

## BTEC National Diploma in Mechanical Engineering Level 3



### In a nutshell

This two-year course – recognised as part of the Apprenticeship Framework – is highly specialised and will give you the knowledge, understanding and skills to prepare for employment in mechanical and manufacturing engineering.

### This course is for...

...anyone wanting to work in the engineering or manufacturing industries.

...those wanting to develop their existing career and move on to higher education, degree and professional development programmes.

### Course content

You'll need to have a good understanding of maths and science and enjoy solving complex problems related to circuit design, construction and fault diagnosis, as well as being fully committed to attendance and able to work independently or as part of a team.

# COURSE INFORMATION LEAFLET

The course itself consists of projects and assignments based on realistic workplace situations, using a mixture of practical workshop/laboratory sessions, classroom sessions, demonstrations, company visits and guest speakers from industry. The topics you'll cover include:

- Health and safety in the engineering workplace
- Communications for engineering technicians
- Mathematics for engineering technicians
- Electro-pneumatic/hydraulic systems and devices
- Engineering project
- Mechanical principles and applications
- Properties and applications of engineering materials
- Computer aided drafting in engineering
- Engineering primary forming processes
- Engineering secondary and finishing techniques
- Further mechanical principles
- Further mathematics for engineering technicians (optional)

You'll be assessed through assignments (graded at pass, merit or distinction), reports, short tests, practical work and portfolio work before being awarded Level 3 Diploma in Mechanical/Manufacturing Engineering (120 credits), after which you could move on to HNC Mechanical or Manufacturing Engineering at Coleg Gwent or other university level study, an Apprenticeship or employment in the engineering sector.

## Entry Requirements

You'll need 5 GCSEs at grade C or above including a C in English or Welsh Language and a B in Maths, along with three other Cs (preferably Science or related subjects), or to have successfully completed an appropriate Level 2 qualification with a Merit profile.

## Additional information

If you're following a formal Apprenticeship you may have to attend an additional course to complete the essential skills needed. You'll need to supply your own stationery e.g. folders, subject dividers, pens, pencils, colouring pencils, compass, ruler and scientific calculator.