

# Course Description

## Physics

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#### 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 in Combined Science with at least a Grade 6 in Mathematics.

Students who do not meet the above criteria can still be considered, subject to a Head Start Test in their first lesson in September.