



Why Study BTEC Engineering at Heathrow Aviation Engineering UTC?

It is a well-known fact that the cost of living is going up and in particular living in London is growing more and more expensive. An Engineering qualification is one of the best ways to ensure employment in one of the areas where the job opportunities are improving. The Telegraph recently reported that an Engineering degree is one of the top qualifications most likely to secure employment and Engineering is reported to be the No.1 most in demand job. With support from our partners and our expertise we believe that we provide an excellent education for 21st century students.

What course do we study at Heathrow Aviation Engineering UTC?

BTEC Level 3 National Diploma/Extended Diplomas in Engineering and Aeronautical Engineering (NQF)

<http://qualifications.pearson.com/en/qualifications/btec-nationals/engineering-2016.html>

Course content

Mandatory units:

- Engineering Principles
- Delivery of Engineering Processes Safely as a Team
- Engineering Product Design and Manufacture
- Applied Commercial and Quality Principles in Engineering
- A Specialist Engineering Project
- Microcontroller Systems for Engineers
- Calculus to Solve Engineering Problems

Possible Optional units:

- Aircraft Flight Principles and Practice (Mandatory for Aviation Engineering)
- Further Engineering Mathematics
- Computer Aided Design in Engineering
- Pneumatic and Hydraulic Systems
- Electrical Machines
- Three Phase Electrical Systems
- Electronic Devices and Circuits
- Mechanical Behaviour of Metallic Materials
- Mechanical Behaviour of Non-Metallic Materials
- Computer Programming
- Programmable Logic Controllers
- Manufacturing Secondary Machining Processes



How will I learn?

Through a combination of theory and practical classes.

How will I be assessed?

Throughout the course many of the units are assessed through school-devised assignments and in line with the new national assessment criteria a few of the units will have external exams at the end of the course.

What does this course lead to?

The course can lead to university courses, apprenticeships or to employment. More details of the benefits of studying Engineering can be found at the Engineering UK website.

<http://www.engineeringuk.com/Research/At-a-glance-2016/>

Which exam board is the BTEC assessed through?

Pearson (the parent company of Edexcel)

Expected prior knowledge and what qualifications or skills do I need to show?

Above all else we expect our students to have a love of Engineering. To have enquiring minds about the world around them and to show an interest in the aviation industry. There are times where you will need to be resilient and work hard in the workshop on your practical pieces a good background with STEM based subjects would be useful but depending upon your exact route through the school the entry requirements vary. Generally you will need 5 GCSEs including English, Maths and Science but see the school's prospectus for more information.

Equipment and other costs

For health and safety reasons we do expect all our students to purchase their own PPE (personal protective equipment including jacket, trousers, safety shoes, safety glasses and optional safety gloves), which upon enrolling with the school, can be ordered through the school for an approximate price of £50.

We would also expect our students to have a complete set of pens, pencils, set squares and protractors etc that can be picked up from any high street retailer.

What other opportunities will there be available to me?

We offer a PEO (Performing Engineering Operations) course which is a highly sort professional qualification and there are other enrichment activities run on Wednesday afternoons. In particular we are looking for students to begin our "build a plane" project and a group of students to develop our drone aircraft project.

