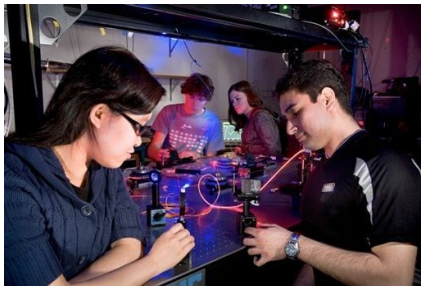
Holsworthy High School

Science Faculty

PHYSICS



Course Outline

Physics is one of the STEM subjects offered at Holsworthy High School. This course provides students with the opportunity to develop their knowledge, understanding and skills relevant to the study of motion. Students examine energy in its different forms, and how we describe and measure electricity and magnetism and their interrelated effects.

Year 11 has 4 modules

- Kinematics
- Dynamics
- Waves and Thermodynamics
- Electricity and Magnetism

HSC has 4 modules

- Advanced Mechanics
- Electromagnetism
- The Nature of Light
- From the Universe to the Atom

Assessment

Both Year 11and Year 12 follow the same assessment pattern of just 3 tasks.

- A Yearly exam worth 30%.
- A practical task adds another 30%
- A Depth Study the remaining 40%

Pattern of Study

Physics can be studied with Chemistry and Biology.

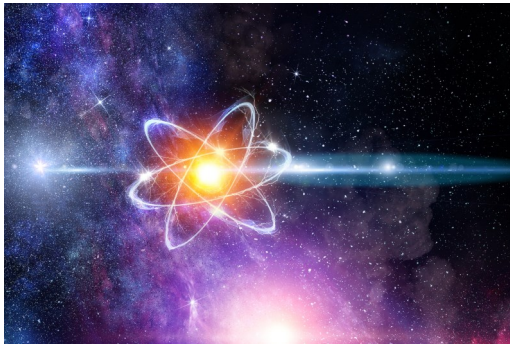
Studying Physics with Mathematics and PDHPE can be beneficial as there is some shared content in these courses that can improve students understanding of some concepts.

ATAR

Physics is a full 2 unit Science course. It can be advantageous for students seeking maximum ATAR scores to include Physics in their pattern of study.

Practical Work

Mandatory hours of practical work must be completed in both Year 11 and Year 12.



Why study Physics

Australia's Chief Scientist told the Federal Parliament, "Science is infrastructure and it is critical to our future. We must align our scientific effort to the national interest; focus on areas of particular importance or need; and do it on a scale that will make a difference to Australia and a changing world." His paper, *STEM: Australia's Future* focuses on:

- Building competitiveness
- Supporting high quality education and training
- Maximising research potential
- Strengthening international engagement

Physics is a 2unit Science course that satisfies recommended studies requirements of many university courses. It is very popular as it has many applications.

Studying Physics leads to a broad range of career options :

- Engineering
- Medical Imaging
- Industrial Technology
- Pilot
- Surveyor
- Telecommunications
- Mining
- Electronics
- Architecture and Building

SCIENCE FACULTY

Ms J. Gorgovski - Head Teacher (Relieving)
Mr K. MacDonald
Mr S. Fernadez
Mr R. McCafferty
Ms E. Sheldon
Mr I. Lian