

# A Level Physics

## What the course covers

New topics, a greater mathematical emphasis and a new approach to assessing practical skills characterise the changes made to the new A Level Physics specification. Practical skills are at the heart of the new specification. A list of twelve essential practicals are prescribed, including, for example, investigating interference and diffraction of laser light; measuring acceleration due to gravity; investigating systems that oscillate; safe use of ionising radiation and magnetic fields. These practicals will give you the skills and confidence needed to investigate the way things behave and work. 15% of exam questions will test knowledge of the prescribed investigations. In addition, students will carry out many other experiments to refine their skills.

### **Year 1**

Students will study five topics:

1. Measurements and their Errors
2. Particles and Radiation
3. Waves
4. Mechanics
5. Materials and Electricity

### **Year 2**

A further three topics will be studied:

1. Further Mechanics and Thermal Physics
2. Fields and their Consequences
3. Nuclear Physics

In addition, an option topic will be chosen from Astrophysics, Medical Physics, Engineering Physics, Turning Points in Physics or Electronics.

The complete specification can be viewed on the AQA website. [www.aqa.org.uk](http://www.aqa.org.uk)

## What students can do with this course

Apart from studying physics or astrophysics at university in more detail, many other avenues will open up to you: mathematics, mechanical engineering, computer science, civil engineering; healthcare scientist, medical physics, scientific laboratory technician, meteorologist, structural engineering, economics and business, to name but a few. An A Level in Physics is considered to be a real achievement. Employers are keen to use the skills you will learn and there is a national shortage in some of the skill areas described above. Finally, students hoping to study any degree at one of the Russell Group of universities (a selection of 20 top UK Universities) will need to study at least two "Facilitating A Levels", such as Physics.

## How this course is assessed

Three 2 hour external examinations. Exam paper formats consist of a mixture of short and long answer and multiple choice questions.

As well as an A Level grade, successful students will also receive a Practical Endorsement "pass", which will also appear on their exam certificate.

## Entry requirements

All our course entry requirements are detailed in the Entry Requirements document located in the admissions section of our website.