## **A-Level Physics**

Year 12 Curriculum Framework



AS and A-level Physics 7407, 7408

## Curriculum Overview

At ICC we follow the AQA Physics AS and A-level Specification. The curriculum is sequenced to be delivered by two members of teaching staff and each unit is mapped to the big ideas from our KS3 and KS4 curriculum. Each unit is assessed with end of topic summative assessments as well as half termly cumulative assessments and formative assessment throughout the course ensures retrieval of relevant content and supports students in making synoptic links. Opportunities to consider rich questions and reference to futures are made where relevant throughout the course in order to help our students understand the present and plan for their own future.

Link to the specification

<u>Link to the scheme of</u> <u>work</u>

		Teacher 1			Teacher 2		
		Topics	Practical's	Big idea	Topics	Practical's	Big idea
Autumn Term	First half	3.1.1 Use of SI units and their prefixes 3.1.2 Limitation of physical measurements Estimation of physical quantities 3.2.1 Particles 3.2.2 Electromagnetic radiation and quantum phenomena	Use of Vernier callipers / micrometer Calculation of error / percentage error	⊕ MATTER	3.4.1 Forces, energy and momentum		FORCES ENERGY
	Second half	3.2.2 Electromagnetic radiation and quantum phenomena 3.3.1 Progressive and stationary waves	Required practical 1	MATTER  WAVES	3.4.1 Forces, energy and momentum 3.4.2 Materials	Required practical 3  Required practical 4	FORCES  MATTER
Spring Term	First half	3.3.2 Refraction, diffraction and interference	Required practical 2	WAVES	3.5.1 Current electricity	Required practical 5	ELECTROMAGNETS
	Second half	Review of course			3.5.1 Current electricity	Required practical 6	ELECTROMAGNETS
Summer Term	First half	Revision			Revision		
	Second half	3.6.2 Thermal physics		ENERGY MATTER	3.6.1 Periodic motion		FORCES