The Cardinal Wiseman School
A Level courses

PHYSICS

Entry Requirements:

- 6 x Level 9 to 4 GCSE passes
- A minimum of a 6 in Separate Physics or 6-6 in Combined Science.
- A minimum of a 4 in English Language.
- You **must** also be studying A-Level Mathematics if you wish to study A-Level Physics (and therefore have achieved the requirements for that course too).

What will I study?

- From fundamental particles to the structure of the universe.
- How forces and motion underpin everyday activities such as transport and sport.
- How waves are used to transmit information in modern communications.
- How physics is used to send probes and astronauts into space.
- Complex electrical circuits and how they are used in sensors and detectors.
- The structure of matter; high energy particles; electric and magnetic fields.
- Nuclear materials; spontaneous and stimulated nuclear decay; nuclear fusion; radioactivity.
- The behaviour of space and time when particles travel close to the speed of light.

What are the examination/coursework requirements?

- We will be following the AQA Physics course.
- The A-Level course concludes with three written exams.
- Pupils will complete 12x Core Practicals throughout the year, during which their practical skills will be assessed.

What skills will I develop?

- Making observations and measurements
- Data manipulation
- Graphical analysis
- Analysis and evaluation
- Problem solving
- Teamwork

How will this subject help me with my future career?

The course is essential for anyone intending to follow an Engineering career of any sort, those interested in Health Physics (such as Radiography) or who might be interested in an academic career in Physics or Astronomy. It will be very useful for those interested in Ophthalmology, Medicine, and Architecture. It is also a very well-regarded general subject, particularly for financial careers.