

# A LEVEL IN PHYSICS

The A-Level in Physics course builds on skills and knowledge gained at GCSE and covers a range of topics which give students a greater insight into principles and concepts underlying the physical world.

Specifically, we look inside the atom to the smallest constituents of matter; and in year 2 we look at the biggest ideas of all; the exploration of the universe.

Along the way we cover mechanics, electricity, fields, gases and nuclear physics too. If you are curious about the world around you, and enjoy maths, physics could be for you.

### **Key Facts**

Course Duration: 2 Years

#### **Course Contents**

#### Year 12:

- Measurements and their errors
- Particles and radiation
- Waves
- Mechanics and materials
- Electricity

# Year 13:

- Further mechanics and thermal physics
- Fields and their consequences
- Nuclear physics
- Astrophysics

### **Features and Benefits**

The course is delivered through a wide range of teaching and learning styles, including the use of lectures, group work, PowerPoint, the College Virtual Learning Environment, and practical work. You will also complete a wide range of practicals to demonstrate your proficiency in a laboratory environment.

### **Entry Requirements:**

### **Minimum Entry Requirements:**

All Loughborough College Sixth Form courses have minimum entry requirements of at least five GCSEs at grade C/4 or above, including English Language and Maths.

### Subject Specific Entry Requirements:

GCSE Maths and Science (Double Science or two 'traditional' sciences) at grade 6.

### **Assessment Methods:**

Three x 2-hour exams Paper 1 and Paper 2 - 35% Paper 3 - 30%

You will complete 12 compulsory practicals over the two years and a number of skills will be assessed by your teacher. This will make up the practical endorsement (CPAC).

## **Progression Opportunities**

This A Level offers a pathway to Higher Education in all branches of Physics, many other sciences, and most Engineering courses. Physics is highly regarded by universities and employers since it requires students to solve a wide range of problems. A Physics qualification is valuable in any profession requiring problem-solving skills, and a variety of employment routes are available, including Engineering, Finance, Banking and Teaching.