

# Physics A Level

**Exam Board: AQA**

**Subject Specific Criteria:**

- **Grade 7, 7 in Combined Science/Triple Physics**
- **Grade 6 in GCSE Mathematics**

As an A - level physicist you will be expected to work both independently and as a member of a team. A - level Physics requires a high level of resilience, determination and problem solving. This is the reason Universities look so favourably on it as an A-level.

During the course you will study:

1. Measurements and their errors
2. Particles and radiation
3. Waves
4. Mechanics and materials
5. Electricity
6. Further mechanics and thermal physics
7. Fields and their consequences
8. Nuclear physics

There will also be an opportunity for you as a group to choose an option you wish to study in year 13.

1. Astrophysics
2. Medical physics
3. Engineering physics
4. Turning points in physics
5. Electronics

Practical work is also marked and students will be taught how to keep a University level Laboratory book. The practical work often spans a number of lessons and is mostly student led.

**Assessment:**

**Paper 1:** 2 hour written exam, 85 marks, 34% of A level. 60 marks of short and long answer questions and 25 multiple choice questions on content.

**Paper 2:** 2 hour written exam, 85 marks, 34% of A level. 60 marks of short and long answer questions and 25 multiple choice questions on content.

**Paper 3:** 2 hour written exam, 32% of A level 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.

**Skills Required:**

- Strong mathematical ability
- A high level of resilience
- A keen interest in answering questions related to the world around you.
- An ability to work independently and in groups.

**Course Information:**

Physicists explore the fundamental nature of almost everything we know. They probe the furthest reaches of the earth to study the smallest pieces of matter. During A level Physics we question, why and how? Physicists have spent history trying to understand the world around them and answer these questions. As well as learning the fundamental laws of nature we take the same journey as many Physicists before us and discover the secrets of the universe.

**Future Opportunities:**

Physics is a “facilitating subject”, meaning that it’s highly regarded whatever degree or career path you choose. It’s considered essential for science and engineering courses, so it keeps a lot of doors open for you.

Physics opens these doors because of the skills and ways of thinking it teaches you. You’ll pick up mathematical and analytical techniques that are valued in a huge range of careers (just have a look at these career options...). You’ll become a critical and creative thinker, and a problem solver.

**Subject Enrichment:**

- Opportunity to visit Jodrell Bank
- Opportunity to use specialist equipment including radiation sources.