



Physics seeks to answer the question "why?"

To describe all the things we see, as well as their motion, behaviour and interactions.

The science covers the entire history and future of the universe, and all objects within it, from the fundamental matter we're made from to the structure of galaxies.

Peek Under The Bonnet, Study Physics

“We live in a society exquisitely dependent on science and technology, in which hardly anyone knows anything about science and technology.”

CARL SAGAN



So Why Study Physics?

Learn the how and why – not just the what. Don't just be a journalist be an inventor or a creator. No other subject teaches as many transferable skills:

- Abstract & creative problem-solving
- Numerical reasoning
- Data analysis
- Synthesis of knowledge & application
- Practical and experimental competencies
- Computational literacy

It is highly regarded by universities.

Physics is a Russell Group Facilitating Subject, a pre-requisite for Engineering, Natural Sciences, and Physics courses.

It is a highly desirable subject for Economics courses too...

A-level Content (AQA)

1. Measurements & Errors

2. Particles & Radiation

3. Waves

4. Mechanics & Materials

5. Electricity

6. Further Mechanics
& Thermal Physics

7. Fields & Their Consequences

8. Nuclear Physics

Optional module

ENGINEERING PHYSICS

A-level Course Structure

Taught by two teachers over seven periods per week.

Practical report (CPAC) based on 12 experiments assessed by teachers.

40% of the total marks will require mathematical skills. No Course work – 15 % of marks in A level questions will assess practical skills

Six carried out in the Lower Sixth, six in the Upper Sixth. This is pass or fail.

A-level Assessment

Assessments

Paper 1	+	Paper 2	+	Paper 3
What's assessed Sections 1–5 and 6.1 (Periodic motion)		What's assessed Sections 6.2 (Thermal Physics), 7 and 8 Assumed knowledge from sections 1 to 6.1		What's assessed Section A: Compulsory section: Practical skills and data analysis Section B: Students enter for one of sections 9, 10, 11, 12 or 13
Assessed <ul style="list-style-type: none">• written exam: 2 hours• 85 marks• 34% of A-level		Assessed <ul style="list-style-type: none">• written exam: 2 hours• 85 marks• 34% of A-level		Assessed <ul style="list-style-type: none">• written exam: 2 hours• 80 marks• 32% of A-level
Questions 60 marks of short and long answer questions and 25 multiple choice questions on content.		Questions 60 marks of short and long answer questions and 25 multiple choice questions on content.		Questions 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.

Entry Requirements

Physics, statistically speaking
is one of the toughest A-levels

PREREQUISITES

Grade 8 in both IGCSE Physics and Maths

COREQUISITES

The study of A-level single Maths

Use of Technology

The Physics department is at the forefront of technology in the classroom. We build data analysis skills into the course, therefore:

Students studying the subject at A-level are required to have a stylus-enabled device that runs windows 10 comfortably.

Opportunities Outside The Curriculum

Further Physics: bespoke course
for gifted students

Physics Olympiad & Competitions

Trips: CERN (Geneva) every two
years, Greenwich observatory

Societies: Astronomy, Curie,
Medical Society and STEM

