## Physics A Level

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<th>ENTRY REQUIREMENTS</th>
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<tr>
<td>• 5 GCSE’s/Level 2s A*-C including GCSE English Language and GCSE Mathematics Grades at Grades 9-4</td>
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<td>• Grade 6 (or above) in GCSE Mathematics</td>
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<td>• At least one grade 6 in Combined Science, Biology, Chemistry or Physics</td>
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### ABOUT THIS COURSE

Physics is the search for the fundamental laws of the universe. Physics is behind the technology that put man on the Moon, made the internet possible and revolutionised surgery, and also the technology that will shape tomorrow’s world: quantum computers, nuclear fusion or perhaps the means to colonise the solar system. Physics is a human endeavour. It is the search for answers and a better understanding of our place in the universe. It is a journey of discovery in which progress is made through teamwork, discussion, debate and collaboration across the globe.

### WHAT WILL I LEARN?

The teaching content is split into six teaching modules:

- **Module 1** – Development of practical skills in physics
- **Module 2** – Foundations of physics
- **Module 3** – Forces and motion
- **Module 4** – Electrons, waves and photons
- **Module 5** – Newtonian world and astrophysics
- **Module 6** – Particles and medical physics

Modules 1-4 are taught in year 12, with modules 5 and 6 being taught in year 13.

### HOW WILL I LEARN?

The A Level course is a two year course with examinations at the end of the second year. Practical skills are assessed and awarded a separate endorsement alongside the A-Level grade. We also offer a stand-alone AS Level, where pupils are able to sit examinations at the end of the single year. There will be regular testing in class to monitor progress and revision classes will be available.

### WHERE WILL IT TAKE ME?

The study of Physics is fascinating in its own right, but a Physics qualification opens the door to all sorts of careers and courses. All of the technology around us is based on the principles of Physics, so if you are considering working in any area related to technology, from music to medicine, studying Physics is an essential first step. Physicists play a vital role in many technology based industries such as optoelectronics, nanotechnology, computing and renewable energy. Others work on investigating the universe; searching for extra-solar planets or looking for the remnants of the big bang. Others still go on to apply their knowledge in healthcare (medical physics), studying the processes of the Earth (geophysics) or the climate (meteorology). Physics provides a broad training in skills that are valued by all employers; an ability grasp concepts quickly, a determination to find coherent answers, along with problem-solving, analytical, mathematical and IT skills. Even if you decide that you don’t want to work in any physics-related industry after your degree, the skills and knowledge that you develop by studying Physics will always help you in whichever area you go into. Studying Physics is a good pathway to a number of careers.

### WHO TO TALK TO?

Mr S Dhaliwal at enquiry@bordgrng.bham.sch.uk