

Apprentice role title	Apprentice Mechanical Workshop Technician
College/Budget Centre	College of Engineering and Physical Sciences
School/Department	School of Physics and Astronomy
Duration of the apprenticeship	2 years
Contact details for any enquires	c.wright.2@bham.ac.uk
Closing Date	Sunday 20 th August 2017

Apprenticeship summary

The apprentice technician will work and learn in any of the college's centrally managed workshops (currently based in Physics, Engineering South and Engineering North). The main function of the college workshops is the design and construction of specialised equipment for use in research and teaching. They will learn to perform support duties and be trained in a range of mechanical workshop skills, under the day to day supervision of experienced technical staff as designated by the workshop manager. They will attend college (day or block release) and follow a pre-determined programme of formal training.

Main duties the apprentice will learn

- General bench fitting of mechanical components. Using hand tools and pneumatic tools following instruction.
- A basic knowledge of health and safety to be able to work safely and not endanger others.
- Cleaning and tidying workshops including emptying bins and sweeping floors.
- Following instruction, operation of machine tools including lathes and milling machines. This will also include CNC lathes and milling machines.
- After suitable training, various welding techniques including TIG, MIG and oxy-acetylene.
- Following instruction, various soldering and brazing techniques.
- Following instruction, perform general maintenance on machines (with guidance).
- Introduction to Computer Aided Design and Computer Aided Manufacturing.
- Manual handling and correct and safe use of lifting equipment.
- The basic elements of design and planning and the preparation of plans and records.
- The use and variety of materials used in the construction of apparatus for use in teaching and research.
- Be able to use a computer to access engineering information from the internet, look at and potentially begin to adapt design drawings and be confident with email.
- Undertake any other tasks across EPS as a whole that might reasonably be asked by the Operations Manager (Facilities) or College Workshop Manager and are suitable by

way of knowledge or experience, or can be achieved by a reasonable programme of training. E.g. Assist with the Engineering Education Scheme.

This apprenticeship would suit:

This post would suit someone with a keen interest in mechanical engineering who is looking to develop a career as a technician at one of the UKs leading Universities.

You will be an enthusiastic and keen learner who is reliable and dedicated to an apprenticeship that could launch your technical career.

Required Knowledge, Skills, Qualifications, Experience

At least 5 good GCSE qualifications (grade A-C) to include Maths and English; physics would be desirable.

Computer literate, able to search the internet for information, use email, etc.

The post holder will be required to attend a day release college course for a relevant qualification in Mechanical Engineering for technicians. Training in workshop skills, health and safety, equality, literacy, mathematics, basic information technology, hydraulics, pneumatics, waste disposal, sustainability, welding, sheet metal work, and gas bottles and regulators.

Some basic knowledge of electronics would be very useful but could be taught by technicians.

The post holder would be expected to follow instruction and respond effectively, and receive training and guidance from senior technicians at all times.

The post-holder must have an enquiring mind, have a positive, helpful attitude and an aptitude to solve mechanical problems.

Career Pathway

If successful in the apprenticeship there will be an opportunity to become a technician, there are many technical career pathways at the University including into management and specialisms.