

Course Description

Physics

Course Description

Module 1 - Development of practical skills in Physics

Skills of planning, implementing, analysis and evaluation

Module 2 - Foundations of Physics

Physical quantities and units, scalars and vectors, measurements

Module 3 - Forces and motion

Motion, forces in action, work, energy and power, materials, Newton's laws of motion and momentum

Module 4 - Electrons, waves and photons

Charge and current, energy power and resistance, electrical circuits, waves, quantum physics

Module 5 - Newtonian world and astrophysics

Thermal physics, circular motion, oscillations, gravitational fields, astrophysics

Module 6 - Particles and medical Physics

Capacitors, electric fields, electromagnetism, nuclear and particle physics, medical imaging

Entry Criteria

Separate Science. Students must have a Grade 7 in the Science they wish to study with at least a Grade 6 in the others. Students must have a Grade 6 in Mathematics.

Combined Science. Students must have a Grade 7,7 in Combined Science with at least a Grade 6 in Mathematics.