

## Explore Tasks – Physics A-level

### Crash Course

Choose your own topic of interest and enjoy these videos (~10 minutes each).

[Crash Course Physics \(thecrashcourse.com\)](https://www.thecrashcourse.com)

### Introducing vectors for engineering applications

Applied mathematics is a key skill for practicing engineers and mathematical modelling is an ever-increasing field within engineering. This 5-hour course, *Introducing vectors for engineering applications*, covers one aspect of a Level 1 engineering module, the application of vectors and vector algebra, using examples inspired by engineering applications.

[Introducing vectors for engineering applications | OpenLearn - Open University](#)

### Particle Physics

This 5-hour course, Particle physics, will give you an overview of current concepts and theories in the field. You will learn about the fundamental components of matter – known as leptons and quarks – and the composite particles, such as protons and neutrons, which are composed of quarks. You will see that all particle reactions may be described in terms of one of two fundamental interactions, known as the strong and the weak interactions, responsible for binding particles together and allowing them to change type, respectively.

[Particle physics | OpenLearn - Open University](#)

### Astronomy with an Online Telescope

This 24-hour course, you are shown you how to navigate the night sky, and introduces the wide variety of objects it contains. You will develop a hands-on understanding of telescopic observations using the Open University's own robotic telescope facility COAST sited on the island of Tenerife. Supported by your own measurements, you discover how stars evolve, and study variable stars.

[Astronomy with an online telescope | OpenLearn - Open University](#)