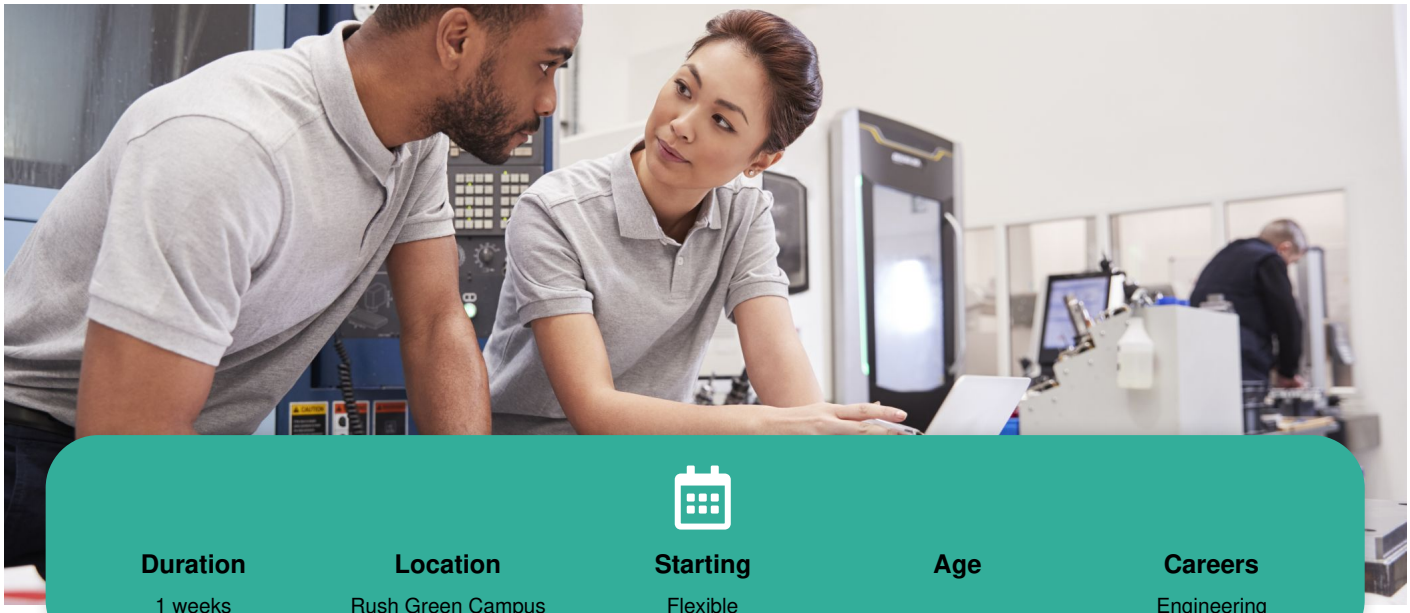
Level 4

Fundamentals of Automation Control Systems

Microcredential



Duration	Location	Starting	Age	Careers
1 weeks	Rush Green Campus	Flexible		Engineering

Course fees per year

Contact us to discuss what Financial support is available.

Overview

The Level 4 Fundamentals of Automation Control Systems Microcredential offers students the opportunity to develop key career skills in a rapidly evolving field.

This course equips you with essential knowledge and practical skills in implementing automation control systems within engineering settings, which are increasingly vital across industries. Emphasising hands-on experience in system design, programming, and implementation, this course prepares learners to adhere to rigorous safety standards while enhancing system efficiency. Ideal for those interested in practical problem-solving and innovation, it appeals to creative minds seeking to apply theoretical knowledge in real-world scenarios.

This course provides pathways to roles where expertise in automation and control systems is highly valued, such as manufacturing, robotics, and industrial engineering.

What you'll learn

Throughout this course, students will explore the foundational principles and practical applications of automation and control systems specifically designed for industrial environments. The modules are compulsory, providing a structured approach to mastering these essential skills:

- Fundamental Principles of Automation and Control Systems: Gain a thorough understanding of the basic concepts underpinning automation and control systems, with a focus on their critical roles in industrial applications.
- Development and Simulation of Automation Systems: Learn to develop and simulate automation systems using graphical and textual programming languages, ensuring proficiency in programming techniques necessary for practical implementation.
- Programming PLC Hardware for Electro-Pneumatic Systems: Acquire practical experience in programming Programmable Logic Controllers (PLCs) specifically for electro-pneumatic circuits and systems, integrating theoretical knowledge with hands-on application.
- Diagnosis and Troubleshooting of Automation Systems: Develop skills in diagnosing and troubleshooting faults in physical automation systems, essential for maintaining operational efficiency and minimising disruptions.
- Analysis, Evaluation, and Enhancement of System Efficiency: Learn systematic approaches to analyse, evaluate, and improve the operational efficiency of control systems, focusing on identifying areas for enhancement and implementing effective solutions.

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 successful completion of this course, learners can pursue further studies at BDC, such as 'Fundamentals of Pneumatics in Engineering' and 'Fundamentals of Electro Pneumatics in Engineering.' You will also be well-prepared for roles in manufacturing, engineering, and automation technology, providing a strong foundation for careers in manufacturing, robotics, and industrial engineering.

Visit this course on our website: *https://barkingdagenhamcollege.ac.uk/find/courses/0000012484*

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