

AAQ BTEC NATIONAL IN ENGINEERING (EXTENDED CERTIFICATE)

By studying AAQ Engineering, you'll gain practical skills in mechanical, electronic and mathematical principles, the engineering materials, processes and emerging technologies, preparing you for engineering careers or further study alongside your A Levels.

Level 3 · A Level (or equivalent) · Penwith College

TOP COURSE HIGHLIGHTS

PRACTICAL SKILLS **ENGINEERING PRINCIPLES** **DESIGN & PROJECT MANAGEMENT** **STEM INTEGRATION** **EXPERT SUPPORT**

PRACTICAL & THEORETICAL BALANCE

The course blends core engineering theory with hands-on projects, giving you a well-rounded understanding of mechanical, electrical, and mathematical principles applied in real engineering contexts.

PROJECT-BASED LEARNING

You'll develop engineering design and project management skills by solving practical challenges, building teamwork, creativity, and problem-solving abilities valued in industry and higher education.

COMPLEMENTARY TO A LEVELS

Designed to be studied alongside A Level STEM subjects, this qualification enhances your technical knowledge and opens pathways to university courses and apprenticeships in engineering fields.

WHY CHOOSE THIS COURSE?

Ideal for students keen on engineering principles, design, and practical skills and complements A Level STEM subjects ready for higher education or engineering careers.

This course is designed for students interested in engineering fundamentals, mechanical and electrical systems, and practical problem-solving. It pairs well with A Levels like Mathematics, Physics, Electronics and 3d Design, supporting progression to degrees such as Engineering, Product Design Engineering, Aerospace and Manufacturing. You'll develop design and project management skills through theory and hands-on tasks, guided by expert tutors at T&PC, preparing you for further study or employment in engineering.

WHAT WILL I LEARN?

You'll study four main units: two externally examined units covering engineering principles and mathematics, and two internally assessed units focusing on practical skills such as:

- Engineering design
- Materials
- Processes

This mix develops your understanding of:

- Mechanical
- Electrical

FOR THE LATEST COURSE INFORMATION

Scan for assessment arrangements, learner support, confirmed start dates and how to apply.
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- Electronic systems

and equips you with project management and problem-solving skills relevant to modern engineering.

WHERE WILL IT TAKE ME?

Careers: Supports pathways into roles such as mechanical engineer, electrical engineer, design technician, manufacturing engineer, and project manager alongside other qualifications. **Progression:** Prepares you for university engineering degrees, apprenticeships, or technical roles in mechanical, electrical, and manufacturing sectors.

ENTRY REQUIREMENTS

5 x GCSEs at 4+ including English and Maths at a 5 (Higher Tier).

IMPORTANT

Course information can change. Please use the QR code below for the current assessment arrangements, entry requirements and start dates.

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