

## **The Engineering Curriculum at Five Acres High School**

*In Engineering, we learn how to apply maths and physics to areas of design to come up with innovative solutions to issues within the wider world.*

### **Intent**

#### **Why should all pupils learn this subject?**

At Five Acres High School, we are proud to offer a rigorous and ambitious Engineering curriculum. Alongside academics, students are encouraged to think outside the box and come up with creative solutions to real life design briefs. Students will experience a range of different activities provided by our curriculum such as running their own research project with a focus on product analysis and disassembly, producing and presenting engineered drawings and 3D realisation.

This curriculum lends itself incredibly well to students who have thoroughly enjoyed DT during KS3 and are wanting to go ahead and undertake an apprenticeship when leaving school. Students will be fully prepared for this exciting new chapter in their life having undertaken the variation of tasks the Engineering curriculum will offer them.

#### **What is the core knowledge in this subject?**

- Design briefs, design specifications and user requirements
- Product analysis and research
- Developing and presenting engineering designs
- 3D design realisation

### **Implementation**

#### **How is this subject taught at FAHS?**

At KS4, students have five lessons a fortnight, spending a half term being caught content which they will spend the next half term applying to a unit of coursework. Theory content will be taught alongside this preparing students for their exam.

Coursework content and coursework completion will take place throughout Year 10 with coursework being submitted early in Year 11. The exam will be sat in the January of Year 11. Students will have the opportunity to resit the exam and resubmit units of coursework.

#### **What are the key ways students practise in this subject?**

- Problem solving
- Communication
- Knowledge of materials
- Application of practical skills
- Evaluation

## **Impact**

### **What does assessment look like in this subject?**

Assessment happens during every lesson in the form of LSQ's. Summative assessment happens in line with the schools assessment calendar with students coursework and a theory paper being marked..