PHYSICS
A LEVEL

What is the course about?

Physics encompasses the study of the universe from the largest galaxies to the smallest subatomic particles. Physics is crucial to understanding the world around us, the world inside us, and the world beyond us. It is the most basic and fundamental science. By studying physics students learn the basis of many other sciences, including chemistry, oceanography, seismology, and astronomy.

Course content

Students study topics including:

- Matter and antimatter, discovering how quarks and antiquarks combine and interact, researching up to the minute discoveries from cern, and other particle accelerators
- The consideration of whether particles can also be waves, investigating the interference patterns, and properties of waves
- Electricity and mechanics
- The mechanics of particles in gases and interactions between charged particles
- Nuclear physics,
- Optional topic of astrophysics, electronics, engineering or turning points in physics

There is an important focus on developing practical skills with students needing to complete a series of 12 required practicals.

Assessment

Three terminal exams.

Successful completion of a series of practical activities will lead to the student being awarded a practical endorsement to the A Level.

Career pathways

Study physics, maths or science related degree courses at higher education.

Employment opportunities: engineering, electronics, astrophysics, particle physics, medical physics, biomechanics and nuclear physics. Research into solving the energy crisis, or discovering what atoms are made of using particle accelerators.

Entry criteria

You have a minimum of Level 6-6 at GCSE for Science and 6 for GCSE Mathematics (also preferably taking A Level Mathematics).