



Applied Science

Pearson AAQ Applied Science



Applied Science is the study of scientific principles and their real-world applications across Biology, Chemistry, and Physics. The Pearson BTEC Level 3 National in Applied Science is an Alternative Academic Qualification, offering a vocational approach ideal for students interested in scientific, healthcare, and engineering careers. This course focuses on both theoretical knowledge and practical skills, preparing students for technical roles or further study in science-related fields.

Topics you will study

Year 12 and Year 13:

Principles and Application of Biology: essential elements of biological science, focusing on cells, tissues, their structures, functions, and interactions within living organisms.

Principles and Application of Chemistry: fundamental concepts of chemistry and chemical reactions that occur in the natural world.

Principles and Application of Physics: practical and mathematical skills through the study of waves, motion, and electricity.

Practical Scientific Procedures and Techniques: essential lab techniques, such as titration, colorimetry, chromatography, and equipment calibration

Science Investigation Skills: planning and conducting experiments, data collection, and analysis in a variety of scientific contexts

Why study this subject?

- **Develop Practical Scientific Skills:** This course emphasises hands-on laboratory work, building essential technical skills for scientific and healthcare professions.
- **Understand Real-World Applications of Science:** Applied Science connects theory with practice, helping students understand the relevance of science in industry, healthcare, and technology.
- **Prepare for Vocational and Higher Education Pathways:** This course provides a strong foundation for vocational routes, apprenticeships, and higher education in healthcare, biomedical science, and engineering.

Why study this subject at Aston?

- Excellent outcomes year on year
- Experiences science teacher with practical industry experience and extensive background in applied science.
- Excellent enrichment opportunities including university lab visits and external speakers in the healthcare professions.

Assessment

The assessment is a blend of internally assessed coursework and externally set exams.

Units 1, 2 and 3: Externally assessed 1 hour exams covering fundamental scientific principle of biology, chemistry and physics

Units 4 and 5: Internally assessed coursework on practical scientific procedures, laboratory techniques, and the investigative project

Links particularly well with these subjects

Health and Social Care, Medical Science, Maths, Biology, Chemistry

Entry requirements

Grade 4 or above in Science (combined or individual sciences) and Mathematics.

Useful for careers in....

Applied Science is particularly valuable for careers in Healthcare, Biomedical Science, Forensic Science, Environmental Science, Nursing, Laboratory Technician, Pharmacology, and Engineering.