

BTEC Nationals in

Applied Science

Transition Guide

Extended Certificate for first teaching from September 2025 Certificate for first teaching from September 2026



This document is for centres/practitioners moving (transitioning) from:

- Pearson BTEC Level 3 National Extended Certificate in Applied Science to the Pearson Level 3 Alternative
 Academic Qualification BTEC National in Applied Science (Extended Certificate) from 2025
- Pearson BTEC Level 3 National Certificate in Applied Science to the Pearson Level 3 Alternative Academic
 Qualification BTEC National in Applied Science (Certificate) from 2026

Nationals from 2025



L3



Content

Introduction to the AAQs	
o What is new?	3
o What makes it easy to transition?	4
Support Offer	5
Qualification Structure	7
Assessment Structure	9
Mapping Guide	1



Introducing the Level 3 BTEC Nationals from 2025 (AAQs)

The Level 3 BTEC Nationals from 2025 qualifications provide students with meaningful and practical learning experiences across a range of career sectors. They equip students with the applied knowledge, skills and personal attributes they need to enter and thrive in higher education and meet the demands of future employment in our fast-changing world.

Level 3 BTEC Nationals from 2025 (AAQs) are:

- Engaging and future-focused providing opportunities for students to learn in real, relatable and practical
 ways and designed to ensure that they develop critical knowledge and transferable skills to navigate the
 future.
- Accessible and fair for students, balanced with the demands of progression to the next stage of learning the use of the N Grade and our holistic approach to designing assessment criteria means that qualifications
 are attainable for students whilst ensuring that they have a solid foundation of skills and knowledge, and the
 confidence to progress.
- Accepted and supported by universities developed in collaboration with educators and universities to
 ensure students have the right combination of skills and knowledge for success in higher education. Over
 100 letters of support from universities.
- Well supported and straightforward to deliver and administer simple structure making unit combination
 more straightforward; uniformed format of external assessment across subjects to streamline
 administration; Pearson-Set Assignment Briefs (PSABs) removing the need for centres to plan their own
 assignments, and wide range of training and support.



What is new?

Preparing students for their future

Our new Level 3 BTEC Nationals from 2025 (AAQ) qualifications are designed with a clear focus on the future.

Our aim is to ensure that students are given every opportunity to develop the new knowledge, skills, attitudes and values they need to navigate and thrive through the uncertainty and to shape their world. We have identified three critical skill areas for the future – *transferable skills, digital skills and sustainability* – and have designed our new BTEC qualifications with these areas at the heart. Join us on the journey as we prepare young people to be the best versions of themselves for the future.

Read our brochure.

Click on the infographic to see further information.







What makes it easy to transition to the new BTEC Nationals from 2025 (AAQ)?

- Auto approval if you are currently approved to deliver BTEC Nationals you will receive automatically approval for the new qualification.*
- Refreshed and updated content and assessments to ensure your learners continue to progress to popular progression routes into HEIs and beyond.
- Simple, manageable and flexible structure you can continue to structure your delivery of teaching, learning and assessment when it best suits you and your learners.
- Unchanged Quality Assurance process with Standards Verification at the heart.
- Assessments Externally Assessed Exams available twice a year, and Internally Assessed units, Assessments set by Pearson, and taken by learners when they are ready.
- Familiar retake and resubmission rules.
- Grading, marking and assessment methodologies unchanged you can continue to teach and assess with confidence.
- Dedicated support our Subject Advisors and assessments teams are here to support you every step of the way.

*You must be approved in the relevant sector to receive automatic approval.





Support offer

Complimentary resources and services

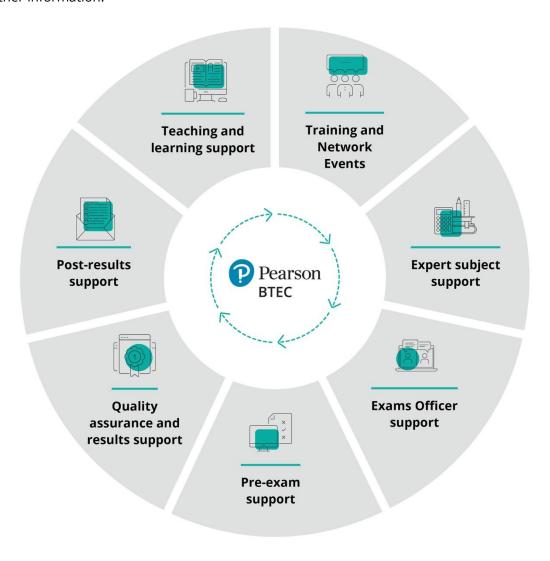
- BTEC National Teacher Guide a comprehensive guide to support preparation for delivery of your new BTEC National AAO.
- Sample Assessment Materials showing how tasks, questions and marking will be applied, which can be used as sample papers/tasks to prepare learners.
- <u>Exam Wizard</u> an online resource containing a bank of past paper questions and support materials to help you create your own mock exams and tests.
- Results Plus a free online results analysis tool for teachers that gives you a detailed breakdown of your students' performance in BTEC external assessments.
- <u>Training</u> and standardisation Getting Started and Preparing to Assess training events and recorded sessions will be available from July 2024 onwards.
- <u>Network events</u> an opportunity to hear about the latest developments from subject experts within Pearson and to share good practice with fellow centres.
- Dedicated <u>Subject Advisor</u> available throughout the year so please do get in touch if you would like any support or guidance with:
 - Planning your courses
 - Overview of BTEC quality assurance processes
 - Suggested resources
 - o Teaching and Assessment of internal units and components
 - Teaching external units and components
 - The training and support materials we have available.

Comprehensive Package of Paid resources

- **Student Books** provide concise yet complete coverage of each sector, with ample student activities and assessment practice, covering all mandatory and optional units. Available in print and e-book formats.
- **Teacher Packs** provide further supporting teacher resources for each sector. Designed to help students excel, including a front-of-class version of the e-book, activity sheets, fact sheets, videos and interactive knowledge check quizzes. Available as a bundle of units for each sector or as single unit packs.



Click on the infographic to see further information.





Nationals 2025



L3

Qualification Structure Comparison (Certificate)

Pearson Science	BTEC Level 3 National Certificat	e in A	oplied		Level 3 Alternative Academic Qua l in Applied Science (Certificate)	lificati	on B1
Unit Unit title GLH How		How	Unit	Unit title		How	
number			assessed	number			asse
Mandatory units – learners complete and achieve all units Mandatory Units, learners complete and achieve all units							
1	Principles and Applications of Science I	90	External	1	Principles and Applications of Biology	60	Extern
2	Practical Scientific Procedures and Techniques	90	Internal	2	Principles and Applications of Chemistry	60	Extern
				3	Principles and Applications of Physics	60	Extern



Internal

Qualification Structure Comparison (Extended Certificate)

Applied Science						
Unit	Unit Unit title		How			
number			assessed			
Mandator	Mandatory units – learners complete and achieve all units					
1	Principles and Applications of Science I	90	External			
2	2 Practical Scientific Procedures and Techniques		Internal			
3 Science Investigation Skills		120	External			
Optional units – learners complete one unit						
8	Physiology of Human Body Systems	60	Internal			
9	Human Regulation and Reproduction	60	Internal			
10	Biological Molecules and Metabolic Pathways	60	Internal			
11	Genetics and Genetic Engineering	60	Internal			
12	12 Diseases and Infections		Internal			
13	13 Applications of Inorganic Chemistry		Internal			
14	Applications of Organic Chemistry		Internal			
15 Electrical Circuits and their Application 60		Internal				
16	16 Astronomy and Space Science		Internal			

Pearson BTEC Level 3 National Extended Certificate in

National in Applied Science (Extended Certificate)						
Unit number	Unit title	GLH	How assessed			
Mandatory	Mandatory Units, learners complete and achieve all units					
1	Principles and Applications of Biology	60	External			
2 Principles and Applications of Chemistry 60 External		External				
3 Principles and Applications of Physics 60 External		External				
4 Practical Scientific Procedures and Techniques 90 Internal		Internal				
Optional units – learners complete one unit						
5	Scientific Investigation Skills	90	Internal			

Contemporary Issues in Science

Pearson Level 3 Alternative Academic Qualification BTEC

Nationals 2025



L3

Summary of key similarities and differences

- **Continued vocational approach to the qualification** ensuring practical application and skill development important for progression into higher education.
- Established and well-recognised grade profiles inclusive of Pass, Merit and Distinction.
- Mandatory content inclusive of foundational principles in Biology, Chemistry and Physics developed to allow flexibility to progress into a variety of degree programmes.
- Familiar, but streamlined optional units provide opportunities to develop practical scientific investigation skills alongside personal* project management as well as the potential to develop analysis and interpretation skills of scientific challenges reporting in the media and publications.
- Identified opportunities to develop sustainability, digital and transferable skills including critical thinking, problem solving and primary research skills.



^{*} optional units apply to the Extended Certificate only.



Assessment Structure

Pearson Level 3 Alternative Academic Qualification BTEC National in Applied Science (Extended Certificate)

NB: For the Certificate, refer to the information on relevant units shared with the Extended Certificate.

Mar	ndatory units, learners complete all units			Assessments
1	Principles and Applications of Biology	60 GLH	External	 An external examination set and marked by Pearson 50 marks Assessment Availability: January and June First assessment June 2026.
2	Principles and Applications of Chemistry	60 GLH	External	 An external examination set and marked by Pearson 50 marks Available January and June First assessment June 2026.
3	Principles and Applications of Physics	60 GLH	External	 An external examination set and marked by Pearson. 50 marks Available January and June First assessment June 2026.
4	Practical Scientific Procedures and Techniques	90 GLH	Internal	 Pearson sets the assignment for the assessment of this unit The PSAB will take approximately 75 hours to complete, and consists of 4 tasks The PSAB will be marked by centres and verified by Pearson You will make assessment decisions for the PSAB using the assessment criteria provided in the specification The PSAB will be valid for the lifetime of this qualification.



Opti	onal units – learners complete one unit			Assessments
5	Science Investigation Skills	90 GLH	Internal	 Pearson sets the assignment for the assessment of this unit The PSAB will take approximately 65 hours to complete, and consists of 3 tasks The PSAB will be marked by centres and verified by Pearson You will make assessment decisions for the PSAB using the assessment criteria provided in the specification The PSAB will be valid for the lifetime of this qualification.
6	Contemporary Issues in Science	90 GLH	Internal	 Pearson sets the assignment for the assessment of this unit The PSAB will take approximately 50 hours to complete, and consists of 3 tasks The PSAB will be marked by centres and verified by Pearson You will make assessment decisions for the PSAB using the assessment criteria provided in the specification The PSAB will be valid for the lifetime of this qualification.

Pearson Set Assignment Briefs

Internally assessed units are assessed using a Pearson Set Assignment Brief (PSAB), which is set by Pearson, marked by you and subject to external standards verification. The PSAB will be valid for the lifetime of this qualification, with clear guidance on how to deliver for each new cohort.





Mapping Guide

Mapping of Pearson Level 3 Alternative Academic Qualification BTEC National in Applied Science (Extended Certificate) to the Pearson BTEC Level 3 National Extended Certificate in Applied Science specification.

NB: For the Certificate, refer to the information on relevant units shared with the Extended Certificate.

Title: Pearson Level 3 Alternative Academic Qualification BTEC National in Applied Science (Extended Certificate)	Pearson BTEC Level 3 National Extended Certificate in Applied Science	Comments		
Unit 1: Principles and	Unit 1: Principles and			
Applications of Biology (60 GLH) External	Applications of Science I (90 GLH) External			
Assessment outcomes: AO1 Demonstrate knowledge and understanding of scientific concepts and theories, terminology, definitions and scientific formulae used in Biology AO2 Apply knowledge and understanding of scientific concepts and theories, procedures, processes and techniques in Biology. AO3 Analyse and interpret scientific information in Biology.	Assessment outcomes: AO1 Demonstrate knowledge of scientific facts, terms, definitions and scientific formulae AO2 Demonstrate understanding of scientific concepts, procedures, processes and techniques and their application AO3 Analyse, interpret and evaluate scientific information to make judgements and reach conclusions AO4 Make connections, use and integrate different scientific concepts, procedures, processes or techniques.	 Content on structure and function of cells and tissues has been retained. Content on structure and function of biological molecules has been introduced. Cellular transport and enzyme activity content has been introduced. Homeostasis content has been introduced. Chemistry and Physics content has been removed and is covered in units 2 and 3 respectively. 		
Unit 2 Principles and Applications of Chemistry (60	Unit 3 Principles and Applications of Science I (90			
GLH) External	GLH) External			
Assessment outcomes AO1 Demonstrate knowledge and understanding of scientific concepts and theories, terminology, definitions and scientific formulae used in Chemistry. AO2 Apply knowledge and understanding of scientific concepts and theories, procedures, processes and techniques in Chemistry. AO3 Analyse and interpret scientific information in Chemistry.	Assessment outcomes AO1 Demonstrate knowledge of scientific facts, terms, definitions and scientific formulae AO2 Demonstrate understanding of scientific concepts, procedures, processes and techniques and their application AO3 Analyse, interpret and evaluate scientific information to make judgements and reach conclusions AO4 Make connections, use and integrate different scientific concepts, procedures, processes or techniques	 Atomic structure content has been retained. Content on bonding and structure has been enhanced. Content on periodicity has been enhanced. Aspects of physical chemistry have been introduced. Aspects of organic chemistry have been introduced. Content associated with biology and physics has been removed to units 1 and 3 respectively. 		



Unit 3 Principles and Applications of Physics (60 GLH) External AO1 Demonstrate knowledge and understanding of scientific concepts and theories, terminology, definitions and scientific formulae used in Physics. AO2 Apply knowledge and understanding of scientific concepts and theories, procedures, processes and techniques in Physics. AO3 Analyse and interpret scientific	Unit 1: Principles and Applications of Science I (90 GLH) External AO1 Demonstrate knowledge of scientific facts, terms, definitions and scientific formulae AO2 Demonstrate understanding of scientific concepts, procedures, processes and techniques and their application AO3 Analyse, interpret and evaluate scientific information to make judgements and reach conclusions	 Content on waves and optical fibres has been enhanced. Content on forces and Newton Laws of Motion has been introduced. Electrical circuit content has been introduced. Aspects of energy transfer have been enhanced. Biology and Chemistry content has been removed to units 1
information in Physics. Unit 4 Practical Scientific	AO4 Make connections, use and integrate different scientific concepts, procedures, processes or techniques Unit 2 Practical Scientific	and 2 respectively.
Procedures and Techniques (90 GLH) Internal	Procedures and Techniques (90 GLH) Internal	
Learning aims: 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 D Review personal development of scientific skills for laboratory work.	Learning aims: A Undertake titration and colorimetry to determine the concentration of solutions. B Undertake calorimetry to study cooling curves. C Undertake chromatographic techniques to identify components in mixtures D Review personal development of scientific skills for laboratory work	 Practical applications and equipment requirements have remained largely the same. Additional practical applications have been introduced in physics to ensure all sciences have equal representation. Application of personal development and scientific skills have remained in the unit content.
Unit 5 Science Investigation Skills (90 GLH) Internal	BTEC National Diploma in Applied Science Unit 6: Investigative Project (90 GLH) Internal	
Learning aims: A Undertake a literature search and review to produce an investigative project proposal. B Produce a plan for an investigative project based on a proposal. C Safely undertake the project, collecting, analysing and presenting the results. D Present the conclusions from the project using correct scientific principles.	Learning aims: A Undertake a literature search and review to produce an investigative project proposal. B Produce a plan for an investigative project based on the proposal. C Safely undertake the project, collecting, analysing and presenting the results. D Review the investigative project using correct scientific principles.	This unit has remained largely consistent with the investigative project approach of unit 6 in the extended diploma qualification.



Unit 6 Contemporary Issues in Science (90 GLH) Internal	BTEC National Extended Diploma in Applied Science Unit 7 Contemporary Issues in Science (120 GLH) External		
Learning aims: A Investigate contemporary scientific issues that impact the global population and environment. B Examine the effect different organisations have on contemporary science. C Understand how to evaluate and report scientific information.	Learning aims: AO1 Demonstrate knowledge and understanding of contemporary scientific issues AO2 Apply knowledge and understanding of contemporary scientific issues to real-life scientific scenarios AO3 Be able to make valid judgements based on interpretation, analysis and evaluation of different sources of scientific information AO4 Be able to apply and synthesise scientific ideas from several sources	•	Content in this unit has remained largely the same with small updates to the content.

and adapt to other real-life scenarios

