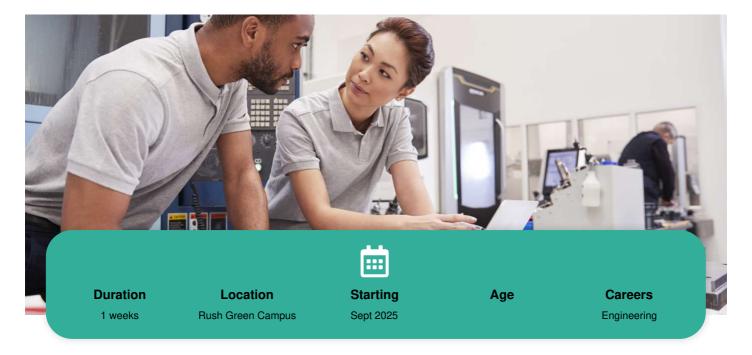


Level 4

# Fundamentals of Electro Pneumatics in Engineering

#### **Microcredential**



#### Course fees per year

Contact us to discuss what Financial support is available.

### **Overview**

The Level 4 Fundamentals of Electro Pneumatics in Engineering microcredential offers a unique opportunity to develop key career skills in a rapidly evolving field. This course equips you with essential knowledge and practical skills in designing and implementing electro pneumatic systems, highly valued in various engineering sectors.

By combining theory and practical application, you will gain hands-on experience that makes your learning immediately applicable in the workplace. Ideal for creative minds, the course encourages innovative thinking in system design and optimisation while developing critical analytical skills for troubleshooting and improving system efficiency.

## What you'll learn

Throughout this course, you will acquire comprehensive knowledge and practical skills in electro pneumatics, focusing on the integration of electrical control with pneumatic systems and their applications in engineering. The curriculum includes the following compulsory units/modules:

- Integration of Electrical Control with Pneumatic Systems: Understanding the principles and applications of combining electrical and pneumatic control in engineering contexts.
- Logic Operations for Electro-Pneumatic Circuits: Evaluating logic operations and designing electro-pneumatic circuits within physical systems to achieve specific functionalities.



- Design and Simulation with Industry-Standard Software: Using industry-standard software tools to design and simulate electro-pneumatic systems, ensuring theoretical concepts are applied practically.
- Construction and Implementation of Electro-Pneumatic Circuits: Hands-on experience in constructing and implementing electro-pneumatic circuits within physical systems, addressing real-world engineering challenges.
- Troubleshooting and Maintenance: Developing skills in troubleshooting electro-pneumatic systems, including hazard identification, common fault diagnosis, and implementing solutions to ensure system reliability.
- Analysis and Improvement of System Efficiency: Analysing the efficiency of electro-pneumatic systems and proposing improvements to enhance performance and operational reliability.

### Assessments / Exams

There are no formal assessments for this course.

### **Entry requirements**

You will need to have GCSE Maths and English Language at grade 4 (C) or above. You will also need a level 3 qualification in a related subject area.

### What this course leads to

Upon completing this course, you have several options. You can continue studying at BDC with courses like 'Fundamentals of Pneumatics in Engineering' and 'Fundamentals of Automation Control Systems.' This course also improves your job prospects and career advancement in engineering sectors that value electro pneumatics skills.

Visit this course on our website: https://barkingdagenhamcollege.ac.uk/find/courses/0000012483

For further information please contact the college: https://barkingdagenhamcollege.ac.uk/contact