

## PHYSICS

### What is Physics?

The Leaving Cert physics course follows directly from Junior Cert Science, and covers more topics in greater depth. Physics is often referred to as the maths side of science even though only a small proportion of the course is based on this.

Physics aims to enhance student's ability to think logically, observe and understand scientific method. The course is heavily based around experiments - students are required to complete and write reports of 24 practical experiments throughout the two years, and be fully aware of how to accurately record and analyse results, and how to minimise and accommodate for experimental errors.

These laboratory experiments, along with many more non-compulsory experiments are examined in detail on a section of the written paper.

### Interested in Physics?

Watch the Video above to see if the course is likely to interest you. [Aoibhinn Ní Shúilleabháin](#)

The Physics course also involves a lot of theory which is tested on the written examination. Students are expected to be able to use various formulae with respect to SI units and significant figures, and have a good understanding of the role of physics in modern society and technology.

### What type of student might Physics suit?

- Students considering a career in any mathematical or scientific discipline, such as finance, statistics, engineering, physics, astronomy or computer science.
- Students who were successful in their Junior Cert science examination, particularly in the Physics section of the course.

### Careers Possibilities

Students who are interested in the following careers would be advised to study Physics: Electrician, Optician, Doctor, Dentist, Engineer, Computer Technician and Programmer.

#### Third Level Entry Requirements

Physics is a requirement for entry into a number of third level courses. Some examples include: Theoretical Physics in UCD and TCD. Click on the link below to view courses that definitely requires, or may require this subject for entry:

### Physics and Careers

Physics contributes to a student's future career in many ways. It helps, in conjunction with the other Leaving Certificate subjects, to provide a broad, balanced education for any student. Physics teaches students to think logically and enables them to express their thoughts in a concise manner. The skills and knowledge developed through their study of physics can be useful in a wide variety of situations.

Physics is a useful subject for many courses and careers and a good foundation for a broad range of scientific and technical careers. Many careers benefit from the logical and numeracy skills developed by the study of physics. Many technical courses involve components of physics.

Students may move into employment or into further study following their two years of physics at secondary school level. They may choose a Post Leaving Certificate course (PLC) or move on into third level.

Physics and physics-related courses may be taken at both certificate and degree level in third-level institutions.

For students who are interested in proceeding further with physics, check out our sector on [Physical and Mathematical Sciences](#), and also the [Institute of Physics](#), which provides information on the range of careers that students can follow after their study of physics at third level.

### Subject Exam Structure

Leaving Certificate Physics is assessed by means of one terminal examination paper at each level. Students are required to keep a record of their practical work over the two years of the course.

The Leaving Cert. Physics exam is three hours in duration:

## **Comment**

While there is an element of maths in the physics course, honours maths is not a requirement to do honours physics. Students should not avoid physics on the basis of not having honours maths. It is entirely possible to get on well in honours physics without honours maths.

Pupils should become able to draw and read graphs and be competent in using a calculator throughout the course. The physics syllabus has strong links with the other science subjects especially chemistry. There are strands of physics which overlap with woodwork and construction especially the electricity and heat sections.

Pupils who will gain the most from studying physics are those who have an interest in science at Junior Cert level and those who enjoy learning about how things work. The science, technology and society section allows students the chance to see where the physics they are learning applies as in TVs, car motors and electricity in the home and also, to see some of the industrial applications of certain topics.