

## Purpose Statement

Name of regulated qualification	
QAN: 601/7435/3	Title: Pearson BTEC Level 3 National Diploma in Applied Science (720 GLH)

### Overview

#### ***The applied science sector***

The applied science sector is diverse and wide-ranging, including, for example, biomedical, forensic, physical and chemical sciences. There are approximately 5.8 million people employed in science-related occupations in the UK. This equates to approximately 20% of the workforce. The applied science sector has a crucial role to play in delivering economic growth in the UK and allowing companies to compete in a rapidly enlarging global market.

#### ***Who is this qualification for?***

The Pearson BTEC Level 3 National Diploma in Applied Science is intended to be an Applied General qualification for post-16 students wanting to continue their education through applied learning and who aim to progress to higher education and ultimately to employment, probably in the applied science sector. The qualification is equivalent in size to 2 A levels, and it has been designed as part of a two-year programme, normally alongside a further level 3 qualification. Students wishing to take this BTEC will have successfully completed a level 2 programme of learning, with GCSEs or vocational learning.

#### ***What does the qualification cover?***

The content of this qualification has been developed in consultation with academics to ensure that it supports progression to higher education. In addition, employers and professional bodies have been involved, in order to confirm that the content is also appropriate and consistent with current practice.

Everyone taking this qualification will study six mandatory units:

- Principles and Application of Science I
- Science Investigation Skills
- Principles and Application of Science II
- Practical Scientific Procedures and Techniques
- Laboratory Techniques and their Application
- Investigative Project.

Students choose two option units from a group, which has been designed to support progression to the range of sector-related courses in HE and to link with relevant occupational areas. The option units cover content areas such as:

- physiology of human body systems
- genetics and genetic engineering
- applications of inorganic chemistry

- electrical circuits and their application
- materials science
- forensic evidence, collection and analysis.

This qualification enables students to acquire substantial cross-sector scientific knowledge and practical scientific skills, including carrying out practical laboratory tasks, planning investigations, collecting, analysing and presenting data, and reviewing and refining the methodology of practical and laboratory based work.

### **What could this qualification lead to?**

#### ***Will the qualification support progression to further learning, if so, what to?***

In addition to the applied science sector-specific content outlined above, the requirements of the qualification will mean students develop the transferable and higher-order skills that are highly regarded by both HE and employers. For example, carrying out practical laboratory tasks, planning investigations, collecting, analysing and presenting data, and reviewing and refining the methodology of practical and laboratory based work.

The qualification is intended to carry UCAS points and is recognised by HE providers as contributing to admission requirements to many relevant courses. Taken on its own, the National Diploma in Applied Science will offer the opportunity to progress to some science-related degree courses. Taken alongside other qualifications, it will prepare students to progress to a wider range of degree programmes. For example, if taken alongside:

- Pearson BTEC Level 3 National Extended Certificate in Health and Social Care, to progress to nursing courses
- A Level in Psychology, to progress to psychology courses
- A Level in Geography, to progress to environmental science courses.

Students should always check the entry requirements for degree programmes at specific HE providers.

#### ***Will the qualification lead to employment, if so, in which job role and at which level?***

This qualification is primarily designed to support progression to applied science and related employment, after further study at university. However, it also supports students progressing directly to employment, as the transferable knowledge, understanding and skills will give successful students an advantage when applying for a range of entry level industry training programmes and/or Higher Apprenticeships in areas such as laboratory technician, industrial technician or medical technician.

#### ***If there are larger and/or smaller versions of this qualification, or it is available at different skills levels, why should the student choose this one?***

The **Pearson BTEC Level 3 National Diploma in Applied Science** is the second largest qualification in the suite of BTEC Nationals in Applied Science and is equivalent in size to 2 A levels. It is an ideal qualification to take where applied science is the main interest of the student and in order to progress to a Foundation Degree or Higher National Diploma, or alternatively to a full degree, if taken with another level 3 qualification.

The suite also includes the following qualifications.

The **Pearson BTEC Level 3 National Certificate in Applied Science** is equivalent in size to 0.5 of an A level. It is intended to be studied by students who have chosen a study programme that may not be focused on science, but for whom an element of science would be complementary. It may act as a stepping stone to further applied science qualifications, if desired.

The **Pearson BTEC Level 3 National Extended Certificate in Applied Science** is equivalent in size to 1 A Level. It is for students interested in learning about the sector alongside other fields of study, with a view to progressing to a wide range of HE courses, but not necessarily in applied science.

The **Pearson BTEC Level National Foundation Diploma in Applied Science** is equivalent in size to 1.5 A levels and is for students looking for a one-year course of full-time study, or for those wishing to study it alongside another area of study that contrasts or complements the Applied Science Foundation Diploma, as part of a two-year full-time study programme.

The **Pearson BTEC Level 3 National Extended Diploma in Applied Science** is the largest qualification in the suite and is equivalent in size to 3 A levels. It is best suited to students wanting to progress to HE in the applied science sector.

For more detail of the other qualifications listed here, and the different progression opportunities they particularly support, please refer to their statements of purpose.

### **This qualification is supported by the following organisations**

#### **Higher education**

The University of Manchester  
 University of East Anglia  
 University of Huddersfield  
 Kingston University  
 University College Birmingham  
 Harper Adams University  
 University of the West of England

#### **Professional and trade bodies**

Royal Society of Chemistry

#### **Employers**

Feedwater