

## Statement of Purpose

### 501/0311/8 - Pearson BTEC Level 2 Diploma in Land-based Technology (QCF)

#### Who is the qualification for?

This qualification is a Technical Certificate at level 2 designed for post-16 students working at that level. It has 360 guided learning hours.

It is designed for students who have chosen to focus their learning and career development within the land-based engineering and technology industries and who are looking for an engaging and stimulating qualification which prepares them for progression directly into employment and/or into further study. It includes a significant proportion of compulsory practical workshop-based activity and covers a range of specialisms within the world of land-based engineering.

#### What does this qualification cover?

The qualification consists of a core of five mandatory units, which make up 66% of the qualification, and a further choice (from 22) of optional units which make up the remainder. The mandatory units provide the underpinning knowledge and practical skills to enable students to use, service, maintain and repair the different types of tools and machinery used in the land-based sector. Unit 1 – '*Monitor and Maintain Health and Safety in a Land-based Engineering Work Area*' equips students with the essential knowledge and skills to be able to work safely with agricultural machinery in a range of workshop and on-site settings. It is supported by four further mandatory units: Unit 2 – '*Land-based Engineering Operations – Applying Mechanical Principles*', Unit 3 '*Land-based Engineering Operations – Understand How to Use, Service and Maintain Tools and Equipment*', Unit 4 '*Land-based Engineering Operations – Material Preparation, Shaping and Assembling*' and Unit 5 '*Land-based Engineering Operations – Carry out Servicing and Maintenance on Land-based Equipment*', which provide essential practical skills and underpinning theoretical knowledge and their applications in the land-based engineering sector.

The optional units cover key areas relevant to those working within any of the three sub-sectors within land-based engineering: dealerships, manufacture and maintenance of machinery for ground care, forestry and garden machines. They enable students to focus on a specialism within the industry and cover a wide range of the principal disciplines that are associated with key areas for employment within the sector, including, for example, using calculations and interpreting engineering instructions to undertake the service and repair of engines, equipment and components, following organisational procedures and workshop practice.

This qualification enables students to acquire a valuable range of practical, work related skills in the land-based engineering and technology sector, requiring them to develop and apply their knowledge in specific industry-related contexts. Examples include servicing and repairing agricultural and forestry machinery, working safely and following procedures in workshop and open air settings, and working with clients and customers within land-based engineering operations.

Students will also enhance their broader skills in literacy and numeracy, which will be invaluable in support of progression to employment and/or to further level 3 studies.

In addition, students will develop transferable technical and practical skills in communication (working with colleagues, customers and clients), and research and project work (providing an opportunity to demonstrate reflective practice by suggesting alternative approaches to a problem).

**What could this qualification lead to?**

This qualification provides a sound basis for students to progress further in the land-based engineering and technology industries - to a level 3 Technical Level qualification in land-based engineering, to an apprenticeship, for example in land-based service engineering, or direct entry to employment. Ambitious students are well prepared for a wide spectrum of occupations within the industry, either with dealers and manufacturers or working with a land-based employer. They include agricultural engineering technician, parts person, workshop supervisor, landscape supervisor and services customer advisor.

**This qualification is part of a larger suite of BTEC Land-based Technology qualifications**

Pearson BTEC Level 2 First Diploma in Land-based Technology has 360 guided learning hours (GLH).

The Pearson BTEC Level 2 First Diploma in Land-based Technology is designed for post-16 students and provides a specialist work-related focus on the land-based sector. This qualification prepares students for employment in the land-based sector.

Pearson also offers a BTEC Level 2 First Extended Certificate in Land-based Technology which has 180 GLH. This forms a broad introduction to the Land-based sector and may form part of the student's study programme. For example, it could be taken alongside subjects such as English, mathematics, science, business, etc.

(Pearson also offers a BTEC First Certificate in Land-based Technology, which has 90 GLH and is predominantly designed for pre-16 students.)

All sizes of the qualification provide progression to Level 3 study programmes, apprenticeships and entry into a specialist area of employment.

**Who supports this qualification?**

This qualification is supported by the Institution of Agricultural Engineers.

The support letter from this organisation is available at the following link:  
<http://qualifications.pearson.com/en/qualifications/btec-firsts/land-based-technology-2010-qcf.html>.

**Further information**

Further information on the qualification can also be accessed at  
<http://qualifications.pearson.com/en/qualifications/btec-firsts/land-based-technology-2010-qcf.html>.