

KS5 – Year 12 – Physics

Term	Topic Titles	Brief Overview
1	Measurements and Their Errors	Students learn the principles of measurement accuracy, precision, and error analysis to ensure reliable and accurate scientific data.
	Waves and Optics	Students learn the properties, behaviour, and applications of progressive and stationary waves, including interference and diffraction.
	Waves and Optics	Students learn the principles of forces, motion, energy, and how the relationships between each can be applied to the real world.
	Measurements and Their Errors	Students learn the principles of measurement accuracy, precision, and error analysis to ensure reliable and accurate scientific data.
2	Particles and radiation	Students learn about the fundamental particles, the Standard Model, and the interactions of radiation with matter.
	Electricity	Students learn about electric current, potential difference, resistance, and the principles governing electric circuits
	Materials	Students learn about the mechanical properties of materials under various conditions.
3	Further Mechanics	Students learn advanced concepts in mechanics, including circular motion, simple harmonic motion, and resonance.
	Thermal Physics and Ideal Gases	Students learn the principles of thermal energy transfer and thermodynamics, with the context of the behaviour of ideal gases.
	Predicted Grade Exams	Students complete summary formative assessments to determine their UCAS predicted grades.