

AAQ in Applied Science

What is Applied Science?

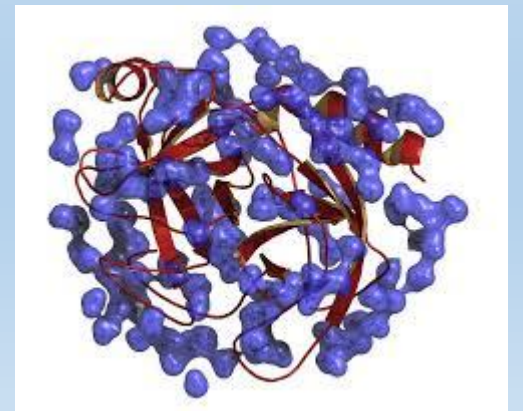
- AAQ Applied Science is a course that covers all 3 aspects of Science.
- The course is designed to ensure progression into higher education, employment or apprenticeships.
- It is broken into 5 units that will be completed over the 2 years.
- If all 4 units are completed the course is the equivalent in size to 1 A-Level

- Equivalent in size to one A Level.
- 4 units mandatory units, of which 3 are externally assessed.
- All disciplines of Science will be covered.
- This means that university degrees that require Biology, Chemistry and Physics can be accessed.

External examination units

Biology

- Structure and function of cells and tissues
- Structure and function of biological molecules
- Cellular transport and enzyme activity



External examination units

Chemistry

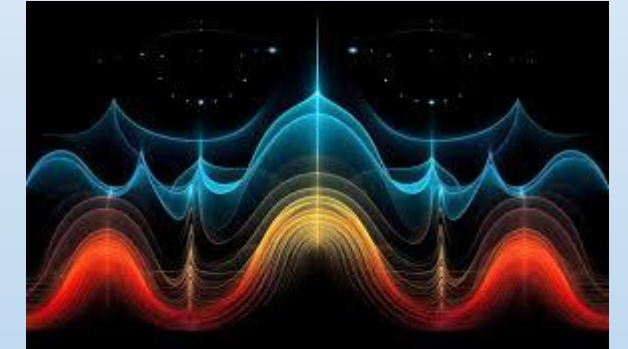
- Atomic and electronic structure
- Bonding and structure
- Periodicity
- Physical chemistry
- Organic chemistry



External examination units

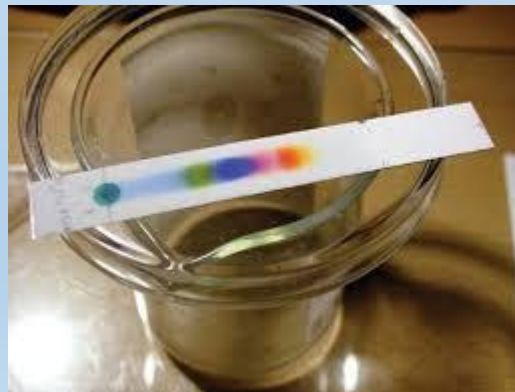
Physics

- Understanding waves and optical fibres
- Forces in transportation and Newtons Laws of Motion
- Electrical circuits and the transfer of energy



Practical Scientific Procedures and Techniques

- This unit includes quantitative laboratory techniques, calibration, chromatography, calorimetry and laboratory safety, which are relevant to the chemical and life science industries



Practical Scientific Procedures and Techniques

- Areas covered include:
- A - Undertake techniques to prepare solutions and determine concentrations, and purity.
- B - Undertake biological procedures to investigate concentration and distribution of biological components
- C - Undertake physical procedures to examine energy transfer

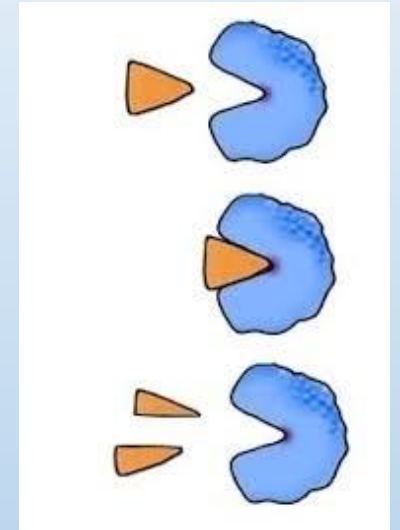


Science Investigation Skills

- Learners will cover the stages involved and the skills needed in planning a scientific investigation: how to record, interpret, draw scientific conclusions and evaluate. This unit will be assessed through a written task book.

Areas that will be covered:

- A - Planning a scientific investigation
- B - Data collection, processing and analysis/interpretation
- C - Drawing conclusions and evaluation
- D - Biology
- E - Chemistry
- F- Physics



Assessment

- The course is assessed in 2 separate ways:

1. Assignment – this is marked internally as coursework.

This include the Practical Investigation unit and the optional unit.

2. Examinations – the Biology, Chemistry and Physics aspects of the course will be examined externally.

Minimum entry requirements

- Five GCSEs at Grades 9-4/A*-C in five different subjects, including:
- English & Maths 9-4 (essential)
- Grade 5 in Science

- BTECs are graded on a scale from Starred Distinction (D*) to Pass (P).
The full grading scale, starting with the highest possible grade, is here:
- Starred Distinction/Distinction Star (D*)
- Distinction (D)
- Merit (M)
- Pass (P)

- A BTEC Level 3 National Extended Certificate is worth one A-level.
- Most unis accept BTEC applicants.
- Russell Group universities, including Oxford and Cambridge, recognise BTECs as part of their overall course requirements. They'll usually accept BTECs alongside other qualifications such as A-levels.