

## Harris Professional Skills – 2 Year Courses

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## Harris Federation Cambridge Technicals at KS5: Intent, implementation and impact.

### Context

Following the recent DFE vocational qualification reform, Harris Federation considered all available Vocational related options and chose the Applied General Qualifications in: Applied Science; Business; Digital Media; Health and Social Care through Cambridge. Harris Professional Skills Sixth Form offers the 1080 GLH Extended Diplomas in 4 subject areas. The key principles for this offer are:

- **High Quality:** The Extended Diploma courses are high-quality courses designed by widely recognised examining bodies and has undergone a rigorous accreditation process. Some Level 3 students (Year 12) study this alongside re-taking their English and Maths GCSEs, one or both.
- **Rigorous and Varied Assessment:** the courses offer a range of assessment methods, including 35% examination. They allow for specialisation whereby students can study Diplomas or Extended Diplomas which expand students learning opportunities within the same subject. In Business these can be through routes such as Marketing, Human Resources and Finance, in Applied Science, the environmental route is followed. They involve meaningful employer engagement and work experience opportunities, making them vocational whilst at the same time retaining their academic status. The Health and Social Care course involves a range of assessment methods, including video presentations about health promotions.
- **Specialisation the courses** allowing students to explore a variety of career paths including: Nursing, Midwifery, Adult and Child Care Workers. They involve meaningful employer engagement and work experience opportunities, making them vocational whilst at the same time retaining their academic status.
- **Allow Progression and Promote Retention:** The qualifications are available within the Federation at Level 1 and 2, promoting a transition between KS4 to 5 and within our Sixth Forms. They serve to close the gap in attainment of contextual groups between KS4 and 5 i.e. by prior attainment, ethnicity, disadvantage and special educational needs. There was no AGQ gap in attainment of Disadvantaged students compared to their peers in AGQs in 2018. We only offer courses that are recognised and valued by UCAS and universities. Our Cambridge AGQs provide learners with routes into further education, training, employment and apprenticeships within similar subject fields.
- Students' assessments are **moderated internally** by other Ctech teachers for quality, consistency and standardisation. This means that high standards are upheld whilst we can also compare performance and progress to guide improved outcomes. The OCR examination board moderation procedures for the Cambridge Technical qualifications are followed.

## **What is the intention of the KS5 vocational Business Curriculum?**

### **Intent**

### **Principles**

1. To develop student's appreciation and interest in the field of Business
2. To develop confidence, independence and resilience
3. To develop written and verbal analysis and evaluation skills, which are transferrable across a variety of different environments
4. To provide opportunities for progression to further education, training and employment

### Intended Content:

Based on the 4 principles listed above we have developed an assessment plan based on skills development, progression and maximising achievement.

Cambridge Technical in Business	Year 1	Year 2
Extended Diploma in Business 1080 GLH  <b>Marketing Route</b>	<ul style="list-style-type: none"> <li>• Teach and assess a range of mandatory and optional units to take advantage of synoptic learning.</li> <li>• Assess in a range of formats including by written report, presentation and working as part of a group.</li> <li>• Keep tasks at a regular controlled pace.</li> <li>• Teach and assess 60% of the course allowing time for revisions and re-takes in Y13.</li> <li>• Internally assess examined coursework content at three points in the year with the purpose of standardisation across the federation.</li> <li>• Sit external examinations in the Autumn and Summer Term, to allow for full preparation access the year.</li> <li>• Use achievement across the year to set Most Likely and Most Recent Assessment Grades. These will inform intervention and support careers and destinations planning.</li> <li>• Moderation in December, March and July to allow for preparation time and resubmission in later windows.</li> </ul>	<ul style="list-style-type: none"> <li>• Teach and assess the remainder of mandatory and optional units.</li> <li>• Allow for more in depth individual and group work.</li> <li>• Teach and assess the remaining 40% of the course and build individual re-sit and resubmission plans alongside this.</li> <li>• Internally assess progress using portfolio based for and January examination sittings. Use regular Most Likely and Most Recent Assessment Grades to inform intervention and support careers and destinations planning.</li> <li>• Sit external examinations in January and June, to allow re-sit opportunities.</li> <li>• Boosters and Masterclasses in Easter and May half terms for units requiring extra support.</li> <li>• Moderation season runs from December to June to allow for resubmission and ensure all students are fully compete by the end of the year.</li> </ul>

## Extended Diploma in Business Curriculum Plan

Cambridge Technical Extended Diploma in Business	Year 1	Year 2
<i>Marketing Route</i>	<ul style="list-style-type: none"> <li>• Unit 1 The Business Environment (120GLH) Examination</li> <li>• Unit 2 Working in Business (30GLH) Examination</li> <li>• Unit 3 Business Decisions (30GLH) Examination</li> <li>• Unit 4 Customers and Communication (30GLH) Internally Assessed</li> <li>• Unit 5 Marketing and Market Research (30GLH) Internally Assessed</li> <li>• Unit 6 Marketing Strategy (60GLH) Internally Assessed</li> <li>• Unit 10 Economics for Business (90GLH) Examination</li> <li>• Unit 11 Accounting Concepts (30GLH) Internally Assessed</li> <li>• Unit 19 International Business (30GLH) Internally Assessed</li> </ul>	<ul style="list-style-type: none"> <li>• Unit 7 Marketing Campaign (60GLH) Internally Assessed</li> <li>• Unit 9 Human Resources (90GLH) Examination</li> <li>• Unit 15 Change Management (30GLH) Examination</li> <li>• Unit 16 Principles of Project Management (30GLH) Internally Assessed</li> <li>• Unit 17 Responsible Business Practice (60GLH) Internally Assessed</li> <li>• Unit 22 Delivering a Business Project (120GLH) Internally Assessed</li> <li>• <b>Unit Revisions and Examination Re-takes</b></li> </ul>

## **Health and Social Care**

### **Intent**

### **Principles**

- 1) To develop students' appreciation and interest in the field of Health and Social Care
- 2) To develop confidence, independence and resilience
- 3) To develop written and verbal analysis and evaluation skills, which are transferrable across a variety of different environments
- 4) To provide opportunities for progression to further education, training and employment

### **Intended Content:**

Based on the 4 principles listed above we have developed an assessment plan based on skills development, progression and maximising achievement. This plan reflects the interest of the students and the local health and social care needs in our community.

Cambridge Technical in Health and Social Care	Year 1	Year 2
Extended Diploma  1080 GLH 17 Units	<p><b>Unit 1</b> Building positive relationships in health and social care (60 GLH Internally assessed)</p> <p><b>Unit 2</b> Equality, diversity and rights in health and social care (60 GLH Examination)</p> <p><b>Unit 3</b> Health, safety and security in health and social care (60 GLH Examination)</p> <p><b>Unit 5</b> Infection control (60 GLH Internally assessed)</p> <p><b>Unit 6</b> Personalization and the person-centred approach to care (60 GLH Examination)</p> <p><b>Unit 7</b> Safeguarding Examination (60 GLH Internally assessed)</p> <p><b>Unit 17</b> Supporting people with mental health conditions (60 GLH Internally assessed)</p> <p><b>Unit 21</b> Looked after children and young people (60 GLH Internally assessed)</p> <p><b>Unit 22</b> Psychology for Health (60 GLH Internally assessed)</p> <p>9 units = 540 GLH</p>	<p><b>Unit 4</b> Anatomy and physiology (90 GLH Examination)</p> <p><b>Unit 12</b> Promote positive behaviour (60 GLH Internally assessed)</p> <p><b>Unit 13</b> Sexual health and reproduction (60 GLH Internally assessed)</p> <p><b>Unit 14</b> Long term Health conditions (60 GLH Internally assessed)</p> <p><b>Unit 15</b> Promoting Health and wellbeing (60GLH Internally assessed)</p> <p><b>Unit 23</b> Sociology for Health and social care (60 GLH Internally assessed)</p> <p><b>Unit 24</b> Public Health (30 GLH Internally assessed)</p> <p><b>Unit 25</b> Research methods in health, social care and childcare (120 GLH Examination)</p> <p><b><i>Complete all coursework</i></b></p> <p>8 units 540 GLH</p> <p><b>Total 1080</b></p>

## **What is the intention of the KS5 vocational Applied Science Curriculum?**

### **Intent**

### **Principles**

1. To provide students with opportunity to build on and utilise the skills that were develop in KS4 science to deepen their interest/appreciation for Science.
2. To develop written and verbal analysis and evaluation skills, which are transferrable across a variety of different environments
3. To provide students with opportunity experience the application of science in authentic settings.
4. To provide opportunities for progression to further education, training and employment

### **Intended Content:**

Based on the 4 principles listed above we have developed an assessment plan based on skills development, progression and maximising achievement. This plan is subject to change to meet local needs.



### Applied Science Course Options

Cambridge Technicals in Applied Science	Year 1	Year 2
Extended Diploma 1080 GLH 15 units	<ul style="list-style-type: none"> <li>• Unit 1 Science Fundamentals (90 GLH) Examination</li> <li>• Unit 2 Laboratory Techniques (90 GLH) Examination</li> <li>• Unit 3 Scientific Analysis and Reporting (120 GLH) Examination</li> <li>• Unit 4 Human Physiology (60 GLH) Internally assessed</li> <li>• Unit 5 Genetics (60 GLH) Internally assessed</li> <li>• Unit 6 Control of Hazards in the Laboratory (60 GLH) Internally assessed</li> <li>• Unit 7 Human Nutrition (60 GLH) Internally assessed</li> <li>• Unit 8 Cell Biology (60 GLH) Internally assessed</li> </ul> <p style="text-align: center;">600 GLH</p>	<ul style="list-style-type: none"> <li>• Unit 6 Control of Hazards in the Laboratory (60 GLH) Internally assessed</li> <li>• Unit 13 Environmental Surveying (60 GLH) Internally assessed</li> <li>• Unit 14 Environmental Management (60 GLH) Internally assessed</li> <li>• Unit 22 Global Scientific Information (60 GLH) Internally assessed</li> <li>• Unit 23 Scientific Research Techniques (120 GLH) Examination</li> <li>• Unit 16: Waste management (60 GLH) Internally assessed</li> <li>• Unit 17: Food Technology (60 GLH) Internally assessed</li> <li>• Unit 18: Microbiology (60 GLH) Internally assessed</li> </ul> <p style="text-align: center;">540 GLH</p>

## **What is the intention of the KS5 vocational Digital Media Curriculum?**

### **Intent**

### **Principles**

The Cambridge Technicals in Digital Media help students develop the knowledge and practical skills required in the digital media industry. Students gain hands-on experience of the production process, developing their ideas from planning, through editing and post-production, to final presentation.

### **Key Principles of CTEC Digital Media**

- The courses have been designed with universities, employers and industry specialists to make sure that our students will gain the right combination of knowledge, understanding and skills required for the 21st century.
- The course offers a wide range of centre assessed units with practical and wider project-based assessment opportunities, as well as examined units on Media products and audiences, Pre-production and planning, Social media and globalisation, and Research for product development.
- Our students will develop professional and social skills through interaction with performers, clients and peers; as well as theoretical and technical knowledge and understanding to underpin these skills. This will allow their creativity and flair to be harnessed in the design and production of media products used within the industry. Students will develop conceptual ideas and visualise these all the way through the production cycle; from planning and pre-production right through to editing, post-production and presentation of products. They'll also learn how to analyse target audience requirements, research market demand and bring a media concept alive working in line with legal and regulatory requirements, in a safe and effective way, protecting themselves and those they're working with from injury or harm.
- Students will also gain an understanding of how different businesses and organisations in the media sector work. When it comes to progression or employment, our students will learn about the variety of opportunities available to them, and the roles and responsibilities of media businesses and organisations within the sector. This will make sure our students develop clear ideas about where they might like to take their career and what progression routes they'd like to follow.

## Digital Media

### **Intent**

#### **What is the intention of the CTEC Digital Media Curriculum?**

The modern media are incredibly powerful and play a central role in contemporary society and culture. They shape our perceptions of the world and have the capacity to influence our thoughts and actions. The media have a real relevance and importance in our lives today, providing us with ways to communicate, with forms of cultural expression and the ability to participate in key aspects of society. The economic importance of the media is unquestionable: the media industries employ large numbers of people in the UK and worldwide – they operate as commercial industries on a global scale. The global nature of the contemporary media, coupled with on-going technological developments and more opportunities to interact with the media, suggest that their centrality to contemporary life can only increase in the future.

Media students are aware of the world and the huge influence the media has on modern life. They are encouraged to engage in a range of debates and are inquisitive about the extent of that influence. Media students want to understand how meaning is created in a variety of traditional and more contemporary texts and how those meanings are interpreted at a global, national and individual level. Media students are also encouraged to be creative; they will be encouraged to develop ideas of their own that they will develop and bring to life by producing original media productions.

Media Studies is the study of the key media industry sectors (broadcasting, music, film marketing, gaming, print publishing and on-line media) and the textual study of their outputs such as: newspapers, magazines, TV drama, radio, advertising and a range of web-based digital media products. All media students will be encouraged to become socially aware on a global scale; they will study texts from other cultures and see how ignorance and prejudice can be challenged.

Extended Diploma Digital Media	Year 1	Year 2
<b>05875</b>  <b>1080 GLH</b>	<ul style="list-style-type: none"> <li>• Unit 1 Media products and Audience (90 GLH) Examination</li> <li>• Unit 2 – Pre-production and Planning (90 GLH) Examination</li> <li>• Unit 3 – Create a Media Product (60 GLH) Internally assessed</li> <li>• Unit 5 - TV and short film production (60 GLH) Internally assessed</li> <li>• Unit 10 – Create a digital animation (60 GLH) Internally assessed</li> <li>• Unit 20 – Advertising Media (60 GLH) Internally assessed</li> <li>• Unit 21 –Plan and deliver a Pitch for a Media Product (30 GLH) Internally assessed</li> <li>• Unit 16- The creation of Sound in Media (60 GLH), Internally assessed</li> </ul> <p>510</p>	<ul style="list-style-type: none"> <li>• Unit 4 – Interactive media Product (60 GLH) Internally assessed</li> <li>• Unit 6 – Social media and globalisation (60 GLH) Examination</li> <li>• Unit 15 – Create audio-visual promos (60 GLH) – Internally assessed</li> <li>• Unit 8 Photography for digital media products (60 GLH) Internally assessed</li> <li>• Unit 9 - Comic and graphics novel story telling (60 GLH) Internally assessed</li> <li>• Unit 18 – Cinematography (60 GLH) Internally assessed</li> <li>• Unit 25 – Research for product development (120 GLH) Examination</li> <li>• Unit 26 – Application of converging technologies (90 GLH) Internally assessed</li> </ul> <p>570</p> <p>Total 1080 GLH</p>

## Judging the Impact of Business, Health & Social Care, Applied Science and Digital Media

We use the following measures to judge the impact

- Achievement –internal assessments, external examinations and moderation outcomes. This is tracked in terms of achievement and progress.
- Recruitment and retention – the number of students who we enrol, remain on the course for its duration and are assessed at the end. This is tracked through our Bromcom MIS.
- Destinations – Students choosing to continue onto business related degrees and apprenticeships. This is tracked through UCAS applications.
- Reporting and feedback – the regularity and quality of the feedback students receive and how it is acted upon.

### Assessment Plan

Cambridge Technicals	Autumn	Spring	Summer
Year 12	<ul style="list-style-type: none"> <li>• Induction assessments</li> <li>• Internal Moderation</li> <li>• Full reports to parents</li> <li>• Y12 Parent/Student Consultation Meeting</li> </ul>	<ul style="list-style-type: none"> <li>• Internal Moderation and external moderation</li> <li>• External examinations</li> </ul>	<ul style="list-style-type: none"> <li>• Internal and External Moderation *</li> <li>• Full reports to parents</li> <li>• Y12 Parent/Student Consultation Meeting</li> </ul>
Year 13	<ul style="list-style-type: none"> <li>• Internal and External Moderation</li> <li>• Full reports to parents</li> <li>• Y13 Parent/Student Consultation Meeting</li> </ul>	<ul style="list-style-type: none"> <li>• Internal and External Moderation</li> <li>• External examinations</li> </ul>	<ul style="list-style-type: none"> <li>• Internal and External Moderation*</li> </ul>

The assessment of coursework units takes place throughout the year and will inform intervention strategies, parental contact and further support. All coursework will be internally standardised before external moderation.

(\*External moderation may not be available in the Summer 2021, refer to OCR guidance)

All students, regardless of target grades, are expected to produce coursework to a Distinction standard. Units entered at Pass or Merit standard should be re-submitted at the next external moderation point.

Support sessions will be available to students, virtual access though MS Teams is available.

## Implementation of CTECH Extended Diploma in Art and Design.

### How will the course be implemented?

The scheme of work is also designed with progression in mind. Foundation knowledge is developed in Y12, which allows students to build, specialise and improve outcomes at the end of Y12 and throughout Y13.

### Extended Diploma in Art and Design Curriculum Plan

Cambridge Technical Extended Diploma in Art and Design	Year 1	Year 2
Mixed content to allow for a variety of pathway choice in Year 2	<ul style="list-style-type: none"> <li>• <b>Unit 01</b> Artists and Designers in Context</li> <li>• <b>Unit 53</b> Upcycling Fashion products</li> <li>• <b>Unit 23</b> Exploring artists as Photographers</li> <li>• <b>Unit 22</b> Portrait Photography</li> <li>• <b>Unit 25</b> Landscape Photography</li> <li>• <b>Unit 60</b> Fine art drawing.</li> <li>• <b>Unit 32</b> Art and Design Illustration</li> <li>• <b>Unit 42</b> Exploring Ceramics</li> <li>• <b>Unit 12</b> Planning and Researching for a specialist Art and Design brief</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Unit 18</b> Presenting, displaying, promoting and selling artwork</li> <li>• <b>Unit 13</b> Realising an outcome for a specialist art and Design brief</li> <li>• <b>Unit 62</b> Understanding Sculpture</li> <li>• <b>Unit 66</b> Fine art Textiles</li> <li>• <b>Unit 65</b> Fine art Printmaking</li> <li>• <b>Unit 61</b> fine Art painting</li> <li>• <b>Unit 11</b> How artists and Designers use 3D materials and processes</li> <li>• <b>Unit 10</b> How artists and Designers use 2D materials and processes</li> <li>• <b>Unit 63</b> contemporary Fine art</li> </ul>

**Implementation aims:**

- To scaffold mandatory and optional units in a way that fosters development of skills
- To provide clear, valuable and timely assessment opportunities
- To allow for flexibility of delivery and assessment
- To keep to a set timetable delivery which supports training, sharing of resources, support, assessment and moderation.
- To discourage summative assessment in the first two terms of Year 12. This should be based on learning and skills development to maximise achievement from summer Y12 forwards.

Cambridge Technicals in Art and Design	Year 1	Year 2
Extended Diploma in Art 1080 GLH QN 600/6150/9	<ul style="list-style-type: none"> <li>• Teach and assess a range of optional units and one mandatory. The mandatory unit <b>The Art and Design in context</b> is taught as the first unit to support all students understanding of Art History.</li> <li>• Assess in a range of formats including by critiques, presentations of practical work and written work.</li> <li>• Keep tasks at a regular controlled pace with demonstrations and safety guidance informing understanding. Visualiser used to support all demonstrations.</li> <li>• Internally assess examined coursework content at three points in the year with the purpose of standardisation across the federation.</li> <li>• Use achievement across the year to set Most Likely and Most Recent Assessment Grades. These will inform intervention and support careers and destinations planning.</li> <li>• Moderation in October, April and May to allow for preparation time and resubmission in later windows.</li> </ul>	<ul style="list-style-type: none"> <li>• Teach students how to present and organise an art and design <b>portfolio</b> in preparation for progression onto Art and Design degree courses, or for an Art and Design related job.</li> <li>• Allow for more independent and student led direction.</li> <li>• Teach and assess the remaining 50% of the course and build individual re-work and resubmission plans alongside this.</li> <li>• Internally assess progress using portfolio. Use regular Most Likely and Most Recent Assessment Grades to inform intervention and support careers and destinations planning.</li> <li>• Boosters and Masterclasses in Easter and May half terms for units requiring extra support.</li> <li>• Moderation season runs from October to June to allow for resubmission and ensure all students are fully compete by the end of the year.</li> </ul>



## City and Guilds Construction Courses

**City and Guilds Diploma Level 1 in Bricklaying/Carpentry/Plumbing**

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<p>To develop knowledge and understanding in:</p> <ul style="list-style-type: none"> <li>health and safety regulations, roles and responsibilities;</li> <li>accident and emergency reporting procedures and documentation;</li> <li>identification of hazards in the workplace;</li> <li>health and welfare in the workplace;</li> <li>how to handle materials and equipment safely;</li> <li>access equipment and working at height;</li> <li>how to work with electrical equipment in the workplace;</li> <li>how to use personal protective equipment. Knowledge in the causes of fire and emergency procedures.</li> </ul>	<p>To develop knowledge and understanding in:</p> <ul style="list-style-type: none"> <li>how to select types of building materials tools equipment plant and machinery used on site;</li> <li>environmental considerations in relation to construction;</li> <li>the construction of foundations;</li> <li>the construction of internal and external walls;</li> <li>the construction of floors.</li> <li>Know about construction of roofs;</li> <li>the types of 1st and 2nd fixing operations in Carpentry and plumbing operations;</li> <li>establishing dimensions and complex setting out</li> </ul>	<p>To be able to:</p> <ul style="list-style-type: none"> <li>plan and select resources for practical tasks;</li> <li>demonstrate the ability to select resources;</li> <li>erect solid walling to specifications;</li> <li>erect isolated and attached piers to specifications;</li> <li>fix hatch lining there uses functions locations in a house how to attach them to roof trusses or bespoke roofing;</li> <li>establish flues soil stacks and how to prevent water egress.</li> </ul>	<p>To d be able to:</p> <ul style="list-style-type: none"> <li>interpret information to establish setting out requirements;</li> <li>demonstrate ability in setting out requirements;</li> <li>prepare construction sites for setting out activities;</li> <li>select resources for setting out works;</li> <li>select resources for setting out work;</li> <li>set out regular shaped masonry structures at ground level;</li> <li>apply detail to establishing roof trusses stud work door linings.</li> <li>apply detail in types of pipework establishing sinks baths and pipe runs.</li> </ul>	<p>To be able to:</p> <ul style="list-style-type: none"> <li>plan and select resources for practical tasks;</li> <li>demonstrate ability to select resources;</li> <li>erect cavity walling;</li> <li>form openings in cavity walling.</li> <li>Understand the schedules for lintels windows, radiators and all site door and module units.</li> <li>install rainwater systems, a type of drainage separate and combined.</li> </ul>	<p>Resits of end of unit tests 101,102 mandatory units. 119,120,121 108,109, 110. 009,010,128,129, 131.</p> <p>Resits of incomplete or non-achieved practical elements.</p> <p>All students fully completed will be set Harris academy accredited unit assessments to further advance their learning and develop skills ready for level 2 programme of study.</p> <p>Bricklaying/ Carpentry/Plumbing Resits of end of unit tests 101,102 mandatory units. 119,120,121 108,109, 110. 009,010,128,129, 131. Resits of incomplete or non-achieved practical elements.</p> <p>Bricklaying/ Carpentry/Plumbing Resits of end of unit tests 101,102 mandatory units. 119,120,121 108,109, 110. 009,010,128,129, 131. Resits of incomplete or non-achieved practical elements.</p>

**City and Guilds Diploma Level 1 in Bricklaying/Carpentry/Plumbing**

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<p>4-week simulated training modules to allow students to choose the best optional route for them to pursue.</p> <p>Simulated training performance in all selected pathways.</p>	<p>Bricklaying workshop activities. Simulated training in the construction of half brick walling. Practice modules for unit 119 assessment Isolated piers 1+half brick 2 brick piers.</p> <p>Assignment 119 assessment to be undertaken by learners.</p> <p>AUTUMN 2. Carpentry workshop activities.</p> <p>Simulated training in the marking out cutting and fixing operations used in carpentry operations 1st and 2nd fixing Practice modules for 2nd fixing operations making scribing establishing skirtings and architraves. Assignment 108 Fixing architraves and Skirtings</p>	<p>Bricklaying workshop activities. Simulated training in the construction of cavity walling. Practice modules for unit 120 assessment Blockwork quoins half brick walling using profiles.</p> <p>Assignment 120 assessment to be undertaken by learners. Carpentry workshop activities.</p> <p>Simulated training in the marking out cutting and fixing operations used in carpentry operations 1st and 2nd fixing Practice modules for 2nd fixing operations drawing rods scribing constructing and fixing hatch linings Assignment 109 Constructing and fixing hatch linings.</p>	<p>SPRING 2 Bricklaying workshop activities Simulated training in the construction of one brick walling. Practice models for accredited unit Flemish &amp; English bond quoins</p> <p>Accredited unit 1 brick solid brick pier construction to be undertaken by learners.</p> <p>Carpentry workshop activities. Simulated training in the marking out cutting and fixing operations used in carpentry operations 1st and 2nd fixing Practice modules for 2nd fix Accredited units 4,5, 6. To be undertaken by students.</p>	<p>SUMMER 1 Bricklaying workshop activities.</p> <p>Simulated training in the construction of solid brick walling. Practice modules for unit 121 assessment 1 brick walling English bond.</p> <p>Assignment 121. assessment to be undertaken by learners. SUMMER 1. Carpentry workshop activities. Simulated training in the marking out cutting and fixing operations used in carpentry operations 1st and 2nd fixing Practice modules for 2nd fixing operations locks and latches.</p> <p>Assignment 110 fitting locks and latches.</p>	

	<p>Plumbing workshop activities.</p> <p>Simulated training in the marking out cutting and fixing operations used in removing and refitting of water filled radiators setting and establishing pipe runs and securing to walling types.</p> <p>Assignment 009 removing and refitting water filled radiators.</p>	<p>Plumbing workshop activities.</p> <p>Simulated training in the marking out cutting and fixing operations used in working with non-manipulative fitting and ancillary appliances.</p> <p>Assignment 010 working with non-manipulative fittings</p>	<p>Plumbing workshop activities.</p> <p>Simulated training in the marking out cutting and fixing operations used in bending and jointing of copper pipes.</p> <p>Assignment 128 bending and jointing copper pipe.</p> <p>Assignment 129 Connecting pipes and fittings to appliances</p>	<p>Plumbing workshop activities.</p> <p>Simulated training in the marking out cutting and fixing operations used in connecting pipes and fittings to appliances.</p> <p>Installation of rainwater pipes training</p> <p>Assignment 131 Installation of Rainwater goods.</p>	
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Overview of purpose: to provide the learners on the course with the necessary skills and knowledge to construct modern housing, industrial buildings and civil engineering projects to industrial standards and be valued members of the construction team.

#### Implementation:

- There is no separation between the individual units being learnt by the students each key element of the units builds knowledge confidence and life skills that will be embedded for life.
- There is no separation between the individual modules being learnt by our students each key element is an integral part of all building work.
- We as a department will aim for the highest attainable grade possible for the student to achieve (Pass, Merit or Distinction) build in support through 1 to 1 tutorial extra training on tasks if highlighted
- Students will participate in set assessments each term which will test their performance levels and allow assessors on the programme to stretch learner performance or allow students extra support through 1 to 1 guidance.
- Each lesson will follow a basic structure consolidation of practical elements essential to the lessons observation of Health and Safety being observed by the learners.
- During classroom & practical based activities we will promote enough challenge to allow outstanding progress.
- In the students' workbooks and portfolios there will be clear evidence of progression throughout the whole course photographic /assessor feedback and marking of candidates work.

**Impact:** Students will do formal writing of underpinning knowledge in line with the city and guilds guidelines. Student will carry out practical assessments in setting out and construction of masonry structures. Measured performance levels take place through summative assessments and feedback relayed on the outcome of the assessment.

Assessment: Knowledge of the unit will be tested through both online and written tests carried out at the end of each unit to show candidates underpinning knowledge retained.

Although the tests and summative marking are how we as a department intend to measure performance and make judgements on their work we will promote extra reading in their career path to enable continued learning and allow them to keep up to date with any changes that need to be carried out in their performance of their duties.

**How else will we measure impact?** Photographic evidence and assessor performance feedback will be measured and sampled in line with the internal verification sampling plan.

## **Year 13 Bricklaying & Carpentry**

### **Intent:**

The year 13 curriculum must:

1. Challenge students' ideas on concepts on construction, enthuse the learners with the will to succeed in their chosen vocational skill in the construction industry.
2. Foster an engagement and enjoyment in the understanding in reading working drawings and specifications /the writing of tenders for contracts and showing good communication skills not only with clients but other trades as well.
3. Candidates will develop portable skills for their working life in calculations of areas, costing of materials and labour for contracts.
4. Students will cultivate essential skills they can use on further educational courses such as L3 Diploma, HNC in the built environment or supervisory level 3 qualifications.
  - Aim to enable all students to complete the level 2 Diploma and move on to the level 3 Diploma.
  - Students objective achieve level 2 retain the skills and learning that has taken place and be able to replicate the skills in the workplace.

### **Overview of purpose:**

- To provide the learners on the course with the necessary skills and knowledge to construct modern housing, industrial buildings and civil engineering projects to industrial standards and be valued members of the construction team. We will endeavour to provide the students with the confidence and motor functional skills, drive and abilities to succeed in an ever-changing work environment.
- The student will be able to adapt to change have good communication skills.
- Be able to work in line with their duties under the HASAWA.
- Have a good understanding of PUWER, Manual Handling Regulations and Roles /Responsibilities of workers on the site.

City and Guilds Diploma in Bricklaying					
Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
201/601.	202/602	204	205	206	
<p>The study of and production of underpinning knowledge in: pass /merit distinction in Evolve online exam</p> <ul style="list-style-type: none"> <li>health and safety regulations, roles and responsibilities;</li> <li>the accident and emergency reporting procedures and documentation;</li> <li>how to identify hazards in the workplace;</li> <li>the health and welfare in the workplace;</li> <li>how to handle materials and equipment safely;</li> <li>access equipment and working at height;</li> </ul>	<p>To develop the knowledge and understanding to be able to: Gain pass /merit distinction in Evolve online exam</p> <ul style="list-style-type: none"> <li>select types of building information;</li> <li>explain environmental considerations in relation to construction;</li> <li>explain and demonstrate the construction of foundations;</li> <li>Explain the construction of</li> </ul>	<p>To develop the knowledge and understanding to be able to: Gain pass /merit distinction in centre set unit test.</p> <p>Achieve task 1.</p> <ul style="list-style-type: none"> <li>plan and select resources for practical tasks;</li> <li>demonstrate ability to select resources;</li> <li>erect solid walling to specifications;</li> <li>erect isolated and attached piers to specifications;</li> <li>demonstrate the correct construction of isolated piers.</li> </ul>	<p>To develop the knowledge and understanding to be able to: Gain pass /merit distinction in centre set unit test.</p> <p>Achieve task 1.</p> <ul style="list-style-type: none"> <li>interpret information to establish setting out requirements;</li> <li>demonstrate ability in setting out requirements;</li> <li>prepare construction sites for setting out activities;</li> <li>select resources for setting out works;</li> </ul>	<p>To develop the knowledge and understanding to be able to: Gain pass /merit distinction in centre set unit test.</p> <p>Achieve task 1.</p> <ul style="list-style-type: none"> <li>to plan and select resources for practical tasks;</li> <li>demonstrate ability to select resources;</li> <li>erect cavity walling;</li> <li>form openings in cavity walling;</li> </ul>	<p>Resits of end of unit tests 201,202,204,205,206</p> <p>Resits of incomplete or non-achieved practical elements.</p>

<ul style="list-style-type: none"> <li>• working with electrical equipment in the workplace;</li> <li>• how to use personal protective equipment;</li> <li>• the causes of fire and emergency procedures.</li> </ul>	<p>internal and external walls;</p> <ul style="list-style-type: none"> <li>• explain and demonstrate the construction of floors;</li> <li>• Explain the construction of roofs.</li> <li>• demonstrate effective communication in the workplace.</li> </ul>		<ul style="list-style-type: none"> <li>• select resources for setting out work;</li> <li>• set out regular shaped masonry structures at ground level;</li> <li>• set out regular shaped masonry structures.</li> </ul>		
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City and Guilds Level 2 Diploma in Site Carpentry					
Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<p>Key objectives. 201/601.</p> <p>To develop the knowledge and understanding to be able to: Gain pass /merit distinction in Evolve online exam</p> <ul style="list-style-type: none"> <li>explain the health and safety regulations, roles and responsibilities.</li> <li>Explain the accident and emergency reporting procedures and documentation.</li> <li>identify hazards in the workplace.</li> <li>Explain health and welfare in the workplace.</li> <li>handle materials and equipment safely.</li> <li>Explain the use of access equipment and working at height.</li> <li>work with electrical equipment in the workplace.</li> <li>use personal protective equipment.</li> <li>explain the causes of fire and emergency procedures.</li> </ul>	<p>Key objectives. 202/602</p> <p>To develop the knowledge and understanding to be able to: Gain pass /merit distinction in Evolve online exam</p> <ul style="list-style-type: none"> <li>to select types of building information;</li> <li>explain environmental considerations in relation to construction;</li> <li>explain the construction of foundations;</li> <li>Understand the construct internal and external walls;</li> <li>explain and demonstrate the construction of floors;</li> <li>explain and demonstrate the construction of roofs.</li> <li>to communicate in the workplace.</li> <li>Resit any assessments not achieved.</li> </ul>	<p>Key objectives. 207</p> <p>To develop the knowledge and understanding to be able to: Gain pass /merit distinction in centre set unit test.</p> <ul style="list-style-type: none"> <li>plan and select resources for practical tasks.in roofing and flooring construction;</li> <li>select resources. For roofing structures including eaves verges soffits;</li> <li>show ability in setting out and establishing flooring;</li> <li>erect different styles of roofing structures Barn end hipped and traditional roofing structures;</li> <li>establish flooring and roof structures;</li> <li>demonstrate the correct</li> <li>Procedures and achieve the assessments in roofing structures and flooring.</li> </ul>	<p>Key objectives. 208/209</p> <p>To develop the knowledge and understanding to be able to: Gain pass /merit distinction in centre set unit test.</p> <ul style="list-style-type: none"> <li>to interpret information to establish frames and door linings;</li> <li>demonstrate ability in setting out and establishing frames and door linings accurately;</li> <li>prepare area and establish stud walling accurately;</li> <li>to select resources and establish stud walling;</li> <li>fix and establish flights of stairs;</li> <li>demonstrate ability in setting out establishing and fixing flights of stairs.</li> <li>hang an internal door;</li> <li>demonstrate through assessment ability in door hanging.</li> </ul>	<p>Key objectives. 210</p> <p>To develop the knowledge and understanding to be able to: Gain pass /merit distinction in centre set unit test.</p> <ul style="list-style-type: none"> <li>to plan and select resources for practical tasks in repairing windows and doors;</li> <li>demonstrate the ability to select resources and repairing of windows doors and mouldings;</li> <li>establish guttering systems, to structures and replace defective working parts;</li> <li>establish new sash cord systems to Sash Georgian style windows;</li> <li>demonstrate through assessment the removal and replacement of new sash cord system to Sash windows.</li> </ul>	<p>Key objectives. 211</p> <p>To develop the knowledge and understanding to be able to: Gain pass /merit distinction in centre set unit test.</p> <ul style="list-style-type: none"> <li>show through underpinning knowledge and providing descriptors of legislation faults and how to operate skill saws accurately in line with PUWER documents;</li> <li>provide details on how to change circular saw blades and demonstrate through assessment changing a blade and testing of machinery;</li> <li>describe timber products and processes of manufacture and curing;</li> <li>show through assessment the cut materials accurately in line with specification and achieve assessment in product evidence.</li> </ul>

City and Guilds Level 2 Diploma in Site Carpentry					
AUT1	AUT2	AUT1	AUT2	SUM1	SUM2
			<p>Key objectives. 208/209 Continuation</p> <p>Unit 209 Continuation</p> <p>Students will be able to:</p> <ul style="list-style-type: none"> <li>demonstrate knowledge in establishing and demonstration ability in the ability of fixing mouldings installing casements cladding;</li> <li>demonstrate knowledge in establishing and demonstration ability in the ability of kitchen units fixing worktops forming mitred joints accurately.</li> <li>Resit any assessments not achieved.</li> </ul>	<p>Key objectives. 210</p> <p>Resit any assessments not achieved.</p>	<p>Key objectives. Resits of end of unit underpinning evidence 201,202,204,205,206</p> <p>Resits of incomplete or non-achieved practical elements.</p> <p>Key objectives. Resits of end of unit tests 201,202,207,208,209,210,211.</p> <p>Resits of incomplete or non-achieved practical elements.201,202,207,208,209,210,211.</p>

City and Guilds Level 2 Diploma in Plumbing					
AUT1	AUT2	SPRING1	SPRING2	SUM1	SUM2
<p>Key objectives.</p> <p><b>201/501. Health and Safety in the building services</b></p> <p>This combination unit provides learners with the essential health and safety knowledge and skills to demonstrate best practice in a building services sector. The unit provides learners with an awareness of relevant legislation and should underpin all building services engineering activities they take part in.</p> <p>This is an underpinning unit for all other units studied in plumbing. It will also provide the core health and safety for working safely on site or to achieve there CSCS card.</p> <ul style="list-style-type: none"> <li>• Know the health and safety regulations</li> <li>• Know how to handle hazardous situations</li> <li>• Know electrical safety requirements when working in the building services industry.</li> <li>• Know the safety requirements for working with gases and heat producing equipment.</li> </ul>	<p>Key objectives.</p> <p><b>210 Understand how to communicate with others within the building services sector.</b></p> <p>This knowledge unit provides learning in the development and continued maintenance of effective working relationships in the building services industry associated with working in dwellings, industrial and commercial premises.</p> <p>Learners will understand the structure of the construction industry, they will understand the important associations in their trade. They will also understand the importance of differing communication methods.</p> <ul style="list-style-type: none"> <li>• Know the members of the construction team and their role within BSI.</li> <li>• Know how to apply information sources in the BSI</li> <li>• Know how to communicate with others in the building services industry</li> </ul>	<p>Key objectives.</p> <p><b>203 Scientific principles for domestic, industrial and commercial plumbing.</b></p> <p>This unit provides the learner with the knowledge and understanding of basic scientific principles applied to domestic industrial and commercial plumbing systems. Learners will be introduced to pressure, force, flow, temperature, electricity, gas and heat transfer.</p> <p>This unit provides the scientific knowledge to explain why plumbers use certain materials. It will also provide explain the properties of water, which will help explain to customers hard water and lime scale. It will also provide the underpinning knowledge for later units to be studied.</p> <ul style="list-style-type: none"> <li>• Understand the properties of common plumbing materials.</li> <li>• Understand the scientific properties and principles of water.</li> </ul>	<p>Key objectives.</p> <p><b>205/505 Cold water systems</b></p> <p>This unit provides learners with knowledge and practical experience in fitting types of domestic cold-water systems and components. Learners will explore direct and indirect cold water systems, pipe work, maintenance requirements, fault recognition and back flow prevention. This unit also provides learners with the knowledge and experience of carrying out commissioning tasks.</p> <p>This is the underpinning knowledge for plumber they need to know how the water enters the property and how it is transported stored and maintained. This unit uses the knowledge from previous units to explain the working principles of cold-water systems. This unit must be taught before hot water and central heating systems.</p> <ul style="list-style-type: none"> <li>• Know the requirements for water distribution</li> </ul>	<p>Key objectives.</p> <p><b>208/508 Central Heating systems</b></p> <p>This unit provides the learner with core knowledge and understanding of central heating principles and processes applied to plumbing. Learners will be introduced to heating system types, tube materials, pipework systems, component parts, heat emitters, radiator valves, mechanical central heating controls, bespoke tools. Also, to be able to demonstrate competence in installing a single panel radiator with fitting.</p> <ul style="list-style-type: none"> <li>• Understand the types of domestic central heating systems in domestic dwellings.</li> <li>• Know the different materials used to install domestic central heating pipework.</li> <li>• Understand heat emitters and their components.</li> <li>• Understand mechanical central heating controls</li> </ul>	<p>Key objectives.</p> <p><b>Unit 209/509 Drainage system.</b></p> <p>This unit provides the learner with the knowledge, understanding and skills of common sanitation and drainage systems. Learners will be introduced to soil systems, common sanitary installations and associated installation practices. Learners will also carry out v=basic installation tasks commonly used in plumbing.</p> <ul style="list-style-type: none"> <li>• Understand the requirements of drainage systems</li> <li>• Know the types of traps associated requirements</li> <li>• Know the procedures for soundness testing and commissioning above ground systems</li> <li>• Be able to install and test above ground systems</li> <li>• Know the requirements of rainwater systems and associated guttering</li> <li>• Be able to install rainwater systems.</li> </ul>

<ul style="list-style-type: none"> <li>• Know the safety requirements for using access equipment's in the building services industry.</li> <li>• Know the safety requirements for working safely in excavations and confined spaces.</li> </ul>	<p><b>204/504 Common Plumbing processes.</b> This unit provides the learner with the knowledge and skills of the common plumbing processes. Learners will be introduced to measuring, bending and jointing tubes and the tools required. Learners will also carry out basic preparation tasks commonly used in plumbing.</p> <p>This unit supports the practical skills learnt in the practical workshop. It is the fundamental practical knowledge to carry out their plumbing tasks and the core skills for a plumbing career.</p> <ul style="list-style-type: none"> <li>• Understand the procedure for measuring and bending plumbing tubes</li> <li>• Be able to measure and bend plumbing tubes</li> <li>• Understand how to joint common plumbing material.</li> <li>• Know common plumbing hand and power tools.</li> <li>• Know the fixing s and component used in CPP</li> </ul>	<ul style="list-style-type: none"> <li>• Understand the pressure, force and flow of water.</li> <li>• Understand the principles of heat in relation to plumbing systems.</li> <li>• Know the principles of combustion and heat producing gases</li> <li>• Know the principles of electricity</li> </ul> <p><b>Unit 202/502 Electrical principles and processes for building services engineering.</b></p> <p>This unit provides learners with the knowledge and understanding to work safely with types of electrical supplies, earthing systems and components used in domestic building services. Learners will use tools and equipment to demonstrate safe isolation, Use of temporary continuity bond, simple wiring tasks and identify basic fault. The unit is intended to be taken by learners who are gaining experience in a building environment.</p> <p>Plumbers work with electrical equipment and must know how to safely isolate this equipment</p>	<p>to the domestic dwellings</p> <ul style="list-style-type: none"> <li>• Understand the requirements of the cold water supplies into domestic dwellings.</li> <li>• Know the components used in domestic cold water</li> <li>• Understand the requirements for pipework installations in domestic cold-water systems</li> <li>• Understand the key requirements of testing and decommissioning of cold water systems.</li> <li>• Understand the basic maintenance requirements of domestic cold water systems</li> <li>• Be able to install cold water systems</li> </ul> <p><b>Unit 206/506 Domestic Hot Water systems.</b> This unit provides learners with knowledge and practical experience in fitting types of domestic hot water systems and components. Learners will maintain installation and commissioning requirements. This unit also provides learners with the knowledge and experience</p>	<ul style="list-style-type: none"> <li>• Be able to carry out radiator installation tasks.</li> </ul>	
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	<ul style="list-style-type: none"> <li>• Know the common preparation techniques.</li> </ul>	<p>before use. They must understand basic electrical safety in the workplace Understand electrical supplies used in domestic plumbing system.</p> <ul style="list-style-type: none"> <li>• Know the components used in electrical installations</li> <li>• Understand the procedures for safely isolating supplies.</li> <li>• Be able to safely isolate electrical supplies</li> <li>• Understand how to identify safety critical faults on electrical components and systems</li> <li>• Understand how to undertake basic electrical tasks</li> <li>• Be able to undertake basic electrical tasks.</li> </ul>	<p>of carrying out installation tasks. This unit should not be studied before cold water systems or science.</p> <ul style="list-style-type: none"> <li>• Know the types of domestic hot water systems.</li> <li>• Know the components used in domestic hot water systems.</li> <li>• Understand the installation requirements of domestic hot water plumbing systems</li> <li>• Know the design features of showers</li> <li>• Understand the basic maintenance requirements of hot water systems</li> <li>• Understand the key requirements of testing and decommissioning of domestic hot water systems</li> </ul>		
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### **Implementation:**

- There is no separation between the individual units being learnt by the students each key element of the units builds knowledge confidence and life skills that will be embedded for life.
- There is no separation between the individual modules being learnt by our students each key element is an integral part of all building work.
- Students will participate in set assessments each term which will test their performance levels and allow assessors on the programme to stretch learner performance or allow students extra support through 1 to 1 guidance.
- Each lesson will follow a basic structure consolidation of practical elements essential to the lessons observation of Health and Safety being observed by the learners.
- During classroom & practical based activities we will promote enough challenge to allow outstanding progress.
- In the students' workbooks and portfolios there will be clear evidence of progression throughout the whole course photographic /assessor feedback and marking of candidates work.

### **Impact:**

Students will do formal writing of underpinning knowledge in line with the City and Guilds guidelines.

Student will carry out practical assessments in setting out and construction of masonry structures. Measured performance levels will be summatively assessed and feedback relayed on the outcome of the assessment.

Assessment: Knowledge of the unit will be tested through both online and written tests carried out at the end of each unit to show candidates underpinning knowledge retained.

Although the tests and summative marking are how we as a department intend to measure performance and make judgements on their work we will promote extra reading in their career path to enable continued learning and allow them to keep up to date with any changes that need to be carried out in their performance of their duties.

**How else will we measure impact?**

Photographic evidence and assessor performance feedback will be measured and sampled in line with the internal verification sampling plan.

## Level 3 Core Mathematics

### The purpose of our Core Mathematics curriculum

We offer Core maths as an option for our students to support them with the mathematical content of their other level 3 subjects and to prepare them for the mathematics encountered in their further study and future careers. Our Core Maths students have a GCSE pass already and follow Core Maths to maintain and develop their interest and skills in the subject. The course of study builds on GCSE mathematics and is designed to help students with their broader skills, beyond maths, including communication, interpretation, analysis and reporting. Consequently, students develop their language skills when tackling and understanding the problems we set them and reasoning and explaining possible answers to these scenarios.

We encourage the presentation of topics to be current and relevant to make the course purposeful for the students and help them to become fully responsible and well-informed citizens. We revisit several GCSE topics to build deeper knowledge and understanding. We also study some A level topics this facilitates the increased confidence and engagement in their mathematical studies.

During Year 13 we continue to focus on using and applying mathematics and statistics to address authentic problems and real-life scenarios, drawn from study, work and life, with a strong emphasis on problem-solving. We have chosen to study the flexible option Critical Path and Risk Analysis as the pathway for our students as this also supports our students' choices for further study.

It is our intent that students studying Core Maths will increase their competency in applying mathematical principles in a variety of contexts including further study, training or employment. Increasing participation in mathematics at post-16 as a method of supporting students to gain numerical and analytical skills proving them with increased opportunities to gain more rewarding and meaningful employment in the future and to contribute to the economic productivity and diverse workforce.



The Core Maths Curriculum has been developed to:

- deepen competence in the selection and use of methods and techniques;
- develop confidence in representing and analysing authentic situations and in applying mathematics to address related questions;
- build skills in mathematical thinking, reasoning and communication.

Our course is designed to give students opportunities to:

1. study a curriculum that is integrated with other areas of their study, work or interest leading to the application of mathematics in these areas;
2. develop mathematical modelling, evaluating and reasoning skills
3. solve problems some of which will not be well defined and may not have a unique solution;
4. solve substantial and real-life problems encountered by adults;
5. use ICT as an exploratory tool for developing mathematical understanding and when solving problems;
6. develop skills in the communication, selection, use and interpretation of mathematics;
7. enjoy mathematics and develop confidence in using mathematics.

**Core Maths 2-year Programme**

Year 12	AUT1	AUT2	SPRING1	SPRING2	SUM1	SUM2
Topics	1. Estimation 2. Percentages 3. Numerical Calculations 4. Types of data 5. Collecting Data	1. Representing data Numerically including with spreadsheets 2. Fermi estimation 3. Representing data numerically	1. Representing data diagrammatically 2. Interest Rates 3. Equation of a line	1. Collecting and sampling data 2. Solutions to financial problems	1. Perimeter, circumference and area 2. Similarity and Pythagoras theorem 3. Analyse Critically	1. Analyse Critically 2. Surface Area and similarity 3. REVISION 4. Assessment 5. Project: Data or Finance
Extended Writing task	Students will complete exam questions where they analyse data, make assumptions and reason out modelling questions.					

Year 13	AUT1	AUT2	SPRING1	SPRING2	SUM1	SUM2
Topics	1. Representing data diagrammatically 2. Representing data numerically 3. Graphical representation	1. Graphical Representation 2. Critical path and risk analysis 3. Analyse Critically 4. Critical path and risk analysis	1. Repayment and credit 2. Taxation: value added tax (VAT) 3. Limits of accuracy	1. Critical path and risk analysis 2. Taxation: Income tax and National Insurance	1. Analyse Critically 2. REVISION AND EXAMINATIONS	1. EXAMINATIONS
Extended Writing task	Students will complete exam questions where they analyse critically.					

### Implementation:

To ensure that students are successful we strive to:

- learn through through collaboration, discussion and problem solving - vital for future studies and work;
- ensure teachers embrace collaboration between each-other and with students, and to teaching through problem-solving;
- The use of real-life examples/scenarios should be included in each lesson to aid in appreciation of the concept being taught, in context;
- students' books should reflect evidence of progress over time through presentation of work;
- in lessons you should see key word highlighted and explained to aid conceptual understanding and dispel any possible misconceptions (especially for those with other meanings outside of the subject);
- use group work and discussion wherever possible;
- developing fluency and confidence in applying mathematical skills;
- use our known techniques and methods in areas such as finance, economics, sociology, psychology, chemistry, geography, computing, and business and management.

### Assessment:

- Students will complete four assessments based on topics covered. These assessments will be used to plan any intervention necessary to aid in dispelling any misconceptions highlighted in the assessment.
- Students will be given individualized analysis of questions completed to highlight strengths and weaknesses.
- Students will complete at least one piece of homework per week mostly on the topic just taught in addition to other topics completed.

	<b>AUTUMN</b>	<b>SPRING</b>	<b>SUMMER</b>
<b>Year 12 Assessments</b>	Exam questions on Paper 1 topics taught	Exam questions on Paper 1 topics taught	A complete paper 1
<b>Year 13 Assessments</b>	Exam questions on Paper 1 topics and paper 2 topics that were covered	Exam questions on Paper 1 topics and paper 2 topics that were covered	Formal examinations

Students will also complete projects on chosen topics to further assess learning. Although assessments are the primary means of measuring impact, live marking and the use of open-ended questions during discussions allow us to see if individual students are progressing well. Students work is also deep marked fortnightly to highlight progress in:

1. Meeting objectives set;
2. Presentation of work;
3. Areas of improvement needed to achieve target.

**Impact:**

Students will:

- make progress throughout the course in all aspects including their abilities to use maths in other areas of their study, using modelling, evaluating and reasoning skills;
- be more confident and equipped to solve problems including real-life problems;
- will know when modern technology is useful and how to incorporate its use in communication and representation of data or solutions;
- show an enjoyment of mathematics and the confidence and ability to use mathematics in new situations.

## Mathematics

Intent:

*The purpose of our mathematics curriculum at HPS6F.*

The HPS6F Curriculum has been developed to promote and encourage learners to appreciate that

- Mathematics is a **universal language**, it allows us to communicate with others and to understand, affect and develop the world around us.
- Mathematics is **the key** that opens the door to other aspects of life and **underpins other areas** of the curriculum.
- Mathematics is a **subject of beauty** and this can be seen in many things from the plants and people we see around us to the machines and technology we design and use in our daily lives.
- Mathematics encourages reasoning and **problem solving** and logical thinking which helps to build well-rounded and aspirational **citizens** of the future.

## Curriculum Design

The HPS6F Curriculum was designed to give Year 12/13 GCSE students one further opportunity to:

- Become fluent in the fundamentals of mathematics through varied and frequent practice with increasingly complex problems, both abstract and in-context;
- Develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately;
- Reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language;
- Solve problems by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions;
- Become more confident in Maths and feel more supported in Maths than they were at 11-16 school;
- Enjoy the challenge of improving their Maths skills with *their* fresh new HPS6F Maths teacher.

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## Rationale

In the Autumn Term, we welcome students to the Maths department and explain our methodology and routines with students and reinforce the value of an improved GCSE re-sit grade in Maths. We see this as a fresh start in a subject that they have found a challenge to learn at their previous school. We will work together as a team to overcome any misconceptions or weaknesses found with maths in the past.

We share with students why it is important to do regular maths, consolidate and practice through homework and attempt exam questions to see how reasoning and problem solving are approached. As a team of staff, we try to follow the same routines of reminder starter, fresh instruction, worked example together, applied learning time, challenge question and set homework, so that students improve and gain confidence.

Within the first term we know it is crucial to tackle basic number skills; addition, subtraction, multiplication and division, fractions, decimals and percentage, ratio, estimating, negative numbers and conversions. Students who feel more confident with these skills will be more effective with the more complex maths that follows in other areas of Maths later in the course.

The students typically arrive with grades 1-3 and we aim for them to achieve a target of the new grade 4/5 or improve upon their previous grade. One key area which helps our students to achieve more than previously is their understanding of maths specific vocabulary, so literacy points are planned, discussed and illustrated visually. For example, in Surface Area we show students a supermarket tin before explaining the formula of finding the surface area of a cylinder. This is so that students can see where the formula comes from and make a visual connection to the work.

Algebra and Geometry are introduced in the second half-term and help to broaden students Maths skills including using the hands-on use of standard maths equipment like compasses, protractors and rulers to construct. The HPS6F learning procedures are designed by staff to suit each individual student, within a collaborative learning environment. Staff are encouraging and value contributions to discussions and other opportunities to articulate understanding.

In the Spring Term the emphasis is predominantly upon understanding visual topics about graphs, shape and statistical representation topics including probability, building upon the number skills refreshed in the Autumn term.

The short Summer term for Post-16 completes the course with some more challenging algebra but is mostly space for staff to design the final weeks to revisit topics pertinent to their groups and remind their classes of the skills gained throughout the year and connect topics to reflect the forthcoming exam, refine their exam technique to build confidence for an improved external exam result. We focus upon the exam vocabulary, breaking questions down, reducing careless errors, showing systematic methods and writing explanation comments and unambiguous worded answers.

	AUT		SPRING		SUM	
	AUT1	AUT2	SPRING1	SPRING2	SUM1	SUM2
Topics Resit GCSE	Prime factorisation <b>Fractions, decimals &amp; percentages</b> Ratio <b>Estimation with rounding</b> Negative numbers <b>Conversions &amp; exchange rates</b>	<b>Nth term</b> Angle rules <b>Polygons, 2d &amp; 3d shapes, Symmetry</b> Simplifying Expressions Solving Equations <b>Pythagoras' theorem</b> Perimeter & scale <b>Area &amp; volume</b>	Averages, charts & graphs <b>Trigonometry &amp; Bearings</b> Area & circumference of a circle <b>Inequalities &amp; indices</b> Similar & congruent shapes <b>Rotation, Reflection, Enlargement, Translation</b> Surface area <b>Area of compound shapes</b>	Distance/time graphs & Scatter graphs <b>Probability &amp; relative frequency</b> Proportion <b>Volume of a prism</b> Venn diagrams <b>Frequency tables</b> Standard Form <b>Loci &amp; constructions</b>	<b>Systematic Listing</b> Histograms <b>Growth and Decay</b> Simple and Compound Interest <b>Expanding Brackets and Factorising</b> Simultaneous Equations  REVISION	Assessments
Functional Skills	Fractions, decimals & percentages Ratio: estimation with rounding Conversions & exchange rates negative numbers Nth term prime factorisation	Polygons 2d & 3d shapes symmetry circles Pythagoras' theorem Area & volume Algebra Perimeter & scale Averages – mode charts & graphs	Review mean, mode and median of set quantities and grouped data. Comparing data sets using the averages Two-way tables Probability Probabilities as fractions, decimals and percentages	Drawing 3-D shapes including plans and elevations Interpret plans, elevations and nets of simple 3-D shapes Calculate values of angles and/or coordinates with 2-D and 3-D shapes Review compound interest, percentage increase, decrease and discounts	Review integers Review Estimation Review Using estimation to check calculations Review substitution Review fractions Review decimals Review ratio and proportion Order of operations	Assessments

			Drawing and Interpreting scatter diagrams and recognise positive and negative correlation	Tax and simple budgeting Review conversions between metric and imperial units Using compound measures including speed, density and rates of pay		
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## Overview of purpose:

Students who have already achieved a grade 3 in GCSE (or lower) in year 11/12 are currently required to re-sit GCSE in post-16 education. For Grade 3 students this Curriculum is intended as a revision programme. However, most Post 16 Maths students have achieved less than a grade 3 so there is a large degree of teaching which is about correcting deep misconceptions embedded at school and totally new concept formation. Therefore, the course is intense and delivered with real purpose by committed staff, who have chosen to devote themselves to older learners who wish to learn Maths more effectively. Hence, the focus within this Curriculum is on the key topics that will help students achieve a better grade, particularly grade 4/5, to open doors in other subject areas. The course builds upon the body of knowledge that students start off with but, due to the short time available, does not attempt to cover the whole specification content at either tier.

Post 16 students studying the re-sit course at HPS6F are normally grateful and positive that a committed teacher is determined to engage them and take a fresh approach to each aspect of the Maths curriculum.

## Approach

This Curriculum is based upon a clear systematic approach for each session. The emphasis within each one-hour lesson is on rapid improvement through engaging and supportive teaching.

Staff plan each lesson to deliver a mixture of activities which allow students opportunities to develop their:

- **Knowledge** of Maths concepts and skills
- **Applying** the skills
- **Problem solving** using a range of skills
- **Reasoning** to argue, compare, justify and explain
- **Connections** to other topics and other subjects at HPS6F

## Implementation:

Staff will typically begin the lesson with a “do-now” starter to help students with their recollection of key facts and techniques.

Staff tend to use Corbett Maths ‘5 a day’ questions to start each lesson to give students the retrieval practice they need to improve rapidly on a range of topics.

We find that a routine starter activity, not only builds their all-round Maths skills, it also sets the tone of the lesson to be purposeful and informative. The repeated nature of the short tasks in the starter help students sharpen and broaden their Maths capabilities, which helps them be ready to study harder topics and successfully attempt exam questions.

After the starters, the main part of the lesson is a mixture of instruction, modelling, discussion, questioning and practice. The plenary is a chance for a low-stakes quiz and a brief recap of key points.

During the “Do now” we would typically expect students to improve with the instant recall of:

Times tables

First 12 prime numbers

First 15 square numbers

Four types of angles and angle rules

Name all the polygons from triangles to decagons

Describe the four types of triangle

Six types of quadrilateral – what are they & what do they look like?

Name and sketch the 9 parts of a circle

Find and compare the mean, median, mode.

What does SOHCAHTOA mean?

Know the key Maths GCSE formulae.

After the “Do now”, the main section of our lessons follows a carefully laid out programme addressing the 50 topics we feel are crucial for learners and which we feel can be learned successfully during a one-year re-sit course, ready to be successful with these frequently occurring topics during the GCSE maths exams. Each topic is laid out in the SOW timings to give a good spread of topics visited. Once a topic is studied and misconceptions revealed and rectified, the topic needs to be repeated. Therefore, topics are re-visited through starters, connections to other topics, homework and revision. The end-goal is the exam, so we use questioning, quizzes, passports and topic tests to gauge progress and show that the key topics being mastered and those which need further support. Students have access to weekly intervention and attend half-termly holiday Maths.

Impact:

**Assessment:**

	AUTUMN	SPRING	SUMMER
<b>Resit Assessments (GCSE)</b>	<i>Students will complete Topic assessments</i>	Students will complete P1 June 2019 GCSE foundation paper in January Students will complete 2 complete past papers in March with support	<b>Assessments</b> Numeracy skills relevant to further study
<b>Resit Assessments (Functional Skills)</b>	<i>Students will complete Topic assessments</i>	Students will complete June Functional skills past paper in January and March	<b>Assessments</b> Numeracy skills relevant to further study

- Year 12/13 students who have already gained a 3 at GCSE are in unique position, as they have 2 opportunities to gain a grade 4 or better. These students are given the opportunity to re-sit in November and if needed, again in May/June.
- Students who have gained grade 2 or lower are given the opportunity to take advantage of more time, before re-sitting, to gain more practise and skills needed to gain a passing grade.
- Students will complete one piece of homework per week mostly on the topic just taught in addition to other topics completed.
- Students improve their Maths skills by also attempting Maths online each week using Mathswatch.

**How we measure impact?**

Although assessments are the primary means of measuring impact, live-marking and the use of open-ended questions to individual students are vital to ascertaining if both the core and hidden curriculum have made positive impact. Deep marking is completed fortnightly to highlight progress in each topic, understanding key ideas and remedying systematic errors. Students gain confidence and enjoy studying Maths again at HPS6F, so combined with everyone's effort and expertise in 6<sup>th</sup> Form learning, we look forward with confidence to their exam results this summer.

## English

### GCSE and Level 1/2 Functional Skills

#### Intent:

#### The key stage four curriculum must:

- 1) Challenge students' ideas and perspectives, build knowledge and critical thinking skills in order to build students' confidence and ability.
- 2) Cultivate an engagement with reading, writing and spoken Standard English with an aim to enjoy English beyond the GCSE specification.
- 3) Develop students' literacy skills with a focus on vocabulary, to bridge gaps in students' ability to write and read fluently.
- 4) Expose students to a range of diverse texts that explore different cultures, while addressing gaps in cultural capital that are often present in our students.
- 5) Develop and cultivate central skills for success in both the GCSE and Level 1 examinations.

Year Group	AUT1	AUT2	SPRING1	SPRING2	SUM1	SUM2
<b>KS4: L2 RE – SIT</b>  <b>AQA GCSE ENGLISH LANGUAGE (2 lessons a week)</b>	<b>Induction Unit (2 weeks)</b>  <b>L2 Pathway: Writing Unit GCSE AQA P1: Fiction.</b> Focus on VSPAG and vocabulary.  OR <b>L1 Pathway: Functional Skills Writing/Reading/Oracy</b> Focus on VSPAG and vocabulary.	<b>GCSE : AQA: Reading Skills: FICTION</b>  Focus on active reading and comprehension. Reading and extracts taken from The Hate You Give and writer’s from around the world.	<b>GCSE: AQA Writing Unit: Non- Fiction + Speaking and Listening</b> Focus on structure for writing: text type, audience and purpose as well as oracy skills for speaking endorsement.	<b>AQA Language Paper 2: Reading Comparing Non- Fiction</b>  Focus on evaluation and comparison skills.	<b>Revision of both Language Papers</b>  Focus on timings and structure of the exam.	<b>N/A</b>

Underpinning all English study is the understanding of ideas, methods and contexts. The KS4 curriculum leads to the progression of knowledge and skills that students will need to be successful at GCSE Level. There is also recognition that many of our students have low confidence in their ability to undertake examinations so we also seek to build this, as well as building core English skills, through undertaking the Functional Skills Level One examinations for those students who join us with very low literacy or are EAL. Although we appreciate our students’ context, we do not compromise on challenge and offer an ambitious curriculum that ensures students leave the school with increased confidence and ability in the subject. There is a recognition in our curriculum that many of our students do not habitually read and many have not engaged with reading in previous study. Therefore, even students only doing GCSE Language with us will read a variety of texts to promote reading and the development of vocabulary. It is also recognised that students who are re-sitting GCSE in year 13 have very low literacy levels and therefore a literacy intervention programme will be used as a tool to support reading and writing taught in lessons. Overall, English study at HPS6F will develop knowledge and literacy empowering students to use Standard English as a tool for communication in reading, writing and speaking in order to build the skills needed for their future career and study.

### Implementation:

- All lessons will develop the knowledge and skills required for the students' Functional skills and GCSE exams.
- Each lesson should follow a basic structure: consolidation, building of knowledge, application, reflection.
- In each lesson there should be sufficient support and challenge to ensure all students make good and outstanding progress.
- In student's books there should be clear evidence of progress over time demonstrated through student work, marking and feedback.
- Vocabulary will be taught explicitly. Words should be relevant to the learning and the teaching of vocabulary should be embedded in the LTPS/STPS.
- Writing skills will be developed using the 'Writing Revolution' theory to underpin practice.
- Reading skills will be developed using strategies from: Kylene Beers 'When Kids Can't Read: What Teachers Can Do' (2003).

### Impact:

#### Assessment:

- Each half term students will do an extended writing task that will be marked and they will be given formative feedback. This will not be a formal mock, but will link to the learning of that half term.
- Each term students will do a formal assessment that are based on the texts/Paper they have studied. These assessments will always use the same wording as the GCSE exam paper to ensure students become familiar with the style of question they will be asked. This data will be input into BROMCOM and measured against baseline testing.

	AUTUMN	SPRING	SUMMER
<b>Year 12 and 13 RE-SIT Language</b>	<b>AQA Language Paper 1:</b> Reading and Writing exam.  November Re-SITS for all students who arrive at the school with a L3.	<b>FULL SET OF MOCK EXAMS</b>	<b>GCSE EXAMS</b>
<b>Level 1 Pathway</b>  If students pass in AUT 1 they will join the Level 2 GCSE pathway. Any students who do not pass will have another opportunity to take the exam in Spring 1.	<b>Functional Skills Exam and Speaking Endorsement</b>	<b>Functional Skills Exam and Speaking Endorsement</b>	<b>Functional Skills Exam and Speaking Endorsement</b>  <b>GCSE EXAMS</b>

Although assessments are the primary way we can measure impact as a department we would also like to aim for all students sitting exams to have read beyond the specification. We aim to inspire further reading through teaching Language alongside novels and through extract teaching. This can be in the form of short stories, poems, novels or plays. Each term there will be a focus on a set vocabulary list. We would like all students to be able to use these words in sentences by the end of the year. Through reading we hope to broaden cultural capital, but we realise this is not enough. Therefore, we aim for all students to go on at least one English trip to the theatre while they are studying with us.

## **KS4 Curriculum Plan**

### **Intent:**

#### **The key stage four curriculum must:**

- 6) Challenge students' ideas and perspectives, build knowledge and critical thinking skills in order to build students' confidence and ability.
- 7) Cultivate an engagement with reading, writing and spoken Standard English with an aim to enjoy English beyond the GCSE specification.
- 8) Develop students' literacy skills with a focus on vocabulary, to bridge gaps in students' ability to write and read fluently.
- 9) Expose students to a range of diverse texts that explore different cultures, while addressing gaps in cultural capital that are often present in our students.
- 10) Develop and cultivate central skills for success in both the GCSE and Level 1 examinations.



Year Group	AUT1	AUT2	SPRING1	SPRING2	SUM1	SUM2
<b>KS4: L2 RE – SIT</b>  <b>AQA GCSE ENGLISH LANGUAGE (4 lessons a week)</b>	<b>Induction Unit (2 weeks)</b>  <b>L2 Pathway: Writing Unit GCSE AQA P1: Fiction.</b> Focus on VSPAG and vocabulary.  OR <b>L1 Pathway: Functional Skills Writing/Reading/Oracy</b> Focus on VSPAG and vocabulary.	<b>GCSE : AQA: Reading Skills: FICTION</b>  Focus on active reading and comprehension. Reading and extracts taken from The Hate You Give and writer’s from around the world.	<b>GCSE: AQA Writing Unit: Non-Fiction + Speaking and Listening</b>  Focus on structure for writing: text type, audience and purpose as well as oracy skills for speaking endorsement.	<b>AQA Language Paper 2: Reading Comparing Non-Fiction</b>  Focus on evaluation and comparison skills.	<b>Revision of both Language Papers</b>  Focus on timings and structure of the exam.	<b>Consolidation of GCSE assessment evidence.</b>  <b>‘Diverse writing’ Using English for next steps.</b>
<b>Year 11 and year 12 RE – SIT</b>  <b>AQA GCSE ENGLISH LITERATURE (OPTION) (4 lessons a week)</b>	<b>AQA Literature P1: Macbeth (revision)</b> Revision of the themes, structure and language with a focus on essay writing skills.	<b>AQA Literature P1: A Christmas Carol (revision)</b> Revision of the themes, structure and language with a focus on essay writing skills.	<b>AQA Literature P2: Modern Text: An Inspector Calls</b> <b>Key objectives:</b> A01, A02, A03	<b>AQA Literature P2: Modern Text: An Inspector Calls</b> <b>Key objectives:</b> A01, A02, A03	<b>AQA P1 and P2 Consolidation with focus on essay writing skills.</b> <b>Unseen poetry.</b>	<b>Consolidation of GCSE assessment evidence.</b>  <b>‘Diverse writing’ Using Literature for next steps.</b>

Underpinning all English study is the understanding of ideas, methods and contexts. The KS4 curriculum leads to the progression of knowledge and skills that students will need to be successful at GCSE Level. There is also recognition that many of our students have low confidence in their ability to undertake examinations so we also seek to build this, as well as building core English skills, through undertaking the Functional Skills Level One examinations for those students who join us with very low literacy or are EAL. Although we appreciate our students' context, we do not compromise on challenge and offer an ambitious curriculum that ensures students leave the school with increased confidence and ability in the subject. There is a recognition in our curriculum that many of our students do not habitually read and many have not engaged with reading in previous study. Therefore, even students only doing GCSE Language with us will read a variety of texts to promote reading and the development of vocabulary. It is also recognised that students who are re-sitting GCSE in year 13 have very low literacy levels and therefore a literacy intervention programme will be used as a tool to support reading and writing taught in lessons. Overall, English study at Harris Aspire and HPS6F will develop knowledge and literacy empowering students to use Standard English as a tool for communication in reading, writing and speaking in order to build the skills needed for their future career and study.

#### **Implementation:**

- All lessons will develop the knowledge and skills required for the students' L1 and GCSE exams.
- Each lesson should follow a basic structure: consolidation, building of knowledge, application, reflection.
- In each lesson there should be sufficient support and challenge to ensure all students make good and outstanding progress.
- In student's books there should be clear evidence of progress over time demonstrated through student work, marking and feedback.
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#### **Impact:**

#### **Assessment:**

- Each half term students will do an extended writing task that will be marked and they will be given formative feedback. This will not be a formal mock, but will link to the learning of that half term.
- Each term students will do a formal assessment that are based on the texts/Paper they have studied. These assessments will always use the same wording as the GCSE exam paper to ensure students become familiar with the style of question they will be asked. This data will be input into a tracking sheet and measured against baseline testing.

	AUTUMN	SPRING	SUMMER
<b>Year 12 and 13 RE-SIT Language</b>	<p><b>AQA Language Paper 1:</b> Reading and Writing exam.</p> <p>November Re-SITS for all students who arrive at the school with a L3.</p>	<b>No assessments due to school closure.</b>	<b>Full set of teacher assessments, Paper 1 &amp; Paper 2</b>
<p><b>Level 1 Pathway</b></p> <p>If students pass in AUT 1 they will join the Level 2 GCSE pathway. Any students who do not pass will have another opportunity to take the exam in Spring 1.</p>	<b>Classroom assessment: Functional Skills Reading and Writing.</b>	<b>External Exam: Functional Skills Exam and Speaking Endorsement</b>	<b>External Exam: Functional Skills Exam and Speaking Endorsement</b>

Although assessments are the primary way we can measure impact as a department we would also like to aim for all students sitting exams to have read beyond the specification. We aim to inspire further reading through teaching Language alongside novels and through extract teaching. This can be in the form of short stories, poems, novels or plays. Each term there will be a focus on a set vocabulary list. We would like all students to be able to use these words in sentences by the end of the year. Through reading we hope to broaden cultural capital, but we realise this is not enough. Therefore, we aim for all students to go on at least one English trip to the theatre while they are studying with us.