

# VCE Physics

Physics is a physical science that studies why things behave as they do. Many theories in Physics have led to innovations in medicine, electronics, energy use, telecommunications and materials science. Physics helps you acquire the key skills and knowledge required to pursue further scientific studies.

Unit 1 & 2	Unit 3 & 4
<p>In Unit 1 &amp; 2 you will:</p> <ul style="list-style-type: none"><li>Investigate light using the wave model and thermal energy using the particle model</li><li>Investigate nuclear energy; the properties of radiation and use of radioisotopes in medical therapy</li><li>Investigate electricity using conceptual models; analyse electrical circuits and explore electrical safety</li><li>Investigate motion and effects of net forces graphically and algebraically</li><li>Investigate the behaviour of light in the context of enhancing human vision</li><li>Practical investigations in light, heat, electricity and motion</li></ul>	<p>In Unit 3 &amp; 4 you will:</p> <ul style="list-style-type: none"><li>Examine the similarities and differences between three fields; gravitational, electric and magnetic</li><li>Use evidence and models of electric, magnetic and electromagnetic effects to explain how electricity is produced and delivered to homes</li><li>Use Newton's laws of motion to analyse relative motion, circular motion and projectile motion</li><li>Use evidence from experiments to explore wave concepts in a variety of applications</li><li>Be able to provide evidence for the nature of light and matter; and analyse the data from experiments that supports this evidence</li><li>Undertake practical investigations in waves, fields and motion</li></ul>
Types of assessment	Class Activities
<ul style="list-style-type: none"><li>Tests</li><li>Data analysis</li><li>Annotations of a practical work folio</li><li>A report of a practical activity</li><li>Problem solving involving physics concepts</li></ul>	<ul style="list-style-type: none"><li>Experiments</li><li>Problem solving</li><li>Data analysis</li><li>Scientific poster</li><li>Modelling</li><li>Tests</li><li>Quizzes</li></ul>

## Careers that may link to this subject area

Architect

Nuclear medicine technologist

Pilot

Electronics Technician

Optometrist

Radiographer

Engineer

Physicist

Science Teacher

Medical Practitioner

Physiotherapist

Telecommunications Technician

