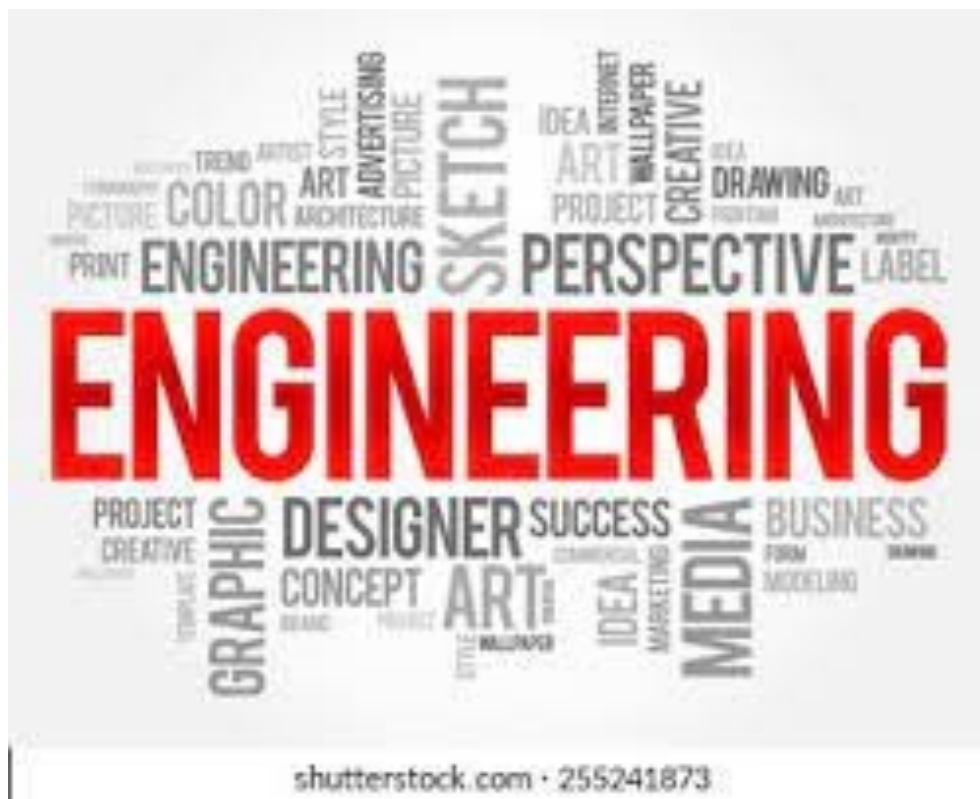


BTEC Level 3 Engineering



BTEC Level 3 Engineering at Southborough Sixth Form

Welcome to BTEC Nationals

Pearson has developed the content of the new BTEC Nationals in collaboration with employers and representatives from higher education and relevant professional bodies. In this way, we have ensured that content is up to date and that it includes the knowledge, understanding, skills and attributes required in the sector. Each qualification in the suite has its own purpose. The mandatory and optional content provides a balance of breadth and depth, while retaining a degree of choice for individual learners to study content relevant to their own interests and progression choices. Also, the content may be applied during delivery in a way that is relevant to local employment needs.

Why is BTEC so successful?

BTECs embody a fundamentally learner-centred approach to the curriculum, with a flexible, unit-based structure and knowledge applied in project-based assessments. They focus on the holistic development of the practical, interpersonal and thinking skills required to be able to succeed in employment and higher education.

About the engineering sector

The UK is regarded as a world leader in engineering, which covers a wide range of exciting and rapidly developing areas such as renewable energy, space, low carbon, aerospace, automotive, agri-food and bioscience. People with engineering skills are always in demand. Between 2010 and 2020, engineering companies are projected to have 2.74 million job openings.

LEVEL 3 BTEC EXTENDED CERTIFICATE IN ENGINEERING

QAN CODE: 601/7584/9



www.southborough.kingston.sch.uk

BTEC Level 3 Engineering

Outline of course

Who is this qualification for?

The Pearson BTEC Level 3 National Extended Certificate in Engineering is designed for learners who are interested in a career in the engineering sector and want to progress to further study in the sector. Learners will take a practical, applied engineering course as part of their Level 3 study programme, which gives them an introduction to the sector. They will be able to combine this with other qualifications, such as a GCE A Level in Mathematics or Physics, which would allow them to progress to higher education to study engineering or other STEM-related programmes.

What does this qualification cover?

Engineering covers a broad variety of roles and it involves the application of scientific principles and practical knowledge to transform ideas and materials into products and systems safely and support them during their lifetime. This qualification has a focus on a broad range of engineering specialist areas. Learners taking this qualification will study mandatory content covering:

- engineering principles and mathematics
- health and safety, team work and interpreting and creating computer-aided engineering
- drawings
- design and manufacture of products.

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 and consulted in order to confirm that the content is appropriate and consistent with current practice for learners planning to enter employment directly in the engineering sector.

What could this qualification lead to?

If completed alongside other programmes of study (e.g A Level Maths, A Level Physics) this course will lead to courses in higher education. The qualification is recognised by higher education providers as contributing to meeting admission requirements for many relevant courses in a variety of areas of the engineering sector, for example:

- BEng (Hons) in Engineering
- BEng (Hons) in Electronics Engineering
- BSc (Hons) in Computer Science • BSc (Hons) in Mathematics.

This qualification also supports progression to job opportunities in the engineering sector. Jobs that are available in these areas include:

- engineering operative
- manufacturing operative
- semi-skilled operative.
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This qualification also supports those following an apprenticeship in engineering who are looking to work and progress in the engineering sector as an engineering operative. Learners should always check the entry requirements for degree programmes with specific higher education providers.



How does the qualification provide employability skills?

This course will help you to develop skills in the following three main categories:

- cognitive and problem-solving skills: use critical thinking, approach non-routine problems applying expert and creative solutions, use systems and technology
- intrapersonal skills: communicating, working collaboratively, negotiating and influencing, self-presentation
- interpersonal skills: self-management, adaptability and resilience, self-monitoring and development