

# **PHYSICS**

## Description

Physics involves the study of matter and its motion through space and time, along with related concepts that include energy and force. Physics deals with the study of phenomena at varying scales of space and time – from nuclear particles and their interactions up to the size and age of the universe.

**Topics include:** Kinematics, Dynamics, Electricity and Magnetism Waves and Thermodynamics, Electromagnetism, Advanced Mechanics, The Nature of Light, From the Universe to the Atom.

#### Assessment

Students will demonstrate their learning through a range of assessment tasks which include research, first hand investigations, written examinations and a depth study.

Students will also be expected to write regular practical reports as part of their home study regime.

#### Additional Information

It is strongly recommended that students are currently achieving at a Grade B average or better across all courses, especially Science. Students need to be highly organised and scientifically motivated to consider this course.

Students must have achieved HSC Minimum Standards in numeracy.

Students will need to demonstrate mathematical skills and writing skills and be able to interpret technical information.

The study of Physics provides the foundation knowledge and skills required to support participation in a range of careers. It is a discipline that utilises innovative and creative thinking to address new challenges, such as sustainability, energy efficiency and the creation of new materials.

### S Costs

\$30.00 per year for Edrolo subscription to be paid directly via the Edrolo payment portal. Excursion costs are additional.

NUMBER OF UNITS: 2 ATAR: YES HSC EXAMINATION: COMPULSORY