

*Applied science is a way of gaining a broad and respected qualification which cuts across the science disciplines to give a coherent understanding of the scientific world.*



**Are you interested in:**

- applications of science
- problem solving
- scientific research
- how science shapes society?

**Leading to a career in:**

- Analytical sciences
- Biomedical sciences
- Forensic Science
- Midwifery and Nursing
- Pharmaceutical sciences
- Paramedic sciences
- Sport Therapy
- Pathways to Medicine

**Teacher to contact:**

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(Head of Vocational Sciences)

**Exam Board: OCR**

## AAQ- Extended Certificate (Level 3)

### EXTENDED CERTIFICATE IN APPLIED SCIENCE (1 A LEVEL EQUIVALENT; up to 56 UCAS points)

This AAQ (Alternative Academic Qualification) in Applied Science opens the door for you to access a broad range of science related careers. This qualification will allow you to progress into many science related degree subjects at university, such as nursing, midwifery, biomedical sciences, physiotherapy, radiology and many others. If you are interested in science but find the emphasis on examinations does not reflect your full potential, this qualification offers an excellent alternative- focusing more on coursework and applied practical work.

The Applied Science course will allow you to study how science is applied in many different types of professions and industries. The focus of the course is scientific usage, concentrating on how scientists and others use science in their work. It has been developed in collaboration with universities and employers to ensure it supports progression to higher education and science-based careers.

### ENTRY REQUIREMENTS

Entry to the AAQ requires you to achieve at least the minimum entry requirements for your chosen pathway plus a grade 5 or higher in GCSE Maths and a grade 5 or higher in GCSE Science.

### COURSE STRUCTURE

You will study 5 units in total, 2 of which are externally assessed and 3 are internally assessed (coursework). All units allow for you to submit resubmission or take resits. This qualification is equivalent in size to **one full A Level**, and carries the same UCAS points. Each unit you complete is graded as Pass, Merit, or Distinction which are combined across all five units to determine your final qualification grade.

**56  
UCAS  
points**

**MANDATORY UNITS.****UNIT F180: FUNDAMENTALS OF SCIENCE**

This unit builds your scientific foundation through biology, chemistry and physics. You'll explore how living organisms function, the structure of atoms, and physical principles like electricity and motion. But it's not just theory- you'll also complete key practicals that help you develop essential lab skills. Whether you're aiming for a science degree or a health profession, this unit gives you the core knowledge to succeed.

**UNIT F181: SCIENCE IN SOCIETY**

This unit shows you how science truly shapes our world. You'll explore how scientists work in global teams, analyse data, and respond to real-world challenges. We will investigate how scientific research informs public policy, medical breakthroughs and media headlines. A key benefit is that the exam is based on **pre-release material** issued before the exam- giving you time to prepare, explore ideas, and develop a deeper understanding of the content. It helps you understand the power- and responsibility- of science in society!

**UNIT F182: INVESTIGATING SCIENCE**

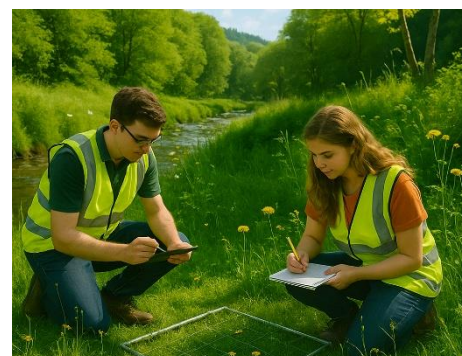
Become a real scientist: in this unit, you'll design, plan, and carry out your own scientific investigation (*just like researchers do, but with teachers to guide you!*). This is the most immersive, hands-on unit of the course where *you* take control. You'll develop key skills like risk assessment, method writing, data analysis, and evaluation. This is a mandatory unit with 100 % coursework.

**OPTIONAL UNITS.**

In addition to the above three core units (two exams and one coursework), you will complete two further coursework units that let you explore specialist areas of science in more depth. See below for possible options.

**UNIT F184: ENVIRONMENTAL SCIENCE**

Love the outdoors or passionate about the planet? In this unit you'll explore ecosystems, biodiversity, and the impact of human activity on the natural world. You'll go beyond the classroom- conducting real fieldwork using quadrats, transects, and data logging equipment to survey environments and gather meaningful data. This unit is **100% coursework** and you produce a piece based on your research and fieldwork.

**UNIT F185: FORENSIC BIOLOGY**

Step into the world of forensic science and uncover how to solve real crimes. In this unit, you'll explore how biological evidence like hair, fibres, blood and tissue is collected, prepared, and analysed in forensic investigations. You'll learn how to use microscopes and imaging techniques to examine biological structures and understand the significance of evidence from suspects and crime scenes. This unit is **100% coursework** and you will complete a structured report.

**UNIT F186: MEDICAL PHYSICS**

This unit takes you behind the scenes of modern healthcare to explore the science behind medical imaging, diagnostics and treatment. You'll study the magic of X-rays, CT scans, ultrasound, and radiotherapy, and understand how these technologies are used to treat patients. You'll learn how to plan safe diagnostic or therapeutic procedures using real-life case scenarios. This unit is **100% coursework**. This unit is perfect for anyone interested in healthcare, radiography, medical engineering, or physics-based science careers in the NHS and beyond.

