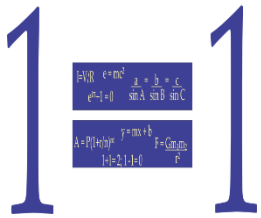
Physics

James Powell



Course Aims

Physics is not just a collection of concepts and theories but rather a different way of challenging our imagination. With concepts ranging from the smallest subatomic particles to the whole Universe, this course will allow you to learn new ways of thinking on a journey to start to search for and explain the fundamental answers of the Universe.

Qualifications and Qualities Needed

An APS of 6+ and 6s in GCSE Science (including 6 in Physics/Physics components of Triple or Combined Science) and a grade 7 in Maths. Students must study A Level Mathematics alongside Physics.

Course Structure

We follow the OCR Physics A2 A course – specification number H556. The course consists of six modules of study:

Development of practical skills in Physics
Foundations of physics
Forces and motion
Electrons, waves and photons
Newtonian world and astrophysics
Particles and medical physics

Students will sit 3 exams at the end of the course; papers 1 and 2 are 2hr 15mins while paper 3, which is synoptic, is 1hr 30mins.

Complementary Subjects

Include Maths, Further Maths, Chemistry, Biology and Computer Science.

Recommended textbook – 'A Level Physics for OCR A': OUP ISBN 978-0-19-835218-1

Assessment

There are three exams at the end of Year 13 and practical skills are tested through internal practical assessment for which you will achieve a pass or fail.

Future pathways

Physics is needed for a degree or apprenticeship in a wide range of STEM careers, including engineering and astronomy and is very useful for futures in finance and medical disciplines.