



### Physics - IAL EdExcel

Approximate available lessons based on 5 lessons per week over 37 week year; assuming approximately 16 lessons missed for holidays/other subject activities/PSHE/exams

Exact curriculum timings are approximate due to holidays/ other subject trips and activities / PHSE / internal examinations

All topics across KS5 will have ongoing formative assessment including:

- Questioning techniques
- Peer/self-marking and assessments
- Written exercises
- Presentations
- Class activities
- Practical work

All topics will have some form of summative assessment to test the knowledge and skills covered within the topic. These will take the forms of:

- End of topic tests
- Scientific Investigations

All topics will include practical work to ensure that the links between practical and theory are encouraged and emphasised.

	<b>Year 12 Physics</b>	<b>Year 13 Physics</b>
<b>Topic and Content</b>	<p><b>Unit 1</b>  <b>T1: Forces and Motion</b>  <b>Fluids, viscosity and TV</b>  <b>T2: Hooke's Law</b>  <b>Key practicals</b></p> <p><b>Unit 2</b>  <b>T3: Waves and particle nature of light</b>  <b>T4: Electric circuits</b></p> <p><b>Unit 3 application of practical skills</b></p>	<p><b>Unit 4</b>  <b>T5: Further mechanics</b>  <b>T6: Electric and magnetic fields</b>  <b>T7: Nuclear and particle physics</b></p> <p><b>Unit 5</b>  <b>T8: Thermodynamics</b>  <b>T9: Nuclear decay</b>  <b>T10: Oscillations</b>  <b>T11: Astrophysics and cosmology</b></p> <p><b>Unit 6 application of experimental methods</b></p>
<b>Skills assessed</b>	<p><b>AO1:</b> Knowledge and understanding of scientific ideas  <b>AO2:</b> Application of knowledge and understanding, analysis and evaluation of science  <b>AO3:</b> Experimental skills, analysis and evaluation of data and scientific methods  <b>AO4:</b> Scientific literacy and communication</p>	<p><b>AO1:</b> Knowledge and understanding of scientific ideas  <b>AO2:</b> Application of knowledge and understanding, analysis and evaluation of science  <b>AO3:</b> Experimental skills, analysis and evaluation of data and scientific methods  <b>AO4:</b> Scientific literacy and communication</p>
<b>Method of Summative Assessment</b>	<p>Projects  Investigations  End of Topic Tests  Public Examinations in Jan and June</p>	<p>Projects  Investigations  End of Topic Tests  Public Examinations in Jan and June</p>