Physics

Examination board: AQA

Physics is the scientific study of the natural world at all scales, ranging from subatomic particles to supercluster galaxies. It attempts to explain the workings of all aspects of the Universe, both large and small, allowing pupils to explore conceptual ideas about how the world works and facilitates the development of their analytical, problem-solving and experimental skills.

Content

Pupils will cover a variety of topics throughout the two-year course. Some topics will build upon knowledge from the GCSE syllabus, whilst others will be new to them.

Core topics include:

- · Particles and radiation
- Further mechanics and thermal physics
- Wave
- Fields and their consequences
- Mechanics and materials
- Nuclear physics
- Electricity
- Measurements and their error.

Practical work

Practical skills are developed and practiced throughout the two years of the A Level with a series of experiments that consolidate understanding of the theory.

A separate endorsement of practical skills is undertaken which is assessed by teachers based on observation of pupils' competency in a range of areas.

Assessment

Paper 1	2 hours	85 marks	60 marks of short and long answer questions and 25 multiple
			choice questions on content
Paper 2	2 hours	85 marks	60 marks of short and long answer questions and 25 multiple
			choice questions on content
Paper 3	2 hours	80 marks	45 marks of short and long answer questions on practical
			experiments and data analysis.
			35 marks of short and long answer questions on optional topic

Studying Physics beyond GCSE is increasingly mathematical. As such it is recommended that pupils study A Level Mathematics alongside A Level Physics to provide a consolidation of skills and allow access to a variety of Physics and Engineering degree courses.