

Our
Values



Pursuit
of Excellence



Value
our People



High Quality
Learning
Environment



Achievement
for all

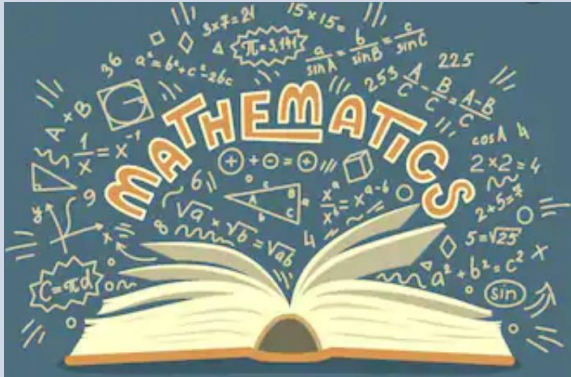


Extending the
Boundaries
of Learning

CMAT | Cambridge Meridian
Academies Trust

Key Stage 5 Mathematics

Year 12



Year 13



Curriculum aims

Our curriculum follows the Edexcel specification. The aims of the course are to enable students to:

- Understand mathematics and mathematical processes in a way that promotes confidence, fosters enjoyment and provides a strong foundation for progress to further study
- Extend their range of mathematical skills and techniques
- Use their mathematical knowledge to make logical and reasoned decisions in solving problems both within pure mathematics and in a variety of contexts, and communicate the mathematical rationale for these decisions clearly
- Represent situations mathematically and understand the relationship between problems in context and mathematical models that may be applied to solve them
- Draw diagrams and sketch graphs to help explore mathematical situations and interpret solutions

Curriculum content

Students sit three, two hour, written examinations at the end of the course. Paper 1 and Paper 2 may contain questions on any topics from the Pure mathematics content. Paper 3 is split between the Statistics and Mechanics elements of the course. Calculators may be used in all three papers.

Pure Content:

- Proof
- Algebra and functions
- Coordinate geometry in the (x, y) plane
- Sequences and series
- Trigonometry
- Exponentials and logarithms
- Differentiation
- Integration
- Numerical methods
- Vectors

Statistics Content:

- Statistical sampling
- Data presentation and interpretation
- Probability
- Statistical distributions
- Statistical hypothesis testing

Mechanics Content:

- Quantities and units in mechanics
- Kinematics
- Forces and Newton's laws
- Moments

Curriculum Delivery

The curriculum is delivered over nine lessons per fortnight by two teachers. One teacher is responsible for teaching half of the Pure content and the Statistics elements of the course, whilst the second teacher teaches the remaining Pure content and Mechanics.

During lessons the teacher will introduce the topic and go through worked examples with the students. It is essential that, for independent study, students complete any exercises started from the textbook during the lesson, as well as any additional homework set by the teacher.

Students are encouraged to attend weekly session 6 revision classes in which there is plenty of opportunity to improve exam technique by working through past paper exam questions.

[Click here for specification](#)