Purpose Statement

Name of regulated qualification	
QAN: 601/7438/9	**Title: Pearson BTEC Level 3 National Foundation Diploma in Applied Science (510 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 applied science occupations in in the UK. This equates to approximately 20 per cent of the workforce. The applied science sector, in particular, 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 Foundation Diploma in Applied Science is intended as 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 to 1.5 A levels, and it has been designed as a one-year full-time study programme, or a full two-year programme when studied alongside further level 3 qualifications. Students wishing to take this qualification will have successfully completed a level 2 programme of learning, with GCSEs or vocational qualifications.

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 for students who choose to enter employment directly in the applied science sector.

The qualification provides the knowledge, understanding and skills that will prepare students for further study or training.

Everyone taking this qualification will study four mandatory units:

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

Students choose one option unit from a group, which has been designed to support choices in progression to a 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
- applications of inorganic chemistry

- electrical circuits and their application
- practical chemical analysis.

What could this qualification lead to?

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

Students who have completed this qualification in a year may progress to further learning at level 3, for example, a second Foundation Diploma in a complementary sector, or to a larger size BTEC National in Applied Science.

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 such as evaluation, analysis and synthesis, which 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 applied science courses. When combined with other qualifications within a two-year study programme, such as AS/A levels or another BTEC Level 3 National Foundation Diploma, students can progress into higher education. For example, if taken alongside:

- Pearson BTEC Level 3 National Foundation Diploma in Health and Social Care, to progress to nursing and health care courses
- Pearson BTEC Level 3 National Foundation Diploma in Engineering, to progress into engineering courses
- A level in Geography and AS level in Mathematics, to progress to an environmental science course.

The breadth of the Pearson BTEC Level 3 National Foundation Diploma in Applied Science combined with the additional qualification(s) taken alongside, offers opportunities to progress both within the applied science sector and beyond.

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 designed primarily to support progression to employment after further study at university. However, it also supports students progressing directly to employment, if studied as a one-year full-time study programme. It will give students the knowledge and understanding to be able to apply for a range of assistant laboratory technician roles, primarily alongside an apprenticeship.

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 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, which contrasts or complements the

Pearson BTEC Level 3 National Applied Science Foundation Diploma, as part of a two-year full-time study programme.

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 3 National Diploma in Applied Science** is equivalent in size to 2 A levels. It typically makes up two-thirds of a 16–19 study programme, and is taken alongside other qualifications. The additional qualification(s) studied allow students either to give breadth to their study by choosing a contrasting subject, or to give their studies more focus by choosing a complementary subject.

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