

# BTEC National Diploma in Electrical and Electronic Engineering Level 3



### In a nutshell

This 2 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 electrical and electronic engineering.

### This course is for you if...

...Anyone wanting to work in the electrical and electronic industries.

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

### What will I be doing?

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

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committed to attendance and able to work independently or as part of a team.

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:

- Engineering Product Design and Manufacture
- Engineering Processes
- Engineering Principles
- Principles and applications of electronic devices and circuits
- Further engineering maths
- Applied commercial and quality system
- Analogue Electronics
- Three-phase motors and drives
- Engineering project
- Selecting and using programmable controllers

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 Electrical and Electronic Engineering (120) credits, after which you could move on to HNC Electrical/Electronic Engineering at Coleg Gwent or other university level, study an Apprenticeship or employment in the engineering sector.

### **What is expected of me?**

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.

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. This course is a progression only and the entry requirement is an Extended Certificate.

### **What comes next?**

HNC Electrical/Electronic Engineering at Coleg Gwent or other university level, study an Apprenticeship or employment in the engineering sector.



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### Additional information

You will need to supply your own stationery eg folders, subject dividers, pens, pencils, colouring pencils, compass, rule and a scientific calculator.

Apply online at [www.coleggwent.ac.uk](http://www.coleggwent.ac.uk)

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