
Their journey starts here
Level 3 Certificates in Applied Science
Find out more at:
aqa.org.uk/applied-general
AQA
Realising potential

Why teach our Certificates in Applied Science?

Our Level 3 **Applied General Certificates** in Science are a vocational complement to A-levels or Tech-levels and ideal for learners looking to broaden their knowledge of a particular sector. Developed with the support of higher education they also meet new performance measurements for achievement and attract **UCAS tariff points**

Our Level 3 Applied Generals come in two sizes:

- 180 GLH Certificate
- 360 GLH Extended Certificate

*GLH = Guided learning hours

They reflect the most current and relevant subjects and themes. With a strong focus on synoptic learning and assessment, learners and tutors can be assured there are strong opportunities to develop teaching links within the curriculum and to integrate assessment.

"I hope that schools and teachers will fully embrace the scope of what could be some really exciting work for their students"

Dr John Wheeler, Head of Science Staffordshire University

An introduction to our Level 3 Applied Certificates in Science

These Level 3 qualifications offer a practical introduction to science and support progression to further study or employment. Developed in collaboration with schools, colleges and higher education, they help learners develop the fundamental scientific knowledge and practical skills valued by universities and employers.

Level 3 Certificate and Extended Certificate in Applied Science

A variety of assessment types allows learners to apply their knowledge in a practical way. An integrated approach to learning supports a more realistic and relevant qualification for learners.

Learners will:

- practise experimental scientific techniques and explore how they're applied in industry
- develop their knowledge and understanding of concepts in biology, chemistry and physics
- plan and carry out a scientific investigation of their own choosing
- explore ways in which topical scientific issues are presented in the media
- investigate the role of scientists and the different career pathways open to them
- use the optional unit to decide which scientific pathway to follow.

Level 3 Certificate in Applied Science

Unit summary

The certificate in Applied Science is made up of three mandatory units.

Unit number	Unit title	Assessment type
1	**Key concepts in science** Learners will develop an understanding of key concepts relating to biology, chemistry and physics. Centres are encouraged to use practical work to reinforce knowledge and develop learners' practical skills.	Written examination
2	**Applied experimental techniques** Learners are introduced to new experimental techniques, reinforcing methods met previously and developing practical skills including accuracy and precision. Learners will research the background to a number of analytical and experimental techniques in an applied or vocational context.	Internally assessed
3	**Science in the modern world** Learners will analyse and evaluate scientific information to develop critical thinking skills and understand the use of the media to communicate scientific ideas and theories. Learners will also find out about scientific careers through the different roles scientists undertake in scientific organisations.	Written examination (pre-release sources)

"This qualification imparts fundamental experimental techniques and allows students to explore and critically evaluate the context of science in the modern world."

Professional science organisation

"The focus on practical application of scientific knowledge and skills will underpin the continual development of such skills beyond graduation."

Professional science organisation

All of our technical and vocational qualifications meet the criteria for inclusion on performance tables.

gov.uk/government/collections/performance-tables-technical-and-vocational-qualifications

Level 3 Extended Certificate in Applied Science

Unit summary

The Extended Certificate (360 GLH) includes the Certificate qualification units 1–3. It develops learners' scientific knowledge and practical abilities and provides optional units in biology, chemistry and physics (one unit to be selected).

Unit number	Unit title	Assessment type
4	**The human body** Learners will develop knowledge and understanding of the structure and function of the digestive system, the components of a balanced and imbalanced diet and the effects on health. Assessment focuses on occupations that require knowledge of the human body, such as sports scientists and dieticians.	Written examination
5	**Investigating science** Learners gain the opportunity to undertake the role of a research scientist, following standard procedures to complete a scientific investigation. The unit enables learners to demonstrate and extend their scientific knowledge and skills. Learners may choose one investigation from a list of titles or choose their own investigation in consultation with their tutor.	Internally assessed
Optional: learners study one of the three options below		
6a	**Microbiology** Learners will develop their knowledge and understanding of key microbiological concepts and techniques used when working in biotechnological industries.	Internally assessed
6b	**Medical physics** Learners will gain an understanding of key areas in modern medical physics. They will learn about different diagnostic techniques and different types of therapy. They will be required to perform specific experiments with radioisotopes and light.	Internally assessed
6c	**Organic chemistry** Learners are introduced to preparative organic chemistry in a wide range of contexts, including pharmaceuticals, dyes and bio-diesel. Learners will synthesise organic compounds and will develop practical chemistry skills and techniques.	Internally assessed

Our qualifications are supported by the following higher education institutes:

- Aberystwyth University
- Birmingham City University
- University of Bolton
- Edge Hill University
- Staffordshire University
- University of South Wales
- Southampton University
- University of Sunderland
- University of Wolverhampton
- York St John University

"The opportunities for broader skills development afforded by this qualification mean that it has a significant edge over A-level. If delivered in the right spirit it will produce well-rounded scientific thinkers who can progress to scientific careers via a range of HE pathways"

Higher education institute

Our qualifications are supported by the following professional bodies:

- WiSET (Women in Science, Engineering and Technology)
- University of York Science Education Group
- The Association for Science Education

Free support materials

We've worked closely with employers, higher education institutes and tutors to create support materials that you'll find useful and inspiring – they'll also help you hit the ground running.

Each resource will help you with a specific aspect – either planning your lessons, delivery or preparing your learners for exams or assignments.

Our free support includes:

- sample schemes of work for every unit
- direct access to our subject and curriculum experts
- delivery models to support curriculum planning
- specimen question papers and mark schemes
- sample assignment briefs
- specific subject pages to access bespoke resources
- teaching guides for unit 3 – Science in the modern world
- additional sample assessment questions for unit 1 – Key concepts in science.

Access these support materials at aqa.org.uk/subjects/science/applied-general/science

Supporting you all the way

Our free introductory and prepare to teach events provide you an overview of the qualification and in depth training on content, delivery and assessment.

Available online or face-to-face. Book your course at aqa.org.uk/professional-development

If you have any queries email: alevelscience@aqa.org.uk or call 01483 477756.

Clear assessment and marking you can trust

We know the time and effort that you and your students put in to exams. We also understand how essential it is that the marks we give are fair, reliable and trustworthy.

Our Applied Science qualifications feature internally and externally assessed units. Externally assessed units are assessed by a 1 hour 30 minute examination. Internally assessed units are compensatory allowing learners' achievements to be recognised in grading the unit.

The criteria have been developed in consultation with higher education, professional bodies and employers to ensure that learners are always being assessed in a meaningful and relevant manner.

Getting the right results

Our experts in Research and Regulation (R&R) provide statistics and research evidence to ensure we assess and mark your learners' work fairly and accurately. We also recruit and train the highest calibre examiners and continually monitor their work.

Clear question papers and structured mark schemes

Learners of all abilities will understand our clearly worded exam papers, and our mark schemes demonstrate how you can help them achieve the best possible marks.

Administration overview

Centre approval

Centre approval is free for all our technical and vocational qualifications. Please contact us at centreapproval@aqa.org.uk for further information and details of how to apply.

Enter your learners

Enter your learners on our approved system and we'll allocate an external quality assurer (EQA) to provide quality assurance advice and support for your centre.

Assessment

For externally assessed units, you can enter your learners for the next available examination session and/or external assignment window on our approved system as soon as they are ready. Results will be issued by the date published on the confirmed exam timetable for the series.

Whilst internal quality assurance should be undertaken within the centre on the same basis, centres will be required to submit learners' work for moderation at specific times during the year.

Certification

Once all units have been successfully achieved, we will issue a full qualification certificate.

We're here to help

If you have any queries or if you'd like to become a centre, email alevelscience@aqa.org.uk or call 01483 477756.

Explore our Applied Science qualifications further by visiting aqa.org.uk/appliedscience

aqa.org.uk

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