

## **Engineering Tech Award**

This year Y11 students are taking part in 3 Components: Component 1 Exploring Engineering Specialisms and Design Application, Component 2 Investigating an engineering Product and Component 3 Responding to an engineering Brief

### **Component 1 - Exploring Engineering Specialisms and Design Application.**

Task 1 Is a written portfolio comprising a description and comparison of different engineering sectors including example companies. In our case, Bentley, BAE and one other.

Task 2 Is a design portfolio comprising research, design, card and CAD modelling and engineering drawings of a final proposal of a portable stand for a remote-controlled car.

### **Component 2 - Investigating an engineering Product.**

A written portfolio comprising a description and evaluation of an engineered product, in our case a bicycle multi tool and a description of engineering processes used to manufacture the product.

Pupils are also provided with drawings of a spanner which pupils plan to make and then make. Pupils produce a written portfolio detailing their plan, photographs of the making stages and an evaluation of their planning and making performance.

### **Component 3 - Responding to an engineering Brief.**

This is an externally set controlled task. Task 1 comprises a practical experiment during which pupils take measurements and record, present and evaluate their results. Task 2 is to analyse information detailing the manufacturing details of a given component and to determine where the process is failing. Task 3 is to design changes to the product and process in order to eradicate the problem.

### **Revision & Coursework Support**

All revision resources and coursework PowerPoints can be found in the Team's class Group area in Files/Class Materials as support files.

Coursework portfolios are completed in PowerPoint files which have notes explaining what needs to be included in the pupil's work.

Other extra support resources will be posted in Teams posts for the January/June exam December 2022