

# Key Stage 4 – Engineering

## LEVEL 1/2 VOCATIONAL AWARD IN ENGINEERING

Throughout year 10 students will be studying the content required for the examination and controlled assessment which both need to be completed in year 11. The content that they will be covering will be delivered using a variety of different teaching techniques, experimental work and practical challenges.

Student will develop a knowledge and understanding of the following areas:

- The effects of engineering achievements
- How environmental issues affect engineering applications
- Properties of engineering materials
- How materials are tested for properties and purpose
- The different methods of preparation, forming, joining and finishing of engineering materials
- The importance of safe working practices
- Solving engineering problems
- How to apply mathematical techniques to solving problems
- Technical drawing techniques

As part of the Non-Examined Assessment (NEA) students will be expected to follow a brief set by the exam board to manufacture a product from the provided engineering drawings. This will require students to use the content knowledge and practical skills they have gained in year 10 to assist with the preparation and production of the product. Once they have made the product students are required to adapt and modify this through the process of design and analysis.