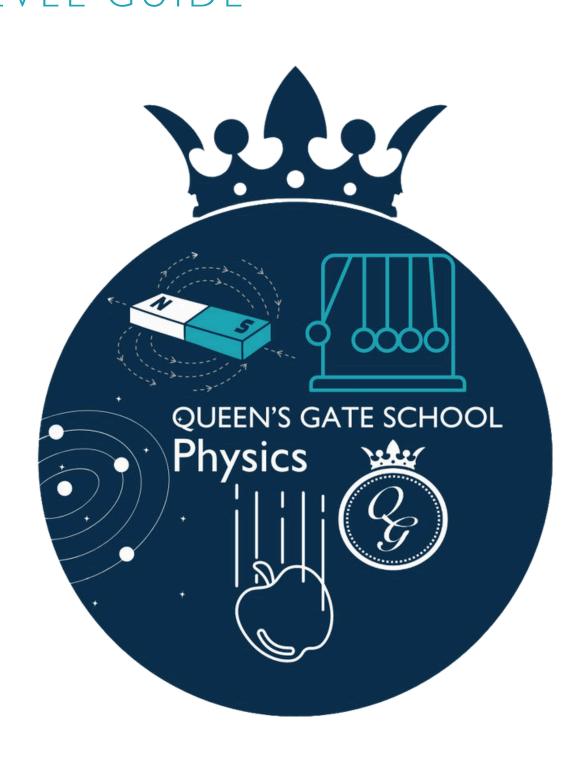
QUEEN'S GATE SCHOOL PHYSICS A-LEVEL GUIDE



WHY STUDY PHYSICS A-LEVEL?

"A-Level Physics is a dynamic and challenging subject that explores the laws of the universe, preparing students for advanced studies and various career opportunities. The curriculum is comprehensive, covering core topics essential to understanding the physical world."

WHY STUDY PHYSICS?

- Gain problem-solving and analytical skills.
- Understand the principles governing our universe.
- Develop practical skills through hands-on experiments.
- Open doors to higher education and a wide range of career opportunities.

KEY TOPICS COVERED:

- Mechanics
- Electric Circuits
- Waves
- Electric and Magnetic Fields
- Gravitational Fields

- Particle Physics
- Nuclear Radiation
- Thermodynamics
- Oscillations
- Space

ENTRY REQUIREMENTS

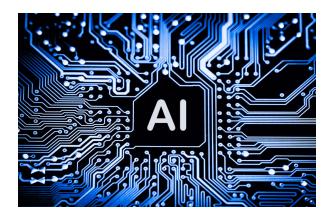
Good grades in Physics and Maths are essential to succeed in A-Level Physics.

EXAM ASSESSMENT BREAKDOWN

Pearson Edexcel	Duration	Weighting
Paper I: Advanced Physics I Topics: Mechanics, Electric Circuits, Further Mechanics, Electric and Magnetic Fields, Nuclear and Particle Physics	I hour 45 minutes	30%
Paper 2: Advanced Physics II Topics: Materials, Waves and Particle Nature of Light, Thermodynamics, Space, Nuclear Radiation, Gravitational Fields, Oscillations	I hour 45 minutes	30%
 Paper 3: General and Practical Principles in Physics Draws from all topics Focuses on conceptual understanding and experimental methods 	2 hours 30 minutes	40%
Science Practical Endorsement: Students must complete at least 12 practical activities as part of their assessment.		

REAL-WORLD APPLICATIONS OF PHYSICS

- Explore careers in engineering, technology, AI, medicine, and space exploration.
- Apply physics principles to renewable energy, communication systems, and scientific research.
- Make a difference in climate science, healthcare technology, and quantum computing.





EXAMS

There is no coursework on this course. However, your performance during practicals will be assessed.

There are three exams at the end of the two years for A-level. At least 15% of the marks for A-level Physics are based on what you learned in your practicals.

CONTACT

Dr J Mercer (Head of Science and Physics) jmercer@queensgate.org.uk