

A+ Programme National Extended Certificate in Engineering (AAQ)



Course Level: Level 3

Campus: Newcastle

Subject Type: Construction & Engineering

Course Overview:

The Pearson BTEC Level 3 National Extended Certificate in Engineering (AAQ) provides an exciting and modern pathway into the dynamic world of engineering. Combining rigorous academic study with practical application, this qualification is designed for inquisitive learners with a strong interest in maths, science and technology. Equivalent to one A Level, it is perfect for students who want to explore engineering principles, applications, design and project management while preparing for higher education or technical careers in the sector.

What's Covered:

Designed to provide a comprehensive understanding of engineering principles, this course covers a wide range of topics. Through hands-on projects and theoretical learning, students develop practical skills in design, analysis, and problem-solving. Whether aspiring to pursue further education or enter the workforce, studying this program equips students with the knowledge and expertise to thrive in the ever-evolving field of engineering.

You will study a 3-4 A Level equivalent programme comprising the Level 3 National Extended Certificate in Engineering, a minimum of 2 science or maths based A Levels and either an Extended Project Qualification or a third A Level choice.

Students will complete four mandatory units, providing a broad foundation of engineering knowledge and skills:

- Engineering Principles – engineering data, applying mathematical and scientific methods in mechanical and electrical contexts.
- Engineering Applications – advances in modern technologies, sustainable solutions, materials and processes.
- Engineering Design – creating and developing 3D CAD models and 2D technical drawings.
- Engineering Project – applying project management processes to deliver a practical or conceptual engineering solution.

This balance of theory and practice equips learners with the technical, analytical, and creative skills needed in higher education and industry.

Entry Requirements:

A minimum of five GCSEs at grade 5 or above including maths and English Language, in subjects relevant to your A Level or A+ Programme subject choices. A genuine interest in engineering and STEM subjects is essential. Strongly suggest this is taken as part of a program which would include Maths and Physics.

Assessment Information:

- 50% external assessment (exams in Engineering Principles & Engineering Applications).
- 50% internal assessment (assignments and practical projects in Engineering Design & Engineering Project).

Units are graded Distinction (D), Merit (M), Pass (P), Near Pass (N) or Unclassified (U), with final grades ranging from Pass to Distinction*.

100%

D* - D

Fees and Financial Support:

This course is free for anyone aged 16 – 18.

College Maintenance Allowance (CMA):

Anyone with a gross household income under £35,000 can receive financial support to cover college related costs such as transport, meals, course equipment and uniform. Bursary support is based on individual circumstances and will be allocated to best suit your individual needs. A range of other financial support is available depending on your personal circumstances. For more details visit nscg.ac.uk/finance

Progression:

This qualification supports progression to a wide range of university courses and technical pathways, including:

Mechanical, Civil, Electrical and General Engineering degrees.

HNCs, Foundation Degrees, or Higher Apprenticeships in Engineering.

It also complements A Level study in subjects such as Mathematics, Physics, and Design & Technology

How do I find out more?

If you wish to find out more about this course, please contact Martin Gallacher, Course Leader by emailing <mailto:martin.gallacher@nscg.ac.uk>