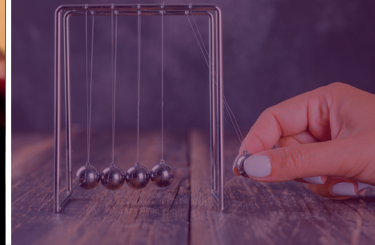
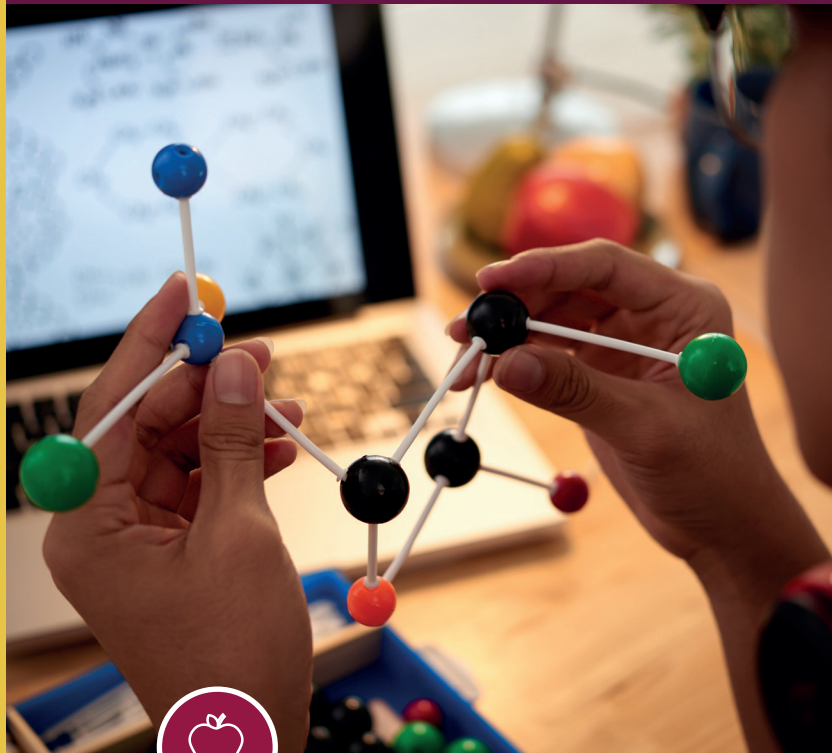


AQA Specification: 7408

Physics

The course is a rigorous, traditional and demanding journey through **Physics**. Students will need mathematical ability as well as imagination.

Physics A Level is an essential entry requirement for many universities if you wish to study engineering, geophysics and astrophysics



“

Austin Friars exists to provide excellent education inspired by our Augustinian values.

”

Take the first step towards your child's post-16 journey: **scan the QR code** to request a prospectus or arrange a visit.



AUSTIN FRIARS

Entry Requirements:

Students would normally be expected to have achieved a Grade 6, 6 or in the Combined Science GCSE or grade 6 in the Physics GCSE. Grades 7 – 9 in GCSE Mathematics would be an advantage. It is also recommended that students study A Level Mathematics.

Course Structure:

There are 8 compulsory sections with one optional section. (Section 9)

1. Measurement and their errors.

Including practical skills, precision, reliability, uncertainty and estimation.

2. Particles and radiation.

Including Quantum Physics, radiation and particle physics.

3. Waves.

Including classification of waves, refraction, reflection and diffraction.

4. Mechanics and Materials.

Including static and kinematic calculations, vectors, forces and material properties.

5. Electricity.

Including Ohm's law, resistivity, resistors, potential division and electromotive force.

6. Further mechanics and Thermal Physics.

Including circular motion, simple harmonic motion and the gas laws.

7. Fields and their consequences.

Including Gravitational, Electrical and Magnetic field theory.

8. Nuclear Physics.

Including radioactive decay, mass-energy equivalence and nuclear fission and fusion.

9. Turning points in Physics. (Option D)

Including the discovery of the electron, wave particle duality and special relativity.

Assessment:

Paper 1 – Two hours. Sections 1 to 5 and 6.1 (periodic motion).

Section A – 60 marks of long and short questions.

Section B – 25 marks of multiple choice.
85 marks total: 34%

Paper 2 – Two hours. Sections 6.2 (Thermal Physics) and sections 8 & 9.

Section A – 60 marks of long and short questions.

Section B – 25 marks of multiple choices.
85 marks total: 34%

Paper 3 – Two hours

Section A – 45 marks of long and short answers on practical Physics and data analysis.

Section B – 35 marks of long and short answers on turning points in Physics. (Option D)

80 marks total: 32%

Physics A Level is an essential entry requirement for many universities if you wish to study engineering, geophysics and astrophysics. Acceptance on these courses requires high grades; the A* grade is increasingly required.

An A Level pass in Physics will also be a suitable qualification to aid entry to university courses involving metallurgy, science research, nanotechnology, natural sciences, mathematics and computer science.