Physics

Description

Physics seeks to understand and explain the physical world. Year 10 Physics takes some of the aspects of physics that students have previously learnt, and begins linking these to modern day industrial and engineering applications. Along the way, students will be introduced to some aspects of VCE Physics.

Unit Topics

Topics to be covered may include motion; forces; energy; electricity and electric circuits; the universe, such as stars and satellites; thermodynamics, including heat and the transfer of heat energy; light and photonics, incorporating fibre optics and laser light technology; atomic theory basics including a brief look at sub-atomic particles.

Students will have the opportunity to conduct a number of practical investigations throughout the semester.

Skill Development

Science inquiry skills, such as questioning, predicting, planning, conducting, recording, analysing, evaluating and communicating.

Possible Assessment Tasks

Practical investigations, research tasks, tests.

Activities/Camps/Excursions

Victorian Space Science Education Centre and practial investigations

Career Options

Physics leads to a wide range of careers, including (but not limited to) acoustics, astrophysics and cosmology, atmospheric physics, bushfire research, climate science, computational physics and games development, education, electrical and electronics, energy research, engineering, forensic science, geology, instrumentation, lasers and photonics, materials science, medical physics, neuroscience, nuclear science, optics, pyrotechnics, radiography, robotics and sports science.