Maths A Level
AQA

This course aims to develop your understanding of mathematics and mathematical processes. Through your study of this course you will gain mathematical skills and techniques and learn how to apply them. You will learn about different areas of mathematics and how they connect to each other and you will also look at the relevance of mathematics in the world.

Course Structure
Introduction to Advanced Mathematics. This unit builds and develops the skills students have learnt at GCSE to prepare for advanced work. The unit teaches algebra, co-ordinate geometry, polynomials, curve sketching, the concepts of mathematical proof and mathematical modelling. Concepts for Advanced Mathematics. Further algebra including logarithms. Trigonometry is introduced as is the theory of calculus. The language of functions is used and the connection between functions and graphs is studied. Statistics looks at statistical modelling and sampling, followed by clear presentation of single variable data and the use of measures of central tendency and dispersion. Probability theory is studied and hypothesis testing is introduced using the binomial distribution. Mechanics is an introduction to mathematical modelling, kinematics, statics and dynamics. Vectors are used to describe forces and motion in two and three dimensions. Newton's laws of motion are applied throughout and the theory of projectiles is introduced.

Skills & Knowledge
There is a gap between GCSE and A Level mathematics but essentially you will be building on the work you did at GCSE particularly by doing further algebra. You should also enjoy mathematics if you are to make significant progress with it.

Assessment
There will be three examinations at the end of the two year course; these will constitute 100% of the A Level grade. There will be several internal assessments carried out over the course.

Opportunities & Enrichment
Mathematics is a very well respected academic subject and can help gain entry to an exceptionally wide range of university courses. As well as being very useful in itself, it is also seen as a good indicator of academic ability and as such is valued both by employers and universities

Future Careers & Pathways
Employers from all different sectors are also firmly behind A Level Maths qualification. Many roles in today's workplace require high levels of budget management and problem-solving skills; A Level Maths will be a useful tool in equipping you with these skills.