How to apply

- Complete and return an application form. Application forms are available from the Wellington Academy website at: www.thewellingtonacademy.org.uk
- Your completed application should be returned to Dave Bissington, Head of 6th Form, this can be done either via your tutor (if internal) or delivered to the school reception
- Alternatively, please complete an online form, found under 2022 - Applications on the 6th Form tab on the school website.
- You will have an individual course consultation, during which provisional courses will be agreed.

  The offer of the course will be conditional upon you meeting the required entry grades, any subject specific criteria and having a suitable reference from your previous school.

  Your final interview will be held immediately after you have received your GCSE results. This is when your actual offer is negotiated and confirmed.

The Wellington Academy

proud to be part of ROYAL WOOTTON BASSETT ACADEMY TRUST

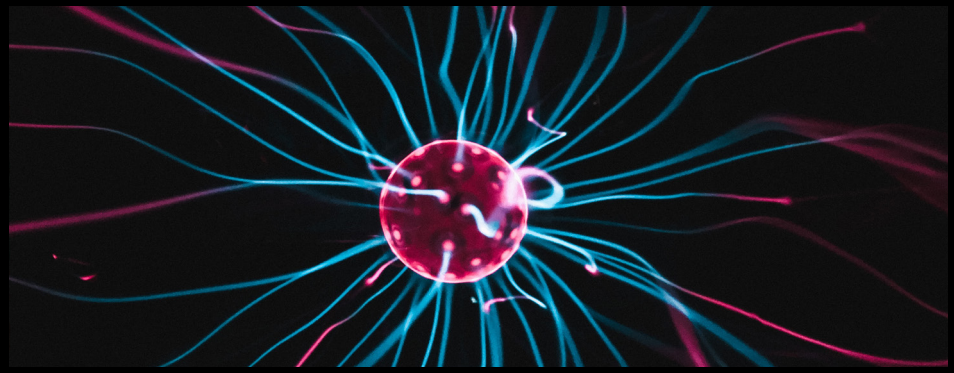
www.thewellingtonacademy.org.uk

The Wellington Academy
Tidworth, Wiltshire, SP11 9RR
t: 01264 405060 e: TWA6th@thewellingtonacademy.org.uk

TWA 6th

6th Form Courses

PHYSICS



- How do you actually use Einstein's famous equation $E=mc^2$?
- How long does the sun need to shine for to provide every person on Earth with enough electricity for a year?
- If you could core through the Earth and jump in, how long would it take before you bobbed back out again? (assume no vapourisation occurs as you pass through the core)

By studying Physics you will be able to answer all these questions and more!

"We all know that light travels faster than sound. That's why certain people appear bright until you hear them speak."

Albert Einstein

A Level Physics (AQA)

What is the course like?

Physicists explore the fundamental nature of almost everything we know of. They probe the furthest reaches of the earth to study the smallest pieces of matter. Join them to enter a world deep beneath the surface of normal human experience.

Course content

Core content:

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

Options (one of the following):

9 Astrophysics
10 Medical physics
11 Engineering physics
12 Turning points in physics
13 Electronics

Entry requirement

A grade 6 in both Physics and Mathematics at GCSE.

Duration

2 years

How will I be assessed?

There is no coursework on this course. However, your performance during practicals will be assessed. There are three exams at the end of the two years for A-level, all of which are two hours long. At least 15% of the marks for A-level Physics are based on what you learned in your practicals

Where does it lead?

According to bestcourse4me.com, the top seven degree courses taken by students who have an A-level in Physics are:

- Mathematics
- Physics
- Mechanical Engineering
- Computer Science
- Civil Engineering
- Economics
- Business

Studying A-level Physics offers an infinite number of amazing career opportunities including:

- Geophysicist/field seismologist
- Healthcare scientist, medical physics
- Radiation protection practitioner
- Secondary school teacher/ Higher education lecturer
- Meteorologist
- Structural engineer
- Acoustic engineer
- Systems developer
- Technical author

You can also move into engineering, astrophysics, chemical physics, nanotechnology, renewable energy and more, the opportunities are endless.

Is this course suitable for me?

Physics, like all sciences, is a practical subject. Throughout the course you will carry out practical activities including:

- investigating interference and diffraction of laser light
- measuring acceleration due to gravity
- investigating systems that oscillate
- investigation of the links between temperature, volume and pressure
- safe use of ionising radiation
- investigating magnetic fields

These practicals will give you the skills and confidence needed to investigate the way things behave and work. It will also ensure that if you choose to study a Physics-based subject at university, you'll have the practical skills needed to carry out successful experiments in your degree. Your problem solving skills will also develop significantly.