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| **Y10 & Y11 Autumn Term: Level 2 1st Certificate in Engineering Board: EAL** | | | |
| **Key Topics** | **Exam Dates** | **Controlled Assessment** | **What the student needs to do:** |
| **[1]** Engineering Environment Awareness - **Theory**  Health & Safety requirements  The role of the Employer  The role of the Employee  How an Engineering Organisation functions  **[2]** Fitting and Assembly Techniques  - **Practical**  Safety in the workshop.  Names & uses of bench tools.  Operation of a Pillar drill. | (Dates to be determined) | [1] Internal School based Unit 1 assessment.  [2] External Online Unit 1 assessment.  [3] Engineering Activity ‘Moving a load’ | Understand how Engineering works in a real life situation.  Complete a test set in school based on their theory lessons.  Complete an on-line multiple answer test relating to the theory lessons.  Complete a group activity looking at safe movement of heavy loads.  Show a responsible and dedicated approach to workshop activity. |
| **[3]** Engineering Techniques  - **Theory**  Technical drawing techniques  Presentation drawings  Applications of IT and ICT in Engineering    **[4]** Fitting and Assembly Techniques  - **Practical**  Methods of holding work  Measuring and marking out  Tolerances & Quality Control | (Dates to be determined) | [1] Internal School based Unit 2 assessment.  [2] External Online Unit 2 assessment.  [3] Engineering Activity ‘Technical Drawing’ | Build up their knowledge of Technical drawing styles (Orthographic).  Complete a test set in school based on their theory lessons.  Complete an on-line multiple answer test relating to the theory lessons.  Complete a Formal drawing of a set object.  Show a high level of accuracy and standards with all aspects of workshop manufacture. |
| **[5]** Engineering Principles  - **Theory**  Selecting Engineering materials  Heat treatment of metals  The Science of Engineering  **[6]** Fitting and Assembly Techniques  - **Practical**  Completion of Set Tasks   1. Bevel Gauge 2. Drill & Tapping Gauge 3. Fasteners & Fixings Test Piece | (Dates to be determined) | [1] Internal School based Unit 3 assessment.  [2] External Online Unit 3 assessment.  [3] Engineering Activity ‘Metals Research’  [4] Bevel Gauge  [5] Drill & Tapping Gauge  [6] Fasteners & Fixings Test Piece | Investigate properties of metals and the mathematics to work with them.  Complete a test set in school based on their theory lessons.  Complete an on-line multiple answer test relating to the theory lessons.  Complete a Formal drawing of a set object.  Complete the two set pieces. |