IB PHYSICS

Measurements and Uncertainties

- Measurements in Physics
- Uncertainties and Errors
- Vectors and Scalars

Mechanics

- Motion
- Forces
- Work, Energy and Power
- Momentum and Impulse

Thermal Physics

- Thermal Concepts
- Modeling a Gas

Waves

- Oscillations
- Traveling Waves
- Wave Characteristics
- Wave Behavior
- Standing Waves

Electricity and Magnetism

- Electric Fields
- Heating Effect of Electric Currents
- Electric Cells
- Magnetic Effects of Electric Currents

Circular Motion and Gravitation

- Circular Motion
- Newton's Law of Gravitation

Atomic, Nuclear, and Particle Physics

- Discrete Energy and Radioactivity
- Nuclear Reactions
- The Structure of Matter

Energy Production

- Energy Sources
- Thermal Energy Transfer

Wave Phenomena Additional Higher Level (AHL)

- Simple Harmonic Motion
- Single-Slit Diffraction
- Interference
- Resolution
- Doppler Effect

Fields (AHL)

- Describing Fields
- Fields at Work

Electromagnetic Induction (AHL)

- Electromagnetic Induction
- Power Generation and Transmission
- Capacitance

Quantum and Nuclear Physics (AHL)

- The Interaction of Matter with Radiation
- Nuclear Physics

Relativity (Option)

- The Beginnings of Relativity
- Lorentz Transformations
- Spacetime Diagrams
- Relativistic Mechanics (AHL)
- General Relativity (AHL)

Engineering Physics (Option)

- Rigid Bodies and Rotational Dynamics
- Thermodynamics
- Fluids and Fluid Dynamics (AHL)
- Force Vibrations and Resonance (AHL)

Imaging (Option)

- Introduction to Imaging
- Imaging Instrumentation
- Fiber Optics
- Medical Imaging (AHL)

Astrophysics (Option)

- Stellar Quantities
- Stellar Characteristics and Stellar Evolution
- Cosmology
- Stellar Processes (AHL)
- Further Cosmology (AHL)