

# The Academic Curriculum

The intent of our academic curriculum is to deliver **Powerful Knowledge** to our students. At Creative Education Trust this is not contextualised as ‘the knowledge of the powerful’, but specialised knowledge in a range of subject disciplines. This will include both disciplinary knowledge and substantive knowledge within each area of study. This curriculum is not only designed to endow children with the social assets, skills and cultural capital needed to succeed and achieve, but also to instil in our children the power and confidence to question, synthesise and scrutinise in a range of disciplines, a variety of social contexts and in their own lives. Beyond a range of academic qualifications, the intended impact of this curriculum is for our students to be able to integrate into any social, academic or professional environment, as well as to question, instigate change or lead within those environments.

Below you will find an overview of what Year 10 students are learning in each of their subjects in Half Term 1 and 2 (September-December).

Subject	Autumn Term Topics
English	<p><b>Half Term 1: A Christmas Carol by Charles Dickens</b> Students will learn to extend their knowledge of prose texts and use the requirements of the exam criteria to be able to produce an evaluative, written response. They will also extend their knowledge of the nuances of impactful descriptive and narrative writing techniques. They will be extending prior knowledge and understanding of texts to identify, understand and analyse how writer’s use:</p> <ul style="list-style-type: none"><li>• Character, structure and setting to communicate their ideas</li><li>• The context of production and reception over time</li><li>• Ideas in the texts are contextually linked and shaped by society at the time.</li><li>• The ability to engage with the text and cross-reference the ideas as a whole to formulate a perceptive and critical argument.</li></ul> <p><b>Half Term 2: Explorations in creative reading and writing (Language Paper 1)</b> Students will learn to extend their analysis skills by focussing on a range 20<sup>th</sup> Century Literary Prose and consider the character, themes and ideas presented by the writer. They will also consider how these themes are presented alongside the context. They will also extend their knowledge of the nuances of impactful descriptive and narrative writing techniques. They will be extending prior knowledge and understanding of texts to identify, understand and analyse how writer’s use:</p> <ul style="list-style-type: none"><li>• Narrative voice</li><li>• Character</li><li>• Setting and atmosphere</li><li>• Methods of creating meaning</li><li>• Context</li><li>• Language choices</li><li>• Structural choices</li></ul>

- Critical and evaluative skills
- To convey key ideas and themes throughout a text

**Maths**

Core

**Securing Number**

- The 4 operations
- Powers
- Directed numbers
- LCM and HCF
- Rounding

**Numerical Representations**

- Fractions
- Percentage

**Ratio**

- Simplifying a ratio
- Sharing in a ratio
- Ratios and Fractions

Extension

**Numerical Representations**

- Operations with fractions, decimals and percentages
- Recurring decimals
- HCF/LCM
- Prime factorisation
- Product rule for counting

**Ratio and Proportion**

- Linking fractions, ratio, and proportion
- Ratio problems
- Direct and indirect proportion

**Probability**

- Basic probability
- Tree diagrams

- Venn diagrams
- Relative frequency
- Two-way tables
- Conditional probability
- Independent events

**Science**

**Biology: Cells and Cell division**

The study of simple prokaryotic and eukaryotic cells from single-cell structures to organisms and how cells have become specialised. These small structures were first observed with the discovery of light microscopes and further enhanced due to the evolution of electron microscopy and calculations to ascertain actual sizes. A variety of processes are required to transport substances into and out of cells such as diffusion, osmosis and active transport and that exchange surfaces have become adapted to allow rapid exchange.

The cell cycle and mitosis are key processes for cell growth and repair. Stem cells are undifferentiated cells which have the potential to become specialised; this has led to many recent scientific discoveries in plants and animal stem cells although there are emotive evaluative reasons for and against the use of stem cells for medical purposes.

**Biology: Digestion**

Cells join to make tissues, different tissues make up organs, and different organs contribute to organ systems. The digestive system can be used to illustrate this relationship. Digestive enzymes are essential to the functioning of the digestive system.

Enzymes work as a key would in a lock, the effectiveness of the enzyme is lessened if conditions move away from the optimal conditions. Different enzymes work within different environmental conditions to take action of different macronutrients.

**Chemistry: Atomic structure and bonding**

The periodic table provides chemists with a structured organisation of the known chemical elements from which they can make sense of their physical and chemical properties. The historical development of the periodic table and models of atomic structure provide good examples of how scientific ideas and explanations develop over time as new evidence emerges. Chemists use theories of structure and bonding to explain the physical and chemical properties of materials. Analysis of structures shows that atoms can be arranged in a variety of ways, some of which are molecular while others are giant structures. Theories of bonding explain how atoms are held together in these structures.

**Chemistry: Chemical Calculations**

Chemists use quantitative analysis to determine the formulae of compounds and the equations for reactions. Given this information, analysts can then use quantitative methods to determine the purity of chemical samples and to monitor the yield from chemical reactions. Chemical reactions can be classified in various ways. Identifying different types of chemical reaction allows chemists to make sense of how different chemicals react together, to establish patterns and to make predictions about the behaviour of other chemicals. Chemical equations provide a means of representing chemical reactions and are a key way for chemists to communicate chemical ideas.

**Physics Energy:**

Energy can be stored or transferred and is needed to make objects move. Energy is a quantity that can be measured and calculated through the use of equations. We can calculate the energy stored when an object is moved, stretched or lifted. Energy transfers can be

	<p>compared in terms of usefulness and calculating the efficiency of a machine or appliance. Energy can also be transferred by heating through conduction or radiation. Transfer by heating can be reduced by insulation and measuring a materials efficiency. The energy needed to initially heat an object depends on its mass and material- The specific heat capacity of a substance is the energy required to raise the temperature of 1kg of a substance by 1°C.</p> <p><b>Physics: Electricity</b></p> <p>What electrical charge is and what is needed for it to flow. The rules for current, potential difference and resistance in series and parallel circuits. Use equations, either singly or in combination with each other to calculate I, V and R. How resistance changes in ohmic and non ohmic conductors and diodes. Know how to make use of variable resistors such as thermistors and LDRs in circuits and why these circuits work. To know and use the equations specified in the syllabus</p>
<p><b>History</b></p>	<p><b>Edexcel:</b> <a href="https://qualifications.pearson.com/content/dam/pdf/GCSE/History/2016/specification-and-sample-assessments/gcse-9-1-history-specification.pdf">https://qualifications.pearson.com/content/dam/pdf/GCSE/History/2016/specification-and-sample-assessments/gcse-9-1-history-specification.pdf</a></p> <p><b>Paper 1 topic: Medicine through time 1250-present</b></p> <p>Students will learn to understand key features of Medicine through time c1250-present, including the nature of change in medicine, treatments, preventatives and knowledge of the human anatomy across the time periods. Skills will include analysis of the cause of change, and the extent of progress in each time period.</p> <p>This will include:</p> <ul style="list-style-type: none"> <li>• Sense of Period – Medieval, Renaissance, Industrial Britain, Modern Britain</li> <li>• Substantive concepts – beliefs, individuals, government, communication, attitudes, technology and science</li> <li>• Disciplinary concepts –change, continuity, significance, describe, analyse, evaluate, similarity, difference, causation, consequence.</li> <li>• C1250-c1500 Medicine in Medieval England: Supernatural and religious explanations of the cause of disease. Rational explanations: the Theory of the Four Humours and the miasma theory; the continuing influence in England of Hippocrates and Galen. Approaches to prevention and treatment and their connection with ideas about disease and illness: religious actions, bloodletting and purging, purifying the air, and the use of remedies. New and traditional approaches to hospital care in the thirteenth century. The role of the physician, apothecary and barber surgeon in treatment and care provided within the community and in hospitals, c1250–1500. The Black Death, 1348–49; approaches to treatment and attempts to prevent its spread.</li> <li>• C1500-1700 Renaissance Medicine: Continuity and change in explanations of the cause of disease and illness. A scientific approach, including the work of Thomas Sydenham in improving diagnosis. The influence of the printing press and the work of the Royal Society on the transmission of ideas. Continuity in approaches to prevention, treatment and care in the community and in hospitals. Change in care and treatment; improvements in medical training and the influence in England of the work of Vesalius. William Harvey and the discovery of the circulation of the blood. Dealing with the Great Plague in London (1665).</li> <li>• C1700-1900 Medicine in the 18 and 19th centuries: Continuity and change in explanations of the cause of disease and illness. The influence in Britain of Pasteur’s Germ Theory and Koch’s work on microbes. The extent of change in care and treatment: improvements in hospital care and the influence of Nightingale. The impact of anaesthetics and antiseptics on surgery. Jenner</li> </ul>

	<p>and the development of vaccination. The changing role of the government and the Public Health Act (1875). Cholera in London (1854); attempts to prevent its spread; the significance of Snow and the Broad Street pump</p> <ul style="list-style-type: none"> <li>• C1900- present Medicine in Modern Britain: The influence of genetic and lifestyle factors on health. Improvements in diagnosis: the impact of the availability of blood tests, scans and monitors. The extent of change in care and treatment. The impact of the NHS and science and technology: improved access to care; advances in medicines, including magic bullets and antibiotics; high-tech medical and surgical treatment in hospitals. Mass vaccinations and government lifestyle campaigns. Fleming, Florey and Chain's development of penicillin. The fight against lung cancer in the twenty-first century: the use of science and technology in diagnosis and treatment; government action.</li> </ul>
<p><b>Geography</b></p>	<p><b>Half Term 1</b> Students will learn to understand the:</p> <ul style="list-style-type: none"> <li>• The causes, consequences and management of climate change.</li> <li>• UK small scale ecosystem – interactions between different elements.</li> <li>• Understand the distribution of ecosystems and global biomes</li> <li>• Understand the characteristics of TRF: location, structure, importance, plant and animal adaptation.</li> </ul> <p>Explore a case study of causes and impacts of deforestation in TRF</p> <p><b>Half Term 2</b> Students will learn to understand the management of tropical rainforests</p> <ul style="list-style-type: none"> <li>• Students will understand the characteristics of hot deserts: location, importance, plant and animal adaptation.</li> <li>• They will understand how hot environments are being developed and the opportunities and challenges this creates and the risks associated.</li> </ul>
<p><b>RE</b></p>	<p>In Half term 1</p> <p>Students should be aware that Christianity is one of the diverse religious traditions and beliefs in Great Britain today and that the main religious tradition in Great Britain is Christianity. This knowledge may be applied throughout the assessment of the specified content. Students should study the beliefs, teachings and practices of Christianity specified below and their basis in Christian sources of wisdom and authority. They should be able to refer to scripture and/or sacred texts where appropriate. Some texts are prescribed for study in the content set out below and questions may be set on them. Students may refer to any relevant text in their answers. Students should study the influence of the beliefs, teachings and practices studied on individuals, communities and societies. Common and divergent views within Christianity in the way beliefs and teachings are understood and expressed should be included throughout. Students may refer to a range of different Christian perspectives in their answers including Catholic, Orthodox and Protestant.</p> <p>In Half term 2</p>

	<p>Students will build on the beliefs and teachings of Christians by discovering how these are put into action. Also drawing comparisons between different denominations within Christianity</p>
<p><b>Citizenship</b></p>	<p>In the first Citizenship unit Theme A: Living together, students focus on what makes a community. They study all the factors that have contributed to the multicultural society we enjoy today and all the challenges that go along with that.</p> <ul style="list-style-type: none"> <li>• Roots</li> <li>• Religious understanding</li> <li>• Population</li> <li>• Migration</li> <li>• Identity</li> <li>• Respect and communities</li> <li>• Meeting barriers</li> <li>• Discrimination</li> <li>• Mutual understanding</li> <li>• What are human rights?</li> <li>• Human rights in the UK</li> <li>• Political rights</li> <li>• Legal rights</li> <li>• Protecting the customer</li> <li>• Rights with responsibilities +</li> <li>• Human Rights checks and balances</li> <li>• Who represents us?</li> <li>• The council</li> </ul>
<p><b>Spanish</b></p>	<p><b>Half Term 1: Holidays</b>  Students are learning to describe their holidays and activities. They will be able to describe their hotel using the imperfect tense and any problems they had They are learning to state and justify their opinion of holidays.</p> <p>Students are revising the present and preterite tenses. Students will be introduced to the imperfect tense:</p> <ul style="list-style-type: none"> <li>• Preterite tense</li> <li>• irregular verb hacer, ir</li> <li>• Superlatives</li> <li>• Comparisons</li> <li>• negatives</li> </ul>

	<p>Students will learn to use different opinions to add variety to what they say.</p> <p><b>Half Term 2 Theme: School</b>  Students will learn to describe their school, school subjects and activities. They will learn to state and justify their opinion. They will be able to discuss school uniforms, school rules and activities and achievements.</p> <p>Students are revising:</p> <ul style="list-style-type: none"> <li>• Present</li> <li>• Preterite</li> <li>• imperfect tenses</li> <li>• future tense</li> <li>• phrases followed by the infinitive.</li> <li>• Preterite tense: irregular verb hacer, ir</li> </ul> <p>Students will learn to use different opinions to add variety to what they say (superlatives, comparisons, negatives)</p>
<p style="text-align: center;"><b>French</b></p>	<p>Students will be able to describe their family and friends, relationships and what they do with family and friends.</p> <ul style="list-style-type: none"> <li>• Students will discuss</li> <li>• What their friends and family are like and what they look like</li> <li>• Friends and what makes a good friend</li> <li>• Who they do and don't get on with in their family and why?</li> <li>• Arrangements to go out</li> <li>• Weekend plans with family and friends</li> </ul> <p>Grammar:</p> <ul style="list-style-type: none"> <li>• Regular and irregular present tense verbs (1<sup>st</sup> and 3<sup>rd</sup> person)</li> <li>• Present tense reflexive verbs to discuss family relations</li> <li>• Near future tense with ALLER to discuss future plans</li> <li>• Common regular and irregular verbs in the perfect tense to discuss what they have done</li> <li>• Extension: Imperfect tense to describe their life when they were younger</li> </ul> <p><b>Half term 2: Free time</b>  Students will learn to describe leisure activities/ hobbies, reading habits, music preferences, TV and cinema, sport, celebrations and festivals</p> <p>Students will discuss:</p> <ul style="list-style-type: none"> <li>• Sports they do and how often</li> </ul>

	<ul style="list-style-type: none"> <li>• What they do online</li> <li>• Reading and books</li> <li>• Television programmes</li> <li>• Films and a trip to the cinema</li> </ul> <p>Grammar:</p> <ul style="list-style-type: none"> <li>• Opinions, including comparisons</li> <li>• Extending sentences with time phrases and sequencers</li> <li>• Regular and irregular present tense verbs (1<sup>st</sup> and 3<sup>rd</sup> person)</li> <li>• Present tense reflexive verbs to discuss family relations</li> <li>• Near future tense with ALLER to discuss future plans</li> <li>• Common regular and irregular verbs in the perfect tense to discuss what they have done</li> </ul>
<p style="text-align: center;"><b>Computer Science</b></p>	<p><b>Half Term 1 Theme: CPU/Memory and Storage/Boolean Logic, Programming Fundamentals</b></p> <p>Students are learning:</p> <ul style="list-style-type: none"> <li>• The effects on performance of changing common characteristics of a CPU</li> <li>• Characteristics of embedded systems</li> <li>• Familiarity with a range of different embedded systems</li> <li>• Programming fundamentals</li> <li>• Sequence and selection</li> </ul> <p><b>Half Term 2 Theme: Systems Architecture</b></p> <p>Students are learning</p> <ul style="list-style-type: none"> <li>• What actions occur at each stage of the FE cycle</li> <li>• The difference between storing data and an address</li> <li>• Why data must be stored in binary format</li> <li>• Familiarity with data units and moving between each</li> <li>• Calculate file sizes of sound, images and text files</li> <li>• Describe common scenarios where compression may be needed</li> <li>• Why computers have primary storage</li> <li>• Key characteristics of RAM and ROM</li> <li>• Why virtual memory may be needed in a system</li> <li>• Why computers have secondary storage</li> <li>• Differences between each type of storage device/medium</li> </ul> <p><b>Text based Programming</b></p> <p>Students will be learning to program in a text-based language Python learning the skills:</p>



	<ul style="list-style-type: none"><li>• Sequence</li><li>• Selection</li><li>• Iteration</li></ul>
<b>Creative iMedia (new spec)</b>	<p><b>Students are learning how the following methods contribute to pre-production, including how each is created and why it is needed:</b> Mood boards, mind-maps, visualisation diagrams, storyboards, scripts</p> <p><b>Students are learning how to effectively plan for pre-production taking into account:</b></p> <ul style="list-style-type: none"><li>• The requirements of the client</li><li>• The timescale in which it is to be completed.</li><li>• A work plan that sets out all the stages that needs to be completed in order to reach the final product.</li><li>• Evaluations of primary and secondary sources and how these feed into the overall work plan and final product.</li><li>• Adapt the final product to the target audience.</li><li>• Understand the differences between hardware and software. Choose the appropriate hardware and software that will enable them to complete the final product.</li><li>• Understand the health and safety issues surrounding creating the product and create risk assessments to take this into consideration.</li><li>• Understand current legislation and laws surrounding creating the product ensuring that it is legal and suitable.</li><li>• Learn about jobs in the media industry and different roles.</li><li>• The different industry standard codes that are used.</li><li>• The distribution channels used in the media industry.</li></ul> <p><b>Students are learning how to produce pre-production documents and successfully reproduce them using the following techniques:</b></p> <p>File formats, version control, moving images, video formats, graphics formats, audio formats, file structure, making all the pre documents</p> <p><b>Students are learning to evaluate and review the documents created in pre-production to ensure that they meet the criteria and clients' needs. The review and evaluation follow these stages:</b></p> <ul style="list-style-type: none"><li>• Review pre-documents</li><li>• Formats</li><li>• Style</li><li>• Clarity</li><li>• Meet client needs</li><li>• Identify areas for improvements</li></ul>

**IT- Eduqas**

**Unit 1**

Student will learn about Computer systems and how IT systems work.

- Functionality of different hardware devices
- Functionality of different software
- Services provided by IT
- Why data must be fit for purpose
- How data is checked for errors
- How data is transfer over networks
- Different types of connectivity
- Risks to information held on computers
- Impact of data loss
- Methods to protect information

**Database skills and Spreadsheet skills**

Students will start their journey into ICT by learning and practicing database and spreadsheet skills.

In database student will learn:

- How to create and use tables
- How to create and use data entry forms
- How to query a database
- How to import and export data
- How to create user reports
- How to automate and create navigation tools

In Spreadsheets students will learn?

- Enter and format data
- Use of formulas and functions
- Creating charts and graphs
- Use of macros and automation
- Advanced formulas and functions
- Inputting and exporting data

<p><b>Art</b></p>	<p><b>Term 1 Theme: Portraits</b>  Pupils will use knowledge and skills learned in Year 9 term 3 as a springboard to create portraits using pencil drawing and painting. Pupils will learn to draw portraits accurately and to use shading to increase realism. They will learn to use shading to create realistic drawings and will use painting techniques to create colourful portraits of their own. Pupils will link portraits to relevant artists including Hans Holbein and Joshua Meils during artist research. They will work from both primary and secondary sources.</p>
<p><b>Photography</b></p>	<p><b>Introduction to DSLR photography</b>  Pupils will learn how to operate the camera in manual mode. They will learn how to use ICT to support their studies. Pupils will learn how to format and present work. They will complete photoshoots demonstrating technical control of the camera including aperture and shutter speed. They will learn how to set up and use the photography studio including studio lighting set ups. They will take a series of portraits inspired by Judith Joy Ross.</p> <p>Pupils will complete a series of photoshoots based on the formal elements linked to contemporary professional photographers and Mangum picture agency photographers.</p>
<p><b>Graphic communication</b></p>	<p>Pupils will learn and develop their CAD skills when using photoshop, illustrator and 2D design. Pupils will also use other media to showcase their design work including pencil, paint, card and paper. Pupils will recognise how to structure and complete work for each section of their forthcoming portfolios. Pupils will practise parts of each assessment criteria this term through small project work. Pupils will build a repertoire of work.</p> <p><b>Autumn 1</b> – Designing skills and A01 practise. A01 requires pupils to develop sophisticated ideas with reference to contextual sources, with evidence of perceptive investigation. Pupils will demonstrate an excellent critical understanding of sources. Pupils will critically analyse work from a range of designers and will show designer influence throughout their portfolios.</p> <p><b>Autumn 2</b> – Continue with small project work whilst focussing on A02, A03 &amp; AO4 criteria. A02 requires pupils to refine their work using perceptive selection of media, materials, techniques and processes. They will show excellent evidence of the exploration of work as it develops. A03 requires pupils to record their ideas, observations and insights showing sophisticated links to intention. Here pupils also need to showcase their ability to reflect on work and progress. A04 requires pupils to give a very personal response with sophisticated realisation of intentions. Pupils need to be sophisticated in presenting their work making sure to apply the formal elements and promote visual language.</p>
<p><b>Food</b></p>	<p><b>Autumn 1</b></p>

Students will learn to apply knowledge, skills and understanding associated with fruit and vegetables.

- Theory of nutrition to focus on sources, functions, and symptoms of excess & deficiency of water-soluble micronutrients B & C, and micronutrients iron, phosphorus, iodine, sodium
- Denaturation and preservation of water-soluble micronutrients caused by cooking methods / storage techniques.
- Sources, functions, consumption requirements, and symptoms of excess & deficiency of water (fluids).
- Functional and chemical properties to cover the prevention of enzymic browning through use of lemon juice.
- Antioxidant vitamin C, and its role in the prevention of disease and preservation of food quality (oxidation).
- Food safety will consider theory related to the control of enzymic action, and mould and yeast growth e.g. oxidation.
- Discussion of the preservation of food quality via antioxidants (Vitamin C).
- Factors affecting food choice - should consider vegetarianism / veganism and related religious diets (e.g. vegetarianism in Hinduism/Buddhism/Sikhism, and the avoidance of coffee/tea/alcohol in many)
- Food processing - should consider loss of vitamins through processing and subsequent fortification.
- Primary/Secondary processing of plant crops. Secondary processing of fruit into jam.
- The positive and negative aspects of Genetically Modified (GM) foods.
- Seasonality
- Food labelling

NEA focus – developing practical prep and cooking skills. All dishes cooked to contain either fruits or vegetables. Introduction to vegetable cuts, knife safety, health and safety, multitasking and refining medium level skills and cooking methods. The list of dishes that students will be cooking is below:

- Vegetable Soup
- Pineapple Upside-down Cake
- Lemon Curd
- Vegetable Gratin
- Mini Roast Dinner
- Japanese dish - Pancake (okonomiyaki) /Ramen
- NEA 1 - Enzymic browning experiment

## **Autumn 2**

Students will learn to apply knowledge, skills and understanding associated with cereals and cereal products.

- Theory of nutrition to focus on the sources, functions, symptoms of excess & deficiency of macronutrient carbohydrate, and fibre (resistant starch). Differences between complex and simple carbohydrates and their effects on health. Amount of carbohydrate required at varying life-stages.
- Functional and chemical properties to cover gluten formation, gelatinisation, viscosity testing (gels), dextrinization, caramelisation, raising agents (chemical, mechanical, biological, steam)
- Food safety will consider theory related to the use of microorganisms in food production i.e., yeast.

	<ul style="list-style-type: none"> <li>• Factors affecting food choice should consider coeliac disease/gluten sensitivity – symptoms, diabetes treatment, alternatives</li> <li>• Food processing and production should consider fortification of cereal products, and the primary/secondary processing of cereal crops.</li> <li>• Environment issues related to packaging. Carbon footprint. Food security.</li> </ul> <p>NEA focus – developing practical prep and cooking skills. All dishes cooked to contain a cereal grain or cereal product. The list of dishes that students will be cooking is below:</p> <ul style="list-style-type: none"> <li>• Choux pastry</li> <li>• Risotto</li> <li>• Treacle tart</li> <li>• Fresh pasta tagliatelle</li> <li>• Gingerbread house</li> <li>• NEA 1 – viscosity experiment</li> </ul>
<p style="text-align: center;"><b>Engineering</b></p>	<p><b>Autumn 1</b> Students will study:</p> <ul style="list-style-type: none"> <li>• Health and safety</li> <li>• Introduction to freehand sketching and Engineering drawings.</li> <li>• Introduction to shading and light direction when drawing.</li> <li>• Introduction to technical Engineering techniques – isometric, orthographic, drawing lines.</li> <li>• Students introduced to the concept of investigating materials.</li> <li>• Student to select appropriate Engineering equipment.</li> <li>• Develop skills of workshop routine and safety.</li> <li>• Shapes and strength of shapes.</li> <li>• Introduction to the Synoptic Project - Bridge investigation. Students to analyse the brief and research a range of bridge types.</li> </ul> <p><b>Autumn 2</b> Students will study:</p> <ul style="list-style-type: none"> <li>• Hand drawings of bridge designs</li> <li>• Construction plans</li> <li>• Practice of modelling techniques</li> <li>• Introduction to simple CAD techniques</li> <li>• Modelling of bridge design using 5mm wood quadrant.</li> <li>• Types of engineering disciplines</li> <li>• Scale drawing</li> <li>• Evaluation and testing techniques in Engineering</li> </ul>

<p><b>PE Core</b></p>	<p>Students are learning to tackle complex and demanding physical activities. They will get involved in a range of activities that develops personal fitness and promotes an active, healthy lifestyle. Students will be taught to use and develop a variety of tactics and strategies to overcome opponents in team and individual games. They will further develop their technique and improve their performance in other competitive sports. They will take part in a range of environments which present intellectual and physical challenges, which encourage them to work in a team, building on trust and developing skills to solve problems, either individually or as a group. They will evaluate their performances compared to previous ones and demonstrate improvement across a range of physical activities to achieve their personal best.</p>
<p><b>BTEC Sport</b></p>	<p>During this term students will study Component 1 – Preparing participants to take part in sport and physical activity.</p> <p>Students develop their knowledge and understand of the following areas:</p> <ul style="list-style-type: none"> <li>• Exploring types and provision of sport</li> <li>• Examining equipment and technology required.</li> <li>• Preparing participants to take part in physical activity</li> </ul>
<p><b>Business Studies</b></p>	<p>Students will follow the OCR Business Studies GCSE course.</p> <p><b>Unit 1-</b> Business activity- students will learn about how business set up and basics of how they operate.</p> <ul style="list-style-type: none"> <li>• The role of business and enterprise</li> <li>• Business planning</li> <li>• Business ownership</li> <li>• Aims and objectives</li> <li>• Stake holders</li> <li>• Business growth</li> </ul>
<p><b>Finance</b></p>	<p><b>Term 1 Component 1 – Finance and the Individual</b></p> <p>Pupils will study:</p> <ol style="list-style-type: none"> <li>1. Budgeting to achieve financial goals</li> <li>2. Fundamentals of Banking</li> <li>3. Lending providers and products</li> <li>4. Savings products</li> <li>5. Investments</li> <li>6. Insurance</li> <li>7. The personal life cycle &amp; inheritance</li> <li>8. Taxation, national insurance and HMRC</li> </ol>
<p><b>Health and Social Care</b></p>	<p>Learners will explore different aspects of growth and development across the life stages using the physical, intellectual, emotional and social (PIES) classification.</p>

	<p>Students are learning the key aspects of 4 areas of development and the differentiation of the 6 life stages:</p> <ul style="list-style-type: none"> <li>• Infancy (0-2), Childhood (3-8) Adolescence (9-18)</li> <li>• Early adulthood (19-45)</li> <li>• Middle Adulthood (46-65)</li> <li>• Later adulthood (65+)</li> </ul> <p>Learners will explore the different factors that can affect an individual's growth and development. Different factors will impact on different aspects of growth and development. For example:</p> <ol style="list-style-type: none"> <li>1. Discussing how poor housing conditions could affect a person's health and wellbeing</li> <li>2. Understanding how Dementia can affect a person's independence and ability to maintain relationships with others</li> </ol>
<p><b>Child Development</b></p>	<p><b>Component 1: Children's Growth and Development</b> Learners will investigate the factors affecting growth and development of children from birth to five years old.</p> <p><b>A1 Understand how and why growth is measured</b> Learners will know how growth is measured, and the individuals involved in measuring growth. They will understand the importance of measuring growth.</p> <ul style="list-style-type: none"> <li>• Definition of growth – changes to physical size, the skeleton, muscles and the brain, children's height, weight and head circumference.</li> <li>• How growth is measured and recorded</li> <li>• Roles and responsibilities of individuals involved in measuring and monitoring growth</li> <li>• Importance of measuring growth</li> </ul> <p><b>A2 The principles of development</b> Learners will understand the principles of development.</p> <ul style="list-style-type: none"> <li>• The skills and knowledge gained by a child over time.</li> <li>• Children acquire skills at varying rates in different areas of development.</li> <li>• Milestones, sometimes called developmental norms, indicate the expected stage of development the child may meet at a particular age. • Identifying current milestones and stage of development, identifying milestones and how they support progression to the next stage of development.</li> <li>• Holistic development – how different areas of development impact on each other and affect overall development.</li> </ul> <p><b>A3 Development across ages of birth to 18 months</b> Learners will explore different stages of development that children aged from birth to 18 months would typically meet across the five areas.</p> <p><b>A4 Development across ages of 18 months to three years</b> Learners will explore different stages of development that children aged from 18 months to three years would typically meet across the five areas.</p>

	<p><b>A5 Development across ages of three to five years</b> Learners will explore different stages of development that children aged three to five years would typically meet across the five areas.</p>
<b>Drama</b>	<p>Students are introduced to their Drama GCSE and understanding drama through the introduction of a text</p> <p>Students will focus on:</p> <ul style="list-style-type: none"> <li>• Theatre roles and responsibilities, staging configurations and the areas of the stage</li> <li>• Devising skills and practitioners</li> <li>• Characteristics of performance texts and dramatic works</li> <li>• Social, cultural and historical contexts</li> <li>• How meaning is interpreted and communicated</li> <li>• Drama terminology and vocabulary</li> </ul>
<b>Film</b>	<p><b><u>Half Term 1: Introduction to Film</u></b> Students will begin by focusing on learning subject terminology and the key elements of film form, which are:</p> <ul style="list-style-type: none"> <li>• <b>Cinematography</b> – camera shots, camera movements, lighting, framing</li> <li>• <b>Mise-en-scene</b> – setting, props, costume, make-up</li> <li>• <b>Editing</b> – types of edit (cuts), continuity, pace, visual effect</li> <li>• <b>Sound</b> – diegetic, non-diegetic, ambient, bridges and sound effects</li> </ul> <p>Students will develop the ability to explain how these elements of film form are used to create meaning by exploring a range of film extracts.</p> <p><b><u>Half Term 2: Component 1 – Key Developments in US Film</u></b> Students will begin their first set text – <i>Browning's 1930's Dracula</i>. Students will apply the subject terminology they've learnt to analyse the film's form by analysing the cinematography, mise-en-scene, editing and sound. Students will also study the film's context, which includes:</p> <ul style="list-style-type: none"> <li>• <b>Social and Cultural context</b> (how aspects of society, beliefs and values, are reflected in the film)</li> <li>• <b>Historical context</b> (when the film was made and its relevance)</li> <li>• <b>Technological context</b> (technologies that impacted the film's production)</li> <li>• <b>Institutional context</b> (film funding and the main stages of production and distribution)</li> </ul>
<b>Music</b>	<p>Students are beginning to work on Component 1 for Btec Music.</p> <p>We spend the autumn term exploring Musical Styles. There are two Tasks to cover in this term:</p> <ul style="list-style-type: none"> <li>• Demonstrate an understanding of styles of music</li> <li>• Apply understanding of the use of techniques to create music.</li> </ul>



**Ethics**

We spend the autumn term exploring classical philosophy. Philosophy is the study of knowledge. It simple means love of knowledge and during this unit we introduce the pupils to what studying philosophy and ethics or religious education at A level or university could be like. We cover:

- The existence of God – considering our Calander pivots around the teaching of a middle eastern Jew two thousand years ago, the existence of God is a question we all must consider at some point in our lives.
- We consider why it is that the majority of human beings on the planet believe in a higher power and consider whether we think their reasons are plausible.
- We ask the question - 'Who decides what is right and wrong and where do they come from?' We evaluate utilitarianism which suggests that the thing that brings the most happiness is always the morally correct option. But is it that easy?