

# PHYSICS A AT A GLANCE

## COURSE OVERVIEW

Physics A content is split into six teaching modules: Modules 1 to 4 constitute the stand-alone AS Level qualification; Modules 1 to 6, combined with the Practical Endorsement, constitute the full A Level. The modules can be summarised as:

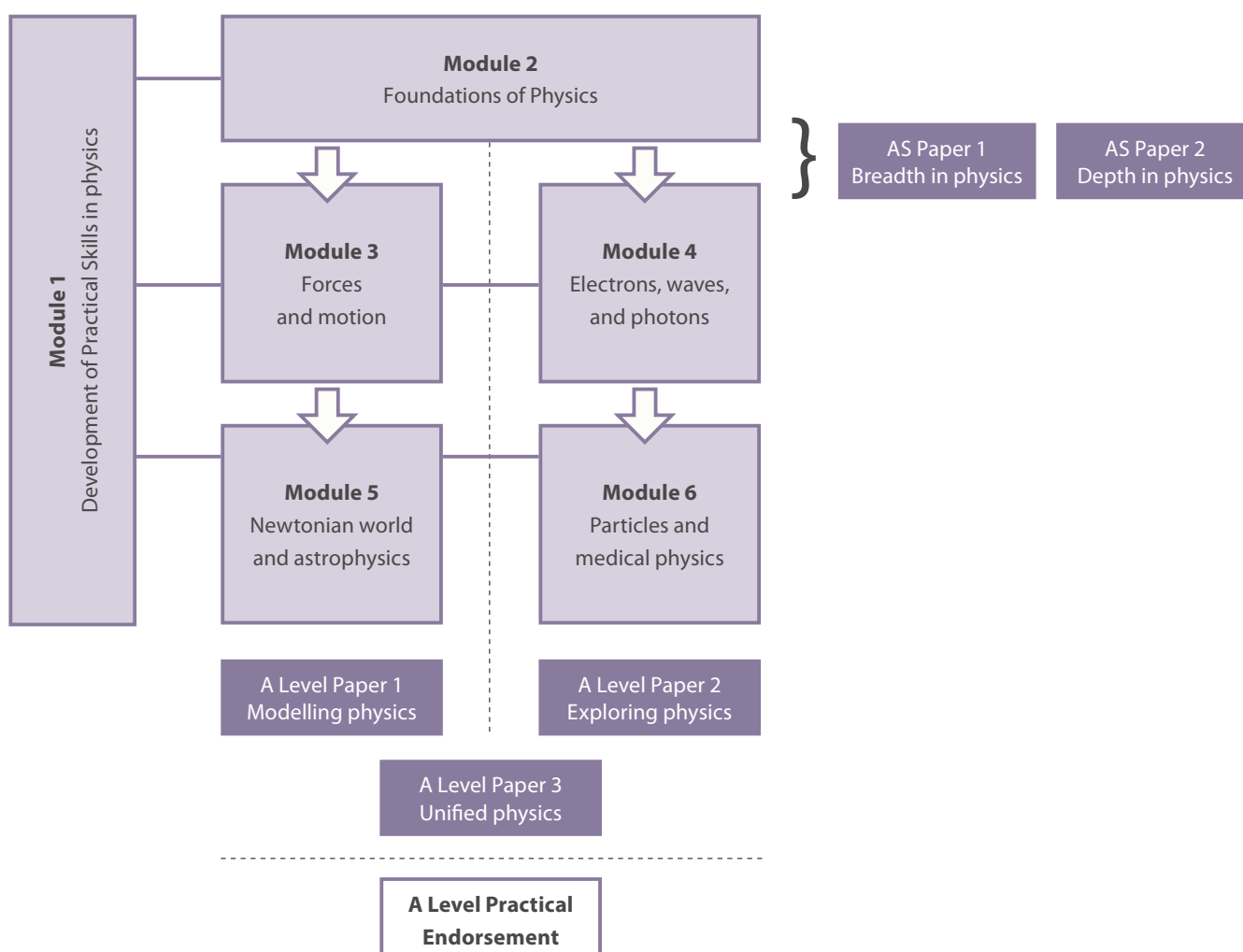
- **Module 1:** Development of practical skills.
- **Module 2:** Foundations of physics.
- **Module 3:** Forces and motion.
- **Module 4:** Electrons, waves, and photons.
- **Module 5:** Newtonian world and astrophysics.
- **Module 6:** Particles and medical physics.

### At AS Level:

- Papers 1 and 2 can assess any content from Modules 1 to 4.

### At A Level:

- Paper 1 assesses content from Modules 1, 2, 3 and 5
- Paper 2 assesses content from Modules 1, 2, 4 and 6
- Paper 3 assesses content from Modules 1 to 6.



# CONTENT OVERVIEW

## PHYSICS A – AS (H156) / A LEVEL (H556)

Module 1 – Development of practical skills in physics		
Skills of planning, implementing, analysis and evaluation		
Module 2 – Foundations of Physics		
Includes: <ul style="list-style-type: none"> <li>Physical quantities and units</li> <li>Making measurements and analysing data</li> <li>Nature of quantities.</li> </ul>		
Module 3 – Forces and motion		Module 4 – Electrons, waves and photons
Includes: <ul style="list-style-type: none"> <li>Motion</li> <li>Forces in action</li> <li>Work, energy and power</li> <li>Materials</li> <li>Newton's laws of motion and momentum.</li> </ul>		Includes: <ul style="list-style-type: none"> <li>Charge and current</li> <li>Energy, power and resistance</li> <li>Electrical circuits</li> <li>Waves</li> <li>Quantum physics.</li> </ul>
Module 5 – Newtonian world and astrophysics (A level only)		Module 6 – Particles and medical physics (A level only)
Includes: <ul style="list-style-type: none"> <li>Thermal physics</li> <li>Circular motion</li> <li>Oscillations</li> <li>Gravitational fields</li> <li>Astrophysics.</li> </ul>		Includes: <ul style="list-style-type: none"> <li>Capacitors</li> <li>Electric fields</li> <li>Electromagnetism</li> <li>Nuclear and particle physics</li> <li>Medical imaging.</li> </ul>

# ASSESSMENT OVERVIEW

## AS LEVEL PHYSICS A (H156) – FIRST EXAM JUNE 2016

Paper		Marks	Duration	Weighting
Paper 1	<b>Breadth in physics</b> Content – Modules 1, 2, 3, 4	70	1 hr 30 mins	50%
	Section A – Multiple choice	20		
	Section B – Structured questions, covering theory and practical skills	50		
Paper 2	<b>Depth in physics</b> Content – Modules 1, 2, 3, 4	70	1 hr 30 mins	50%
	Structured questions and extended response questions covering theory and practical skills	70		



## A LEVEL PHYSICS A (H556) – FIRST EXAM JUNE 2017

Paper		Marks	Duration	Weighting
Paper 1	<b>Modelling physics</b> Content – Modules 1, 2, 3, 5	<b>100</b>	2 hr 15 mins	37%
	Section A – Multiple choice	15		
	Section B – Structured questions, covering theory and practical skills	85		
Paper 2	<b>Exploring physics</b> Content – Modules 1, 2, 4, 6	<b>100</b>	2 hr 15 mins	37%
	Section A – Multiple choice	15		
	Section B – Structured questions, covering theory and practical skills	85		
Paper 3	<b>Unified physics</b> Content – all modules	<b>70</b>	1 hr 30 mins	26%
	Structured questions and extended response questions covering theory and practical skills	70		
Non-exam assessment	<b>Practical endorsement for physics</b>	Pass/Fail	Non-exam assessment	Reported separately
	See pages 28-29. Teacher-assessed component common to Physics A and Physics B (Advancing Physics). Candidates complete a minimum of 12 practical activities to demonstrate practical competence. Performance reported separately to the A Level grade. Moderation details still to be confirmed by Ofqual at the time of going to press	Reported separately		