

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 Physics

Year 12



Our curriculum is built upon the AQA specification. This is designed to deepen students knowledge of physics and improve their problem solving skills.

Practicals are built into the curriculum, where students will create a lab book of practical work and how they have improved over the two year course.

AQA A-Level Specification:

<https://filestore.aqa.org.uk/resources/physics/specifications/AQA-7407-7408-SP-2015.PDF>

- Errors and measurements
- Particles
- Mechanics
- Electricity
- Waves and quantum behaviour
- Materials
- Circular motion and SHM

There will be nine taught hours per fortnight in the department. Lessons will be based on extending thinking with stretch & challenge tasks, after pre-lesson reading as flipped learning. This allows more time for exam practice.

Practical work is embedded into teaching to further understanding.

Year 13



In year 13, we build upon their knowledge from year 12 and apply what they have learnt to as many applications as possible, turning the impossible into what now seems possible.

Students are able to choose an option module to further their own personal interest in the subject.

- Electric and magnetic fields
- Gravitational fields
- Capacitance
- Nuclear physics
- Thermal physics

Option:

- Astrophysics
- Medical physics
- Turning points in physics

There will be a mix of learning styles incorporated into the curriculum like booklets, worksheets, written notes and mindmaps. There will be plenty of opportunities for extra exam practice and essay writing and there will be lots of learning by research outside of the lessons.

Practical work is embedded into teaching to further understanding.