Link to exam board specification:
Pearson Edexcel AS and A level Mathematics (2017) | Pearson qualifications

Course Overview:
This specification is designed to encourage candidates to:

- Develop their understanding of advanced mathematical processes, extending their range of mathematical skills and techniques.
- Use their mathematical knowledge to make logical and reasoned decisions when solving problems.
- Apply their skills and knowledge in pure mathematics to applications in statistics and mechanics.

Areas of Study:
Students will learn about:

Algebra and graphs	Statistical sampling
Coordinate geometry	Probability
Trigonometry	Statistical distributions
Exponentials and logarithms	Hypothesis testing
Sequences and series	Vectors in mechanics
Numerical methods	Kinematics
Vectors	Moments
Calculus	Statics and dynamics of a particle

Course Requirements:
In addition to the general Sixth Form entry requirements, a Grade 6 in GCSE Mathematics is advised, though a Grade 5 with evidence of strong algebra skills will be considered. Students will complete an entry assessment at the beginning of the course.

Where can this course take me?

- A-level Mathematics is a requirement if you want to study subjects such as Mathematics, Statistics, multiple Sciences, Engineering, and many more at university.
- You are also more likely to succeed in many other degree subjects if you have A-level Mathematics, for example; Geography, Psychology and Medicine all use advanced Math's skills.
- A-level Mathematics is one of the facilitating subjects identified by the Russell Group of top universities. It is recognised as giving students many transferable skills and as such are sought after in applications to a full range of degree subjects.

Year 12:

- Algebra and Functions.
- Coordinate Geometry and Further Algebra.
- Trigonometry.
- Kinematics 2 (Variable Acceleration).

Year 13:

- Algebraic and Partial Fractions.
- Applications of Kinematics.
- The Binomial Theorem.Parametric Equations.