Examples of future careers involving Physics:

Physics teaches you about matter and energy – the basis of all scientific disciplines. As well as preparing students to investigate what you see in the world around you, it also encourages you to solve problems practically and creativity.

Wind Energy Engineer

You'll develop the hardware for wind energy projects, including the turbines, blades, electrical systems, and energy production systems. The offshore wind workforce in the UK is expected to grow 2.5 times by 2030, creating an additional 16,000 jobs. The UK will need to recruit 100,000 people to green energy roles to meet its targets on limiting climate change. You'll need to think creatively about how to overcome problems connected to technology, installation, or location.

Protecting the Planet

You'll study planets and moons, including features such as gravity, geologic processes, climate geomorphology and atmosphere.
The country's space sector generates £14.8 billion of income and could create 15,000 jobs in the UK by 2030.
As planetary exploration takes off, there is a growing need for planetary scientists with the skills needed to understand other worlds.
You'll analyse data to help further your understanding of a particular planet or celestial body and share your insights.

How will the most popular industries for Physics graduates change?

Science - Employers including Met Office, NHS and European Space Agency actively recruit Physicists.

Horizon Community College

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Horizon Community College

PHYSICS

5 work skills that Physics will give you:

Research

Research means collecting your own data by carrying out experiments. It also means reading around a subject to find information and data that could help you or support your theories. You might need to look through scientific papers or read books about scientific discoveries.

Critical Thinking

You can't take everything at face value. That means you need to think critically about the information you're presented with to find new solutions. Being able to do this allows you to take a rational approach to problem solving. This is essential in Physics.

Data Analysis

Whenever you perform an experiment in Physics, you'll generate data. It's this information that can help you spot trends and patterns or reveal something completely new. You need to be able to analyse the data you create, otherwise it's just numbers with no clear meaning.

Communication

It's not just enough to carry out experiments and research. You need to be able to explain your findings to others. You'll do this through written and spoken reports. That means you need to present information in a clear and logical way.

Problem Solving

Like all branches of science, Physics is experimental. You'll be encouraged to look at problems from new angles and find innovative solutions using your Physics knowledge. You'll need to gather all the relevant information to help you as you work towards a solution.

Where can Physics take you?

Applied Science & Technology:

- Acoustics Consultant
- Audiologist
- Agronomist
- Geophysicist/ Field Seismologist
- Geo-scientist
- Geo-technician
- Materials Scientist
- Medical Physicist
- Meteorologist
- Radiation Protection Practitioner

Practical jobs where Science is useful:

- Electrician
- Electronics Engineering Technician
- Fingerprint Officer
- Plumber
- Sterile Services Technician
- Textile Machinery Technician
- Water Treatment Worker
- Beauty Therapist
- Hairdresser

Scientific Research & Lab Work:

- Astronaut
- Nano-technologist
- Physicist
- Research Scientist (Physical Sciences)

Engineering:

- Civil Engineer
- Clinical Engineer
- Electrical Engineer
- Electronics Engineer
- Materials Engineer
- Materials Technician
- Mechanical Engineer
- Metallurgist
- Nuclear Engineer
- Structural Engineer

Future of Job Facts:

Construction

With almost **300,000** business trading in construction, this sector accounts for 7% of all employment in the UK. That's 2.3 million jobs.

Engineering

The proportion of young engineers has dropped over the last decade. This means there will be high demand for younger workers in the years to come!

Energy & Utilities

Today, about **500,000** people work in the energy sector. But with the demand for green energy growing, by 2020 half a million people could be working in re-newables alone.

Transport & Logistics

The UK transport industry employs 1.5 million people across the country. Over the next 10 years, **100,000** new workers will be required in rail alone.

Science & Research

Between 2016 and 2023, jobs in science and research will grow at twice the rate of other industries, creating **142,000** new jobs. One in every six jobs will be in science and research.

IT & the Internet

People with qualifications in Information Technology have one of the highest rates of employment in the UK.