



**Pathway 2**





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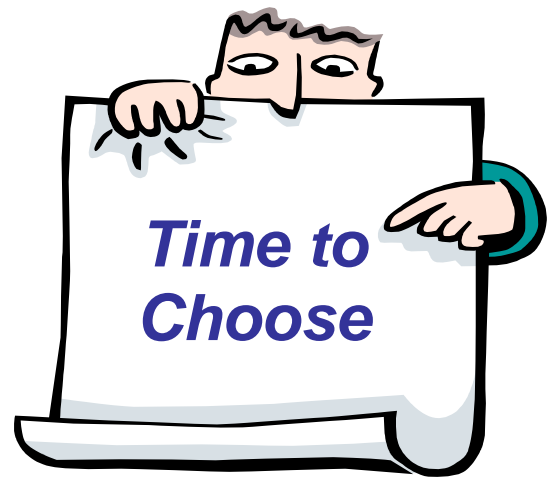
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### Options Form

The link to the online options form can be found in the Pathway section on the Options Page.

You must make sure that it is filled in by **Monday 26<sup>th</sup> February 2024.**





## Time to Choose - Introduction

Choosing which subjects you are hoping to study and which subjects you intend to leave behind is perhaps the first really important decision you have made in your life. It is important not only because it is going to affect your timetable at Fernwood over the next two years, but your decisions now are also going to affect your future career.

Choosing subjects opens doors to certain careers; dropping subjects closes doors to other careers. So how are you going to make this important decision?

This booklet was written for you, because it is you who will have to live with the choices made, but we hope that your parents/carers will play a large part in the decision-making process. We hope that you will read this booklet together and make the most of every opportunity to find out more about what is involved for each course. Perhaps your parents/carers will help you to think of some of the additional questions you need to ask.

Firstly, you will need to know which subjects are options (you can choose to study them, or you can choose to drop them!) and which subjects are compulsory (you have to continue with them).

## The Key Stage 4 Curriculum

The Key Stage 4 (Year 10 & 11) Curriculum has been very carefully designed to:

- Allow you to complete the National Curriculum
- Provide flexible pathways leading to new and traditional qualifications and progression onto meaningful courses or training, when you leave Fernwood at 16.
- Give you maximum choice of subjects.

The curriculum is divided into two main areas. These are:

- The Core Curriculum - This is a group of compulsory subjects which all students study.
- The Optional Curriculum - This is a set of Option blocks, lists of subjects, from which you can make your preferred choices.



## First let's look at the Core Curriculum

There are some subjects which, because of their importance for life and the world of work, are considered to be essential for all students. So next year there will be some parts of your timetable where you will have no choice. But luckily, these are all exciting subjects which you would want to continue with anyway!

Courses in English, combined science, mathematics, religious education, physical education and personal development continue for all students.

Personal Development also includes careers advice, information and guidance, plus preparation for post 16 applications and work experience.

## Now let's look at the Optional Curriculum

On the next page we talk about option blocks. These are lists of subjects where you choose which one from the list you want to study.

When you choose a subject / course think carefully about what type of qualification the course leads to. Most courses at Fernwood lead to a GCSE (General Certificate of Education) qualification, but not all. Because GCSEs are highly academic in nature some students prefer, or are more suited to, practical or vocational qualifications. The Government call these Technical Awards.

*“Technical Awards are broad, high-quality level 1 and level 2 qualifications that equip students with applied knowledge and associated practical skills. They focus on the applied study of an industry sector or occupational area, or the acquisition of practical and technical skills. Technical Awards will fulfil entry requirements for both academic and vocational study post-16, alongside GCSEs“.*

If it's not a GCSE make sure you know what type of qualification your chosen course leads to, e.g. OCR Cambridge National, Level 2 NCFE, and what type of grades it offers.

## CORE CURRICULUM

### Compulsory Subjects:

- English
- Combined Science
- Mathematics
- Religious Education
- Personal Development
- Physical Education



Careers Education & Guidance

1 week Work Experience  
Personal Learning & Thinking Skills

## Curriculum Design

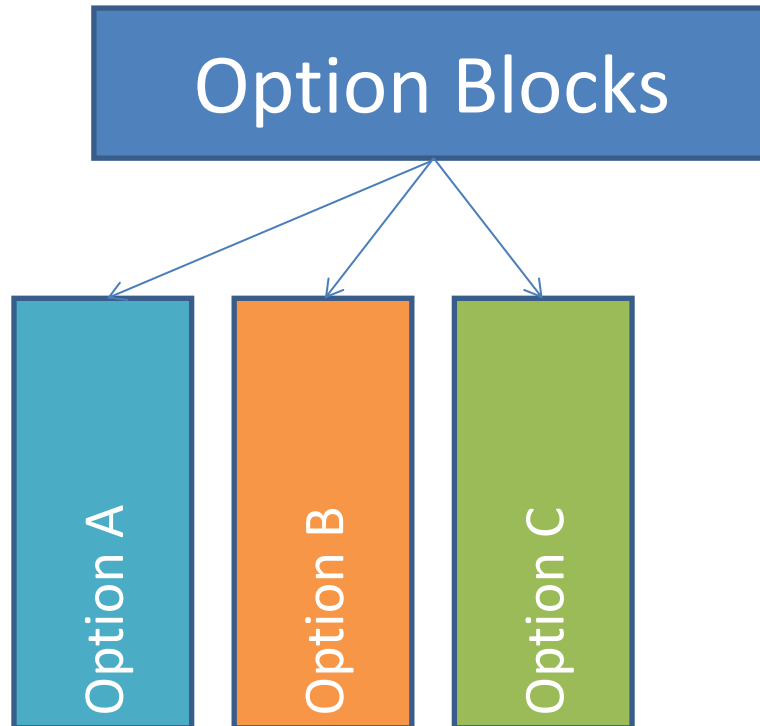
Compulsory Core

Option Choices



## ***The Broad & Balanced Curriculum***

The Broad and Balanced Curriculum is divided into option blocks. Option blocks are lists of subjects. To follow the Broad and Balanced Curriculum you will select one subject from each block (list). There are 4 Option Blocks as shown below.



The Broad and Balanced Curriculum gets its name because it is trying to do what it says i.e. give you a curriculum which keeps all doors open for the future and provides you with a sensible range of subjects.

You will be strongly advised not to pick all your subjects from one faculty. For example it's not a good idea to take art, drama and music and not take a subject from the other areas. It's important that you complete the National Curriculum and work in areas which are very successful at Fernwood.

When you make your choices there are some very important decisions to be made.

### **Science**

One of the most important decisions concerns science. At Fernwood, we offer two different versions to suit different learners. These are combined science and triple science. As a minimum all students must take combined science within the compulsory core curriculum. However, you can choose to opt for triple science as one of your option choices.

**First Decision  
Combined Science or Triple  
Science?**



Triple Science	These separate courses in biology, chemistry and physics each lead to a separate GCSE qualification. This course is academic in nature and aimed at those with a keen interest in science or those with a high chance of pursuing science beyond Fernwood. These prepare students very well for studying any of the three sciences at post 16 as well as competitive degrees such as Medicine or Veterinary Science. All exam papers are sat at the end of Y11.
Combined Science	This course covers an equal mix of all the three sciences above. It leads to a double award GCSE i.e. is equivalent/equal to two GCSEs. All exam papers are sat at the end of Year 11. Combined science is also academic in nature and it still allows progression to post 16 science courses.
For more information about these courses please read page 17	

### The English (School) Baccalaureate (EBacc)

The EBacc is a set of subjects at GCSE that keeps young people's options open for further study and future careers, particularly in cases where students are unsure of their next steps. These are highly regarded, traditionally academic subjects. These subjects complement other GCSE options courses including practical and vocational courses.

It recognises where students have achieved a grade 5 or above at GCSE in English, Maths, Sciences, a language **and** a humanities subject.

The subjects that are included in the EBacc are:

- English
- Mathematics
- Science
- French or German (a modern foreign language)
- Geography or History (a humanities subject)

Whilst the government are targeting a high proportion of students to qualify for the Ebacc, the school does not insist on students fulfilling the complete Ebacc qualification, but should you wish to **qualify you should choose a language and a humanities subject.**

As a school, we do **encourage students on Pathway 2 to select either a language or a humanities subject or both.** The language could come from a subject studied outside of school (Arabic, Urdu, Punjabi, Turkish, Russian etc)

It is compulsory for all students at on **Pathway 2 to choose at least one from these subjects**, but you are free to choose which one.

### Second Decision Which subject?

You must include in any option block a minimum of **one** of these subjects:  
Triple Science, French, German,  
Geography and History.



Your third crucial decision is do I want to achieve the full English Baccalaureate?

If the answer is yes, you must include within your choices the following:

- **A modern language i.e. French or German**, and
- **Geography or History**

**Third Decision**  
**Do I want to qualify for the EBacc?**  
 If you want to qualify for the EBacc you must include:  
**French or German** and  
**Geography or History**

If you study another modern language, from outside school, this will count towards your full English Baccalaureate.

**Technical Awards**

Alongside GCSE qualifications the Government has introduced an approved list of Technical Awards. Technical Awards are broad, high quality level 1 and level 2 qualifications that equip students with applied knowledge and associated practical skills not usually acquired through general education. Your option blocks includes a range of GCSE courses and Technical Awards.

**Fourth Decision**  
**Do I want a blend of GCSE and vocational courses?**  
 Will I have a balanced curriculum?  
 e.g. academic v practical  
 Are my choices good preparation for A level / my future career choice?

**Open Options**

Once you have considered the decisions to be made, as outlined above, you are ready to select your four preferred subjects from the list provided. You must decide if you want to take academic subjects, vocational subjects or a mix of the two.

Option A	Option B	Option C
Triple Science	Triple Science	French
French	French	German
German	German	Geography
Geography	Geography	History
History	History	Business Studies
Art	Art	Drama
PE	Music	DT: Graphic Design
Sports Studies*	Creative iMedia*	DT: Product Design
Music Technology*	Engineering*	Food Prep & Nutrition
	Health & Social Care*	Photography
	Information Technology*	Business & Enterprise*





You will be asked to nominate two reserve choices. These are your next preferred choices in the unlikely event that any of your first four choices does not run next year.

More information about each of these courses can be found on the following pages in this booklet.

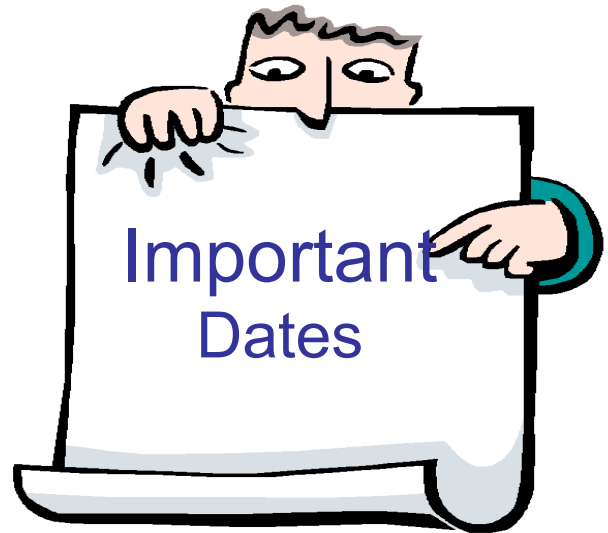
### ***The unfortunate facts of life***

We will do our best to make sure that you can study all the subjects that you want to study. You need to know that situations may arise which mean that you are not always able to have your first choices. For example:

- Not enough people choose a particular course – we will not be able to run very small groups
- Too many people choose a particular course – safety considerations and shortages of essential equipment in some subjects mean that maximum group sizes have to be set
- Certain subject combinations may be impossible to timetable – unlike some schools, we offer a completely free choice from the option list and then set about trying to provide group combinations which allow the majority of students to study the majority of what they have chosen. Usually we are very successful but occasionally students have to make alternative choices at a later stage.

In all cases we will do the best we can to help and advise you.





## *Important Dates*

Tuesday 30th January 2024  
Options Evening Presentation

YOUR ONLINE OPTIONS FORM MUST  
BE  
COMPLETED BY  
**Monday 26<sup>th</sup> February 2024**





## Careers Advice

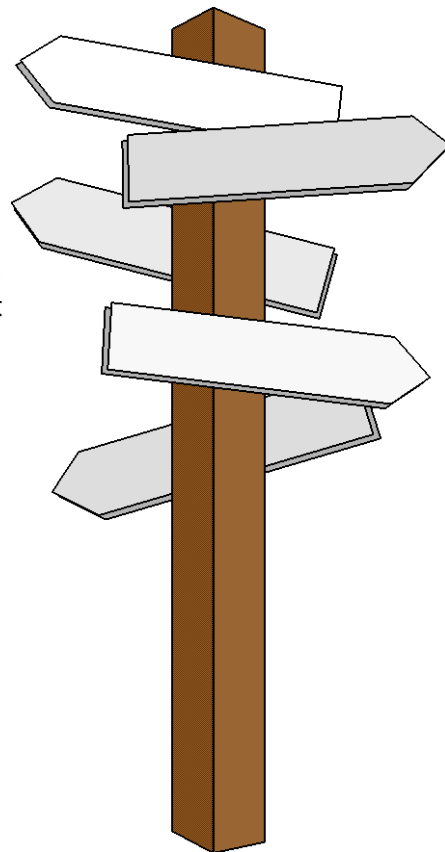
As part of their entitlement to Careers Education and Guidance, Year 9 students receive a planned programme of lessons to give them help and information so that they make good career choices. This support is offered by the Fernwood School staff through PD lessons and is supplemented wherever possible by a Personal Advisor from Futures and local post 16 providers.

All students can seek advice from a member of staff, usually their tutor and are signposted to appropriate resources. The importance of the option process and how to make good subject choices for the future is highlighted at every opportunity.

Ongoing support is offered throughout Years 10 and 11 through Personal Development, Nottingham Futures and local Post 16 providers to help students to make appropriate decisions and realistic career choices.

In February, we hold an annual 'Working Life Week' for all students. In Year 10, they will get the opportunity to go on work experience in this week which will further support their careers education and future plans.

The remaining pages of this option booklet describe each of the optional subjects on offer, giving details about the type of course, qualification and method of assessment. Read them carefully and find out everything you need to know. Each subject descriptor includes a named member of staff to talk to if you want to find out more.



# The Core Curriculum



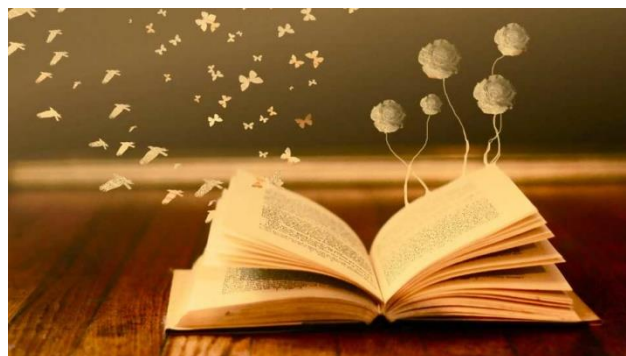
# English

**Key Contact:** Mrs M Bennett, Head of English

**Faculty:** English and English Literature

**Exam Board:** AQA

**Level:** GCSE 9 - 1



## Is it compulsory? YES

All students are required to study English until they leave the school.

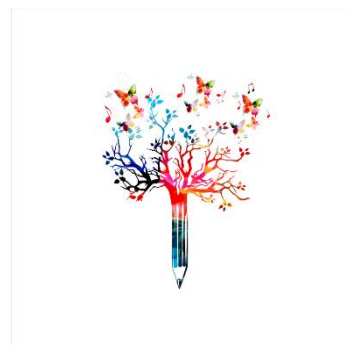
## What will I be studying during the course?

All students follow a course in English. The vast majority of students will be entered for GCSE English Language and Literature, with a small proportion of students completing just the GCSE English Language course if this is deemed most appropriate by their teacher. They will study a Shakespeare play, poetry - seen and unseen, PLUS a 19th Century novel and either a Post 1914 prose OR drama text.

English Language and Literature are 100% terminal examination subjects.

### English Language

Throughout Year 10 and 11, students will follow a carefully structured course designed to develop their writing skills in a creative and a persuasive response. They will be assessed on their ability to communicate effectively and their accuracy, in terms of spelling, punctuation and grammar. Students will be assessed on their inference, analytical and comparative skills when reading fiction and non-fiction texts from different times in history.

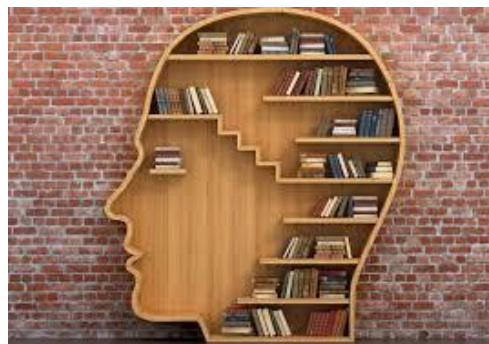


### English Literature

The English Literature examinations are essay based where students will analyse the characters, themes, context and language of a range of texts as outlined below:

The English Literature examinations are essay based and will cover the following topics:

- A Shakespeare play and 19<sup>th</sup> century novel
- A modern play or novel
- Poetry - anthology of 15 studied poems and some 'unseen' poetry - students need to know how to analyse and compare two poems they will not have studied but see for the first time in the exam.



## Why study English or English Language & English Literature

English is an essential requirement for all careers and all forms of further and higher education. A GCSE in English informs an employer that you have reached a certain level of literacy and they will then know what they can expect you to be able to do in a way of communicating both orally and in writing. They will know what to expect of your level of understanding of written texts, and they will understand that they can rely on your ability to respond appropriately.

## What will the examinations be like?

Both English Language and English Literature examinations will be carried out in the summer term of Y11. Throughout Y10 and Y11 there are formal assessments within the classroom to assess your progress, and show you which areas of your knowledge and skills require further development.

The English Language GCSE has two examination papers. Both papers last 1 hour 45 minutes and equate to 50% of your GCSE each



The English Literature GCSE has two examination papers. One paper lasts 1 hour 45 minutes and will focus on a Shakespeare play and a 19<sup>th</sup> century novel; this exam equates to 40% of the final GCSE. The second exam lasts 2 hours 15 minutes and will focus on the modern text, the poetry collection you have studied, and unseen poetry; this exam equates to 60% of the Literature GCSE.

## Routes to employment

Studying English enables students to develop many transferable skills including critical thinking, using a broad vocabulary and effective written and spoken communication.



Students who have studied English go on to study courses at college, sixth forms and universities such as English Language, English Literature, Journalism, Media Studies, Law, Ethics and Philosophy.

Students who have studied English have access to a wide range of careers and employment opportunities such as publishing, teaching, journalism, human resources, law and project management.

## Who do I need to see to find out more?

Talk to your English teacher or to Mrs M Bennett, the Head of English.



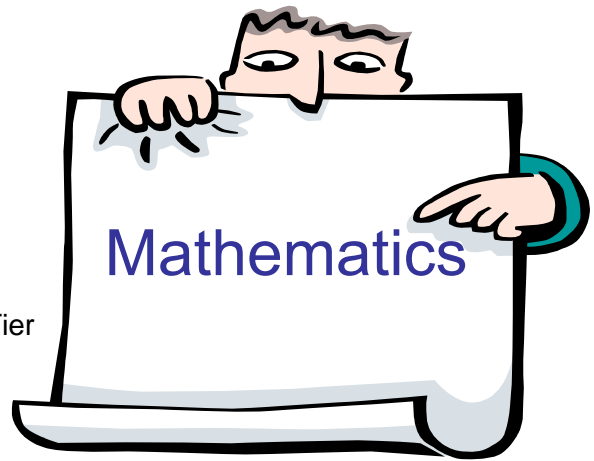
**Key Contact:** Mr Thompson

**Faculty:** Mathematics

**Exam Board:** OCR J560 – Higher and Foundation Tier

**Level:** GCSE 9 - 1

**Is it compulsory?** YES



## What will I be studying during the course?

Year 9 at Fernwood stands as a transition between the end of Key Stage 3 but with a clear focus on getting students ready for Key Stage 4. This gives them an opportunity to further explore topics with greater depth and breadth, building on the mastery curriculum studied in years 7 and 8 while preparing them for the additional challenge of GCSE.



The course has been divided into distinct units of study which are further differentiated to suit the needs of learners. Pupils will be assessed at the start and end of each unit so that you can follow their progress as you continue with this course. Assessment analysis sheets and improvement activities can be found in pupils' exercise books which will inform of their progress and areas for improvement.

It is an expectation in mathematics that; pupils revisit basic material on a regular basis, they make sufficient notes in their reference books that allow them to do this, and they show clear working solutions in their workbooks. Pupils should also utilise MyMaths to support their studies and boost their confidence in the basic material as well as stretching themselves, allowing them to achieve their full potential at the end of Year 11. All pupils should have a scientific calculator (preferably a CASIO).

### OCR Additional Maths

For our most able young mathematicians we can offer the OCR Additional Maths (6993), which is graded A-E. If you choose to study this (please note, this is not an option for year 9 and entry will not be decided until year 11) then you will be able to achieve an additional qualification, which is also great preparation for those studying A Level maths. The course is not a taught course, but an optional extra for those students with the desire and determination to study the modules in their own time. The online platform Integral is used to support this.

## What will the examinations be like?

For each exam board there are 3 Papers:

	Paper 1	Paper 2	Paper 3	Marks	Length
OCR H & F	Calculator	Non-Calculator	Calculator	3 x 100	3 x 90mins
Assessment Style	Content from any part of the curriculum can appear on any paper and is assessed with a mix of question styles from short single answer questions to multi-step problems. The mathematical demand increases as a pupil progresses through the paper.				



## Grading

Pupils can achieve a grade 1 – 5 (pass 4, strong pass 5) on the foundation tier paper and a grade 4 – 9 on the higher tier paper. Students should only consider entering the higher tier paper if they are confident that they will achieve a grade 6 or above.

## Routes to employment

Studying mathematics enables students to develop many transferable skills including problem solving, reasoning and logical thinking. Mathematics at all levels provides skills to allow students to be effective in all future careers, as well as being able to understand issue related to personal finance.

Students who have studied mathematics go on to study courses at college, sixth forms and universities such as: maths, economics, medicine, pharmacy, sciences, engineering, computing, and architecture.

Students who have studied mathematics have access to a wide range of careers and employment opportunities such as: finance (e.g. banking, trading, accounting), computing, engineering and all branches of science and technology.

## Who do I need to see to find out more?

Talk to your mathematics teacher or to Mr Thompson, the Head of Mathematics. Make a note of any extra information you manage to find out here...





**Key Contact:** Mr J Thompson - Head of Science  
Mrs L. Sheppard - GCSE Coordinator

**Faculty:** Science

**Level:** GCSE 9 - 1

**Exam Board:** AQA



## Is it compulsory? YES

All science at The Fernwood School is offered to GCSE standard. Students are able to opt for Combined Science (2 GCSEs) or separate GCSEs in Biology, Chemistry and Physics as standalone subjects. This would therefore be worth 3 GCSEs. It should be noted that students wishing to opt for the Triple Science option must take all 3 sciences. As a consequence of the greater amount of content and number of lessons - Triple Science does take up one of the option blocks from which students select their subject choices.

*"Nothing in life is to be feared, it is only to be understood. Now is the time to understand more, so that we may fear less"- Marie Curie*

### Combined Science

This is a popular course that many students opt for to give them a solid grounding in science with the option still open to do A-Level science in the future if they wish (dependent on grade). This is a good option for those students that are unsure what they want to do after their GCSEs as it keeps all options open for both A-Levels as well as other Post-16 qualifications and careers. Students opting for this course would be following the AQA Combined Science: Trilogy course.

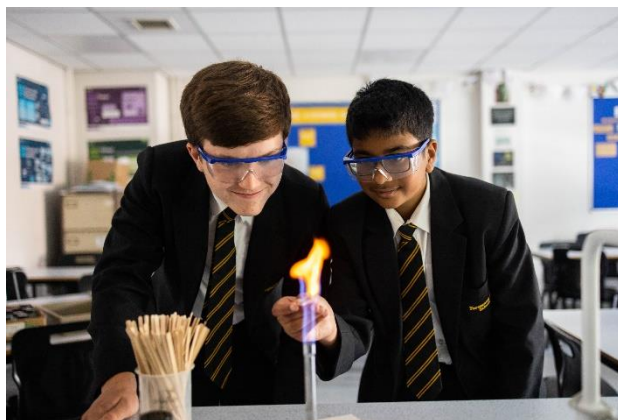
### How is the course structured?

Combined science is a course that is worth 2 GCSE grades upon completion. The students would be taught by 3 specialist teachers with a balance of biology, chemistry and physics. There is an emphasis on practical work and investigation in combined science. There is no controlled assessment or coursework in GCSE science. Instead, students will complete 8 key practicals per subject. These practicals are then assessed through questions as part of the final GCSE exams. The course is assessed by 6 exam papers at the end of Year 11. Each of these exams is 1 hour 15 minutes and is worth 16.5% of their overall grade.



## Triple Science- GCSE Biology, GCSE Chemistry and GCSE Physics

Triple science is an option that students with a passion and interest in science should seriously consider. We would also recommend triple science for any student who has a firm commitment to A-Level science or science-based degree options. Strong performance lower in the school is preferable, but not essential for students wishing to do triple science. It is however essential that students who opt for triple science can demonstrate a commitment to learning out of lesson, self-reflection and independence in their studies. High levels of engagement and motivation are keys for success in triple science.



## How is the course structured?

Students opting for triple science will receive two extra lessons per week to reflect the extra GCSE they are studying for. They are taught by 3 subject specialists for these lessons, predominately in our laboratories. Students opting for triple science should expect to take part in many practical investigations throughout the programme of study. There is no controlled assessment or coursework in GCSE science. Instead, students will complete 8 key practicals per subject. These practicals are then assessed through questions as part of the final GCSE exams.

Biology, chemistry and physics each are assessed with 2 exam papers at the end of Year 11. These exams are 1 hour 45 minutes, with each being worth 50% of the subject grade.

## Routes to Employment

Studying science enables students to develop many transferable skills including being able to work with and analyse data or evidence, how to plan effectively, drawing evidence-based conclusions, evaluating evidence on both its quantity and quality as well as being able to consider moral and ethical dilemmas that affect our lives considering points of view outside of our own.

Students who have studied science go on to study **courses at college, sixth forms** such as A-Level biology, chemistry and physics alongside other courses like psychology or engineering. Other students have opted for vocational science-based courses such as Level 1, 2 and 3 BTEC awards in applied science, forensic science and animal science. At **university**, students have gone on to study the biology, chemistry and physics as well as degrees in microbiology, pharmacy, veterinary science, medicine, biochemistry, genetic, astronomy amongst many others.

Students who have studied science have access to a wide range of **careers and employment** opportunities in areas including nursing, medicine, scientific research, engineering and architecture, criminal science, dentistry, optometry (study of the eyes), environmental science



or ecology. There are too many to list here! For more information, check the website [www.futuremorph.org](http://www.futuremorph.org) for careers ideas and advice in Science.

### **Who do I need to see to find out more?**

Your science teacher in the first instance would be able to answer any questions you may have and will give a recommendation as to which course they think you will have greatest success on. Mr Thompson (Head of Science Faculty) or Mrs Sheppard (Head of KS4 Science) are also happy to discuss any questions or queries you may have.



**Key Contact:** Mrs E Gray

**Faculty:** Personal Development



## Is it compulsory? YES

The Fernwood School is proud of the fact that we help our students to become resilient and responsible young people who are able to leave school with both good qualifications, a knowledge of who they are, what skills they have, and how they can use those skills to positively contribute to society.

They are enabled to do this through exploring three core themes as part of the Personal Development curriculum: Health and well-being, Living in the Wider World and Relationships. As such we are preparing them for the challenges, opportunities, and responsibilities of life ahead of them. This course will cover:

- Communication and life tools
- Physical health and well being
- Conflict resolution
- Sex, Relationships and Responsibility
- Mental Health
- Drugs, Alcohol and the Law
- Work Experience
- Careers post 16
- Politics and Democracy
- Personal Finance
- The UK Legal System



## Routes to employment

Studying Personal Development encourages students to develop many transferable skills including critical thinking, empathy and reflection. Studying Personal Development provides students with the opportunity to think and plan for their future and is complimentary to courses at college, sixth forms and universities such as citizenship, economics, business studies, law and health & social care. In studying Personal Development students actively spend time considering the routes to a wide range of careers and employment opportunities.

## Who do I need to see to find out more?

For more help and advice talk to Mrs Gray

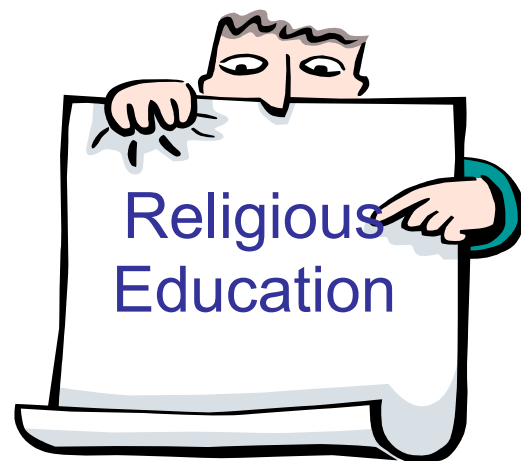


**Key Contact:** Miss Butler, Head of RE

**Faculty:** Humanities

**Exam Board:** AQA A

**Level:** GCSE 9 - 1



## Is it compulsory? Yes

It is your entitlement to have Religious Education throughout your school career. At Fernwood we provide the opportunity for every student to gain a GCSE qualification in Religious Education in one lesson per week. You have already begun the first part of your Full Course RE GCSE work that is spread over the final three years of your Religious Education -Years 9, 10 and 11.

## Which examination board specification will I follow?

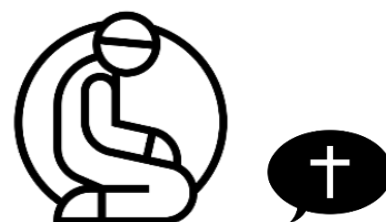
We follow the AQA A Religious Education specification which leads to a Full Course GCSE RE.

## What will I be studying during the course?

The course is designed to challenge you with questions about belief, values, meaning, purpose and truth, alongside developing your own attitudes towards religious issues. You will consider how religion, philosophy and ethic form a basis of our culture. You will develop critical thinking and analytical skills. We will be focussing primarily on Christianity and Islam as these are the two major religions in our school and our country.

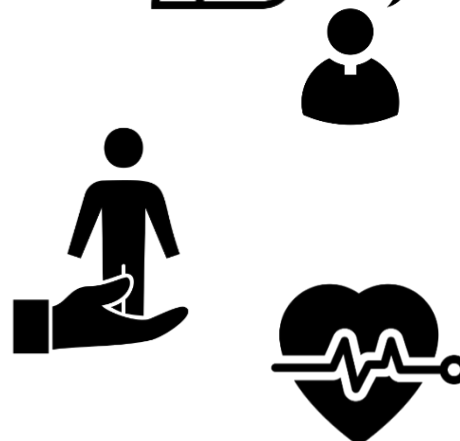
Component 1: The study of religions: beliefs teachings and practices

1. Christian Beliefs and Teachings
2. Christian Practices
3. Muslim Beliefs and Teachings
4. Muslim Practices



Component 2: Thematic study – Religious and ethical issues

1. Relationships and families
2. Religion and Life
3. Religion, peace and conflict
4. Religion, human rights and social justice



## What will the examinations be like?

The full course GCSE option will involve two examination papers, one for component of the course. Each paper is 1 hour and 45 minutes long. Students are entered in Year 11 for both areas of study.

## Why study GCSE RE?

The course focuses on a range of issues that affect how we think and believe. These issues complement work done in other areas of the curriculum. You will need an open mind and a respect for others and their beliefs. The course provides students with an informed appreciation of the world they belong to and as a member and citizen of our local, diverse and global community. It also provides a foundation for those careers, especially in our multi-faith community, that involve working with children and adults. At post 16 level, the course provides a solid skills base for a range of humanities and social science subjects.

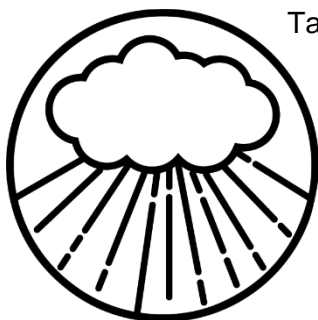
## Routes to employment

Studying religious education enables students to develop many transferrable skills including independent learning, reflective and analytical thinking and writing to support and evaluate opinions.

Students who have studied religious education go on to study courses at college, sixth forms and universities such as sociology, medicine, journalism, childcare, psychology, archaeology and theology.

Students have access to a wide range of careers and employment opportunities. Any job that involves interacting with other humans will require some level of religious and cultural understanding. These jobs can range from advice worker to newspaper journalist and any job in healthcare or law enforcement. Having an understanding and appreciation of different cultures, faiths and worldviews equips individuals to relate to others in an informed and considerate way.

## Who do I need to see to find out more?



Talk to Miss Butler or your RE Teacher



# Option Choices

## EBACC subjects





Counts as a science subject towards the EBACC

**GCSE Computing**  
(Computer Science)

Computer Science

- Key Contacts:** Mr Barker / Mrs Dakers
- Faculty:** Art, Design & Technology
- Level:** GCSE 9 - 1
- Exam Board:** OCR
- Is it compulsory?** **No (EBACC science subject)**

**Requirements:** A solid ability at mathematical problem solving (we will consult your maths teacher in some cases)

## What is a GCSE in Computer Science?

This course enables you to truly understand how computers work. Computer Science is the fastest growing industry in the world and as technology progresses, we will need more people involved within this industry. This GCSE will help develop ways of thinking and problem solving that can be applied to all areas of life. It will help you understand and apply the fundamental principles and concepts of Computer Science, including abstraction, decomposition, logic, algorithms, and data representation. You will analyse problems in computational terms through practical experience of solving such problems, including designing, writing and debugging programs. You will need to think creatively, innovatively, analytically, logically and critically. You will also learn about the impacts of digital technology to the individual and to wider society and apply mathematical skills relevant to Computer Science.

## What do I need to know or be able to do before taking the GCSE in computing?

You need to be someone who is keen on computers and actively enjoys using them in your free time. You do not need any previous knowledge of programming although if you do then this is an advantage. You need to be motivated to learn and prepared for knowledge of computing you may never have experienced before. Your Year 9 level for Maths should be a high level 5 or above.



Mark Zuckerberg -  
Creator of Facebook

*"The whole limit in the system is that there aren't enough people who are trained and have these skills today."* **Mark Zuckerberg talking about the shortage of Computer Programmers worldwide.**







*“Just the experience of programming, gives you access to a new way of thinking.”* Mia, a female programmer from the American National Intelligence Agency

Mia - Works for National Intelligence

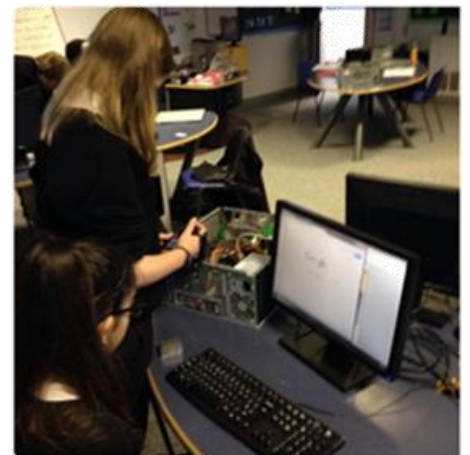
## Why should I choose this course?

- Fastest growing industry in the world
- Teaches you a way of thinking that can be applied to any problem-solving industries
- Develop skills to program games, apps, software, and medical/scientific advancements
- Learn about current and emerging technologies and how they impact on your lives
- Gain an understanding of how software works and is put together
- Take apart computers and understand how different components work
- Learn about the design of websites, computer games and databases
- Get to solve computing program issues and create your own products
- A route into being your own boss, entrepreneur or making you highly employable
- Develop key skills which are highly valued by employers and further education
- Learn skills that will enable you to manipulate a computer to do anything you want!
- Gain confidence by developing independent learning skills.

## Who is the GCSE in computer science for?

This course will appeal to you if you:

- Have ambition to be a ‘problem solver’ in life
- Have ambitions of being your own boss
- Have a keen interest in information and communication technology
- Enjoy studying a subject that is relevant to your own life and experience
- Want to potentially follow a career into programming and computing
- Are interested in developing an understanding of current and emerging technologies
- Want to study a course that is active and enjoyable
- Want to move on to a related career or further education



## The structure of the GCSE in Computer Science

### Unit J276/01: Computer Systems

In this unit you will build up a mental model of how a computer system should work from hardware to software. You will use binary coding and recognise its place in a computer system. You will finally look at the hardware involved in a computer and understand how they work together and contribute to the overall system. Modules include:

- 1.1 Systems architecture
- 1.2 Memory and storage
- 1.3 Computer networks, connections and protocols
- 1.4 Network security
- 1.5 Systems software
- 1.6 Ethical, legal, cultural and environmental impacts of digital technology

### **Unit J276/02: Computational thinking, Algorithms and programming**

This unit is designed to build up your computational thinking. Computational thinking is the process of breaking problems down into smaller components. This is a life skill and a way of thinking that can be applied to many life situations whether it's working with machines or people. Modules include:

- 2.1 Algorithms
- 2.2 Programming fundamentals
- 2.3 Producing robust programs
- 2.4 Boolean logic
- 2.5 Programming languages and Integrated Development Environments

### **What assessments will I do?**

Unit	%	Assessment
Unit J277/01: Computer Systems	50%	External Examination 1 hour 30 minutes
Unit J277/02: Computational thinking, algorithms and programming	50%	External Examination 1 hour 30 minutes

### **Future progression to other qualifications**

Cambridge Technical in iMedia (Levels 2 and 3), GCE A Level Computer Science, GCE A Level ICT, Apprenticeship Framework (Level 2 and 3).

At University, typical modules in a Computer Science degree may include: Principles of programming, Data management, Mathematics for computer science, Languages and computability, PC technology, Software systems development.

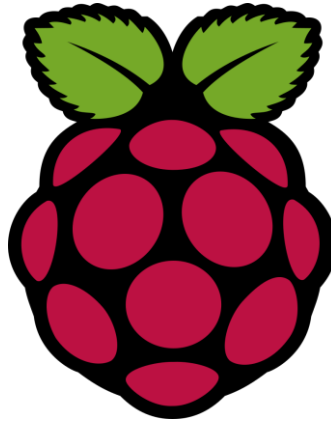
### **Routes to employment**

Computer Science is a way of thinking. The thinking skills you will develop can translate into science, medicine, psychology, and other industries linked to problem solving. In a highly digitised world, there are few employers who don't value computing specialists. Last year, some of the industries that employed the most computer scientists - apart from the many branches of the IT industry itself – included electronics, oil and gas, and printing and publishing. Studying Computer Science also enables students to develop many transferable skills such as research skills, communication skills, team-working, time management, critical thinking, project management, and self-motivation.



## Example potential careers:

Software Developer  
Web Designer  
IT Support Technician  
Network Manager  
Management Consultant  
IT Manager  
Games Designer  
App Developer

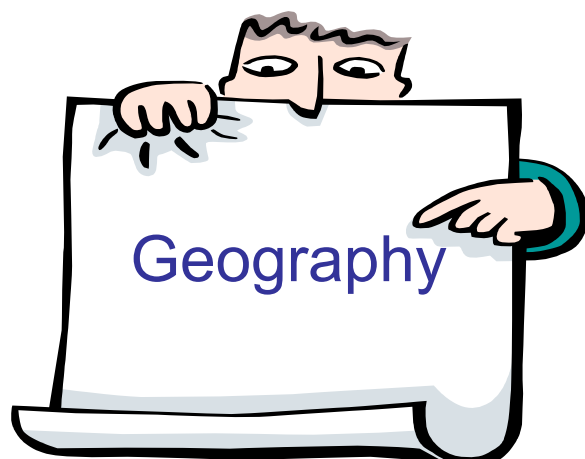


**Key Contact:** Your class Geography Teacher or Mr Foulk, Head of Faculty

**Faculty:** Humanities

**Level:** GCSE 9 - 1

**Exam Board:** AQA, specification 8035



**Is it compulsory? No** (Recommended as one of EBACC suite of subjects)

No, this is another of your free options but it is advisable that a 'Humanities' option is chosen (Geography and/or History) if you are considering an academic route to University in the future as part of the proposed English Baccalaureate.

## What will I be studying during the course?

We will be following the AQA Geography Specification 8035. The content covers three divisions of Geography as follows:

### **Paper 1: Living with the physical environment 35% of the full course**

- Natural hazards (earthquakes and volcanoes, weather hazards and climate change)
- The living world (tropical rainforest and Hot Deserts)
- Physical landscapes (coastal, and river landscapes)



**Style of Assessment** - 1 hour 30 minutes exam.

### **Paper 2: Challenges in the human environment 35% of the full course**



- Urban issues and challenges (NEE City Rio and UK city Bristol)
- The changing world (development. Nigeria and the UK economy)
- The challenge of resource management and Water

**Style of Assessment** - 1 hour 30 minutes exam.

### **Paper 3: Geographical applications 30% of the full course**

- Issues evaluation
- Fieldwork (Students must complete 2 fieldtrips)

**Style of Assessment** - 1 hour 15 minutes exam.





“Geography is the subject which holds the key to our future” - Michael Palin



## What courses or employment can I progress to at the end of my course?

Geography can be studied for AS/A Level and degree levels. It is also a qualifying subject for degree entry by itself and for more specialised area e.g. law, economics, construction management, leisure and tourism etc. The list is vast. Many qualified geographers work in business and management at various levels. Over the years our students have gained so many

skills and experiences during their GCSE geography course. They can see the relevance of the course in the modern world as well as gaining insight into the formation of the landscape we live in. The course covers social, economic, environmental and political aspects of our daily lives. Students learn to investigate arguments, problems and issues. There is a huge take-up of students who go on to study geography A' Level as a result of inspiration gained from their GCSE course. Geography as a subject is a 'field of knowledge' which enables it to be classed as both an Arts and Science subject. This makes it a perfect blend for whatever general direction a pupil wishes to pursue for further study whether it be in the Arts or Sciences.

## Who do I need to see to find out more?

Talk to your geography teacher or Mr Foulk, Head of Humanities.

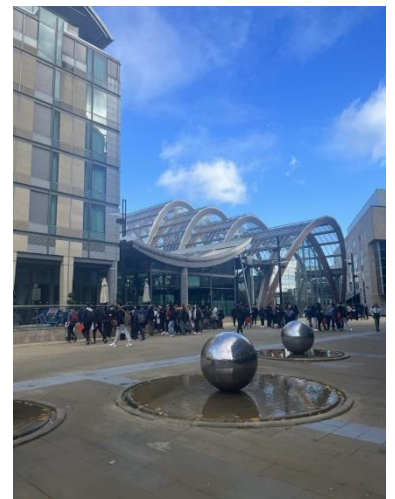
## *"It's the must have subject" – The Guardian*

*"Graduating geographers experience some of the lowest unemployment levels of any degree subject" – The Times, 2015*

## Routes to employment

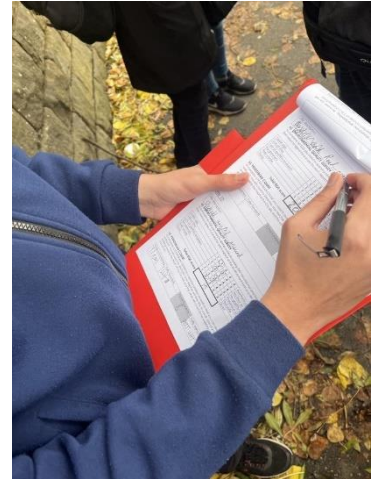
Studying Geography enables students to develop a wide range of transferable skills including independent thinking, investigation, analytical and presentation skills, critical thinking, the ability to think about moral and ethical issues, team work, communication, project management and problem solving.

Students who have studied Geography go on to study a wide range of courses at college, sixth forms and universities within both the Arts and Sciences. For instance the Royal Geographical Society (RGS) states that for students who have studied Geography at A level and who are *"working towards a future course in medicine or veterinary medicine then geography is a good choice to give your A Level options the breadth that universities seek, as you will gain a clear understanding of how the*



*environment affects health and survival of people, animals and ecosystems as well as enhancing your skills of writing essays and extended reports". According to the RGS, "in a recent analysis by the Institute for Fiscal Studies (IFS) in 2018 placed Geography among the top subjects for graduate earnings".*

Students who have studied Geography have access to a very diverse range of careers and employment opportunities working in a variety of environments – such as working for central & local government in Town & Country Planning or Policy making, or for Environment Agency, the HM Armed Forces, careers in business, engineering, development and global issues, and in the travel & tourism industry, to name but a few.



**Key Contact:** Miss Thomson, History Department

**Faculty:** Humanities

**Level:** GCSE 9 - 1

**Exam Board:** Edexcel



**Is it compulsory?** **No** (Recommended as one of EBAC suite of subjects)

No, History is another of your free options but choosing at least one Humanities subject is strongly advised.

## What will I be studying during the course?

We will be following the Edexcel History Specification. There are 4 different topics split over 3 exam papers.

### Paper 1: Thematic study and historic environment worth 30% of the final GCSE



#### Section A: A historic environment

The British sector of the Western front, 1914-1918; injuries, treatment and the trenches.

Study includes:

- Knowledge of warfare; trench warfare & 7 key battles
- Main stages of the chain of evacuation
- Medical problems and solutions; injuries & illnesses

#### Section B: A thematic study

Medicine in Britain, c1250-present

Study includes:

- Medieval Medicine in Britain c1250-c1500
- Renaissance Medicine in Britain c1500 - c1750
- Industrial Medicine in Britain c1750-c1900
- Modern Medicine in Britain c1900 – present day



**Style of Assessment** - 1 hour 15 minutes exam. Students answer SIX questions.

### Paper 2: Period study and British depth study worth 40% of the final GCSE



#### Booklet B: British depth study

Anglo-Saxon and Norman England, c1060-1088.

Study includes:

- Anglo-Saxon England 1060-66
- William I securing power 1066-1087
- The Norman Conquest 1066-1088



### Booklet P: Period study

The American West, c1835-c1895

Study includes:

- Settlement of the West
- Cattle ranching in the West
- Law and order in the West
- Conflict between White Americans and Plains Indians



**Style of Assessment** - 1 hour 45 minutes exam. Students answer six questions



### Paper 3: Modern depth study worth 30% of the final GCSE Weimar and Nazi Germany, 1918-39



Study includes:

- The Weimar Republic 1918-1929
- Hitler's Rise to Power 1919-1933
- Nazi Control & Dictatorship 1933-1934
- Life in Nazi Germany, 1933-1939

**Style of assessment** – 1 hour 20 minutes exam. Students answer six questions

Throughout your studies you will be developing your history skills:

- To recall, select and organise your historical knowledge
- To describe, explain and analyse historical events, periods and individuals
- To comprehend, analyse and evaluate historical sources and interpretations to explain historical issues

## History and your career

Studying history enables students to develop critical thinking skills like no other subject and employers value it as a qualification. History teaches you to challenge, analyse and make judgements about information. It enables you to think for yourself, to understand a wide range of opinions and interpretations, to formulate ideas and opinions and to use a wide range of literacy and personal skills.

Studying history gives you the opportunity to study a wide range of courses post GCSE including History, English Literature, Law, Drama, History of Art, Politics, Economics, Accountancy, Business, Sociology, Psychology and Management Studies.





## Routes to employment

Students who have studied history have access to a wide range of careers and employment opportunities such as in law, politics, the media, accountancy, corporate management, teaching, work in museums and research, archaeology, the civil service, lecturing, personnel and many more that require skills in organising information, working with people and expressing your ideas in a logical and ordered way.

## Who do I need to see to find out more?

Talk to your history teacher.

“What fascinates me are the turning points where history could have been different”  
H. Mantel



**Key Contact:** Ms J Hannon

**Faculty:** Modern Foreign Languages

**Level:** GCSE 9 - 1

**Exam Board:** Edexcel



**Is it compulsory?** No, but highly recommended and here's why...



A language GCSE is an important component of the EBacc qualification, which many universities look at to give them an indication of what can set one student apart from another. Aside from that, languages are becoming ever more essential in today's world market, whatever your speciality, and are a skill for life which employers value highly.

At Fernwood, we offer a choice of two European languages, French or German. These are the languages most in demand by UK businesses. You can choose one of them, or, if you have the relevant experience, you can take both! Students will follow a full GCSE course in French and/or German.

Whatever you choose, the course will be very similar - the only big difference will be the language you speak!

## Why should I study this course?

If you enjoy communicating with other people, finding out how language works and learning about different countries and cultures, studying GCSE French and German is an excellent choice for you. Of course, you will learn to understand a lot more French and German when you hear it or read it and be able to say and write a lot more in French and German. But there are many other reasons for taking this GCSE course:

- You will add an international dimension to your choice of GCSE subjects, which is something many future employers and higher education providers look for.
- You will learn many skills which are useful in a wide range of future careers, such as the ability to communicate clearly, being confident about speaking in public, using problem-solving strategies, etc.
- You will create greater opportunities for yourself to work abroad, or for companies in the UK with international links. Many employers look for people who speak a foreign language. Remember 75% of the world does not speak English.
- You will learn about the countries where French and German are spoken and will get an insight into the cultural differences between European countries.
- The study of French and German will broaden your horizons and encourage you to step beyond familiar cultural boundaries and develop new ways of seeing the world.

**What do I need to know, or be able to do, before taking this course?**



Good news! If you've studied French or German at Key Stage 3, you're well prepared to do a GCSE course in these languages. You already know a lot of the vocabulary and grammar you'll need for GCSE. You know how to talk about yourself, your family and friends, your hobbies, where you live, school, holidays, food and drink. You'll build on these topics during your GCSE course, as well as moving on to new topics. So, you're already part way there.

## What will I be studying during the course?

The course is based on the skill areas of Listening, Speaking, Reading and Writing.

The language content of the Full GCSE examination will be based around the three themes:

- My personal life
- Lifestyle and wellbeing
- My neighbourhood
- Media and technology
- Studying and my Future
- Travel and tourism

## How will I be assessed?

This is a linear qualification with all assessments being completed at the end of the course in May or June of Year 11. You will take all four components - Listening, Speaking, Reading and Writing - at the same level - either Foundation or Higher - and each component is worth 25% of the GCSE grade.

## Routes to employment

People with language skills and knowledge are highly thought of in the modern world. They stand out as talented and successful people, with broad and exciting horizons. Taking GCSE French and German means you will:

- have much more fun when travelling to a French or German speaking country.
- be able to study A Level French and/or German courses.
- add an extra dimension to your personal skills profile which will impress anyone who reads your CV. A language qualification will make you stand out from the crowd in your university and apprenticeship applications.
- be in a stronger position to get a job in companies with international links or to work abroad.

There are many Fernwood students who have continued their language studies at A Level and beyond and who are currently either living and working abroad or using their language skills in their employment in the UK in fields such as Business, Law, Management and Public Relations. Being able to communicate in French and German can open many doors in life. You never know where it may lead!

Come and talk to us if you have any questions!



# Option Choices

# Wider

# subjects

**GCSE Courses**



## Art & Design - Art

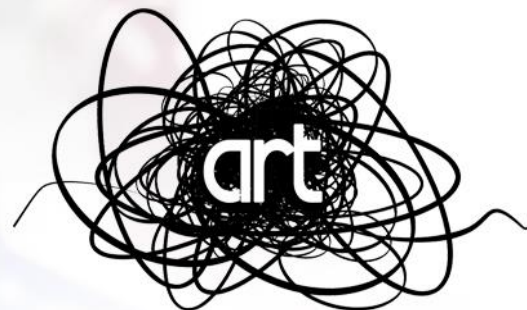
**Key Contact:** Ms Kutarski / Ms Daffe / Ms Stones

**Faculty:** Art, Design & Technology

**Level:** GCSE 9 - 1

**Exam Board:** AQA

**Is it compulsory? No**



Art and Design



### Which examination board syllabus will I follow?

We follow the AQA syllabus in Art and Design.

We follow a general art and design curriculum but later in the course some pupils decide to specialise dependent on their expertise e.g. sculpture or textiles.

### What will I be studying during the course?



We follow the GCSE curriculum closely from the beginning of year 10 by using themes like 'Natural Forms' and 'My World' where you explore a large variety of techniques from 2D to 3D studies, printing, sculpture, photography, spray paint and digital art. This gives you an opportunity to explore new and exciting techniques and processes that you may not have experienced before. You will later have the opportunity to specialise in distinct areas of study by following your own interests.



## What will the controlled assessment be like?

You will be asked to submit a portfolio of work worth 60% of the final mark. You will start working on this from September in Year 10. The work will be based on themes and topics suggested by your teachers as outlined above. You will be able to choose the best of your work from those themes, completed within a maximum of 45 hours of lesson time. For your mock exam you will do a controlled assessment of 10 hours based on your final project.

## What will the examinations be like?

There will be a set task with themes given by the exam board, in January, so you have the opportunity to spend at least 10 weeks creating a body of work. Students are encouraged to work to their creative strengths and to follow their own interests. The actual exam lasts 10 hours and that along with your prep work contributes towards 40% of your final result.



## Why is art and design important?

The third highest sector of employment in the UK is in the creative industries and graduates of creative studies make up to 70% employment in high paid jobs. We are incredibly fortunate in the art and design department because we have several contacts in industries such as film, theatre, fashion, and working artists and we maintain these links through workshops and visits. The focus of each topic of study will be on exploration, research, developing techniques and outcomes. These outcomes may be linked to a theme or a real-life art and design task giving our pupils an insight into real life employment experience.

## Transferrable Skills

Within the context of a formal education the subject supports personal, social, moral, spiritual, cultural and creative development, also enabling engagement with and exploration visual, tactile and other sensory experiences which in turn helps to recognise and communicate ideas and meanings. These opportunities enable work with traditional and new media, developing confidence, competence, imagination and creativity in all future experiences.

GCSE art & craft enables a chance to provide a critical judgement and allows you to communicate ideas, develop confidence, competence, imagination and creativity, layout, and presentation needed in all careers and is an essential life skill particularly with job applications and interviews, preparing presentations, business cards, building websites and generally selling yourself. Analysis, critical thinking and independent learning are essential qualities in all career paths, these are qualities to help you get ahead and stand out in a crowd.

## Routes to employment and post 16 courses

GCSE art is a well-equipped course and has so many interesting and diverse projects that many pupils experience a smooth transition to further and higher education courses studying A level, BTEC Diploma courses and eventually degrees. Many of our pupils have continued onto degree courses at some of the most prestigious universities renowned for art and design such as the likes of Central St Martin's and Goldsmiths



## Possible career paths

Graphic designer, illustrator, set designer, work in film and television, designing making sets in theatre and film, merchandiser, animator, ceramicist, web design, game design, furniture design, product design, community project artist, commercial artist, teacher, art therapist, architect, interior designer, working in galleries, museum and libraries, curators and restorer.

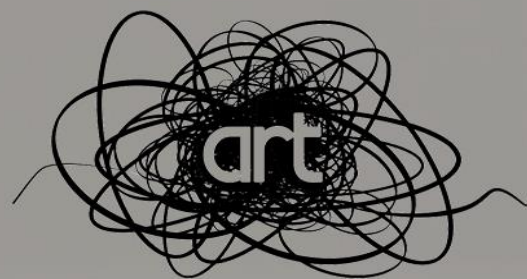
## Who do I need to see to find out more?

Talk to Ms Kutarski, Ms Stones or Mrs Percival for more information.



## Photography

<b>Key Contact:</b>	Ms Kutarski
<b>Faculty:</b>	Art, Design & Technology
<b>Level:</b>	GCSE (Grades 9 to 1)
<b>Exam Board:</b>	AQA
<b>Is it compulsory?</b>	No



## Art and Design Photography

### Which examination board syllabus will I follow?



We follow the AQA syllabus in Photography. Photography is defined here as the practice of producing images using photographic film or digital methods of development and production to create static or moving images.

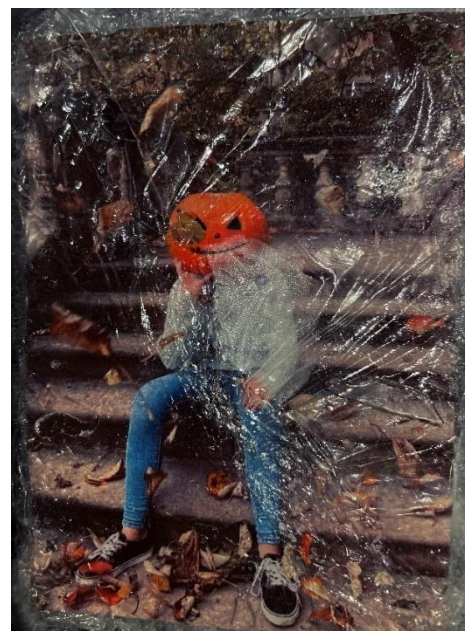
### What will I be studying during the course?

We follow the GCSE curriculum closely from the beginning of year 10. First, we

investigate the camera and how we can control it to create exciting and creative images. We go on to use themes such as “Distortion” and “Inside Out” where you explore a large variety of areas such as portraiture, location and studio photography. We use industry standard software to manipulate images along with more hands-on approaches. This gives you an opportunity to explore new and exciting areas that show career potential. You will later have the opportunity to specialise in distinct areas of study by following your own interests.

### What will the controlled assessment be like?

You will be asked to submit a portfolio of work worth 60% of the final mark. You will start working on this from September in Year 10. The work will be based on themes and topics suggested by your teachers as outlined above. You will be able to choose the best of your work from those themes, completed within a maximum of 45 hours of lesson time. For your mock exam you will do a controlled assessment of 10 hours based on your final project.





## What will the examinations be like?

There will be a set task with themes given by the exam board in January, so you have the opportunity to spend at least 10 weeks working towards your final piece. Students are encouraged to work to their creative strengths and to follow their own interests. The actual exam lasts 10 hours and that along with your prep work contributes towards 40% of your final result.



## Why is photography important?

The third highest sector of employment in the UK is in the creative industries and graduates of creative studies make up to 70% employment in high paid jobs. We are incredibly fortunate in the Art department because we have several contacts in industries such as film, theatre, and fashion whom we maintain links with. The focus of each topic of study will be on exploration, research, developing techniques and outcomes. These outcomes may be linked to a theme or a real-life art and design task giving our pupils an insight into real life employment experience.

## Transferrable skills

Within the context of a formal education the subject supports personal, social, moral, spiritual, cultural and creative development, and the exploration of visual experiences which in turn helps to communicate ideas and meanings. These opportunities enable work with traditional and new media, developing confidence, competence, imagination and creativity in all future experiences.



## Routes to employment and post 16 courses

Photography is proving to be one of the most popular courses post 16. Having engaged in a course that is mindful and progressively engaged with the vocational aspects of photography gives a head start in a competitive industry. Post 16 courses give opportunities to refine your skills and enhance prior learning with a smooth progression onto A levels and diploma courses and ultimately BA Honour degrees.

**Potential careers-** merchandise photographer, working on websites, fashion photographer, portrait photographer for actors, models, schools, pop stars, wedding photographer, photographer for television and film, promotions, advertising, documentary, film maker, cinematographer, photojournalist.

## Who do I need to see to find out more?

Talk to Ms Kutarski for more information.



# GCSE Business Studies

<b>Key Contacts:</b>	Mr Barker
<b>Faculty:</b>	Art, Design & Technology
<b>Level:</b>	GCSE 9 - 1
<b>Exam Board:</b>	OCR
<b>Is it compulsory?</b>	<b>No</b>

## What is a GCSE in Business Studies?

- This is an up-to-date and engaging qualification that is relevant to the world of business today.
- It will equip you with the skills and confidence to explore how different business situations affect business situations.
- It will encourage you to make informed choices about a wide range of further learning opportunities and career pathways.
- You will develop life skills that enable you to become financially and commercially aware.
- You will explore business concepts, business terminology, business objectives and the impact of business on individuals and the wider society.
- You will understand contemporary business issues and different types and sizes of business in local, national and global contexts.

## Why should I choose this course?

- If you have an interest in business and entrepreneurial skills.
- If you want to make a well-informed career choice.
- If you want to learn about current and emerging technologies within the business world.
- To gain an understanding of the business world in which we live in.
- To start the journey into being your own boss, entrepreneur or making you highly employable.
- To develop key skills which are highly valued by employers and further education.
- To gain confidence by developing independent learning skills.



## Who is the GCSE in Business Studies for?

This course will appeal to you if you:

- Have ambition to be a 'problem solver' in life.
- Have ambitions of being your own boss.
- Have a keen interest in information and communication technology.
- Enjoy studying a subject that is relevant to your own life and experience.
- Want to potentially follow a career into the business world.
- Are interested in developing an understanding of current and emerging technologies in the business world.
- Want to study a course that is active and enjoyable.
- Want to move on to a related career or further education.



## The structure of the GCSE in Business Studies

### **Unit 1 Business 01: Business activity, marketing and people**

You will be introduced to business concepts and issues concerning the activities of a business. You will explore the purpose and role of a business from spotting an opportunity through to the growth of an established business. You will also look at the role of marketing and human resources.

### **Unit 2 Business 02: Operations, finance and influences on business**

In this unit you will take a closer look at the role of operations and finance in business activity. Operations include production processes, quality of goods and services, customer service, and working with suppliers. Finance covers its role, its sources, costs, profit and loss, cash and cash flow.

You will also explore how business responds to external influences, such as ethical and environmental considerations, the economic climate and globalisation, and the interdependent nature of business.





## What assessment will I do?

Unit	%	Assessment
Business 01: Business Activity, Marketing and People	50%	External Examination 1 hour 30 minutes
Business 02: Operations, finance and influences on business	50%	External Examination 1 hour 30 minutes

## Future progression to other qualifications

Cambridge Technical in Business  
GCE A Level Business Studies  
GCE A Level Economics

At University, typical modules in a Business Studies degree may include: Skills for employment, consumer behaviour, using finance in business, managerial economics, strategic marketing, financial reporting, environmental sustainability.

## Routes to employment

The most popular subjects studied at degree level are business and management. A degree in this subject will provide many subject-specific skills including an understanding of finance, markets, business policy and operations and effective customer interaction. A business studies student will also learn a number of transferable skills in numeracy, communication, problem-solving, decision-making, critical thinking and independent working. Business and management careers typically involve working for finance organisations, large corporations, small businesses and self-employment but they can also be found in almost every other industry such as community work, IT, marketing, PR and even surveying.

## Example potential careers

IT Business Analyst  
Market Researcher  
Human Resources Officer  
Retail Manager  
Management Consultant  
IT Manager  
Chartered Accountant



**Key contact:** Miss C Johnson-Chuter, Head of Drama

**Level:** GCSE 9 - 1

**Exam Board:** OCR

**Is it compulsory?** No



## What will I be studying during the course?

You will be adding to your drama knowledge built in Key Stage 3 and learning many new ways of creating engaging performances. You will study and perform extracts from published plays as well as developing skills to devise original pieces.

You will be expected to work with a variety of different people and be willing to share your thoughts and ideas with others. We spend most of our time learning practically but you will also be required to complete research, written reflections and prepare for a theory-based exam.

## What will the examination be like?

The exam paper is 90 minutes long. In this time, you will be required to write an evaluation of a piece of live theatre, which we have seen and studied together. You will also answer questions on a play we have explored practically as a class.

## What will the coursework be like?

There are two units of coursework. One is based on the study of a scripted play. You will perform two extracts from this play either on your own or in a group. This will be assessed by a visiting examiner.

The other requires you to devise an original piece of drama in a group based on a stimulus from the exam board. This will be assessed by your teacher.

Most of the work is practical and done in class, though there is a significant amount of written work too.

Please be aware that as part of this course we will aim to see at least two pieces of live professional theatre and students will normally be required to make a contribution of between £40.00 and £50.00 to ticket and travel costs over the two years.



## **Routes to employment**

Studying Drama enables students to develop many transferable skills including problem solving, creative thinking, teamwork and the ability to present ideas to an audience.

Students who have studied Drama are prepared to embark on A Level Theatre Studies and BTEC Performing Arts Level 3 as well as a variety of other arts-based qualifications. GCSE Drama could lead to a degree in Theatre Studies or vocational performance training but would also support any higher qualification where communication is key.

Students who have studied Drama have access to a wide range of careers and employment opportunities such as those in theatre film and television but also in publishing, journalism, education, business and law.

## **Who do I need to see to find out more?**

Talk to Mrs. Johnson-Chuter, Miss Applegate or Mrs. Cannon





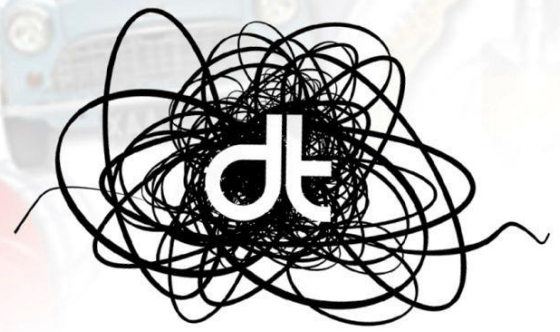
## DT: Product Design/Graphic Design

**Key Contact:** Mr D Jones / Miss Cox / Mrs Kwasny

**Faculty:** Art, Design & Technology

**Level:** GCSE 9 - 1

**Exam Board:** AQA



# Design and Technology

**Is it compulsory? No**

## Why choose GCSE Design & Technology?

GCSE Design and Technology will prepare students to participate confidently and successfully in an increasingly technological world. Students will gain awareness and learn from wider influences on design and technology including historical, social, cultural, environmental and economic factors. Students will get the opportunity to work creatively when designing and making and apply technical and practical expertise. The course allows students to study core technical, designing and making principles, including a broad range of design processes, materials techniques and equipment. They will also have the opportunity to study specialist technical principles in greater depth.



Have the opportunity to get involved with [#fernwoodracing](#) and the formula 24 races



Cultural influences can impact on design outcomes (solar light)

## Do you want a well-paid job?

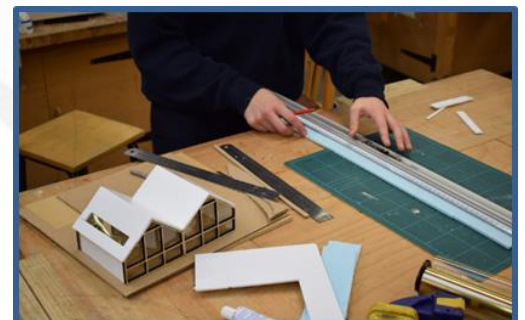
Design and technology feeds into two major sectors of employment.

UK **engineering** (mechanical/electrical/civil/structural) is world renowned for excellence, and one of very few sectors where employment is expanding. What you might not know is that the skills people gain in preparation for this profession also make them incredibly good managers and chief executive officers. In fact, over a **third of the country's highest paid managers are qualified engineers.**

The **creative industries** are one of the largest sectors of employment within the UK, worth around £15.5 billion per year, and one of very few sectors to have continued to **grow during the recession. Companies are desperate for young designers** with fresh ideas, combined with the technical ability to realise creations.

## Transferrable Skills

Students throughout KS3 have developed skills in the design and creation of products in a wide variety of materials and contexts. They understand the design process and are comfortable with creating new and unique items. GCSE design and technology is the continuation of this to a **higher level**, combining **practical knowledge** with **transferrable skills**, such as **applied mathematical** and **scientific principles** along with **problem solving** and **analytical thinking**.

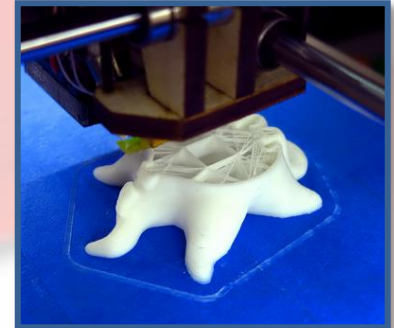
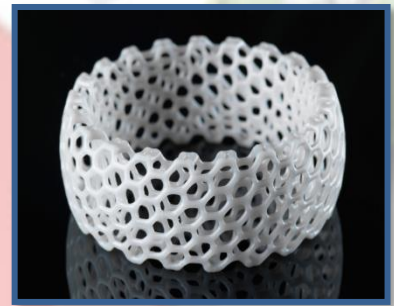


Modelling is just as important as drawing to designing

## Core designing and making principles

Students should understand how the prototypes they develop must satisfy wants or needs and be fit for their intended use and context. They will need to demonstrate and apply knowledge and understanding of designing and making principles in relation to the following areas:

- investigation, primary and secondary data
- environmental, social and economic challenge
- the work of others
- design strategies
- communication of design ideas
- prototype development
- selection of materials and components
- tolerances
- material management
- tools and equipment
- techniques and processes.



We are well equipped with modern manufacturing equipment such as 3D printing (additive manufacturing).

Core **designing and making principles**, will be graded within the non-examined assessment (coursework), alongside some questions within the terminal examination.

## What will you do?

The new GCSE places greater emphasis on understanding and applying iterative design processes. Students will use their creativity and imagination to design and make prototypes that solve real and relevant problems, considering their own and others' needs, wants and values. Evidence of designing can be submitted in a range of formats including A4 or A3 folders, sketchbooks or electronically in PowerPoint format, whilst making can be evidenced in the form of model making, all the way through to a working prototype. The assessment is holistic, ensuring students are fully rewarded for their efforts. The department has invested heavily in the **latest technologies** to support this such as audio-visual equipment, industry standard CAD and graphics software, **rapid prototyping machinery, 3D milling and laser cutting.**

## Core technical principles

To make effective design choices students will need a breadth of technical knowledge that consists of:

- New and emerging technologies
- Energy storage and generation
- Modern and smart materials
- Systems approach to designing
- Mechanical devices
- Materials and their working properties.







cdt

**DESIGN  
MARK  
AWARD  
EXCELLENCE  
IN DESIGN  
TEACHING**



## Specialist paths

Through your GCSE option you will also choose a specialist focus. This area you will then cover in greater depth, and it will also be primarily the focus of your NEA.

### Option Choices

#### D&T: Product Design

- Polymers, woods, metals, **smart materials**
- Forces and stresses
- Rapid prototyping (**3D Printing**) & advanced CAD
- Scales of production
- Specialist techniques (e.g. plasma cutting)
- Ecological and social footprints (in context)



#### D&T: Graphic Design

- Board, Card, and Polymers
- Point of sale / packaging
- Laser cutting and wide sheet printing
- Designing of nets
- Specialist techniques
- Ecological and social footprint (in context)



## Course key details

Non Examined Assessment: **50% - 35 hours of designing and making (low level control)**  
Context driven challenge, with working prototype produced as a result. Work will be within lessons and can be continued at home.

Examinations: **50% - single 2 hour exam**

Progression: A level Design & Technology (and supports other qualifications)

## Post 16 Courses and Routes to Employment

This GCSE leads directly into A-level Design & Technology following an 'academic route'. We actually deliver the A-level course at Fernwood on behalf of Bilborough College. University degrees in Engineering (mechanical, electrical, civil etc.) Industrial design, architecture, project management and a vast array of others directly follow on. Following a more vocational route, options include high level professional apprenticeships amongst other choices.

## Possible career paths

Management positions, Professional Engineers, Architects, Industrial Designers, Graphic Designers, Marketing, Sales, Business and Entrepreneurship, Mechanical Engineering, Advertising, Apprenticeships such as Rolls Royce.

## Thoughts from the UK Education Secretary

*"The UK needs to recruit 83,000 engineers a year over the next 10 years to compete economically, the subjects that keep young people's options open and unlock the door to all sorts of careers are the **STEM** subjects (science, **technology**, **engineering** and maths),"*





# Food Preparation and Nutrition

## Food Preparation & Nutrition

<b>Key Contacts:</b>	Mrs Chamberlain / Mrs Sampson
<b>Faculty:</b>	Art, Design & Technology
<b>Level:</b>	GCSE 9 - 1
<b>Exam Board:</b>	AQA Food Preparation and Nutrition
<b>Is it compulsory?</b>	<b>No</b>

## What is Food Preparation and Nutrition?



This is an exciting and creative course which aims to nurture students' practical cookery skills to give them a strong understanding of nutrition. The course focuses on practical cooking skills to ensure students develop a thorough understanding of nutrition, food provenance and the working characteristics of food materials.

## What will I learn during the course?

Here are few examples of what you will be learning:

- General practical skills including, knife skills, preparing fruit and vegetables, use of the cooker and other equipment.
- Methods of cooking, including how to prepare, combine and shape different ingredients
- Sauce making, tenderising and marinating.
- Dough forming and shaping and using different raising agents
- Setting mixtures
- Nutritional needs and health including micro and macro nutrients
- Energy needs, nutritional analysis, diet, nutrition and health
- Technological developments associated with better health
- Cooking of food and heat transfer
- Selecting appropriate cooking methods
- Functional and chemical properties of food



- Raising agents
- Food safety, food spoilage and contamination
- Buying and storing food
- Factors affecting food choice
- British and international cuisines
- Sensory evaluation
- Food labelling and marketing and food provenance
- Environmental impact and sustainability of food



## What will the assessment be like?

There are two elements which contain both written and practical elements.

### **Non Exam Assessment: 50% of the total GCSE marks.**

- Task 1 (NEA Non Exam assessment)  
A food investigation worth 15% of the final grade
- Task 2 (NEA Non Exam assessment)  
A food preparation assessment worth 35% of the final grade, a portfolio is produced and 3 dishes are made within a 3 hour assessment.

### **Written examination: 50% of the total GCSE marks**

## Is the course right for me?

You will have the opportunity to develop your own practical and design skills which can easily be applied when catering for yourself or friends at home, college or university. Food preparation and nutrition is a sound basis for further study at higher levels alongside catering and hospitality courses.

## Transferrable skills

Studying Food Preparation and Nutrition enables students to develop many transferable skills including independent thinking, people skills, creativity, organisation, problem solving and time keeping.

## Routes to employment and post 16 courses

Students who have studied Food Preparation and Nutrition go on to study courses at college, sixth forms and universities such as food science, dietetics, sports science, hospitality and catering, biology, product design and nursing.





## Possible career paths

Catering, Chef, Cookery School, Development Chef, Dietician, Environmental Health Officer, Hospitality, New Product Development Technologist, Nutritionist, Marketing, Process Technologist, Product Development, Quality Assurance Technologist, Research and Development Technologist, Teaching, Technical Assistant, working in a café or restaurant or even start your own business!

## Who do I need to see to find out more?

Speak to Mrs Chamberlain or Mrs Sampson



**Key Contact:** Mr J Crabtree

**Faculty:** Music

**Level:** GCSE 9 - 1

**Exam Board:** OCR

### **Is it compulsory? No**

No, Music is another of your free options.



### **Will I enjoy the course?**

Yes, if you enjoy the following:

- Performing music on your instrument or singing
- Composing music, either on your instrument or using ICT
- Listening to and appreciating different types of music

### **What if I already learn an instrument or have singing lessons?**

That's great! You may decide to use pieces that you have already prepared as part of your controlled assessment work. As a rough guide, a piece of music that is suitable for a Grade 3 instrumental exam could get you a GCSE Grade 7 or 8 in the performance element if you play it well.



### **What if I don't play an instrument or have singing lessons?**



**Performance is a big part of this course.** You must be able and prepared to perform, but this can be on any instrument at all, including voice. Although performance is only 30% of the overall mark directly, the more advanced you are as a performer, the more accessible you are likely to find the other elements of the course.

You will not be taught to play an instrument as part of GCSE music; rather it is expected that you are learning one alongside it.

If you do not currently play an instrument but are interested in taking music, please speak to Mr Crabtree or Mrs Young for advice.

## What will the examination be like?

At the end of the course you will listen to a CD and answer questions on the Areas of Study, which cover music from around the world over the last 400 years. These areas are: *The Concerto Through Time*, *Rhythms of the World*, *Film Music* and *Conventions of Pop*. **The exam is 40% of your total mark.**

## Is there any coursework?

**Yes** – 60% of the overall mark. You will **perform (play or sing) at least two pieces, lasting at least 4 minutes**. At least one must be as a soloist and at least one as part of a group. Combined, they must be at least 4 minutes long and should ideally be of approximately Grade 3 standard or above. They will be recorded and marked by your teacher. **The performance portfolio is worth 30% of your GCSE.**

You also need to **compose two pieces, lasting at least 3 minutes**. One of these will be for your own instrument that you use for your solo performances, the other will be written in Year 11 to a brief that is set by the exam board. **The two compositions together make up 30% of your GCSE.**

## Routes of employment

Studying Music enables students to develop many transferable skills including creative thinking, reflection and refinement of work and independence.

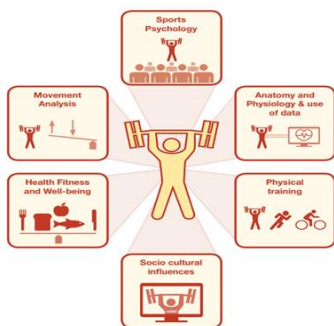
Students who have studied Music go on to study courses at college, sixth forms and universities such as Music, Music Technology or Performing Arts, as well as a wide range of other courses.

Students who have studied Music have access to a wide range of careers and employment opportunities such as those within the creative industries, either performing or in the many roles behind the scenes, as well as being looked on favourably by almost any employer; success in music is a demonstration of an ability to dedicate effort over many years.

## Who do I need to see to find out more?

Talk to Mr Crabtree in the Music Department.





# GCSE Physical Education

Head of Subject: Mr Clark

Exam Board: Edexcel

Students will receive a well-rounded education to the world of sport performance and sport science by developing an understanding of how the mind and body works in relation to performance in physical activity.

## Structure of the course in Key Stage 4

Pupils will have 2 lessons of GCSE PE a week. These lessons will be predominantly theory based and will focus on the two examination papers and the written coursework that makes up 70% of the course.

The remaining 30% is practically based and is covered within some GCSE PE and core PE lessons. Pupils are assessed in a variety of sports within schools and are externally moderated. Their best three scores give the total grade. It is expected that students participate in at least one sport outside of school.

## Content of the course

<u>Component 1</u>	<u>Component 2</u>	<u>Component 3</u>	<u>Component 4</u>
Fitness and Body Systems	Health and Performance	Practical Performance	Personal Exercise Programme (PEP)
Topic 1: Applied anatomy and physiology  Topic 2: Movement analysis  Topic 3: Physical training  Topic 4: Use of data	Topic 1: Health, fitness and well-being  Topic 2: Sport psychology  Topic 3: Socio-cultural influences  Topic 4: Use of data	One team activity.  One individual activity  One free choice a further individual or team activity	Aim and planning a training program.  Carrying out and monitoring improvements in your performance.  Evaluation of your 6-week training program.



## Assessment in the subject

<b>Component 1</b>	<b>Component 2</b>	<b>Component 3</b>	<b>Component 4</b>
<u>Written examination</u> 36% of the qualification 1 hour and 45 minutes 90 Marks	<u>Written examination</u> 24% of the qualification 1 hour and 15 minutes 70 Marks	<u>Practical Exam</u> 30% of the qualification 35 Marks per activity 105 marks	<u>Written Coursework</u> 10% of the qualification 20 Marks

The practical examination consists of 3 activities.

- One individual activity
- One team activity
- One other choice. Either a team or individual activity from the list below.

### **Individual Activities:**

Amateur boxing, Athletics, Badminton, Canoeing, Cycling, Dance, Platform diving, Equestrian, Figure Skating, Golf, Gymnastics, Kayaking, Rock climbing, Rowing, Sculling, Skiing, Snowboarding, Squash, Swimming, Table tennis, Tennis, Trampolining and Windsurfing. *Specialist Activities*; Boccia and Polybat.

### **Team Activities:**

Acrobatic Gymnastics, Association Football, Badminton, Basketball, Camogie, Cricket, Dance, Figure Skating, Futsal, Gaelic football, Handball, Hockey, Hurling, Ice Hockey, Inline roller Hockey, Lacrosse, Netball, Rowing, Rugby league, Rugby union, Sailing, Squash, Table tennis, Tennis, Volleyball and Water polo. *Specialist Activities*; Blind cricket, Goal ball, Powerchair football, Table cricket, Wheelchair basketball and Wheelchair rugby

## Pathways Post 16

GCSE PE links to A Level PE at a further education and 6<sup>th</sup> form colleges. A level PE is a rigorous and academic subject accepted by all Universities including Russell Group Universities (top 24 in the UK.)

The course should appeal to anyone on pathway 1 who plays sport outside of school or is willing to represent the school teams in a variety of sports and has an interest in the human body, PE lessons and sport. Related careers may include; the armed forces, emergency services, nutritionist, physiotherapist, physical training instructor, sports coach, teacher or sport scientist.

## Extra-curricular opportunities

Students would be expected to represent the school in sports that they are being assessed in for their GCSE practical performance. We would encourage GCSE PE students to apply for PE prefect status in year 11 and encourage our GCSE PE students to help support teachers with the delivery of Key Stage 3 extra-curricular clubs. Additionally, through the course we offer students the opportunity to visit Loughborough University to experience some sport lectures, a tour around their world class sport facilities and participate in some practical sports.





## Frequently asked questions

### **Does doing PE mean I have more practical lessons?**

Within your two lessons a week, there will be the equivalent of one practical lesson every two weeks. The focus of these lessons may be based around theory content or completing practical assessments for the students three sports. PE staff will, where possible, deliver theory content in a practical setting to further improve learning opportunities.

### **What other subjects does it go well with?**

The GCSE PE course consists of a wide variety of subject areas. The closest linking subjects would be biology, alongside some psychology and also mathematics with the use of data now adding value to the overall mark.

### **Can I use my sports that I play currently?**

The list of sports allowed can be found above. If your sport or hobby is on that list, then it can be used. We will assess you in one of two ways. If you compete in a sport outside of school that we do not offer as part of the school curriculum you would be expected to film yourself training and in competitive situations to secure your mark.

### **Do I still get to do PE if I don't choose GCSE?**

Yes. All pupils will get one lesson of core PE per week





# Option Choices

# Wider

# subjects

**Vocational Courses**



# Creative iMedia



**Key Contacts:** Ms Birnie  
**Faculty:** Art, Design & Technology  
**Level:** GCSE Equivalent Cambridge National  
**Exam Board:** OCR

**Is it compulsory?** **No**

## Why Creative iMedia?

This qualification will assess the application of creative media skills through practical and creative industry scenarios. It will provide you with essential knowledge of the media sector, give you transferable skills and tools to improve your learning in other subjects with the aims of enhancing your employability when you leave education, contributing to your personal development and future economic well-being. The qualifications will encourage independence, creativity and awareness of the digital media sector.

## What do I need to know or be able to do before taking the Technical Award in Creative iMedia?

You should have enjoyed the creative sides to Computer Systems throughout KS3 including sound, video and image editing. You may have enjoyed projects such as BBC School Report, App design & the media taster in Year 9. It is important that you have a creative mind and good interpersonal skills. You will also use industry standard software to edit your productions and, therefore, need to be competent at using image and video editing software.

## Why should I choose this course?

- Learn about how the media sector industries operate through project life cycles (planning, creating and testing).
- Work with a range of digital tools and techniques specific to image and video.
- Learn about digital photographic equipment, camera lighting, different shot angles and other technical recording technology techniques.



- Follow a programme of study that enables progression to further courses and employment in the Media sector
- Develop key skills which are highly valued by employers and further education

## Who is the Creative iMedia course for?

### This course will appeal to you if you:

- Have a keen interest in film, performing arts or digital image and video manipulation
- Enjoy studying a subject that is relevant to your own life and experience
- Want to study a course that is creative, active and enjoyable
- Want to move on to a related career or further education

## Structure of the course

Unit:	Weighting	What is it?
Creative iMedia in the media industry	40%	<b>Written Exam:</b> A detailed look at the different sectors, products and job roles that form the media industry.
Visual identity and digital graphics	30%	<b>Coursework:</b> You will learn how to develop visual identities for clients. You will also learn how to apply the concepts of graphic design to create original digital graphics, which will include your visual identity, to engage a target audience.
Visual imaging	30%	<b>Coursework:</b> You will learn how to apply the conventions for both static (photography) and moving images (video), which make up the language of visual imaging and communication. You will plan and capture photographs and video footage using a digital camera and learn how to edit and process photographs and video sequences to create a meaningful product, in response to client briefs.



## Future progression to other qualifications

Cambridge Technical in iMedia (Levels 2 and 3)

GCE A Level Media Studies

Apprenticeship Framework (Level 2 and 3)

At University, typical modules in a Media Studies degree may include:

- Screen media
- British TV drama and society
- Cultures of consumption
- Elements of visual media
- Media audiences
- Media ethics, compliance and sustainability
- Understanding media cultures

## Routes to employment

Studying Creative iMedia enables students to develop many transferable skills such as research skills, communication skills, team-working, time management, critical thinking, project management and self-motivation and these skills are sought after by employers from industries such as film, publishing, television, public relations, radio, design and computing.

## Example potential careers:

- Video Editor
- Special Effects Technician
- Sound Recordist
- Public Relations Officer
- Broadcasting Production Assistant
- Animator
- Web Designer
- Photographer





Information Technology

**Key Contacts:** Mr Barker / Ms Dakers

**Faculty:** Art, Design & Technology

**Level:** GCSE Equivalent Cambridge National

**Exam Board:** OCR

**Is it compulsory?** No

## Cambridge National Information Technology

### What is a Cambridge National in Information Technology?

This course will give you a wide skills base in a range of ICT areas that can be used and applied in all industries. The need for ICT skills and qualifications has become a necessity to all businesses and higher education organisations, making this an important subject for the present and the future. You may be interested in this if you want an engaging qualification where you will use your learning in practical, real-life situations, such as:

- Using different application and tools to design, create and evaluate IT solutions and products.
- Creating a data manipulation solution.
- Creating an Augmented Reality prototype.

### What do I need to know or be able to do before taking the National Cambridge Award in Information Technology?



You will need to have enjoyed Information and Communication Technology before starting the GCSE. You may have enjoyed projects such as Data Analytics, Web Theory, App Design & E-safety. It is important that you have a lively and enquiring mind, an interest in Information and Communication Technology, a willingness to explore new ideas and an ability to communicate your ideas effectively. You may also have a keen business mind as some of the theory content ties to business theory such as marketing and target audience

### You may have enjoyed these Key Stage 3 projects

- E-safety (Year 7)
- Data Analytics (Year 7)
- App Design (Year 7)





- Web Theory (Year 8)
- Taster in Digital Technologies (Year 9)

## Why should I choose this course? You will,

- Learn about current and emerging technologies and how they impact on your lives
- Work with a range of digital tools and techniques
- Learn about the design of websites, computer games and databases
- Create an interactive digital product for others to use
- Follow a programme of study that enables progression to further courses and employment in ICT
- Develop key skills which are highly valued by employers and further education
- Gain confidence by developing independent learning skills

## Who is the Cambridge National in Information Technology for?

This course will appeal to you if you:

- Have a keen interest in Information and Communication Technology
- Enjoy studying a subject that is relevant to your own life and experience
- Want to find out more about how ICT tools, applications and systems are used by organisations
- Are interested in developing an understanding of current and emerging technologies
- Want to study a course that is active and enjoyable
- Want to move on to a related career or further education
- Wish to build up a qualification by studying separate units



## The structure of the Cambridge National Award in Information Technology

<i>Units</i>	<i>%</i>	<i>Assessment</i>
Component 1: IT in the Digital World	36%	Written Exam
Component 2: Data manipulation using spreadsheets	32%	Coursework
Component 3: Using augmented reality to present information	32%	Coursework

### Component 1: IT in the Digital World

In this unit, you will learn the theoretical knowledge and understanding to apply design tools for applications, principles of human computer interfaces and the use of data and testing in different contexts when creating IT solutions or products.

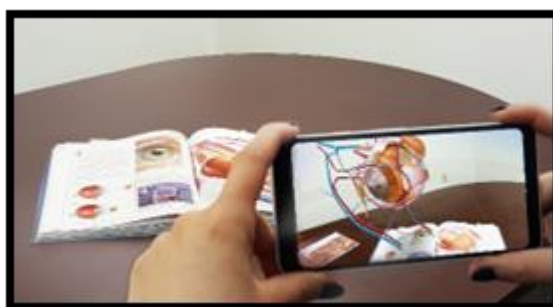
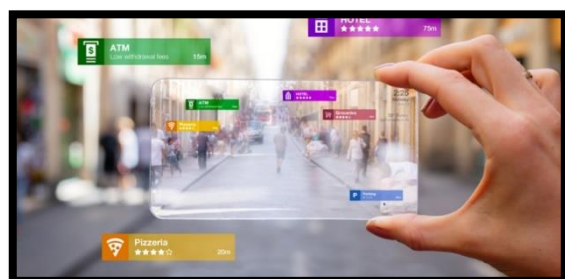
You will understand the uses of Internet of Everything and the application of this in everyday life, cyber-security and legislations related to the use of IT systems, and the different types of digital communications software, devices, and distribution channels.

### Component 2: Data manipulation using spreadsheets

In this unit, you will learn the skills to be able to plan and design a spreadsheet solution to meet client requirements. You will be able to use a range of tools and techniques to create a spreadsheet solution based on their design, which you will test. You will be able to evaluate your solution based on the user requirements.

### Component 3: Using augmented reality to present information

In this unit, you will learn the purpose, use and types of augmented reality (AR) in different contexts and how they are used on different digital devices. You will develop the skills to be able to design and create an AR model prototype, using a range of tools and techniques. You will also be able to test and review you AR model and techniques.



## Future Progression to Other Qualifications

Cambridge Technical in iMedia (Levels 2 and 3)  
Cambridge Technical in Information Technology (Levels 2 and 3)  
GCE A Level ICT  
BTEC National Information Technology  
Apprenticeship Framework (Level 2 and 3)

At University, typical modules in a Digital Technology degree may include:

- Network development and maintenance
- Project Management
- Software design and development
- Emerging Technologies
- Digital Marketing
- Innovative Multimedia
- IT Infrastructure

## Routes to employment

The digital sector is a major source of employment in the UK, with 1.46 million people working in digital companies and around 45,000 digital jobs advertised at any one time. Digital skills span all industries; almost all jobs in the UK today require employees to have a good level of digital literacy. Aside from the digital skills gained on this course, studying Digital Technology enables students to develop many transferable skills such as research skills, communication skills, team-working, time management, critical thinking, project management and self-motivation, and these skills are sought after by employers from industries such as film, publishing, television, public relations, radio, design and computing.

## Example potential careers:

Network Administrator  
Information Systems Manager  
IT Sales Professional  
Systems Analyst  
IT Technical Support Officer  
Technology Consultant  
Project Manager





ering

**Key Contact:**

Mrs S Holmes / Mr F Stewart

**Faculty:**

Art, Design & Technology

**Level:**

Level 2 (Pass, Merit, Distinction, Distinction\*)

**Exam Board:**

OCR (Cambridge Nationals)

**Is it compulsory? No**



Engineering  
Manufacture

## What is Engineering Manufacture?

Engineering manufacture is the discipline of engineers dealing with different manufacturing practices and processes using the machines, tools and equipment that turn raw materials into new products. Engineering Manufacture is responsible for every device that makes our lives easier and more fun, an engineer has helped to design and build the computers and printers we use, the chairs we sit on, our mobile phones, the planes we go on holiday in; even the saucepans we use to cook our dinner. Engineering is worth shouting about and to get rid of a few stereotypes, you'll be glad to know that more often than not, engineering is not about wearing overalls and getting dirty, it's not boring and certainly not a badly paid career.

Engineering manufacture is crucial for the performance and competitiveness of our country. Engineers support businesses in areas like research, design and product development. The engineering industry already employs over 1.6 million people and employers are keen to increase their intake of new, young recruits with all the right skills.

## What will I be doing?



The course mirrors real world engineering practice, and allows you to participate in activities, which would be useful in any future engineering or design based career. You will engage in technical drawing methods and come to appreciate how various types of drawings are used within engineering, such as sketching, orthographic projection, 2D computer aided design, 3D solid modelling and assembly drawings.

You will learn how to interpret drawings and produce planning schedules that will allow you to operate the tools and equipment used to make products from the requirements of a design specification, as well as use relevant computer applications such as CAD/CAM, and CNC equipment

Developing an awareness of materials, manufacturing methods, quality control techniques and scale of production will underpin the production of a quality piece of practical work. The department has access to some of the very latest technologies to help support your manufacturing such as CNC Milling Machinery, a CNC lathe, rapid prototyping machinery a laser cutter and industry standard CAD software.



During the course you will be assessed by completing the following two units:

### Unit 1 - Manufacturing a one-off product

An assignment is set by the exam board each year. In this unit you will learn how to safely plan and produce a one-off product by using appropriate processes, tools and equipment.

Topics include:

- Planning and production of a one-off product
- Measuring and marking out
- Safely use process, tools and equipment to make a product



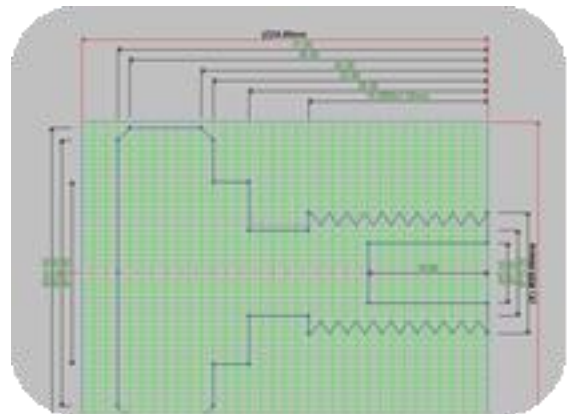
Written and machine & hand practical work undertaken.

### Unit 2 - Manufacturing in quantity

In this unit you will learn how to manufacture using simple jigs and templates to support manufacturing in volume using Computer Aided Design (CAD) software and Computer Numerical Control (CNC) equipment

Topics include:

- Preparing for manufacture
- Develop programmes to operate CNC equipment
- Safely use process and equipment to make products in quantity



CAD and CNC manufacture undertaken.

### Course key details

Course Title:	OCR Cambridge National Certificate in Engineering Manufacture
NEA:	60% - 2 Units
Examinations:	40% - 1 exam (60mins)
Key Contacts:	Mrs Holmes or Mr Stewart





## Transferrable skills

- Note taking and research skills
- Analytical and independent thinking
- Planning and sequencing tasks
- Use of CAD CAM software and equipment
- Adaptability in order to gain more efficient working practices
- Develop a keen sense of detail in assessing quality.

## Routes to employment and Post 16 courses

Following the completion of this Level 2 Cambridge National in Engineering Manufacture will enable you to progress to A level Engineering or Product Design, vocational courses (BTEC or VQF's) and Apprenticeship framework.

## Possible career paths

Mechanical Engineering, Electrical Engineering, Fabrication Engineering, Civil Engineering, Practical Apprenticeships, Product Design, Industrial Design, Marketing, Business & Management.





## Health & Social Care

**Key Contact:** Mrs Chamberlain / Mrs Sampson

**Level:** BTEC Technical Award Level 1 or 2

**Exam Board:** Pearson

**Is it compulsory? No**

### What is Health & Social Care?

Cambridge National in Health and Social Care introduces you to the specialist knowledge and skills needed to work in various care settings. It's a vocational qualification, equivalent in value to a GCSE and contains both practical and theoretical elements. It is all about life. It aims to provide knowledge that underpins effective use of skills, process and attitudes in the health and social care sector such as human growth and development, health and social care services, and factors affecting people's health and wellbeing. It aims to promote attitudes that are considered most important in health and social care, such as the care values. The lessons include discussions, video clips and a variety of written and creative tasks on the topics that we are studying. The lessons are divided into the different units mentioned below

As part of the Cambridge National, you'll cover:

- principles of care
- helping individuals find the support they need following life events
- planning and delivering creative and therapeutic activities
- health promotion and how to plan your own campaign



### Assessments - The course is divided into units

RO32 Principles of care in health and social care settings - Assessed through an exam at the end of Year 11.

RO33 Supporting individuals through life events - Assessed as a set assessment in Year 10.

RO34 Creative and therapeutic activities.

RO35 Health promotion campaigns. The centre chooses which of these (RO34 or RO35) units is taken and it is as a set assessment in year 11.



## Why should I choose Health & Social care?

If you are interested in working in the health and social care sector, then this might be the course for you. This could lead to a very rewarding career in this sector where you can make a difference to the lives of others and to many of the most vulnerable in society.



## Building Futures through Practical Skills / Transferrable Skills



You'll develop a range of skills which will help you to succeed not only in the workplace but also in other subjects too. These skills include: • effective verbal communication • presentation skills • creative thinking • problem solving • research and planning. No matter what you progress on to – the skills you'll learn from a Cambridge National will prepare you for the future.

### Post 16 Courses and Routes to Employment

Students who have studied Health and Social Care go on to study courses at college, sixth forms and universities such as nursing, social work, teaching and health and social care to a higher level.

These skills will help you to progress onto further study in the health and social care sector. This may be Level 3 vocational qualifications in Health and Social Care; A levels in psychology, biology or sociology and the following apprenticeships:

- Adult care worker
- Allied Health Profession Support
- Health and Social Care
- Healthcare science assistant
- Maternity and Paediatric Support.

It is anticipated that this qualification will also enable you to progress onto a T Level, such as Health and Healthcare Science, when they are available.



### Future Opportunities and Possible Careers

By developing applied knowledge and practical skills, this course will help to give you the opportunity to progress on to A Levels, a Cambridge Technical in Health and Social Care, an apprenticeship or university. The careers that start from Health and Social Care are endless – Nurse, Midwife, Social Worker, Occupational Therapist, Paramedic and more.

### Who do I need to see to find out more?

Talk to Mrs Chamberlain or Ms Sampson



# Business, Enterprise and Marketing

<b>Key Contacts:</b>	Mr Barker / Mrs Dakers
<b>Faculty:</b>	Art, Design & Technology
<b>Level:</b>	L1 – D2*
<b>Exam Board:</b>	OCR
<b>Is it compulsory?</b>	No

## What is the OCR Cambridge National L1/L2 in Enterprise and Marketing?

The Level 1/Level 2 Cambridge National in Enterprise and Marketing is aimed at students who wish to develop applied knowledge and practical skills in enterprise and marketing. It contains both practical and theoretical elements, which will prepare students for further study of qualifications in enterprise, marketing or business. The Cambridge National in Enterprise and Marketing is graded pass, merit and distinction for Level 1 and pass, merit, distinction and distinction\* for Level 2. You may be interested in this if you want an engaging qualification where you will use your learning in practical, real-life situations, such as:

- Carrying out market research
- Planning a new product and pitching it to a panel of experts
- Reviewing whether a business proposal is financially viable

## What do I need to know or be able to do before taking the OCR Cambridge National L1/L2 in Enterprise and Marketing?

You will need to enjoy exploring business contexts and the working of a variety of different enterprises. It is important that you have a lively and enquiring mind, an interest in the workings of enterprise, a willingness to explore new theories and be able to communicate your ideas confidently and effectively. As part of the qualification, you'll need to give a 'pitch' so being able to speak publicly in front of your peers would also be a useful skill.

## You may have enjoyed these Key Stage 3 projects:

- Data Analytics (Year 7)
- Internet of Things – Introduction to Business (Year 9)





Units	Component Title	Assessment
R067	Enterprise and Marketing Concepts	External Assessment – Exam (end of Y11)
R068	Design a business proposal	NEA – Non-Examined Assessment (Y10)
R069	Market and pitch a business proposal	NEA – Non-Examined Assessment (Y11)

### Why should I choose this course? You will,

- Understand how and why enterprises and entrepreneurs are successful.
- Understand customer needs and competitor behaviour through market research.
- Understand how the outcomes of situational analyses may affect enterprises.
- Choose an idea and produce a plan for a micro-enterprise idea.
- Present a plan for the micro-enterprise idea to meet specific requirements.
- Review the presentation of the micro-enterprise idea to meet specific requirements.
- Demonstrate knowledge of facts, terms and issues in relation to enterprise
- Demonstrate an understanding of facts, terms and issues in relation to enterprise.
- Apply an understanding of facts, terms and issues in relation to enterprise.
- Make connections with concepts, issues and terms in enterprise.
- Carry out calculations to complete financial documents, carry out calculations using formulae and ratios, and construct and interpret break-even charts.

### Who is the OCR Cambridge National L1/L2 in Enterprise and Marketing for?

#### This course will appeal to you if you:

- Have a keen interest in Business Enterprise
- Enjoy studying a subject that is relevant to your own life and experience
- Want to find out more about how businesses operate and how they create and use financial figures
- Are interested in developing an understanding different business operation.
- Want to study a course that is active, enjoyable and has a mixture of assessment methods
- Want to move on to a related career or further education
- Wish to build up a qualification by studying separate units

### The structure of the OCR Cambridge National L1/L2 in Enterprise and Marketing:

#### Unit R067: Enterprise and Marketing Concepts.

In this unit you will learn how market research gives the entrepreneur an insight into the wants and needs of its customers, so that products and services can be developed to satisfy them. It also complements other competing products and services on the market to ensure a financially viable business. As well as understanding your target market's needs, you will learn how the marketing mix elements must be carefully blended to enhance business performance. You will





examine each element individually and explore the decisions that an entrepreneur needs to make. You will learn about the types of ownership for an enterprise and sources of capital available. Running a successful enterprise can be tough, but there is a lot of support available, which you will learn about so that you can understand how to obtain timely and appropriate guidance.

**Unit R068:** Design a business proposal.

In this unit you will learn how to develop market research tools and use these to complete your market research. You will use your research findings to decide who your customers will be, create a design mix and produce your product design ideas. To help decide on your final design, you will gain feedback and then assess the strengths and weaknesses of your initial ideas. You will complete financial calculations to determine whether your proposal is likely to make a profit. You will use the evidence you have generated to decide whether you think that your new product is likely to be financially viable.

**Unit R069:** Market and pitch a business proposal.

In this unit you will learn how to design a brand which will make your product stand out in the market, before creating a promotional campaign to get your brand noticed by customers. Your promotional campaign will include you choosing different methods of promotion which you think are most suitable for your target customers. You will then need to create a presentation that you will pitch to an audience.

## Future Progression to Other Qualifications

Students who generally achieve at Level 2 across their Key Stage 4 learning might consider progression to:

- A Levels as preparation for entry to higher education in a range of subjects
- study of a vocational qualification at Level 3, such as a BTEC National in Enterprise and Entrepreneurship, which prepares learners to enter employment or apprenticeships, or to move on to higher education by studying a degree in the business sector.

Students who generally achieve at Level 1 across their Key Stage 4 learning might consider progression to:

- study at Level 2 post-16 in a range of technical routes designed to lead to work, employment, apprenticeships, or further study at Level 3. Learners who perform well in this qualification compared to their overall performance, should strongly consider this progression route as it can lead to employment in the enterprise sector.
- study business enterprise post-16 through a Technical Certificate designed to lead to work, progression to employment via apprenticeships or further study at Level 3.

## Routes to Employment

The role of entrepreneurs is to help create wealth for the nation and its citizens through the creation of enterprises that innovate and grow the economy. According to 2019 data, there are nearly six million such businesses in the UK, employing around 16.6 million people. Small and medium-sized enterprises (SMEs) account for 99.9 per cent of the business population in the UK and account for three-fifths of the employment and around half of the turnover in the UK private sector, worth around £2.2 trillion.



## Music Technology

**Key Contacts:** Mr Crabtree  
**Faculty:** Art, Design & Technology  
**Level:** Level 2 Technical Award  
**Exam Board:** NCFE

**Is it compulsory?** No

### What is NCFE Music Technology?

A career in music technology takes creativity, drive and intelligence. If you're just starting out or already have some experience, we've got the course to take you to the next level. You'll be producing your own music and getting hands-on experience with professional music production equipment and music software. You will develop skills in sound engineering to record your own music or other bands. Suitable for all musical backgrounds and genres. This course could also be applied to the film industry and building sound-scopes for TV and film.

### What will I study?

You'll be learning how to setup and operate computer-based music production systems and recording studio equipment. You'll produce a portfolio of your own music in styles of your choice and learn how to record vocals and musical instruments in a recording studio.

### What will I do?

- Learn how to produce your own music using industry standard music software
- Learn recording techniques using professional recording equipment
- Learn how to create a professional sounding mix
- Investigate the music and music technology industries.



## How will I be assessed?

Unit	%	Assessment
Non-Examined Assessment	60%	Internally Assessed, Externally Moderated
Exam	40%	Externally Assessed

## Routes to employment

Studying music technology enables students to develop many transferrable skills including creativity, computer technology and teamwork.

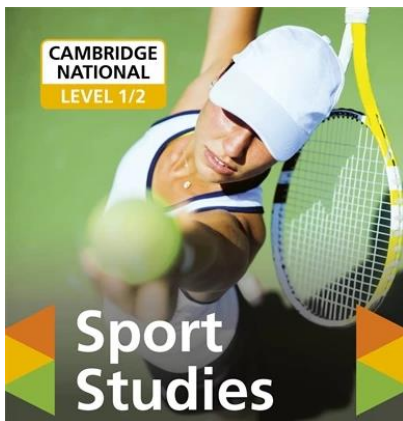
Students who have studied music technology go onto study courses at college, sixth forms and universities such as music technology A Level, sound engineering apprenticeships, game design courses and more.

Students who have studied music technology have access to a wide range of careers and employment opportunities such as any work within the music, film, theatre or gaming industries, computer programming or any pathway which requires a creative approach.

## Who do I need to see to find out more?

If you want to know more, please see Mr Crabtree





## Sport Studies

Head of Subject: Mr Clark

Exam Board: OCR

Cambridge National Technical Award in Sport Studies will encourage students to think for themselves about the study of sport and the application to real life practical sport, leadership and evaluation of the skills required there. They will study up to the minute topics affecting sport through the contemporary issues unit, both play and lead sporting activities, as well as having the chance to either explore the world of outdoor sport.

### Structure of the course in Key Stage 4

Pupils will have a one-hour lesson and a 90-minute lesson of Sports Studies per week. These lessons will be mixed between classroom, computer rooms and practical lessons. The course is split into three units covering a written exam, internally assessed coursework written on the computer with some practical assessment, leading a sports session and a trip to an outdoor activity centre.

### Content of the course

<u>Unit 1 – 40%</u>	<u>Unit 2 – 40%</u>	<u>Unit 3 – 20%</u>
Contemporary Issues in Sport	Performance and Leadership in Sports activities	Increasing awareness of Outdoor and Adventurous Activities
<p>Topic Area 1: Issues which affect participation in sport</p> <p>Topic Area 2: The role of sport in promoting value</p> <p>Topic Area 3: The implications of hosting a major sporting event for a city or country</p> <p>Topic Area 4: The role National Governing Bodies (NGBs) play in the development of their sport</p> <p>Topic Area 5: The use of technology in sport</p>	<p>Topic Area 1: Key components of performance</p> <p>Topic Area 2: Applying practice methods to support improvement in a sporting activity</p> <p>Topic Area 3: Organising and planning a sports activity session</p> <p>Topic Area 4: Leading a sports activity session</p> <p>Topic Area 5: Reviewing your own performance in planning and leading a sports activity session</p>	<p>Topic Area 1: Provision for different types of outdoor and adventurous activities in the UK</p> <p>Topic Area 2: Equipment, clothing and safety aspects of participating in outdoor and adventurous activities</p> <p>Topic Area 3: Plan for and be able to participate in an outdoor and adventurous activity</p> <p>Topic Area 4: Evaluate participation in an outdoor and adventurous activity</p>

## Assessment in the subject

<b><u>Component 1</u></b>	<b><u>Component 2</u></b>	<b><u>Component 3</u></b>
This unit is assessed through a 1 hour 15 minute written exam. Lessons will be in the classroom	This unit is a mixture of practical lessons and computer-based coursework.	This unit is a mixture of computer-based coursework and a trip to an outdoor adventure centre

## Pathways Post 16

This vocational course includes a wide range of content for a job in the sports industry. If you are interested in working in sport as a performer, outdoor activity instructor, PE teacher, sports coach, sports analyst, sports development officer, sports marketing officer. There are so many opportunities this course would help with. Students will also develop transferable skills, in particular communication and aspects of team working.

Sport Studies level 2 links to Level 3 Technical Awards in Sport at post-16 colleges. Over recent years there has been an increase in local sports clubs offering scholarships alongside Level 3 Technical Awards from a variety of local semi-professional football clubs. This involves half a day football training plus half a day studying.

Level 3 Technical Award courses are widely accepted by most Universities including Russell Group Universities. In 2021, 25% of students starting University had a Technical Award qualification opposed to an A-level. Technical Awards can also lead to level 4 and 5 diploma's involving working in industry whilst completing a degree course.

## Extra-curricular opportunities

Students would be encouraged to represent the school in sports and complete their Sports Leaders Award through compulsory PE lessons. This is a nationally accredited award involving delivering PE lessons to students at Fernwood Infant School. We would also encourage Sports studies students to apply for PE prefect status in year 11 and encourage students to help support teachers with the delivery of Key Stage 3 extra-curricular clubs. Students will get the opportunity to experience a trip to an outdoor activity centre such as Nottingham Climbing Centre or Holme Pierrepont as part of their assessment. Finally, through the course we offer students the opportunity to visit Loughborough University to experience some sport lectures, a tour around their world class sport facilities and participate in some practical sports. Both trips would accrue a cost to parents.

## Frequently asked questions

### **Does doing Sports Studies mean I have more practical lessons?**

Yes, you will have more practical lessons and there are probably more practical lessons in Sports studies compared. Practical lessons will not be every week and there maybe a series of practical lessons or computer-based lessons depending on the unit of work.





### **Are Cambridge Nationals seen as equivalent to GCSEs?**

Sport Studies is the equivalent of one GCSE and is accepted by all local colleges and sixth form academies as part of their entry requirements. Cambridge Nationals are widely accepted by universities across a wide range of degrees.

### **How is Sport Studies graded?**

The course is assessed through a mix of internally assessed assignments (worth 60% of the final grade) and an externally assessed written examination (worth 40% of the final grade). The grades that can be awarded are:

Level 2 Distinction\* (equivalent to an A\* or approximately an 8 in GCSE grades)

Level 2 Distinction (equivalent to an A or a 7 in GCSE grades)

Level 2 Merit (equivalent to a B or approximately a 6 in GCSE grades)

Level 2 Pass (equivalent to a C or a 4 in GCSE grades)

Level 1 Pass/Merit/Distinction (equivalent to a F/E/D or approximately 1/2/3 in GCSE grades)

### **Is Sports Studies the right choice for me or would I better be doing studying GCSE PE?**

If you have a keen interest in sport but do not necessarily play outside of school, you enjoy your PE lessons, prefer working on computers and working practically Sport Studies maybe the better option for you. Additionally, I would recommend if you are a pathway 2 or 3 student Sport Studies would be more suited to your strengths.



