



MULTI-SKILL ENGINEERING MODULES



INTRODUCTION TO THE MODULES

Our courses are aimed at mechanical and electrical engineers in manufacturing and process industries, who require refresher courses in theory and practice. The modules are suited to both mechanical and electrical engineers wishing to become multi-skilled or cross-skilled maintenance engineers. The modules may also suit experienced operators undertaking first line maintenance.

LEARNING AND ASSESSMENT

All the modules combine taught theory with practical, hands on training. The modules can be tailored to meet your exact skills requirements, ensuring the training is as relevant and effective as possible for the individuals and the business.

COURSE DURATION

All modules and content are standard 5 day courses, delivered at Tameside College or in-company (dependent on equipment required). However content and duration can be tailored to meet your exact requirements. We can also continue working with the staff after the course to assess the newly acquired skills in the workplace.

HOW IT ALL WORKS

MODULES	CONTENT: Understanding and achievement of a quantifiable standard
Electrical	<ul style="list-style-type: none"> • Electrical terminology and elements – circuits, voltage (single and 3 phase), power, current (A.C and D.C.) etc. • Electrical devices • Electrical schematic drawings • Fault finding – including use of meters • Electrical safety
PLC Awareness	<ul style="list-style-type: none"> • Basic PLC elements – input and output cards, CPU, back plane etc. • Programming aids – timers, registers, counters etc. • Basic ladder program and fault finding • Field device fault finding – input devices and how they interact with the PLC
Mechanical	<ul style="list-style-type: none"> • Mechanical terminology and elements – replacing/ aligning bearings, lubrication, couplings, replacing motor/ gearboxes (including splitting and rebuilding) etc. • Fault detection, analysing and rectification • Mechanical drawings • Mechanical safety
Welding	<ul style="list-style-type: none"> • Welding techniques – Arc, Gas, MIG & TIG • Practical welding with non-destructive visual testing • Welding safety
Pneumatic & Hydraulic	<ul style="list-style-type: none"> • Pneumatic and Hydraulic terminology and elements – circuits, pressure etc. • Devices – valves, cylinder, solenoids, timers etc. • Schematic drawings • Fault finding • Safety
CNC Machine Settings & Operations	<ul style="list-style-type: none"> • CNC Machining Principles • Data preparation & input work • Tool preparations and CNC operation • Safety procedures
Use of Tools & Equipment	<ul style="list-style-type: none"> • Safe use of workshop tools – including lathe, stand drill, band saw etc. • Safe use of field equipment – including power tools, hand tools, ladders etc.

WANT TO KNOW MORE? CONTACT THE BUSINESS COLLEGE

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