Physics

What will I need before taking this course?

Two Grades 6 or above in Combined Science. Grade 6 or above in Physics one other Science if you studied separate Sciences at GCSE.

A Grade 6 or above in GCSE English and a Grade 7 or above in Mathematics.

The expectation is that you would also be studying A level Mathematics.

Assessment and Grading

For A level, there are three examined modules;

- Modelling Physics
  (Worth 37%) 100 marks (2 hour 15 minutes exam)
- Exploring Physics
  (Worth 37%) 100 marks (2 hour 15 minutes exam)
- Unified Physics
  (Worth 26%) 70 marks (1 hour 30 minutes exam)
- Practical endorsement in Physics
  (non exam assessment, reported separately)

All papers are sat in June of Year 13, which count for 100% of the grade. Currently an overall mark of 80% at A level represents a Grade A, a Grade E is 40%, with intervening grades at 10% intervals. (The A* Grade is available with a 90% score).

How will I learn?

Lessons involve theoretical and practical activities. A commitment to discussion and study time outside lessons is essential for success in this course.

What can I do at the end of the course?

Physics lends itself to a wide range of career opportunities including engineering, power generation, medicine, research and development. However, the analytical and problem-solving skills that you will develop will greatly enhance your employment prospects with any organisation.

What will I learn?

A Level Course Outline :

The content is split into six teaching modules**:**

Module 1 – Development of practical skills in Physics

1.1 Practical skills assessed in a written examination

1.2 Practical skills assessed in the practical endorsement

Module 2 – Foundations of Physics

2.1 Physical quantities and units

2.2 Making measurements and analysing data

2.3 Nature of quantities

Module 3 – Forces and motion

3.1 Motion

3.2 Forces in action

3.3 Work, energy and power

3.4 Materials

3.5 Newton's laws of motion and momentum

Module 4 – Electrons, waves and photons

4.1 Charge and current

4.2 Energy, power and resistance

4.3 Electrical circuits

4.4 Waves

4.5 Quantum physics

Module 5 – Newtonian world and astrophysics

5.1 Thermal physics

5.2 Circular motion

5.3 Oscillations

5.4 Gravitational fields

5.5 Astrophysics and cosmology

Module 6 – Particles and medical Physics

6.1 Capacitors

6.2 Electric fields

6.3 Electromagnetism

6.4 Nuclear and particle physics

6.5 Medical imaging

Before beginning the course in September, you would be well-advised to read: Head Start to A Level Physics by CGP.

AWARDING BODY	OCR
CONTACT FOR FURTHER DETAILS	Ms Myrtle—Head of Science