

PHYSICS

WHY STUDY PHYSICS *at* STONYHURST?

WE HAVE A MAXIMUM CLASS SIZE OF 12

To ensure you receive the individual attention you need to excel in Physics



INSPIRING COURSE ENRICHMENT

We are very proud of our ability to inspire and motivate our students; and the fact that many go on to study Science at university is testament to this. Activities include:

- ✓ Science Society talks
- ✓ British Physics Olympiad – run by Oxford University and includes written exams: A2 Challenge, A2 BPhO Round 1, AS Challenge
- ✓ Visiting speakers
- ✓ Drone building and racing club
- ✓ Science Live Physics Event at The University of Manchester
- ✓ Astronomy Society

MORE THAN EDUCATIONAL EXCELLENCE

We will help you to develop and share your individual gifts and talents, learn from others and reach your full potential, preparing you for a successful future, wherever it may take you.

WHAT CAREER COULD I GO INTO?

Research-based roles and positions in Physics and other sciences and business, finance, IT and engineering are all areas in which a Physics graduate can build a career.

WHAT WILL I LEARN?

Studying Physics is about attempting to explain the universe in terms of simple models.

At Stonyhurst you will learn a great deal about the universe and the amazing range of different ways that nature's building blocks can be put together and interact with each other.

We also teach you to look critically at the world and how our ideas about it have developed through the ages.

At Stonyhurst, we aim to help students develop skills and capabilities that will help you in your adult and working lives. Many of our students go on to study Science-based courses at university.



WHAT DO I NEED?

- ✓ The ability to think logically
- ✓ The ability to work independently
- ✓ The ability to apply mathematical skills in order to gain a deep understanding of the nature of matter
- ✓ The ability to critically evaluate information and communicate this evaluation effectively
- ✓ Good practical skills
- ✓ A good basic understanding in the Sciences and Maths. If you have less than a Level 7 at GCSE in either, you will find the A level course difficult

In addition to studying the theory behind Chemistry, you will carry out a wide range of experiments throughout the course.

You will also keep a detailed lab book, which forms the evidence for achieving the practical endorsement at the end of the course.

WHAT COURSES ARE ON OFFER?

At Stonyhurst we offer two different courses in Physics. Please talk to a member of the teaching staff for more information.

A LEVEL PHYSICS OCR-A

Year 1

- ✓ Development of Practical Skills in Physics
- ✓ Foundations of Physics
- ✓ Forces and Motion
- ✓ Electrons, Waves and Quantum

Year 2

- ✓ Newtonian World
- ✓ Astrophysics
- ✓ Particles
- ✓ Medical Physics

INTERNATIONAL BACCALAUREATE STANDARD/HIGHER LEVEL

- ✓ Measurements and Uncertainties
- ✓ Mechanics
- ✓ Thermal Physics
- ✓ Circular Motion and Gravitation
- ✓ Oscillations and Waves
- ✓ Electricity and Magnetism
- ✓ Atomic, Nuclear and Particle
- ✓ Energy Production
- ✓ Additional Units (Higher Level only)

Our IB Diploma Programme is designed to produce highly-educated all-rounders who embrace social responsibility, intercultural awareness, and a duty to local and global communities to make an increasingly complex world a better place.



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Scan the QR
code for more
information on
the subject

www.stonyhurst.ac.uk

LDS

