

Why study Physics?

Physics is fundamental to technology, engineering and all other sciences. Physics has a tremendous impact on society and therefore you, e.g. televisions, electronics, microchips and computers. X-Rays and CT-scans

Studying Physics develops problem solving skills, which are important in the widely different areas of health, commerce and industry.

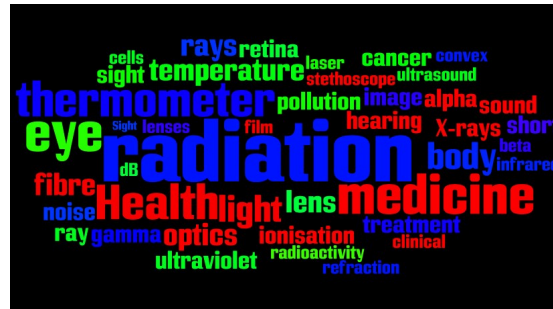
The study of Physics involves students working individually and with others in practical, field and interactive activities that are related to the theoretical concepts in this course.



Careers in Physics

Occupations where a study of Physics would be useful are endless, but could include: -

Architect	Astronomer
Audiologist	Doctor
Dentist	Engineers
Family Physician	Forensic Scientist
Geophysicist	Hydrographer
Metallurgist	Meteorologist
Mineralogist	Oceanographer
Optometrist	Patent Examiner
Pharmacist	Physicist
Physiotherapist	Pilot
Radiographer	Surgeon
Surveyor	Science Teacher



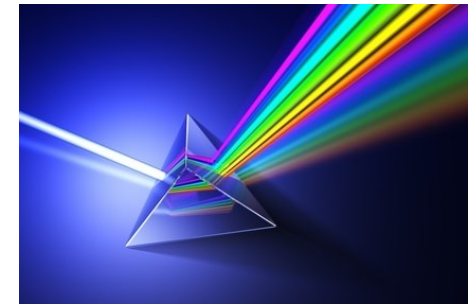
www.melville-h.schools.nsw.edu.au

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MELVILLE HIGH SCHOOL
SCIENCE FACULTY



PHYSICS

The study of **Physics** in Stage 6 aims to enable students to develop an appreciation and understanding of the application of the principles of physics, and of the theories, laws, models, systems and structures of physics. It also enables students to apply Working Scientifically skills processes to examine physics models and practices and their applications.

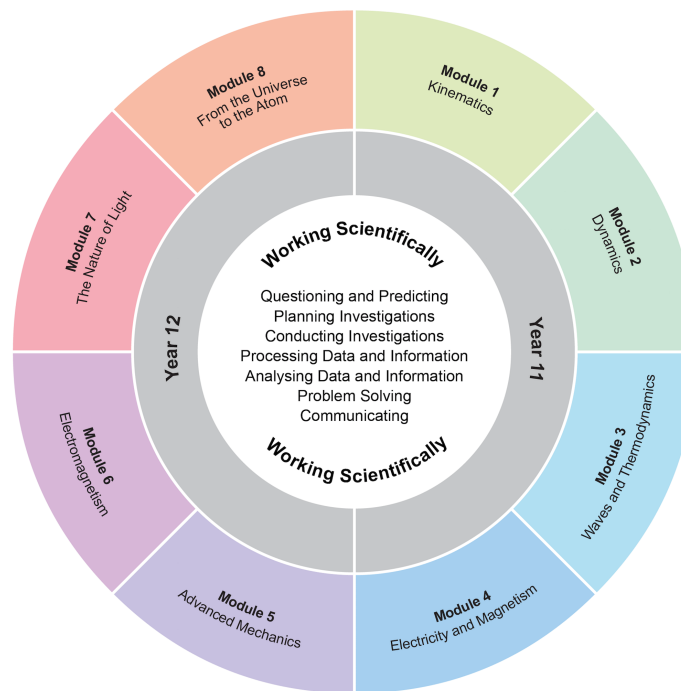
Year 11 Course Topics

- Module 1
Kinematics
- Module 2
Dynamics
- Module 3
Waves and Thermodynamics
- Module 4
Electricity and Magnetism



Year 12 Course Topics

- Module 5
Advanced Mechanics
- Module 6
Electromagnetism
- Module 7
The nature of Light
- Module 8
From the Universe to the atom



- ⇒ A **Depth Study** must also be completed in **both** Year 11 and Year 12.
- ⇒ This is any type of investigation/activity that a student completes individually or collaboratively that allows the further development of one or more concepts found within or inspired by the syllabus.
- ⇒ Depth studies provide opportunities for students to pursue their interests in Physics, acquire a greater depth of understanding, and take responsibility for their own learning.

Course Specific details

To support learning in Physics, some experiences which **may** be offered in the study of this course include: -

- ◇ Physics Experiments University of Sydney
- ◇ PhysicsFest—University of Newcastle
- ◇ Canberra excursion to visit the observatory and Questacon
- ◇ ANSTO Nuclear reactor



Further information about the course content and outcomes can be obtained from the website below.
<http://syllabus.nesa.nsw.edu.au/physics-stage6>