

# Cambridge House

Grammar School

# GCSE OPTIONS

2020 - 2022

## 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?
- 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.
- Do I have a career in mind?

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**

### WHY STUDY AGRICULTURE AND LAND USE?

Northern Ireland has a strong rural tradition. Almost 75 % of land here is used for agricultural purposes. The agri-food industry contributes hugely to the local economy, representing employment for around 50,000 people in farms and factories and the agri-food sector.

### WHAT WILL I STUDY AND HOW WILL I BE ASSESSED?

The structure of the course is summarised in the table below:

Unit	Assessment	Weightings
Unit 1: Soils, Crops and Habitats	Written examination 1 hr 15mins.  The exam consists of a number of compulsory structured questions that give opportunities to respond with short answers, extended writing and calculations.	20%
Unit 2: Animals on the Land	Written examination 1 hr 15mins.  The exam consists of a number of compulsory structured questions that gives opportunities to respond with short answers, extended writing and calculations.	20%
Unit 3: Controlled Assessment Contemporary Issues in Agriculture and Land Use	Written examination 1 hr 15mins.  The exam consists of a number of compulsory structured questions that gives opportunities to respond with short answers, extended writing and calculations.	60%

Unit 1 students explore topics such as soil composition, plant biology, crop production and biodiversity in a range of local habitats.

Unit 2 introduces animal husbandry and animal production, including breeding and reproduction, health and welfare, nutrition and food processing. Students also consider issues of health and safety, farm economics and the use of technology to support farmers.

Unit 3 is the controlled assessment for the specification and consists of two tasks. In Task 1, students plan and carry out a risk assessment and an investigation and present a report. In Task 2, students research a topic and present their findings in an appropriate format.

### WHAT CAN I DO WITH A QUALIFICATION IN AGRICULTURE AND LAND USE?

This course will be of particular interest to pupils who wish to pursue Biology or Geography further at A Level, or Agriculture at Cafre following GCSE studies.

### **Art and Design**

### **GCSE**

### WHY STUDY ART & DESIGN?

- It encourages pupils to investigate topics which are of personal interest to them through the production of Art and Design work.
- It allows pupils to focus on the areas of Art and Design which they enjoy most.
- It provides a very good basis for studying Art and Design at a higher level and is also relevant to other subject areas.
- It builds skills and knowledge relevant to a very wide range of career options.

### WHAT DO I NEED TO BE ABLE TO TAKE THIS COURSE?

- Genuine enthusiasm for the subject.
- Dedication to your studies and willingness to work hard.
- Commitment to seeing projects through from start to finish.

If you are considering this course you should discuss your current work (Year 10) with your Art teacher who can advise on the levels of ability, creativity and imagination required for this syllabus. It is strongly recommended that pupils have achieved at least a Grade B throughout their Year 10 work; however, exceptions can sometimes be made at the discretion of the HOD.

### WHAT WILL I STUDY?

The new Revised GCSE Art and Design course is a very exciting and enjoyable programme of study. There are two units of study. The first requires pupils to produce a unit of coursework as shown on the left side of the table below. You will be allowed to choose your own theme with the help of your teacher. This portfolio should contain a selection of work which shows the breadth and depth of the experience you have gained over the coursework unit, which lasts until January in Year 12. The emphasis is on a broad, creative learning experience which allows you to develop skills in a range of Art and Design areas. Coursework is worth 60% of the overall grade.

In January of the second year of the course the examination paper is issued. This requires you to produce preparatory work over a number of weeks from your interpretation of a set theme and then complete a final piece under examination supervision. The examination unit, shown on the right side of the table below, is worth 40% of the overall grade. Enjoyment of the learning process is an important aspect of the course.

# **Art and Design**

**GCSE** 

### Unit 1 - 60% of GCSE

### **Part A: Exploratory Portfolio**

Part B: Investigating the Creative and Cultural Industries

(These two parts make up the Coursework Unit)

You choose the theme/starting point.

You select the work which reflects your ability and personal achievement in relation to the assessment objectives for this course and create a response which shows the influence of other artists' work. You will be able to experiment with a wide range of materials and then focus on the processes which suit your own creative intentions best.

### **Unit 2 - 40% of GCSE**

### **Externally Set Assignment (Exam Unit)**

Theme/starting point is set by CCEA.

Paper released in January.

You produce preparatory work; and a final response which is completed within a 10 hour supervised examination period.

### **HOW WILL I BE ASSESSED?**

Pupil self-evaluation and teacher assessment will occur throughout the course, so you will be expected to work steadily to meet set deadlines. You will be given an Assessment Timeline which lists every week of the school year and highlights each deadline for coursework and the exam unit. This will be attached to your sketchbook throughout the year and you can record your progress on it at each stage. You will never be in doubt about what stage of your work you should be at. We find that this clear structure helps pupils to plan their work very effectively.

### WHAT CAN I DO WITH A QUALIFICATION IN ART AND DESIGN?

Art and Design is a unique and very broad area of study. No other subject offers the range of creative experiences and opportunities available in this course. The new GCSE programme is designed to help you increase self-confidence, resilience, perseverance, self-discipline and commitment and to develop skills of investigating, realising, experimenting and problem solving. These qualities will be of benefit in any future employment.

Qualifications in Art and Design can lead to employment in areas such as architecture, animation, ceramics, furniture design, graphic design, fashion, interactive media design, interior design, jewellery/silversmithing, product design, textile design or teaching. As already stated, the course will also provide you with the type of creative skills which are valued by many employers.

If you are contemplating a career which incorporates any element of design, construction, visual presentation, display or the ability to make creative decisions, then GCSE Art and Design is a must for you. Check out the posters on the notice board outside Mrs Lockhart's room (at the top of the stairs) for further information on careers involving Art and Design.

### **Business Studies**

### **GCSE**

### WHY STUDY 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 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.

### WHAT DO I NEED TO BE ABLE TO TAKE THIS COURSE?

You should have developed competence in Literacy and Numeracy.

### WHAT WILL I STUDY AND HOW WILL I BE ASSESSED?

Three units: Unit 1 - Starting a Business, Unit 2 - Developing a Business, Unit 3 - Planning a Business

### Year 11: Unit 1 - Starting a Business

### **Creating a Business**

- Entrepreneurs
- · Business Resources
- Business Ownership
- Public Sector
- Social Enterprise
- · Business Location
- Business Aims and Objectives
- Stakeholders

### Year 12: Unit 2 - Developing a Business

### **Human Resources**

- Recruitment
- Selection
- Appraisal
- Training
- Motivation

### **Business Studies**

### GCSE

### WHAT WILL I STUDY AND HOW WILL I BE ASSESSED?

### 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

### **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

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

### 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. 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.

'In the business world, everyone is paid in two coins: cash and experience. Take the experience first, the cash will come later.' Harold S Geneen – international businessman

### **Business and Communication Systems**

**GCSE** 

### WHY STUDY 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:

- · gain practical ICT skills
- gain an understanding of how ICT skills are used to enhance business activities, particularly through e-commerce
- develop a lifelong interest in and enjoyment of business subjects that could potentially lead to related further study and employment
- develop skills and understanding in the use of software applications and how to apply them to enhance business through digital solutions
- understand how business is changing because of digital technology
- study business activity and how ICT has changed the business environment
- · develop as an effective and independent thinker with an enquiring mind
- have the opportunity to develop valuable practical ICT skills in a business context
- use software applications to develop digital solutions to enhance business activities

Unit 3 of the specification: Developing Digital Solutions. Provides pupils with the opportunity to make use of the skills developed in Units 1 and 2 to plan and develop a digital solution for business.

### WHAT CAN I DO WITH A QUALIFICATION IN BUSINESS STUDIES?

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 ICT.

The combination of two key competencies required by employers: business literacy and ICT 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 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**

### WHAT DO I NEED TO BE ABLE TO TAKE THIS COURSE?

You should have developed competence in Literacy and Numeracy.

### WHAT WILL I STUDY AND HOW WILL I BE ASSESSED?

You will study three units:

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

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### **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

### Year 12

### **Unit 2: The 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				
Year 11 Unit 1	External computer-based examination	Worth 40% of the final GCSE grade	Duration 2 hours	
Year 12 Unit 2	External examination	Worth 35% of the final GCSE grade	Duration 1 hour	
Year 12 Unit 3	Controlled Assessment	Worth 25% of the final GCSE grade		

### Construction and the Built Environment

### **GCSE**

### WHY STUDY CONSTRUCTION?

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.

### WHAT DO I NEED TO BE ABLE TO TAKE THIS COURSE?

The course we provide in Year 10 comprises the basic knowledge needed, to undertake construction industry and the building environment at GCSE level.

### WHAT WILL I STUDY AND HOW WILL I BE ASSESSED?

### Unit 1: Introduction to the built environment

20%

**External Assessment** 

1 hour

There is one written assessment which is externally set and externally marked.

### **Unit 2: Sustainable Construction**

30%

**External Assessment** 

1 hour and 30 minutes

There is one written assessment which is externally set and externally marked.

The paper requires students to answer questions based on pre-release materials.

### **Unit 3: Construction Craft Project**

25%

#### **Controlled Assessment**

Students carry out one craft project under controlled conditions. They produce an allied craft project folder. The teacher assesses the project and then it is moderated by the examination board.

### **Unit 4: Computer Aided Design in Construction**

25%

### **Controlled Assessment**

Students produce a portfolio of work under controlled conditions. The teacher assesses the portfolio and then it is moderated by the examination board.

### WHAT CAN I DO WITH A QUALIFICATION IN CONSTRUCTION?

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

### Drama

### **GCSE**

### WHY STUDY DRAMA?

Drama helps pupils to develop:

- knowledge and understanding of style, genre and social context
- performance techniques interpretation, improvisation, voice, physicality, stage relationships with others
- · design skills interpretation, visual and design impacts and the use of scenic devices
- technical abilities lighting, sound, technology and appropriate equipment
- · practical skills from making masks and puppets to make-up
- · collaboration and communication skills
- · enquiring and reflective minds
- independent thinking and working.

### WHAT WILL I STUDY AND HOW WILL I BE ASSESSED?

Practical Work 60% Two group performances:

- One group performance (devised) in class time which is assessed by your teacher.
- One group performance (scripted) for friends and family which is assessed by your teacher and a visiting moderator.

Written Examination 40% The written examination takes place at the end of Year 12. Pupils must

write about their own performance work and a play they have studied in

class (Blood Brothers by Willy Russell)

### WHAT CAN I DO WITH A QUALIFICATION IN DRAMA?

 Many former pupils have used success in GCSE Drama as a stepping stone to careers in Drama, and many have entered the teaching profession.

# English Language

All students at GCSE Level study English Language, with a large number of students also taking GCSE English Literature.

#### WHY STUDY ENGLISH LANGUAGE?

### To:-

- Analyse and interpret a wide range of non-fiction texts;
- Develop skills in Speaking and Listening in a wide range of contexts;
- Express themselves creatively and imaginatively;
- · Develop skills in writing for a range of purposes;
- Explore the impact of variations in spoken and written language and how they relate to identity and cultural diversity.

### WHAT WILL I STUDY AND HOW WILL I BE ASSESSED?

Unit	Method of Assessment	Weighting
Unit 1: Writing for Purpose and Audience; and Reading to Access Media and Non-Fiction Texts	External Examination (at the end of Year 11)	30%
Unit 2: Speaking and Listening	Internal Assessment	20%
Unit 3: Studying Spoken and Written Language	Internal Assessment 2 Pieces of Controlled Assessment	20%
Unit 4: Personal or Creative Writing; and Reading Literary and Non-Fiction Texts	External Examination (at the end of Year 12)	30%

Assessment in this course is through a variety of methods. Two Controlled Assessment pieces are completed over the two years. Students will be internally assessed on their ability to respond to a literature text as well as their ability to write creatively and to analyse the spoken word. Speaking and Listening assessment is a significant component of GCSE English Language and students are internally assessed on their ability to engage in group discussions, role-play scenarios and to deliver individual presentations. Students will sit two external examinations; one at the end of Year 11, the other at the end of Year 12.

# **English Literature**

GCSE

At Cambridge House Grammar School, a significant number of students are encouraged to study GCSE English Literature. The study of English Literature is an enriching and worthwhile pursuit and opens many career pathways for students.

### WHY STUDY ENGLISH LITERATURE?

Through the study of GCSE English Literature, pupils will be afforded the opportunity to;

- Explore texts from the English, Welsh and Literary Heritage; their influence today and their meaning over time:
- Explore how texts from different cultures may reflect or influence values, assumptions and sense of identity;
- Become critical readers of fiction and non-fiction prose, poetry and drama;
- Experience different times, cultures, viewpoints and situations as found in literary texts.

### WHAT WILL I STUDY AND HOW WILL I BE ASSESSED?

Assessment in this course is through a variety of methods. Students will sit two external examinations as well as being assessed internally in the form of Controlled Assessment.

### **Unit 1: The Study of Prose**

30%

Method of Assessment: External Examination (Taken at end of Year 11)

**Possible Texts: Golding** Lord of the Flies, **Lee** To Kill a Mockingbird, **Steinbeck** Of Mice and Men, **Hornby** About A Boy, **Johnson** How Many Miles to Babylon?, **Doyle** Paddy Clarke Ha Ha Ha

### **Unit 2: The Study of Drama and Poetry**

50%

Method of Assessment: External Examination (Taken at end of Year 12)

**Drama**: **Friel** Philadelphia, Here I Come!, **O'Casey** Juno and the Paycock, **JB Priestley** An Inspector Calls, **Russell** Blood Brothers, **Sherriff** Journey's End, **Stephens** The Curious Incident of the Dog in the Night-Time

Poetry: A selection of poetry based on a choice of themes: Identity; Relationships; or Conflict

### **Unit 3: The Study of Shakespeare**

20%

Method of Assessment: Internally Assessed Controlled Assessment

**Texts:** A Shakespeare Play

# **Modern Foreign Languages**

**GCSE** 

We offer two choices: GCSE French and GCSE Spanish.

Through their study of GCSE French / Spanish, 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.

### WHY STUDY MODERN 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.

### WHAT DO I NEED TO BE ABLE TO TAKE THIS COURSE?

Before taking this course, you will need to have obtained a good standard in the language(s) at KS3. A sustained, committed effort from the outset is essential if you wish to be successful in this subject.

### WHAT WILL I STUDY?

There are 3 main contexts which cover the following areas of learning:

Students' lives, families, homes and interests, and those of others in TL countries and communities.

Students' lifestyles and attitudes to environmental, social and global issues, and those of others in TL countries and communities.

Education and employment issues in students' own country or community and in TL countries and communities.

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

# **Modern Foreign Languages**

**GCSE** 

### **HOW WILL I BE ASSESSED?**

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

### **Unit 1 Listening**

### 1 Paper: Foundation (35 mins) or Higher Tier (45mins)

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

### **Unit 2 Speaking**

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

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

### **Unit 3 Reading**

### 1 Paper: Foundation (50 mins) or Higher (60 mins)

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

### **Unit 4 Writing**

### 1 Paper: Foundation (60 mins) or Higher Tier (75 mins)

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

### WHAT CAN I DO WITH A QUALIFICATION IN MODERN 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, Diplomatic Services operational officer, English as a foreign language teacher or English as a second language teacher, Event organizer, Marketing executive, Market researcher, Solicitor.

'Employers are always looking for people with language skills. If you speak one or more language, even if not fluently then research shows that your brain is already more flexible and better at many important tasks than that of someone who only speaks one language'

# Geography

GCSE

### WHY STUDY GEOGRAPHY?

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.

### WHAT CAN I DO WITH A QUALIFICATION IN 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.

### WHAT WILL I STUDY AND HOW WILL I BE ASSESSED?

At GCSE level we follow the CCEA Specification. There are three units in GCSE Geography.

	What will I study?	How will I be assessed?
Unit 1 (40%) Understanding Our Natural World	Theme A: River Environments Theme B: Coastal Environments Theme C: Our Changing Weather and Climate Theme D: The Restless Earth	1 written exam which is 1 hour and 30 minutes long. This examination is worth 40% of the overall GCSE qualification.
Unit 2 (40%) Living in Our World	Theme A: Population and Migration Theme B: Changing Urban Areas Theme C: Contrasts in World Development Theme D: Managing Our Environment	1 written exam which is 1 hour and 30 minutes long. This examination is worth 40% of the overall GCSE qualification.
Unit 3 (20%) 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	1 written exam which is 1 hour long. The questions are related to knowledge and experience of fieldwork. This examination is worth 20% of the overall GCSE qualification.

<sup>&</sup>quot;There has never been a better or more important time to study geography...

The rate at which the world's environment and society are changing, combined with growing interest in issues such as climate change, migration, means that...

...geography is one of the most relevant courses students can choose to study."

Rita Gardner, RGS-IBG Director

# **History**

### **GCSE**

### WHY STUDY 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: Investigative Study in class based on the assassination of John .F Kennedy;
- · To understand how individuals have shaped history e.g., Hitler, Stalin, Kennedy;
- 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 2017/18.

#### WHAT WILL I STUDY AND HOW WILL I BE ASSESSED?

Paper		Content	%
Paper 1 Short answer, structured answer questions – some based on source interpretation & evaluation	Section A  Section B (1hr 45mins) Summer Yr 12	e.g., Hitler & the Police State, Hitler Youth & education, life for Germans during World War Two, the Holocaust.  Northern Ireland & its Neighbours, 1920-49 e.g., relations between Northern Ireland & the Irish Free State, IRA, Belfast Blitz, the Battle of Britain, setting up the NHS.	60%
Paper 2 1 Document Investigation with 4 questions based on interpretation & evaluation of source material. 1 Essay Question (from a choice of 2)	(1 hr 15 mins) Summer Yr 11	International Relations, 1945 – 2003 e.g., Berlin Airlift, Berlin Wall, Cuban Missile Crisis, Vietnam War, the War on Terror including 9/11, invasion of Afghanistan in 2001 & invasion of Iraq, 2003 (Operation Shock & Awe).	40%

### WHAT CAN I DO WITH A QUALIFICATION IN 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.

### History means employability:

Law, Journalism, Conservation, Personnel, Banking, Retail Management, Social Work, Civil Service, Industrial Management, Accountancy, Teaching, Marketing, Advertising.

### **Home Economics: Child Development**

### **GCSE**

#### WHY STUDY CHILD DEVELOPMENT?

You will gain knowledge and understanding of:

- The family and parental responsibilities
- Reproduction
- Pregnancy
- Diet and lifestyle during pregnancy
- Birth
- The newborn baby
- Feeding the newborn baby

- Dietary needs of the child (0-5 years)
- Child health and education
- · Child development
- · Social development
- · Physical development
- Intellectual development
- Communication development
- Emotional development

### WHAT DO I NEED TO BE ABLE TO TAKE THIS COURSE?

Students do not need to have reached a particular level of attainment before beginning to study this specification. Students are not required to have any prior experience of Home Economics.

### WHAT WILL I STUDY AND HOW WILL I BE ASSESSED?

Content	Assessment	
Unit 1: Parenthood, Pregnancy and the newborn baby.	External written examination 1 hour 15mins 75 marks (30%) The exam paper includes multiple-choice, short and structured questions, and questions requiring extended writing.	
Unit 2: The Development of the Child	<b>External written examination</b> 1 hour 15mins 75 marks (30%)  The exam paper includes multiple-choice, short and structured questions, and questions requiring extended writing.	
Unit 3: Investigative Task	Controlled Assessment 100 marks (40%)  CCEA will issue the title of the task on 1 September of the academic year in which the award is to be made. Students complete one task from a choice of two. The task has the following parts:  Part A: Analysis and Justification; Part B: Secondary Research and Analysis of Own Viewpoint Part C: Conclusions and Evaluation of Parts A and B; Part D: Planning and Outcome Part E: Evaluation of Planning and Outcome. Students present the written report on the task in the required format. Teachers mark the task and CCEA moderate the results.	

### WHAT CAN I DO WITH A QUALIFICATION IN CHILD DEVELOPMENT?

Careers using Child Development include:

- Midwife
- Children's Nurse
- Nursery Teacher / Assistant
- Play Group Leader
- Social Worker
- Nanny

- Au Pair
- Dietician
- Youth Worker
- Health Visitor
- Teacher
- Health Visitor

### **Home Economics: Food and Nutrition**

### **GCSE**

### WHY STUDY FOOD AND NUTRITION?

You will gain knowledge and understanding of:

- 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

### WHAT DO I NEED TO BE ABLE TO TAKE THIS COURSE?

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

### WHAT WILL I STUDY AND HOW WILL I BE ASSESSED?

Content	Assessment	Weightings
Component 1: Food and Nutrition	External written examination. 2 hours. 120 marks The written examination includes multiple-choice, short and structured questions, and questions requiring extended writing.	50%
Component 2:	Controlled assessment	,
Practical Food and	120 marks	
Nutrition	Students complete one task that involves the following:	
	Part A: Research and Viewpoints; Part B: Justification of Choice;	50%
	Part C: Planning; Part D: Practical Activity; and Part E: Evaluation.	3070
	Students present the written report on the task in the required format.	
	Teachers mark the task, and CCEA moderate the results	
	will be issued on 1 September of the academic year in which the award is le each Summer from 2019.	to be made.

### WHAT CAN I DO WITH A QUALIFICATION IN FOOD AND NUTRITION?

Careers using Food and Nutrition:

Nutritionist, Demonstrator, Teacher, Catering/Hospitality, Dietitian, Health Promotion Officer, Food Technology, Caterer, Consumer Advisor.

# **Digital Technology**

**GCSE** 

#### WHY STUDY DIGITAL TECHNOLOGY?

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.

### WHAT WILL I STUDY?

The GCSE Digital Technology involves 3 units of work as follows:-

Unit 1 - Digital Technology

Unit 2 - Digital Authoring Concepts

Unit 3 - Digital Authoring Practice

The course is 70% Exam and 30% Controlled Assessment

### **HOW WILL I BE ASSESSED?**

The 3 units of work are currently assessed as follows:-

Unit 1 – 1 hour external written exam (30%) Unit 2 – 1 hour 30 minutes external written exam (40%)

Unit 3 - 2 x Controlled Assessment tasks internally assessed (30%)

### WHAT CAN I DO WITH A QUALIFICATION IN 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. Further study of ICT or computing disciplines at university level can lead to high end professional careers in computer programming and systems development.

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, http://bringitonni.info/ and www.e-skills.com are useful websites.

### **Mathematics**

### **GCSE**

#### WHY STUDY MATHEMATICS?

Mathematics 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.

GCSE Mathematics supports the aim of the Northern Ireland Curriculum to empower young people to achieve their potential and to make informed and responsible decisions throughout their lives. The mathematical skills you learn are of great benefit in other subjects such as physics, chemistry, biology, computing, geography and business studies.

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.

It aims to encourage students 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.

### WHAT WILL I STUDY AND HOW WILL I BE ASSESSED?

The CCEA GCSE Mathematics specification has two tiers of entry: Foundation and Higher. Each tier offers a choice of units that are suited to a wide range of abilities and enable students to demonstrate achievement. Each assessment unit gives students enough time to consider various problem-solving strategies and to decide on the best approach.

### **Mathematics**

### **GCSE**

The summative structure used for the GCSE course includes:

Content	Assessment	Weightings	Target Grades
Unit M2: Foundation Tier	External written examination with calculator 1 hour 45 minutes	45%	C*, C, D, E, F & G
Unit M6: Foundation Tier Completion Test	<ul> <li>Two external written examinations:</li> <li>Paper 1 without calculator</li> <li>1 hour</li> <li>Paper 2 with calculator</li> <li>1 hour</li> </ul>	55%	C*, C, D, E, F & G
Content	Assessment	Weightings	Target Grades
Unit M3: Higher Tier	External written examination with calculator 2 hours	45%	B, C*, C, D & E
Unit M7: Higher Tier Completion Test	<ul> <li>Two external written examinations:</li> <li>Paper 1 without calculator</li> <li>1 hour 15 minutes</li> <li>Paper 2 with calculator</li> <li>1 hour 15 minutes</li> </ul>	55%	B, C*, C, D & E
Content	Assessment	Weightings	Target Grades
Unit M4: Foundation Tier	External written examination with calculator 2 hours	45%	A*, A, B, C* & C
Unit M8: Higher Tier Completion Test	<ul> <li>Two external written examinations:</li> <li>Paper 1 without calculator     1 hour 15 minutes</li> <li>Paper 2 with calculator     1 hour 15 minutes</li> </ul>	55%	The A* grade is awarded at subject level and is dependent on the total marks gained from the M4 and M8 assessment units.

### 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. People who have studied mathematics are in the fortunate position of having an excellent choice of career. Whilst the number of young people studying A-level Mathematics and Further Mathematics is increasing there is still a huge demand from science, engineering and manufacturing employers.

Students of Mathematics have wide and varied employment opportunities available to them. These include:

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

### **Further Mathematics**

### **GCSE**

### WHY STUDY FURTHER MATHEMATICS?

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 specification encourages students 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.

### WHAT DO I NEED TO BE ABLE TO TAKE THIS COURSE?

Students and parents should seek clarification from their mathematics and careers teachers regarding the suitability of such a course as this.

### WHAT WILL I STUDY AND HOW WILL I BE ASSESSED?

The following summative structure used for the GCSE Further Mathematics course is outlined below. Students must complete the mandatory unit (Unit 1) and two optional units. The two optional units to be offered by Cambridge House will be Unit 2 Mechanics and Unit 3 Statistics as these units provide more pathways for further study in mathematics.

Content	Assessment	Weightings
Unit 1: Pure Mathematics (Mandatory)	External written examination in the form of a single question- and-answer booklet that includes a formula sheet. 2 hours	50%
Unit 2: Mechanics	External written examination in the form of a single question- and-answer booklet that includes a formula sheet. 1 hour	25%
Unit 3: Statistics	External written examination in the form of a single question- and-answer booklet that includes a formula sheet. 1 hour	25%

### WHAT CAN I DO WITH A QUALIFICATION IN FURTHER MATHEMATICS?

Career prospects in this area are extremely rich.

### **Mathematics: Statistics**

**GCSE** 

### WHY STUDY STATISTICS?

The GCSE Statistics course is essentially a practical subject the main purpose of which is to obtain and process data with a view to extracting numerical information and making inferences that may extend beyond the data. A basic principle of statistical work is obtaining information about a population from an appropriately drawn sample. Students will be taught on how to make informed judgements on what is presented to them so that they are aware of the dangers of being influenced by misleading statistics.

Students will use their Key Stage 3 Mathematics knowledge of Handling Data along with GCSE Mathematics topics taught simultaneously with Statistics to consolidate their progress. The use of ICT will permeate classwork and be evident as a necessary tool in extracting and applying statistical techniques to social, economic, political, environmental and scientific problems.

#### WHAT DO I NEED TO BE ABLE TO TAKE THIS COURSE?

Students and parents should seek clarification from their mathematics and careers teachers regarding the suitability of such a course as this.

### WHAT WILL I STUDY AND HOW WILL I BE ASSESSED?

The CCEA GCSE Mathematics specification has two tiers of entry: Foundation and Higher. Each tier offers a choice of units that are suited to a wide range of abilities and enable students to demonstate achivement. The assessment model gives students the opportunity to apply the complete statistical problem-solving process.

Content	Assessment	Weightings	Target Grades
Unit 1	External written examination. Foundation Tier: 1 hour 30 minutes - 80 marks or Higher Tier: 2 hours - 100 marks. All questions are compulsory	50%	Foundation C*-G Higher A*-D
Unit 2	External written examination. Foundation Tier: 1 hour 30 minutes - 80 marks or Higher Tier: 2 hours - 100 marks. Some questions are set on the information in the pre-release case study. All questions are compulsory.	50%	Foundation C*-G Higher A*-D

### WHAT CAN I DO WITH A QUALIFICATION IN STATISTICS?

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

Actuary | Forensic Statistician | Enovironmental Statistician | Government Statistician | Medical Statistician | Pharmaceutical Statistician | Market Reasearch Statistician | Sports Statistician | School Teacher | Statistical Consultant.

### **Media Studies**

### **GCSE**

The Media Studies Department in Cambridge House Grammar School is led by four dynamic and enthusiastic teachers. 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.

#### WHAT WILL I STUDY?

The study and exploration of Media Theories. We will explore and analyse the key media areas of Audiences, Narrative, Genre & Representation in relation to modern media products

As part of your examination elements we will focus on key texts ranging from newspapers, magazines, films, website and television.

You will be able to produce some of your own media products – you will complete a major 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

### **HOW WILL I BE ASSESSED?**

70% Examination – 2 written examinations both taken at the end of Year 12 30% Controlled Assessment

### WHAT CAN I DO WITH A QUALIFICATION IN MEDIA STUDIES?

According to the Office of National Statistics 2013 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.

# Music

**GCSE** 

### WHY STUDY MUSIC?

It offers opportunities to build on the skills and capabilities developed through the delivery of the Key Stage 3 curriculum in Northern Ireland.

Students will be offered the opportunity to complete Grade 5 Theory which is required by many exams boards to complete practical examinations of Grade 6 and above.

History has shown that pupils who engage fully with the extra-curricular life of the school are the most successful in the practical aspect of public examinations because of their familiarity with the pressures involved with public performances.

### WHAT DO I NEED TO BE ABLE TO TAKE THIS COURSE?

Key Stage 4 Music requires a suitable degree of musical ability and knowledge as a prerequisite.

### WHAT WILL I STUDY AND HOW WILL I BE ASSESSED?

- It includes two externally assessed components and one internally assessed component.
- It includes the three fundamental musical activities:
  - performing and appraising;
  - composing; and
  - listening and appraising.
- It promotes knowledge, understanding and appreciation of past and present
- musical styles, traditions and contexts.

Composing and Appraising – 30% Performing and Appraising – 35% Listening and Appraising – 35%

### WHAT CAN I DO WITH A QUALIFICATION IN MUSIC?

Many former pupils have used success in GCSE as a stepping stone to careers in music.

# **Physical Education**

**GCSE** 

### **WHY STUDY PE?**

Our Physical Education qualifications allow students to play to their strengths and gain dynamic skills for further education and a healthy future

### WHAT DO I NEED TO BE ABLE TO TAKE THIS COURSE?

It is recommended that pupils have 3 different areas of interest in sport e.g. rugby, tennis and athletics OR hockey, netball and athletics. Website: http://ccea.org.uk/physical\_education/

### WHAT WILL I STUDY AND HOW WILL IT BE ASSESSED?

This qualification is linear. Linear means that students will sit all their exams and submit all their non-exam assessment at the end of the course in May/June 2020.

Component 1 – Factors Underpinning Health & Performance – 100 marks, written paper = 25%

Component 2 – Developing performance – 100 marks, written paper = 25%

Component 3 – Individual performances in physical activities and sports – students perform 3 physical activities and/or sports from the CCEA list and an analysis of performance controlled assessment task – 3x50 marks/50 mark = 50%

Both written examinations taken place at the end of Year 12.

### WHAT CAN I DO WITH A QUALIFICATION IN PE?

Sports Studies in Year 13 & Year 14

Careers in Sport or PE e.g. PE Teacher, Physiotherapist, Sports Coach, Personal Trainer etc.

OR

Use it to improve your skill & team work in your own sports.

# **Religious Studies**

**GCSE** 

### WHY STUDY RS?

Religious Studies at GCSE would suit anyone who has a genuine interest in the subject. Having good written communication skills, or having an interest in reading, history or events in the world around us, would also contribute to a successful outcome in the subject. Throughout their GCSE studies, students are encouraged to have an open and honest approach to the units they study. It is not necessary to be a religious person, or to hold any particular opinion, as candidates are tested on what they know, what they understand and how well they can support an opinion. The examination is set by the CCEA Examination Board and is open to candidates of all beliefs and none.

### WHAT WILL I STUDY?

This course is divided into two units. Each unit is worth 50% of the total marks.

- One Unit will involve the study of 5 ethical issues, looking at various Christian and non-religious viewpoints on these. The 5 issues are Matters of Life & Death, War & Peace, Care for the Environment, Equality and Personal & Family Issues.
- The second unit will be a study of selected passages from Matthew's gospel, looking at the identity of Jesus, Jesus the miracle worker, the parables of Jesus, and Jesus' death and resurrection.

### **HOW WILL I BE ASSESSED?**

### **Unit 1: Christian Ethics**

It is worth 50% of the total marks.

### **Unit 2: Matthew's Gospel**

This is assessed by examination of 1 hour 30 minutes. This is assessed by examination of 1 hour 30 minutes. It is worth 50% of the total marks.

Pupils are assessed through examinations with no coursework involved

For both these examinations, extended writing is required.

### WHAT CAN I DO WITH A QUALIFICATION IN RS?

This qualification:

- Will be a useful or essential qualification for certain careers or degree level courses. (e.g. primary school teaching, Theology, Biblical Studies, law, social work, any of the caring professions)
- Helps develop essential writing skills which are needed for all Higher Education Courses.
- RS is an important **bridging subject**. This means that that by studying RS you are keeping your career path
- RS at GCSE can lead to an A level subject which is accepted by all UK universities

### Science

### **GCSE**

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

### WHY STUDY 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.

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

### **Double Award Science**

### WHAT WILL I STUDY?

This is a broad and balanced science course with Biology, Chemistry and Physics content. Subject specialists will teach each area of study. We follow the CCEA Unitised specification. This specification may be subject to changes.

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, Physics. and Life and Health Sciences.

### **HOW WILL I BE ASSESSED?**

NOTE: Pupils will sit Unit examinations at the end of Yr 11 and 12.

Yr. 11: Subject Content	Weighting	Yr. 12: Subject Content	Weighting
Biology Unit 1: Cells, Living Processes and Biodiversity	11%	Biology Unit 2: Body Systems, Genetics, Micro-organisms and Health	14%
Chemistry Unit 1: Structures, Trends, Chemical Reactions, Quantitative Chemistry and Analysis	11%	Chemistry Unit 2: Further Chemical Reactions, Rates and Equilibrium, Calculations and Organic Chemistry	14%
Physics Unit 1: Motion, Force, Moments, Energy, Density, Kinetic Theory, Radioactivity, Nuclear Fission and Fusion		Physics Unit 2: Waves, Light, Electricity, Magnetism, Electromagnetism and Space Physics	14%

### **Practical Skills Unit: 25%**

Practical Skills (Booklet A 7.5%) Externally marked. Students carry out three pre-release practicals (Biology, Chemistry and Physics) in the final year of study. There are two tiers of entry. Practical Skills (Booklet B 17.5%) External written examination. Students answer compulsory structured questions that include short responses, extended writing and calculations, all set in a practical context for Biology, Chemistry and Physics. There are two tiers of entry, Foundation and Higher.

### Science

**GCSE** 

### **Single Award Science**

### WHAT WILL I STUDY?

This is a broad and balanced Science course with some Biology, Chemistry and Physics content. We follow the CCEA Unitised specification. This specification may be subject to changes. Single award Science counts as one GCSE. Study of Single Award Science leads to no further study in Science at A-Level.

### **HOW WILL I BE ASSESSED?**

NOTE: Pupils will sit Unit examinations at the end of Yr 11 and 12.

Unit	Subject Content	Weighting
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.	25%
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.	25%
Unit 3: Physics	Electrical circuits, Household electricity, Energy, Electricity generation, Heat transfer, Waves, Road transport and safety, Radioactivity, Earth in space	25%

### Practical Skills Unit: 25%

Practical skills assessment (Booklet A 7.5%) No time limit Students carry out two pre-release practical tasks (from two of Biology, Chemistry and Physics) in the final year of study. Students can be entered for Foundation or Higher Tier. External written examination (Booklet B 17.5%) Students answer compulsory structured questions that include short responses, extended writing and calculations, all set in a practical context for Biology, Chemistry and Physics. There are two tiers of entry, Foundation and Higher Tiers.

### Science

### **GCSE**

### 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, Horticulture, Agriculture, Teaching, Sports Science, Speech Therapy, Social and Environmental employment to name but a few.

**Chemistry**: 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, Chemical Engineering, Materials Science, Metallurgy, Forensics, Scientific Civil Service, Teaching, Agriculture, Food Science, You may also be surprised to know that chemists also work in Banking, Law, Publishing and Accounting.

**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. A list of careers available to you if you study Physics would fill a book – here are just a few of them: Medicine, Dentistry, Pharmacy, Ophthalmics, Nursing, Physiotherapy, Radiography, Law, Teaching, Geology, Meteorology, Pilot, Environmental Science, Engineering (Mechanical, Production, Electrical, Electronic, Civil, Chemical, Aeronautical), Computing Design, Architecture, Industrial or Scientific Research, Marketing, Army, Air Force, and Navy.

# **Technology and Design**

**GCSE** 

### WHY STUDY TECHNOLOGY AND DESIGN?

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.

### WHAT WILL I STUDY AND HOW WILL I BE ASSESSED?

The Specification can be found on the examination boards' website. The board is CCEA.

This equips the students with knowledge of key electronics components, as well as the skills necessary to manufacture a finished PCB and product for their controlled assessment. If the students select this subject at GCSE they are assessed in the following way:

### Year 11

### Theory Test (1 hour 30 minutes exam)

25%

This includes all theory learned over year 11 Technology. This involves electronic components, electronic systems, materials and manufacturing processes, pneumatics and design techniques. All sections are assessed in an exam at the end of year 11.

### Year 12

### Theory Test (1 hour 30 minutes exam) 25%

This includes all theory learned over year 12 Technology. This involves electronic components and electronic systems. Both sections are assessed in an exam at the end of year 12.

### **Controlled Assessment**

50%

### **Systems Design and Manufacture**

In this section the students create a systems design product. The pupils use their knowledge and skills to create a new product. The design context is set by the examination board. This consists of a 10 page A3 design portfolio and a final manufactured prototype.

### WHAT CAN I DO WITH A QUALIFICATION IN TECHNOLOGY AND DESIGN?

This would be an appropriate subject to select with the following career paths in mind: Electrical Engineering, Technology Teacher, Biomedical Engineering

### GCSE Options Curriculum Protocol

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.	Stage 1	Distribution of subject choice booklets to pupils.
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	Stage 2	Subject Choice and Consultation Evening.
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	Stage 3	Careers Interviews.
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	Stage 4	Deadline for receipt of GCSE Subject Choice return forms is met.
returns).  Stage 7 Consideration of any requests for subject change after 1st September 2020 but not	Stage 5	
	Stage 6	
	Stage 7	

#### **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.
- 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).
- 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.
- 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



Cambridge Avenue, Galgorm Road Ballymena, BT42 2EH



028 2564 3151



info@cambridgehouse.org.uk

