

## Year 12

**Further Mechanics** - This topic covers motion in different manners, circular motion and simple harmonic motion.

**Waves** - Having been introduced to waves previously students will take their learning further by learning about the refraction, diffraction and interference of waves in more detail.

**Electricity** - Having built the foundation of electricity in KS3/4, students will now learn about resistivity and internal resistance of materials, and how potential dividers are used in everyday life.

**Mechanics & Materials** - In mechanics students will learn about things such as projectile motion, collisions and resolving vectors. In materials students delve into the stress and strain of materials, and apply it to determine Young's Modulus.

**Particles & Radiation** - Students will delve deeper into the fundamentals particles and forces which govern the universe. They will also learn about the photoelectric effect and de Broglie wavelength, demonstrating wave-particle duality.

