film Industry • The News Reporting Industry • Radio	**Component 2: Understanding Media Forms and Products** • Television: Sitcoms / Crime Drama • Music Videos and Online Music **Component 3: Non-Exam Assessment – Creating Media Products** **You will have to opportunity to create your own media products such as:** • Film Magazines • Online Media • Television • Radio • Music Video • Marketing materials

ASSESSMENT

Unit	Assessment Format	Weighting	Duration	Assessment Taken
Component 1	External Written Examination	Worth 40% of the final GCSE grade	1 Hour 30mins	Summer Year 12
Component 2	External Written Examination	Worth 30% of the final GCSE grade	1 Hour 30mins	Summer Year 12
Component 3	Controlled Assessment	Worth 30% of the final GCSE grade	Completed in class over several weeks	Winter/Spring Year 12

Modern Foreign Languages

GCSE French or Spanish

INTRODUCTION

The CCEA GCSE Modern Foreign Languages specification develops students' enthusiasm for the language while increasing their confidence in the four key skills of listening, speaking, reading and writing.

Three contexts for learning provide plenty of variety and scope for investigating, understanding, describing, discussing and giving opinions. The contexts are: Identity, Lifestyle and Culture, Local, National, International and Global Areas of Interest and School Life, Studies and the World of Work.

THE COURSE – WHY CHOOSE MODERN FOREIGN LANGUAGES?

Modern Languages 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.

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.

Through studying Modern Foreign Languages, pupils will be afforded the opportunity to:

- enjoy language learning, and be inspired, moved and changed by following a broad, coherent, satisfying and worthwhile course of study;
- develop their linguistic skills to help them take their place in a multilingual global society;
- extend skills, knowledge and understanding that will provide them with a suitable basis for further study and practical use of French/Spanish;
- to make informed decisions about further learning opportunities and career choices;
- understand French/Spanish in a variety of contexts;
- enhance their knowledge of the language(s) and language learning skills;
- communicate effectively in French/Spanish;
- show an awareness and understanding of French/Spanish-speaking countries and communities.

CAREERS FOCUS – WHAT CAN I DO WITH A QUALIFICATION IN MODERN FOREIGN LANGUAGES?

The course provides a sound base for further study of French/Spanish at a more advanced level. Using your languages at work no longer means being just a teacher, translator or interpreter (although these jobs make for an extremely interesting career). It can mean working in one of many industries, in which your languages, combined with expertise in another field, can really help you to go further.

Retail buyer, Chartered accountant, Diplomatic Services operational officer, English as a foreign language teacher or English as a second language teacher, Event organizer, Marketing executive, Market researcher, Solicitor.

Modern Foreign Languages

GCSE French or Spanish

ENTRY REQUIREMENTS

Pupils should have a keen interest in studying the language and culture of other countries.

GCSE MODERN FOREIGN LANGUAGES COURSE DESIGN

You will study 4 units:

Unit 1 Listening Unit 2 Speaking Unit 3 Reading Unit 4 Writing

SUBJECT CONTENT

Year 11 and 12

Context for Learning 1: Identity, Lifestyle and Culture

- Myself, my family, relationships and choices [e.g. family and friends]
- Social media and new technology [e.g. online communications, computers, tablets and smartphones]
- Free time, leisure and daily routine [e.g. hobbies, cinema, TV, music, dance, fashion, eating out, shopping, at home, at school and at the weekend]
- Culture, customs, festivals and celebrations [e.g. Easter, Christmas, birthdays, cultural activities and events, national holidays, celebrations and cuisine]

Context for Learning 2: Local, National, International and Global Areas of Interest

- My local area and the wider environment [e.g. home, neighbourhood, town or city, places to visit, region]
- Community involvement [e.g. charity and voluntary work]
- Social and global issues [e.g. health, lifestyle, anti-social behaviour, caring for others, caring for the environment]
- Travel and tourism [e.g. holidays, destinations, transport, tourist information, weather, directions, accommodation, activities, shopping and eating out]

Context for Learning 3: School Life, Studies and the World of Work

- My studies and school life [e.g. school subjects, uniform, timetable, rules and regulations]
- Extra-curricular activities [e.g. clubs, societies, events, trips and visits]
- Part-time jobs and money management [e.g. evening work, weekend work and work experience]
- Future plans and career [e.g. further studies, employment, aspirations and choices]

ASSESSMENT

Unit	Assessment Format	Weighting	Duration	Assessment Taken
Unit 1	Listening	Worth 25% of the final GCSE grade	Foundation: 35 mins Higher: 45 mins	Summer Year 11 (F) Summer Year 12 (F/H)
Unit 2	Speaking	Worth 25% of the final GCSE grade	12 minutes + 10 minutes preparation	Summer Year 12
Unit 3	Reading	Worth 25% of the final GCSE grade	Foundation: 50 mins Higher: 60 mins	Summer Year 11 (F) Summer Year 12 (F/H)
Unit 4	Writing	Worth 25% of the final GCSE grade	Foundation: 60 mins Higher: 75 mins	Summer Year 11 (F) Summer Year 12 (F/H)

Music

GCSE

INTRODUCTION

The CCEA GCSE Music specification is for everyone who loves music: composing, playing an instrument, listening to music, or using music technology. It encourages students to develop their musical potential by focusing on performing, composing and listening.

Students can explore a range of music, including classical, pop, film, and traditional Irish music. This deepens their appreciation of the diverse heritage of music and promotes their personal, social, intellectual and cultural development.

Through the performance element of the course, students develop the skills they need to communicate effectively as musicians. This increases their self-confidence and enhances their presentation, communication and evaluation skills. The opportunity to write their own music allows them to be creative.

This qualification builds on the knowledge, understanding and skills developed through the Area of Learning The Arts and the Cross-Curricular Skill of Using ICT.

THE COURSE – WHY CHOOSE MUSIC?

Benefits to Students:

1. Grow in confidence in performance, both individually and as part of a group. This can also help boost your skills in presentation, communication and evaluation.
2. Be creative! You will have the opportunity to write your own music, both from the starting point of a stimulus and using your own original ideas.
3. Explore contrasting music from many different contexts: from classical to pop, from traditional Irish to film music.

CAREERS FOCUS - WHAT CAN I DO WITH A QUALIFICATION IN MUSIC?

Creative industries are a rapidly growing area of the economy and Music forms a huge part of this. Northern Ireland and the UK continue to produce world-renowned music artists and composers within genres of the art form.

The study of music develops many transferrable skills, for example, creative thinking effective communication, forward planning, time management and working collaboratively. Studying music has strong links with improving numeracy and literacy through harmony, composition and music analysis.

Careers in music include:

Entertainment Lawyer, Music Producer, Artists and Performance Manager, DJ, Singer/Musician, Music Publisher Composer, Sound Engineer, Conductor, Music Director, Concert Promoter, Teacher.

Music

GCSE

ENTRY REQUIREMENTS

Students do not need to have reached a particular level of attainment before beginning to study this specification. However, this specification builds on the knowledge, understanding and skills developed through the Key Stage 3 Music curriculum. It is recommended that students possess some skills in vocal or instrumental performance.

GCSE MUSIC COURSE DESIGN

You will study 3 units

1. Component 1: Performing and Appraising
2. Component 2: Composing
3. Component 3: Listening and Appraising

SUBJECT CONTENT

Year 11 and 12

Component 1: Performing and Appraising
Students present one solo and one ensemble performance.
The combined duration of the performances should be no longer than 6 minutes.
Students discuss and evaluate performances with the visiting examiner.

Component 2: Composing
Students create two compositions. One is in response to a pre-release stimulus and one is free choice.

Component 3: Listening and Appraising
Students answer questions based on familiar and unfamiliar music relating to the Areas of Study:
Western Classical Music 1600-1910
Film Music
Musical Traditions of Ireland
Popular Music 1980-present day

ASSESSMENT

Unit	Assessment Format	Weighting	Duration	Assessment Taken
Component 1	External examination assessed by a visiting examiner	Performances 30% Discussion 5%	9 minutes	Summer Year 12
Component 2	Controlled assessment	30%	25 hours	Spring Year 12
Component 3	External written examination	35%	1 hour and 30 minutes	Summer Year 12

Physical Education

GCSE

INTRODUCTION

The CCEA GCSE Physical Education specification offers opportunities to develop a healthy, active lifestyle and explore a range of physical activities.

It inspires, motivates and challenges students and enables them to make informed decisions about further learning opportunities and career pathways.

Students explore health, the active leisure industry, physical fitness, activities and sports through academic and physical challenges.

THE COURSE – WHY CHOOSE PHYSICAL EDUCATION?

You will gain an understanding of health, physical fitness and the role of the active leisure industry in providing opportunities to improve health and fitness. You will perform in three physical activities or sports.

There is a new option of event management. Pupils will be able to organise and run a sporting event at Cambridge House GS. Any three sports can be selected from our list of activities, including sports recommended by Disability Sport NI. We are making our list as long as possible to give you more choice. One activity can be externally assessed.

The three components of the PE specification are integrated, so students have the opportunity to apply what they learn for the written examinations to the practical component, and vice versa. This provides a good base for further study at advanced level, BTEC Advanced Level 3 in Sport provided at Cambridge House GS.

This qualification builds on the knowledge, understanding and skills developed through the Physical Education Area of Learning.

This specification is a linear qualification: students take all the assessment at the end of the course.

GCSE Physical Education incorporates:

- Skills developed through our GCSE Physical Education
- The specification which supports the Northern Ireland Curriculum at Key Stage 4 and gives students further opportunities to achieve their potential and develop skills for life.
- Skills including communication, using mathematics, working with others, problem solving, managing information and being creative.
- Physical activity promoting mental and social wellbeing and develops self-esteem, creative thinking and interpersonal skills.
- A GCSE qualification, which leads students to choosing to study our BTEC Advanced Level 3 in Sport in Year 13/14.
- Studying Physical Education developing a range of transferable skills and providing career opportunities in areas such as recreation and leisure, education, event management and health and wellbeing.

Physical Education

GCSE

CAREERS FOCUS - WHAT CAN I DO WITH A QUALIFICATION IN PHYSICAL EDUCATION?

Pupils obtaining a GCSE qualification in PE, can lead students to choosing to study our BTEC Advanced Level 3 in Sport in Year 13/14.

Studying Physical Education develops a range of transferable skills and providing career opportunities in areas such as recreation and leisure, education, event management and health and wellbeing.

Applying the skills that you will learn from studying GCSE Physical Education will benefit you in everyday life and any career path that you follow.

GCSE PHYSICAL EDUCATION COURSE DESIGN

You will study 3 units

1. Component 1: Factors Underpinning Health and Performance (25%)
2. Component 2: Developing Performance (25%)
3. Component 3: Individual Performances in Physical Activities. (50%)

SUBJECT CONTENT

Year 11	Year 12
Unit 1: Factors Underpinning Health and Performance • Health and Lifestyle Decisions • Physical Health: Exercise • Principles of Training • Fitness Testing • Risk Assessment • Nutrition • Sleep • Tobacco, Alcohol & Illegal Drugs • The Active Leisure Industry	**Unit 2: Developing Performance** • Developing Physical Fitness for Performance • Developing Skilled Performance **Unit 3 Individual Performances in 3 Physical Activities** • 3 Sporting activities of choice offered in School/Out of school. • Performance Analysis coursework (oral presentation on selected sport excluding fitness testing/event management). **Note* Unit 3 assessed over a two-year period**

ASSESSMENT

Unit	Assessment Format	Weighting	Duration	Assessment Taken
Unit 1	External Examination	Worth 25% of the final GCSE grade	1 hour 15mins	Summer Year 12
Unit 2	External Examination	Worth 25% of the final GCSE grade	1 hour 15mins	Summer Year 12
Unit 3	Controlled Assessment	Worth 50% of the final GCSE grade	N/A	Completed in class/extra curricular/outside sporting agencies over 2 years.

Religious Studies

GCSE

INTRODUCTION

The CCEA GCSE Religious Studies specification encourages students to develop an enquiring, critical and reflective approach. They explore religions and beliefs, reflecting on and responding personally to fundamental questions.

THE COURSE – WHY CHOOSE RELIGIOUS STUDIES?

You will have the opportunity to develop interest in and enthusiasm for religion by studying different topics and issues.

Through studying Religious Studies, pupils:

- will be able to participate in discussions and debates, consider the evidence and argue a case.
- develop your own values and opinions based on what you have learned
- will hear different viewpoints and will have the opportunity to express your own thoughts and influence others.

CAREERS FOCUS – WHAT CAN I DO WITH A QUALIFICATION IN RELIGIOUS STUDIES?

By undertaking this subject, you will be well prepared to study Religious Studies at Advanced level.

Studying Religious Studies can lead on to a variety of careers, for example in teaching, medicine, public service, advice work, counselling, journalism, sales and marketing companies, ministry, social work, charity organisations, youth work, community work, libraries, and museums.

Religious Studies

GCSE

ENTRY REQUIREMENTS

Before taking this course, you will need to have obtained a good standard at Key Stage 3. A sustained, committed effort from the outset is essential if you wish to be successful in this subject.

GCSE RELIGIOUS STUDIES COURSE DESIGN

You will study 2 units

1. The Gospel according to Matthew
2. An Introduction to Christian Ethics

SUBJECT CONTENT

Year 11	Year 12
Unit 1: The Gospel according to Matthew • The Identity of Jesus • Jesus the Miracle Worker • The Kingdom of God • The Death and Resurrection of Jesus • Christian Discipleship	**Unit 2: An Introduction to Christian Ethics** • Personal Relationships • Abortion • Euthanasia • Capital Punishment • Developments in Bioethics • Contemporary issues in Christianity • Modern Warfare

ASSESSMENT

Unit	Assessment Format	Weighting	Duration	Assessment Taken
Unit 1	External Examination	Worth 50% of the final GCSE grade	1 hour 30 minutes	Summer Year 12
Unit 2	External Examination	Worth 50% of the final GCSE grade	1 hour 30 minutes	Summer Year 12

Science - Double Award

GCSE

INTRODUCTION

We offer two choices: GCSE Double Award Science and GCSE Single Award Science.

Double award Science counts as two GCSE leading to two grades.

NOTE: High attainment in GCSE Double Award Science along with being a good mathematician provides a suitable basis for study at AS and A2 level in the following subject areas: Biology, Chemistry and Physics and Life and Health Sciences.

THE COURSE – WHY CHOOSE DOUBLE AWARD SCIENCE?

Science stimulates and excites pupils' curiosity and their interest in, and knowledge of, phenomena and events of the world around them. Science at KS4 provides an opportunity for students to build on the knowledge and skills obtained at Key Stage 3.

Through studying Science, pupils:

- develop their knowledge and understanding of the material, physical and living worlds;
- develop their understanding of the effects of science on society;
- develop their understanding of the importance of scale in science;
- develop and apply their knowledge and understanding of the nature of science and of the scientific process;
- develop their understanding of the relationships between hypotheses, evidence, theories and explanations;
- develop their awareness of risk and the ability to assess potential risk and potential benefits;
- develop and apply their observational, practical, modelling, enquiry and problemsolving skills and understanding in laboratory, field and other learning environments;
- develop their ability to evaluate claims based on science through critical analysis of the methodology, evidence and conclusions both qualitatively and quantitatively; and
- develop their skills in communication, mathematics and the use of technology in scientific contexts.

CAREERS FOCUS - WHAT CAN I DO WITH A QUALIFICATION IN SCIENCE?

Biology: Qualifications in Biology lead to Careers in such fields as Pure and Applied Research, Medicine, Biomedical Sciences, Biochemistry, Veterinary Medicine, Dentistry, Dietetics, Physiotherapy, Radiography, Nursing, Pharmacy, Pharmacology, Food Science, Opthalmics

Chemisty: Chemical scientists work in a huge variety of interesting careers both in and out of the laboratory such as: Medicine, Dentistry, Veterinary Science, Pharmacy, Pharmacology, Pharmaceutical and Industrial Chemistry, Biochemistry, Environmental Chemistry

Physics: Physics opens the doors to a wide variety of careers due, in part to the transferable skills gained through its study. Employers look favorably on any Physics qualification because it is an indicator of ability to benefit from further training, and the subject provides a good background for new technology.

Science - Double Award

GCSE

ENTRY REQUIREMENTS

All students will study GCSE Double Award Science or Single Award Science as advised by Heads of Department.

GCSE SCIENCE COURSE DESIGN

You will study 7 units

Units 1 - 3:	Biology Unit B1	Chemistry Unit C1	Physics Unit P1
Units 4 - 6:	Biology Unit B2	Chemistry Unit C2	Physics Unit P2
Unit 7:	Practical Skills Unit 7 - Parts A and B		

SUBJECT CONTENT

Year 11	Year 12
Unit 1: **Biology Unit B1** • Cells • Living Processes and • Biodiversity **Chemistry Unit C1:** • Structures • Trends • Chemical Reactions • Quantitative Chemistry and Analysis **Physics Unit P1:** • Motion • Force and Moments • Density and Kinetic Theory • Energy • Radioactivity, Nuclear Fission and Fusion	**Unit 2** **Biology Unit B2:** • Body Systems, Genetics • Microorganisms, Health **Chemistry Unit C2:** • Further Chemical Reactions • Rates and Equilibrium , Calculations • Organic Chemistry **Physics Unit P2:** • Waves, Light • Electricity, Magnetism, Electromagnetism • Space Physics **Unit 3** **Unit 7: Practical Skills** • This comprises two sections: Practical Skills A and Practical Theory Paper B in each of Biology, Chemistry and Physics

ASSESSMENT

Unit	Assessment Format	Weighting	Duration	Assessment Taken
Unit B1, C1, P1	Three external written Examinations	Worth 11% of the final GCSE grade 33% in total	1 hour for each unit	Summer Year 11
Unit B2, C2, P3	Three external written Examinations	Worth 14% of the final GCSE grade 42% in total	1 hour and 15 mins for each unit	Summer Year 12
Unit 7 Part A	Practical skills	Worth 7.5% of the final GCSE grade	1 Hour in each subject area	Winter/Spring Year 12
Unit 7 Part B	External written examination	Worth 17.5% of the final GCSE grade	30 mins in each subject area	Summer Yr 12

Science - Single Award

GCSE

INTRODUCTION

We offer two choices: GCSE Double Award Science and GCSE Single Award Science.

Single award Science counts as one GCSE and is the preferred option for pupils for whom Science is not a strength and allows them the opportunity to select a GCSE in other areas of the curriculum.

THE COURSE – WHY CHOOSE SINGLE AWARD SCIENCE?

Science stimulates and excites pupils' curiosity and their interest in, and knowledge of, phenomena and events of the world around them. Science at KS4 provides an opportunity for students to build on the knowledge and skills obtained at Key Stage 3.

Through studying Science, pupils:

- develop their knowledge and understanding of the material, physical and living worlds;
- develop their understanding of the effects of science on society;
- develop their understanding of the importance of scale in science;
- develop and apply their knowledge and understanding of the nature of science and of the scientific process;
- develop their understanding of the relationships between hypotheses, evidence, theories and explanations;
- develop their awareness of risk and the ability to assess potential risk and potential benefits;
- develop and apply their observational, practical, modelling, enquiry and problemsolving skills and understanding in laboratory, field and other learning environments;
- develop their ability to evaluate claims based on science through critical analysis of the methodology, evidence and conclusions both qualitatively and quantitatively; and
- develop their skills in communication, mathematics and the use of technology in scientific contexts.

CAREERS FOCUS - WHAT CAN I DO WITH A QUALIFICATION IN SCIENCE?

Biology: Qualifications in Biology lead to Careers in such fields as Pure and Applied Research, Medicine, Biomedical Sciences, Biochemistry, Veterinary Medicine, Dentistry, Dietetics, Physiotherapy, Radiography, Nursing, Pharmacy, Pharmacology, Food Science, Opthalmics

Chemisty: Chemical scientists work in a huge variety of interesting careers both in and out of the laboratory such as: Medicine, Dentistry, Veterinary Science, Pharmacy, Pharmacology, Pharmaceutical and Industrial Chemistry, Biochemistry, Environmental Chemistry

Physics: Physics opens the doors to a wide variety of careers due, in part to the transferable skills gained through its study. Employers look favorably on any Physics qualification because it is an indicator of ability to benefit from further training, and the subject provides a good background for new technology.

Science - Single Award

GCSE

ENTRY REQUIREMENTS

All students will study GCSE Double Award Science or Single Award Science as advised by Heads of Department.

GCSE SCIENCE COURSE DESIGN

You will study 4 units

1. Biology 2. Chemisty 3. Physics 4. Practical Skills

SUBJECT CONTENT

Year 11	Year 12
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 3 Physics** Electrical circuits, Household electricity, Energy, Electricity generation, Heat transfer, Waves, Road transport and safety, Radioactivity, Earth in space
Unit 2 Chemistry Acids, bases and salts, Elements, compounds and mixtures, Atomic structure and Periodic Table, Bonding, Materials, Symbols, formulae and equations, Qualitative analysis, Metals and the reactivity series, Rates of reaction, Organic chemistry.	**Unit 4: Practical Skills** This comprises two sections: Practical Skills A and Practical Theory Paper B

ASSESSMENT

Unit	Assessment Format	Weighting	Duration	Assessment Taken
Unit 1	External written Examination	Worth 25% of the final GCSE grade	1 hour	Year 11 or 12
Unit 2	External written examination	Worth 25% of the final GCSE grade	1 hour	Year 11 or 12
Unit 3	External written examination	Worth 25% of the final GCSE grade	1 Hour	Year 11 or 12
Unit 4 Part A	Practical skills	Worth 7.5% of the final GCSE grade	2 hours in class	Winter/Spring Year 12
Unit 4 Part B	External written examination	Worth 17.5% of the final GCSE grade	1 Hour 15 mins	Summer Yr 12

Statistics

GCSE

INTRODUCTION

The study of Statistics is central to "a world where data are at the heart of understanding and decision-making" (Royal Statistical Society). GCSE Statistics encourages students to develop understanding of the basic concepts of statistical problem solving. They also develop skills in planning, collecting, processing, analysing and representing data. This involves drawing graphs and trend lines and deciding the best method to present data clearly.

Students reason, interpret and discuss results and use data to calculate estimates of probability. There is an element of appreciating how statistics are used to present information in industry, research and the economy. This includes how technology has enabled us to collect, visualise and analyse large quantities of data to inform decision-making in public, commercial, charitable and academic sectors.

Students apply their knowledge and understanding to planning a statistical enquiry. They also learn to evaluate and interpret the outcomes of the enquiry, which involves thinking critically and choosing an appropriate means of communicating their conclusions.

THE COURSE – WHY CHOOSE STATISTICS?

GCSE Statistics offers opportunities to build on the skills and capabilities developed through the delivery of the Northern Ireland Curriculum at Key Stage 3. It enables students to develop appropriate statistical skills, knowledge and understanding to support their GCSE studies and enable them to progress to further academic and vocational study and to employment.

The course has two tiers: Foundation and Higher and the assessment model provides students with the opportunity to apply the complete statistical problem-solving process

CAREERS FOCUS - WHAT CAN I DO WITH A QUALIFICATION IN SCIENCE?

Statistics is a rewarding and often exciting career choice. Statisticians work with the data that is all around us and the opportunities for work are endless. If you are forward thinking, IT-savvy, interested in finding practical solutions to problems in the society and the world we live in and you enjoy working with numbers and people, this could be the career for you. A professional statistician works in many different sectors including:

Actuary | Forensic Statistician | Environmental Statistician | Government Statistician | Medical Statistician | Pharmaceutical Statistician | Market Research Statistician | Sports Statistician | School Teacher | Statistical Consultant.

Statistics

GCSE

ENTRY REQUIREMENTS

This specification builds on the knowledge, understanding and skills developed through the statutory requirements for Mathematics (including Financial Capability) in the Northern Ireland Curriculum at Key Stage 3.

GCSE STATISTICS COURSE DESIGN

Students will study 2 units

1. Foundation or Higher Unit 1
2. Foundation or Higher Unit 2

SUBJECT CONTENT

Year 11	Year 12
Unit 1 Foundation or Higher	**Unit 2 Foundation or Higher**
Students must take Unit 1 and Unit 2 at either Foundation or Higher tier for an award in GCSE Statistics.	The examination for Unit 2 has some questions on information in a pre-release case study focusing on Northern Ireland data.
• Planning and data collection • Problems with data • Types of data • Processing, representing and analysing data • Reasoning, interpreting and discussing results • Probability • The normal distribution as a model • The binomial as a model • Statistics in real-life	• Planning and data collection • Problems with data • Types of data • Processing, representing and analysing data • Reasoning, interpreting and discussing results • Probability • The normal distribution as a model • The binomial as a model • Statistics in real-life

ASSESSMENT

Unit	Assessment Format	Weighting	Duration	Assessment Taken
Unit 1	External written examination Foundation Tier: 80 marks OR Higher Tier:100 marks	Worth 50% of the final GCSE grade	Foundation Tier: 1 hour 30 minutes OR Higher Tier: 2 hours	Summer Year 11
Unit 2	External written examination Foundation Tier: 80 marks OR Higher Tier: 100 marks	Worth 50% of the final GCSE grade	Foundation Tier: 1 hour 30 minutes OR Higher Tier: 2 hours	Summer Year 12

Technology and Design

GCSE

INTRODUCTION

As a STEM subject, Technology and Design is at the core of technical industries. Design and Technology has become one of the integral subjects now being taught within the school curriculum, due to the large demand for STEM related jobs in Northern Ireland and further afield.

It is enhanced with good skills in Maths, Science, Art and ICT.

THE COURSE – WHY CHOOSE TECHNOLOGY?

This specification aims to encourage students 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;
- 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.

CAREERS FOCUS - WHAT CAN I DO WITH A QUALIFICATION IN TECHNOLOGY?

The course we provide in year 10 includes the basic knowledge needed, to undertake electronic products at GCSE level. This would be an appropriate subject to select with the following career paths in mind: Electrical Engineering, Technology Teacher, biomedical engineering

Technology and Design

GCSE

GCSE TECHNOLOGY AND DESIGN COURSE DESIGN

You will study 3 units

1. Technology & Design Core Content- Unit 1
2. Electronic and Micro-electronic Control Systems- Unit 2
3. Design and Manufacturing Project- Unit 3 (controlled assessment)

SUBJECT CONTENT

Year 11

Unit 1: Technology & Design Core Content

Materials
- Materials and their general physical, aesthetics and structural characteristics
- Tools and Processes
- Moulds, JIGS & fixtures
- Smart Materials
- CAD/CAM

Pneumatics
- Cylinders and Valves
- Speed Control
- Safety
- Construction

Mechanisms
- Levers
- Gears
- Pulley Systems

Electronics
- Block Diagrams
- Circuit components in use
- Flowchart programming

Year 12

Unit 2: Electronic & Micro-electronic Control Systems
- Ohms Law
- Resistors
- Voltage Dividers
- Capacitors
- Transistors
- Thyristors
- PIC
- Timers
- Integrated Circuits
- Testing & Fault Finding
- Binary Counting and signals
- Robotics

Unit 3: Design & Manufacturing Project

The solution should have:
- scaled physical model(s) which relate(s) to and convey(s) a clear understanding of the final solution, proportion, form and function;
- evidence of the function and form of the prototype;
- appropriate materials and fabrication techniques;
- evidence of skills, precision, quality of manufacture, finish and attention to detail;
- evidence of working under test conditions;
- evidence of safety having been taken into account in its final construction and use.

ASSESSMENT

Unit	Assessment Format	Weighting	Duration	Assessment Taken
Unit 1	External examination	Worth 25% of the final GCSE grade	1 hour 30 minutes	Summer Year 11
Unit 2	External examination	Worth 25% of the final GCSE grade	1 hour 30 minutes	Summer Year 12
Unit 3	Controlled Assessment	Worth 50% of the final GCSE grade	Completed in class over several weeks	Winter/Spring Year 12

GCSE Options Curriculum Protocol

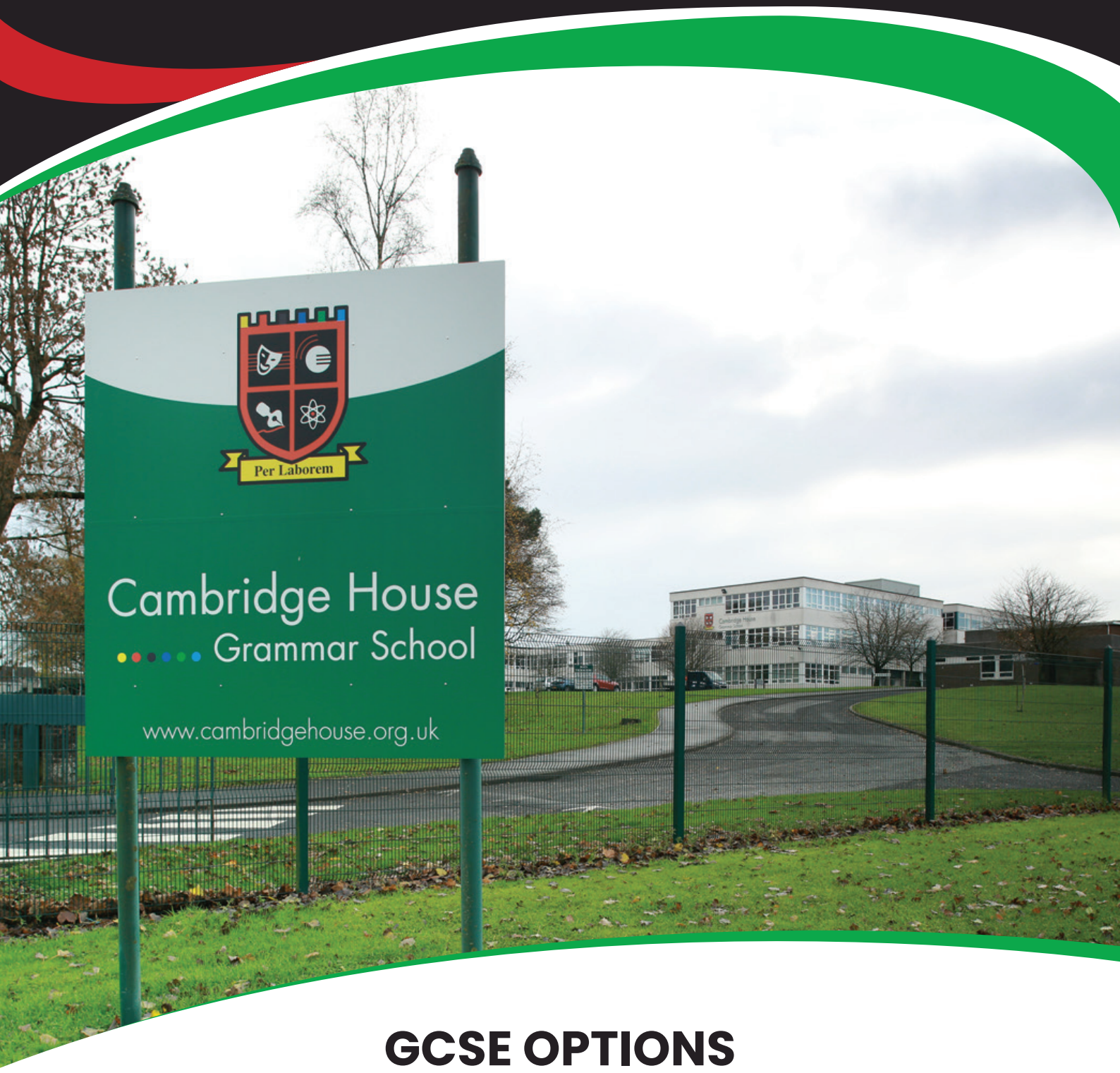
Stage 1	Distribution of subject choice booklets to pupils.
Stage 2	Subject Choice and Consultation Evening.
Stage 3	Careers Interviews.
Stage 4	Deadline for receipt of GCSE Subject Choice return forms is met.
Stage 5	Negotiation of alternative for the small number of 1st preference pupils not accommodated.
Stage 6	Consideration of late forms (forms which are received beyond the deadline for returns).
Stage 7	Consideration of any requests for subject change after 1st September 2020 but not beyond 30th September 2020.

NOTES ON STAGES 1-7

1-3	Pupils are given a period of time for consideration and reflection after the distribution of subject choice booklets. Time is provided for consultation with class teachers and a careers interview.
4	Forms must be received at the careers interview or by the Year 10 Form Teacher on or before the deadline. These forms will then be forwarded to the Vice Principal (Curriculum).
5	Options will be processed immediately after the deadline and no changes will be made until the first preference groups have been collated. On occasions, depending on timetable/blocking procedures/numbers choosing a subject, a small number of pupils may not be able to have all of their first preference subjects. These pupils will have priority to select alternative subjects from undersubscribed groups. This will be carried out by negotiation through the Principal/Vice Principal (Curriculum) and timetabler. The Principal reserves the right to authorise alterations and the Board of Governors will be kept informed.
6	Consideration of late forms against block subjects with vacant places.
7	Any applications asking for a subject change to be considered must be received in writing from a parent/guardian and must state the eucational reason for the request These should be given to the Vice Principal (Curriculum).

GCSE Options Curriculum Protocol

On receipt of the letter requesting consideration, the Vice Principal will consult with relevant staff. On some occasions, it will be necessary for the Vice Principal and Principal to meet with both pupil and parent/guardian to clarify the position and to provide a professional overview. The Principal reserves the right to decide based on professional judgement. Requests for an alternative subject can only be considered in cases where there is spare teaching capacity in groups. It is vital that parents/guardians and pupils take care when considering subject choices. The school cannot guarantee a pupil being accommodated in any particular grop where there are overarching timetable or staffing considerations.



GCSE OPTIONS

2021 - 2023

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