

# PHYSICS

### Why should I study Physics A-level?

- I enjoy physics and have an interest in the subject.
- An A-level in Physics is highly regarded compared to some other A-level subjects.
- Physics A-level is a very versatile qualification to have, allowing entry into a wide variety of Further Education courses and job opportunities.
- Physics is the second most requested A-level at Russell Group universities, after mathematics.
- Many universities and businesses are offering bursaries, scholarships and extra funding to students studying physics and related subjects such as engineering.
- There is a shortage of physics graduates in the UK so there are plenty of job opportunities.

#### How is the Course Structured?

AS and A-level students receive a total of 12 lessons per fortnight split between two teachers including 2 practical lessons. Theory lessons are well structured, consisting of an introduction to a new topic usually with demonstrations to aid understanding, some written theory and some time allocated to completing examples and questions from textbooks and previous exam papers.

Practical lessons are used to acquire a range of practical and analytical skills through investigation that are relevant to the theory being covered at that time. They are also used to help prepare pupils for the practical related written sections of both AS and A-level.

## **The AS-level Course**

The specification followed is AQA Physics.

**Paper 1:** 70 marks of short and long answer questions split by topic. 50% of the AS-level.

**Paper 2:** 20 marks of short and long answer questions on practical skills and data analysis, 20 marks of short and long answer questions on all topics and 30 multiple choice questions.

50% of the AS-level.

## **The A-level Course**

**Paper 1:** 60 marks of short and long answer questions and 25 multiple choice questions, predominantly on the first year topics.

34% of the A-level.

Paper 2: 60 marks of short and long answer questions and 25 multiple choice questions, predominantly on the second year topics.
34% of the A-level.

**Paper 3:** 45 marks of short and long answer questions on practical experiments and data analysis and 35 marks on the optional topic. 32% of the A-level.

# Results

The Science Department have excellent results at GCSE and this is continued into A-level. The Physics department's results at A-level have been consistently above the national average for many years.

	A*	А	В	С	D	Е	U	TOTAL
2021	3	1	1	3	3	0	0	11
2022	2	5	2	1	1	1	0	12
2023	0	2	3	0	3	4	0	12
2024	0	6	0	3	2	1	1	12

	% A*/A/B	% A* - C	% A – E
2021	45	73	100
2022	75	83	100
2023	42	42	100
2024	46	69	92

### What Subjects go with Physics?

Any! You need a good level of mathematical capability (at least a B at GCSE) but do not need to study Mathematics at A-level. Mathematics A-level, however, would be needed if you wanted to study physics or related courses such as engineering at University. Other subjects that 'go with' physics include Chemistry, Biology, Geography, Modern Foreign Languages (advantageous if working in industry), Economics and many more.

#### **Possible Careers**

A-level Physics opens the door to a large variety of careers and Further Education courses. As well as the more obvious careers such as engineering, physics research, medical physics, astrophysics or architecture, some of our past students have become oceanographers, IT specialists, pilots, doctors, barristers, accountants, and even teachers!