A Level Physics	
Exam board & Specification Number	AQA
Qualification Accreditation Number (QAN)	60147447
Link to Course Details Webpage	click here
Duration, Delivery and Study Mode	Two Years Full Time Day Time Study
Start Date (not flexible) and Campus	01 September from Stanley Avenue Campus

## Course Details: Who is this Course for?

This course is for students progressing from GCSE into Level 3 (A Level or Equivalent) studies, with a view to study this subject or related subjects at degree level.

### Course Details: What Will You Learn?

Year

3.1: Measurements and their errors: Use of SI units and their prefixes,

Limitation of physical measurements, and Estimation of physical quantities

Particles and radiation: Particles, and Electromagnetic radiation and quantum phenomena

Waves: Progressive and stationary waves, and Refraction, diffraction and interference

3.2: Mechanics and materials:

Force, energy and momentum, and Materials, including the Young modulus

**3.1 Electricity:** Topics you will study include: Current electricity

Year 2

3.6 Further mechanics and thermal physics:

As well as revision of Year I topics, topics you will study include: Periodic motion and Thermal physics

- **3.6 Fields and their consequences:** As well as revision of Year 1 topics, topics you will study include: fields, gravitational fields, Electric fields, Capacitance, and Magnetic fields
- **3.6: Nuclear physics:** As well as revision of Year I topics, topics you will study include: Radioactivity, including Radioactive decay, Nuclear instability, Induced fission and Safety aspects.

Option Unit: Engineering.

#### Course Details: How will you be Assessed?

These are the Unit Codes and their percentage weighting at AS Level:

Paper 1: 7408/1 [34%]	Assessed by a 2 hour examination in the Summer Term
Paper 2: 7408/2 [34%]	Assessed by a 2 hour examination in the Summer Term
Paper 3: 7408/3 [32%]	Assessed by a 2 hour examination in the Summer Term

Throughout the course students complete the 'Practical Skills Endorsement' component as well, for which a pass/fail is awarded. The experiments chosen for this are closely related to the theoretical content of the specification and so reinforce learning as well as giving the students an opportunity to acquire valuable experimental and analytical skills.

### **Course Details: Entry Requirements**

Please see our webpage for details of our course entry requirements.

Students must achieve a D grade or higher at the end of Year 12 in order to progress into Year 2 of this course.

# **Additional Course Information**

# Course Details: How will you Learn?

Delivery Mode:

- Classroom based teaching
- Flipped Learning based independent study
- Laboratory based practical experiments

### Course Details: Equipment / Materials you will need

- Scientific Calculator
- Graph Paper, Writing Paper, Pencils and Pens
- Maths Sets including Ruler, Compass, Protractor
- All other equipment will be provided to you by the school

### How can I prepare for and explore this course further?

- Glossary of Technical Terminology
- Recommended Text Books
- Past Exam Papers
- Physics Related Articles
- Physics VIP Zone

## Careers & Progression (Where Next)?

Career ideas and Progression route:

Physics at A-level and degree level is recognised as a very valuable subject by employers as it relies on clear and logical thinking and is a rigorous intellectual discipline. The practical and problem-solving skills gained in this course are in demand not only in science-based careers and university courses, but in the world of Finance. Economics and Business.

Click here for information on Careers in Physics