Name of Course	GCSE Engineering
Examination Board	AQA

What is Engineering?

Engineering is an increasingly innovative and exciting area to work in. It affects every aspect of modern life – from skyscrapers to smart phones, cars to carrier bags. Our new GCSE introduces students to a host of new technologies, helping them to gain practical skills and understanding to inspire a lifelong interest in engineering. It will particularly appeal to those who enjoy being creative, with an affinity for drawing, design, maths and problem-solving.

What skills will I learn?

Through design and make tasks you will learn about the various aspects of engineering.

- Engineering Materials (Metal, alloys, polymers and composites).
- Engineering and manufacturing processes.
- Systems (Mechanical, electrical, electronic, structural, pneumatic and hydraulic).
- Testing and investigation (Simulations, modelling and calculations).
- The impact of modern technologies.
- Practical engineering skills (Problem solving, engineering drawings and practical skills).

What will I do in Engineering?

Through practical and theoretical sessions students will cover in depth all the areas mentioned above. This will be through small practical sessions followed by analysis and testing of outcomes. Calculating and predicting the performance of engineering systems. Designing, drawing and making components for an engineering task set by AQA in Year 11.

How will I be assessed?

Unit 1 60% of GCSE is a written paper of 2 hours.
Consisting of :

- Multiple choice questions assessing breadth of knowledge.
- Short answer questions assessing in depth knowledge, including calculations.
- Multiple choice questions related to the application of practical engineering skills.
- Extended response questions drawing together elements of the specification.

Unit 2 40% of GCSE is Practical timed assessment where a brief is set by AQA.
Students will be expected to respond to that brief by producing:

- Engineering drawings or schematics to communicate a solution to the brief
- An engineering product that solves a problem.

Particular issues for this subject

Students will need to be confident in maths and have an interest in the word around them. They will need a willingness to solve problems. Unit two although rewarding does need focus and an ability to independently research and analyse design solutions.

Useful Websites etc.
https://www.aqa.org.uk/subjects/engineering/gcse/engineering-8852

Resources - links to the two setworks
Online text books and revision guides will be available to supplement the course