

PHYSICS AT SCGSG

In 2019, 80% of A level Physics students at SCGSG achieved grades A*-B



Andromeda galaxy, taken with the Hubble telescope.

https://c1.staticflickr.com/3/2787/4058451581_ab9d45ca31_b.jpg

Students should have excellent mathematical skills, which they will build on during their studies. They will develop well-tuned logical and analytical skills as well as the ability to problem solve. The course is supported by a high quality text book and an interactive online question resource.

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.

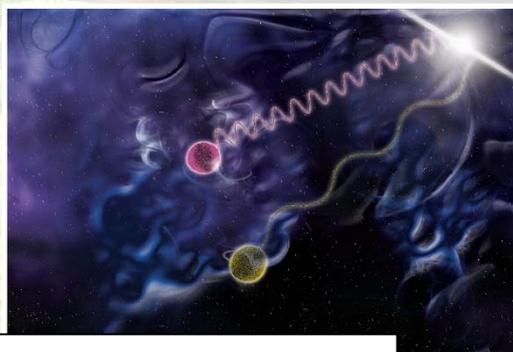
Physics seeks to explain the entire universe, from the smallest sub-atomic particles to the largest galaxies and beyond. The course aims to stimulate students' interest in and enjoyment of Physics and how it explains the world around them.

During the course, which is with the Edexcel exam board, students will study:

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.



Artist's impression of photons.

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In 2019 75% of A-level Physics students went on to study Physics related subjects including:

Aerospace Engineering
Mechanical Engineering
Physics
Automotive engineering
Civil Engineering