**A-Level Physics**

**Overview**

**What skills will I get from studying physics?**

Physics will help you to build up your [problem solving](https://successatschool.org/advicedetails/600/How-can-problem-solving-help-me-at-work%3F), research, and analytical skills. With these skills you’ll be able to test out new ideas plus question and investigate other people’s theories, which is useful for any kind of job that involves thinking!

**What careers can I do with physics?**

Physics is a seriously useful subject for the majority of [STEM](https://successatschool.org/advicedetails/770/what-are-stem-subjects) (science, technology, engineering and maths) careers and you’ll find physicists everywhere, in industry, [transport](https://successatschool.org/careerzonesummary/31/Transport-Logistics), [government](https://successatschool.org/careerzonesummary/36/Public-Sector-Government), universities, the [armed forces](https://successatschool.org/advicedetails/603/Army-jobs%3A-It%E2%80%99s-not-just-about-being-a-soldier), the secret service, games companies, [research](https://successatschool.org/careerzonesummary/34/Science-Research) labs and more. It is especially helpful for jobs that involve building things and developing new technologies, including: engineering (flight, buildings, space, you name it…), astronomy, robotics, renewable energies, computer science, communications, space exploration, science writing, sports and games technology, research and nanotechnology (that’s engineering on a seriously tiny molecular scale).

A spokesperson for the Institute of Physics says: “Physicists are involved in finding solutions to many of our most pressing challenges – as well as studying atoms or making sense of the extra-terrestrial, physicists diagnose disease, [model the climate](https://successatschool.org/advicedetails/752/life-as-a-meteorologist), design [computer games](https://successatschool.org/advicedetails/738/game-jobs), predict markets and design hi-tech goods.  Studying physics opens doors.”

**What subjects does physics go with?**

Physics will support your study of other science and tech subjects, including chemistry, biology, geography and IT. Physics is especially closely linked to maths, so studying the two together can improve your skills in both.

**What degrees and other qualifications do I need physics for?**

Physics A-level has been named as a "facilitating subject" by the [Russell Group](https://successatschool.org/advicedetails/341/Who-Are-the-Russell-Group-Universities%3F) of universities, which means it can be useful for getting onto a wide range of University courses. It is part of the gang of four – which includes [maths](https://successatschool.org/advicedetails/186/Why-Study-Maths%3F), [chemistry](https://successatschool.org/advicedetails/190/Why-Study-Chemistry%3F) and [biology](https://successatschool.org/advicedetails/208/Why-Study-Biology%3F) – that you usually need to pick at least two from at A-level to do a range of science degrees, including medicine and [engineering](https://successatschool.org/advicedetails/551/What-are-the-Different-Types-of-Engineering-Jobs%3F).

Physics A-level is usually required for degree courses in: [engineering](https://successatschool.org/careerzonesummary/2/Engineering%22%20%5Ct%20%22_blank%22%20%5Co%20%22Engineering) (general, aeronautical, civil, electrical, mechanical, sometimes chemical), and, you guessed it, physics! It is often recommended or useful for: biochemistry, biology, chemistry, [medicine](https://successatschool.org/careerzonesummary/23/Medicine-Healthcare%22%20%5Ct%20%22_blank%22%20%5Co%20%22Medicine), dentistry, [nursing](https://successatschool.org/advicedetails/577/How-to-Become-a-Nurse) and other practice-based medicine courses, architecture, computer science, geography, earth and environmental sciences, maths, materials science, pharmacy, sports science, surveying, psychology, [teaching](https://successatschool.org/careerzonesummary/8/Education-Teaching).

You may need a Physics A-level for [apprenticeships](https://successatschool.org/advicedetails/582/Degree-apprenticeships%3A-What-are-they-and-are-they-for-me%3F) in many types of engineering.

**Whilst there will be some specific ‘bridging work’ set on the school website before the end of term you should recap/familiarise yourself with these units from GCSE:**

Forces Electricity

**Save your work in a portfolio that can be incorporated into your subject folder if/once you decide to commence this course.**