



Course Information

Sciences

Physics | PHY

 ATAR

ATPHY

Unit 3 Gravity and relativity

In this unit you will focus on two areas of study. The first focus is on motion and forces in a gravitational field. You will explore the motion of objects in gravitational fields, including the motion of projectiles, orbiting planets, moons and satellites and the ways in which forces affect the stability of extended objects.

The second area of focus you will explore is electricity and magnetism. Within this content area you will learn about magnetic fields and how they interact with moving charges in situations involving current electricity, the motor effect and electromagnetic induction. You will also have the opportunity to plan, conduct and evaluate investigations looking at real world problems associated with the content areas.

Unit 4 Electromagnetism and modern physics

This unit focuses on two content areas. The first is particles, waves and quanta while the second is motion and forces in electric and magnetic fields. This unit will provide you with studies of mechanical and electromagnetic waves and allow you to appreciate both classical and modern interpretations of the nature and behaviours of waves.

Secondly you will have the opportunity to learn about some aspects of modern physics such as Standard model of particle physics, the Big Bang theory, relativity and cosmology.



Prerequisites

Minimum **C Grade** in
ATAR Units 1 and 2 or
equivalent



Year of Study

Year 12



Type of Assessment

10% Science Inquiry Portfolio
40% Test
50% Examination



Costs

Total Cost \$60