Chifley College
Learn Discover Inspire

# Physics

## Course Description

Physics investigates natural phenomena, identifies patterns and applies models, principles and laws to explain their behaviour.

The Preliminary course develops a knowledge of waves, motion, forces, fields, electricity and magnetism by focusing on increasing students' understanding of current communication technologies, the use of electricity in the home, interaction involving vehicles (such as car crashes) and the mechanisms that maintain the physical conditions of planet Earth.

The HSC course builds on the concepts of the Preliminary course by expanding on areas such as relativity, the motor effect and solid state physics, and by focusing on space flight, motors and generators and the scientific advances involved in the development of semi-conductors and electronics. The options cover a variety of interest areas and draw on the increased information and understanding provided by improved technology to examine areas of current research.

## Main Topics Covered

### Preliminary

- The World Communicates
- Electrical Energy in the Home
- Moving About
- The Cosmic Engine

### HSC Course

- Space
- Motors and Generators
- From Ideas to Implementation

## Particular Course Requirements

Students will complete a minimum of 80 indicative hours of practical experiences across Preliminary and HSC course time with no less than 35 hours in the HSC course. Practical experiences must include at least one open-ended investigation in both the Preliminary and HSC Courses.

**Faculty:** Science

**BOS Course No:** 15330

2 units for each of Preliminary and HSC Board Developed Course.

**Exclusions:** Senior Science (Preliminary only)

ATAR HSC EXAM CAT A