The Fisher Way: Curriculum

The Fisher Way aims to educate and inspire with joy, faith an
love because we are an inclusive Catholic community.

Successful and resilient learners who aspire to and achieve excellence

Confident individuals who can explore and communicate effectively

Responsible citizens who are active, loving and wise in all their endeavours

Subject	Physics
Year Group	Year 11
Intent	Successful and resilient learners: who use physics knowledge and scientific skills to investigate and solve problems in the physical world. Confident individuals: who use models, mathematics and evidence to explain physical processes and communicate their reasoning clearly. Responsible citizens: who evaluate the benefits, risks and environmental implications of technologies and make informed decisions about energy and resources.

Narrative	Learners consolidate forces and motion, then study waves and the electromagnetic spectrum before magnetism and electromagnetism. Separate Science learners study space physics; Combined Science learners use this time to strengthen earlier content and practical understanding. The sequence builds on energy, electricity, atomic structure and forces from Years 9 and 10. Learners connect mathematical relationships with models and observations, and consider applications in communication, medicine and engineering. Mock feedback and targeted revision prepare learners for both GCSE papers. This supports progression to further study, including A-level Physics, while strengthening their ability to evaluate scientific and technological claims.					
Half term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Knowledge (topics studied)	Forces and motion consolidation; waves, wave properties, frequency, wavelength and speed.	Wave investigations; electromagnetic spectrum, uses and hazards; Separate Science wave extensions.	Magnetism and electromagnetism: fields, electromagnets and the motor effect; pathway-specific extensions.	Space physics (Separate Science): stars, orbits, red-shift and the expanding Universe. Combined Science consolidation.	Targeted revision of both GCSE papers, required practicals, equations and data analysis.	GCSE examination preparation and examinations; final review of identified gaps.
Key skills	Interpret motion graphs; apply equations; describe wave behaviour using accurate vocabulary.	Measure wave speed; investigate refraction and infrared radiation; evaluate methods and risks.	Plot fields; explain motor action; apply equations appropriate to tier and qualification.	Evaluate astronomical evidence and orbital models; or strengthen electricity and forces through practical problems.	Select equations; convert units; interpret unfamiliar data and justify practical improvements.	Manage time; show working; check units and answers; respond precisely to command words.

Half term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Cultural capital and careers	Transport safety, seismology and communication technologies.	Medical imaging, telecommunications and optical engineering.	Electrical engineering and motor design; applications in transport and industry.	Astronomy and satellite technology; how evidence changes scientific explanations.	Routes into physics, engineering and technical careers; independent study skills.	A levels, vocational courses and apprenticeships; transferable problem-solving skills.
Assessment	Topic checks; exam and practical questions.	Mock assessment, question-level analysis and recovery.	Topic assessment; targeted checks of identified gaps.	Mock or cumulative exam practice; feedback and recovery.	GCSE preparation and examinations, following the exam timetable.	GCSE examinations and final targeted support.