

PHYSICS

at SCGSG

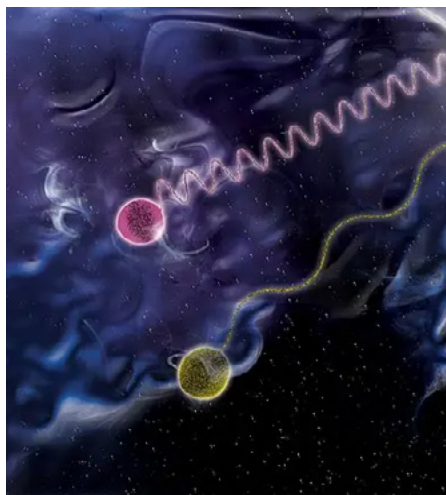
What will I study?

Topics studied as part of the Edexcel course include...

- Mechanics
- Electric Circuits
- Materials
- Waves and the particle nature of light
- Quantum Physics
- Electric, magnetic and gravitational fields
- Nuclear Physics and radiation.
- Particle Physics (Quarks, leptons and mesons)
- Stars and the Universe

Assessment is through two papers of 1 hour and 45 minutes, each examining half the course content, and one paper of 2 hours and 30 minutes examining the entire content with synoptic questions and questions on practical skills. Students are also awarded a practical endorsement by completing practical work during the course.

At least 40% of the marks will be awarded for applying maths skills at level 2 and above.



What is Physics?

Physics is about understanding how nature behaves from the smallest possible scale, deep inside the atom to the largest conceivable distance, stretching across the entire universe. During the course, you will discover how physicists use observations and measurements to devise theories and laws, which are then refined through further testing. You will examine the application of Physics to the development of a wide range of technologies.

Miss Thomson and Mr Hughes teach A-Level Physics here at SCGSG. They will offer comprehensive support and guidance throughout the course.

Where might Physics take me?

Students will have opportunities to extend their work beyond the laboratory. These include the opportunity to visit lectures by current researchers at Birmingham University, to subscribe to Physics Review magazine, and **a biannual trip to the particle physics research facility at CERN in Geneva!**



Physics + Maths

When combined with Mathematics, Physics A-Level will enable you to progress to Higher Education and careers in fields such as Physics, Astrophysics, Medical Physics, Geophysics, Space Science, Engineering and Computer Science.

Materials Science and Chemical Engineering are options if you study Chemistry in addition to Physics and Mathematics.