A LEVEL PHYSICS

You will learn about advanced physics concepts, including classical areas such as mechanics, forces, waves and magnetism, as well as modern physics topics including quantum physics, particle physics and astrophysics, and how to apply these ideas to solve real-life problems.

Level 3 · A Level (or equivalent) · Truro College

TOP COURSE HIGHLIGHTS

EXCELLENT LECTURER SUPPORT | EXCEPTIONAL FACILITIES | STRETCH AND CHALLENGE OPPORTUNITIES | HIGHLY STRUCTURED DELIVERY

FRIENDLY AND SUPPORTIVE SPECIALIST STAFF

Our physics staff at the college are a highly experienced team who focus on delivery of physics-based content in the 16-19 curriculum. We help to engage students and nurture their enthusiasm of the subject whilst also giving all learners the support they need to achieve on the course.

DETAILED LECTURER FEEDBACK

Our course delivery is highly structured to ensure you have a holistic understand of the course and its assessment from the start of your time with us. You will have a clear understanding of your progress in the subject, and regular assessments and detailed lecturer feedback will support you to further improve.

SUPERB RESOURCES

We have a wide range of physical and digital resources to support your learning and help you to achieve highly on the course.

WHY CHOOSE THIS COURSE?

A Level Physics is an academic course designed to increase your knowledge, skills and understanding of the physical sciences and support your ability to apply that knowledge to solve problems. The course is studied as part of a programme of A Levels and has both theory and experimental components to the course. Physics allows you to understand the fundamental structure of the universe from atoms (or smaller!) to galaxies (or bigger!) and how the matter within the universe interacts. Through focused lectures we will explore these topics and how to use mathematical approaches to apply these ideas to a large range of real-life situations.

You will discover that the same underlying physical laws can be applied from everyday situations such as electric circuits or theme park rides to complex situations like particle accelerators or black holes. You will study through theory and experimental based lectures, meeting new concepts and applying them to a range of situations. You will develop your problem solving and mathematical skills, as well as understanding of a range of diverse topics, and there will be a clear focus on how to apply your understanding to solve problems of increasing complexity. There is a large emphasis on the application of mathematics within the course and how it can be used to explain the world around us. Practical lectures will enable you to develop confidence in working experimentally, as well as increasing your knowledge and skills regarding scientific method, data analysis and the presenting of data. We are also very keen to offer students to opportunity to engage in stretch and challenge activities, such as Olympiad competitions, and to support our students to make rewarding

progression to higher education, work based training or employment. Students benefit from access to three modern physics laboratories, as well as a staff team with substantial expertise within the teaching of physics at this level.

WHAT WILL I LEARN?

In your first year of study you'll begin by exploring classical (Newtonian) mechanics, allowing you to understand how objects move and interact in terms of everyday forces. You'll then progress into explaining electric circuits in terms of current, potential difference and resistance, by considering the motion of charge carriers. You will also learn about material properties and how different materials behave when exposed to different forces before moving on to consider classical wave theory, followed by more contemporary physics, such as using observational evidence to argue for a quantum mechanical treatment of light.

WHERE WILL IT TAKE ME?

Physics is a highly respected A Level and an understanding of physics is desirable for a variety of university courses and valued for most degree subjects. It is also valued by employers worldwide. Studying physics provides you with many skills such as problem solving, communication, creativity, and teamwork. If you want to study physics, electronics or engineering you will need A Level Physics. Other course progression options include mathematics, computer science, chemistry, geology, medicine, dentistry, veterinary science, environmental science. Physical scientists are much sought after and can pursue careers in many exciting and varied fields of work including applied sciences, engineering, computing, finance, and meteorology. **Note:** Students who want to study a degree in physics or most forms of engineering at university are expected to study A Level Mathematics as well.

ENTRY REQUIREMENTS

Minimum of 5 GCSEs Grades 4 or above, including at least Physics Grade 6 or Combined Science Grades 66, English Grade 5 or a Humanities subject Grade 5, and GCSE Maths Grade 6.

IMPORTANT

Course information can change. Please use the QR code below for the current assessment arrangements, entry requirements and start dates.

FOR THE LATEST COURSE INFORMATION

Scan for assessment arrangements, learner support, confirmed start dates and how to apply.