

<u>Type of course – A Level</u>

Course Overview

In an ever changing world Physics is a key science subject. Knowledge of Physics opens doors to many careers and opportunities. The course taught at DAA has a strong mathematical bias and it is important that you feel strong with maths, this includes concepts such as rearranging equations, and trigonometry. Many of the units you studied at GCSE are continued such as electricity, light, magnetism and mechanics; however new areas of Physics will be introduced which you have not seen before such as Quantum and fundamental particles. The new emphasis on practical skill will mean you will be testing exciting aspects of your everyday world such as the strength of gravity or the effect on the body with zero friction.

In order to study Physics you must also study

A Level Mathematics

Course Content

Core content

- 1. Measurements and their errors
- 2. Particles and radiation
- 3. Waves
- 4. Mechanics and materials
- 5. Electricity
- 6. Further mechanicals and thermal physics
- 7. Fields and their consequences
- 8. Nuclear physics

Options

- 9. Astrophysics
- 10. Medical physics
- 11. Engineering physics
- 12. Turning points in physics
- 13. Electronics

Assessment

Paper 1: What's assessed

- Sections 1-5 and 6.1 (Periodic motion) How its assessed
 - Written exam: 2 hours
 - 85 marks
 - 34% of A Level grade

Paper 2: What's assessed

 Sections 6.2 (Thermal physics), 7 and 8 assumed knowledge from sections 1- 6.1

How its assessed

- Written exam: 2 hours
- 85 marks
- 34% of A Level Grade

Paper 3: What's assessed

Section A: Compulsory section: Practical skills and data analysis Section B: Students enter for one of the sections 9, 10, 11, 12, or 13 How its assessed

- Written exam: 2 hours
- 80 marks
- 32% of A Level grade

A level practical skills to be assessed via endorsement:

a minimum of 12 practical activities to be carried out by each student, which together meet the requirements from the prescribed subject content, published by the department for education. The required practical activities will be defined by each awarding organisation.

Careers and Opportunities for Further Study

- Medicine
- Engineering
- Consultancy
- Teaching
- IT
- Games /Software Development
- Construction
- Astrophysics
- Programming
- Civil service
- Scientific research
- Optometry
- Pharmacy
- Dentistry
- Geotechnics

Entry Requirements

Minimum grade 6 in Science, grade 7 in Maths and 6 in English Language

In order to study physics, you must also study maths at A-Level