

Purpose Statement

Name of regulated qualification	
QN: 603/0421/2	Title: Pearson BTEC Level 2 Technical Diploma in Engineering (360 GLH)

What is engineering?

Engineering is a dynamic sector that offers huge potential for students. Engineering turnover grew by 3.4 per cent to £1.21 trillion over the 12 months to March 2014. In the year ending March 2014, the sector accounted for 27.1 per cent of the turnover of all enterprises in the UK. The UK is regarded as a world leader in engineering sectors, including renewable energy, space, low carbon, aerospace, creative industries, utilities, automotive, agri-food and bioscience. The sector employs 5.5 million people across 608,920 enterprises. Between 2012 and 2022, engineering enterprises are projected to need 1.82 million people with engineering skills, including more than 400,000 technician roles (as the predominantly ageing workforce in this area is expected to retire during this period). Filling demand for new engineering jobs will generate an additional £27 billion per year for the UK economy, from 2022.

Careers in engineering offer a fantastic progression pathway into a number of roles throughout an organisation, and the skills you can develop are transferable into most engineering job functions.

Who is this qualification for?

This qualification is for you if you want to start a career in engineering. It is designed for post-16 students and can be taken as part of a wider study programme. It is an ideal qualification if you are intending to progress directly into employment in engineering, or to an apprenticeship in engineering.

What does the qualification cover?

This qualification has been developed in consultation with employers within the engineering sector to ensure you learn the essential knowledge, skills and behaviours that will give you the best opportunity to be successful when applying for work.

The content of the qualification consists of five mandatory units and relates directly to the skills, knowledge and behaviours expected by employers in the engineering sector. The areas you cover include:

- engineering principles
- processes and materials
- business improvement techniques
- workshop skills
- delivering engineering solutions.

You also choose two option units, where the content introduces the more focused knowledge and skills that you will need to start working in the engineering sector. The areas you will choose from are:

- machining techniques
- PCB components and soldering
- computer numerical control
- electrical components and wiring.

You will also enhance your broader skills in literacy and numeracy, which will be invaluable in supporting progression in other areas. In addition, you will develop transferable technical and practical skills in communication (working with colleagues, customers and clients), and research and project work (providing you with an opportunity to demonstrate your reflective practice by suggesting alternative approaches to a problem).

As part of your course, you will be required to engage with sector employers, where opportunities will be given for you to develop practical skills in preparation for employment.

What could this qualification lead to?

Achieving this qualification will give you an advantage when applying for a job in engineering. The types of role you will be ready for are:

- plant and machine operative
- process operative
- routine inspectors and tester
- metal working machine operative.

When studied as part of a full study programme, typically alongside maths or English, this qualification also gives you a sound basis to progress further within the engineering sector to a level 3 qualification such as a Pearson BTEC Level 3 National Extended Diploma in Engineering.

Who supports this qualification?

This qualification is supported by the following professional body:

- IET (Institution of Engineering and Technology)

This qualification is also supported by the following employers

- DP World London Gateway
- HVMS Power Engineering
- Wilson Tool International (Europe) Ltd

Further information

Further information about the qualification can also be accessed at:

<http://qualifications.pearson.com/en/qualifications/btec-technicals/engineering.html>