



ELECTRICAL

MECHANICAL

HYDRAULICS

PNEUMATICS

PLC

ACDC-B227
24 HOURS-6 LAPS
Basic Electrical Circuits
Electrical Measurements
Circuit Analysis
Inductance and Capacitance
Combination Circuits
Transformers

MECH 1-B502
20 HOURS-7 LAPS
Intro to Mechanical Drive Systems
Key Fasteners
Power Transmission Systems
Intro to V-Belt Drives
Intro to Chain Drives
Spur Gear
Multiple Shaft Drives

BASIC HYDRAULICS-B831
14 HOURS-5 LAPS
Hydraulic Power Systems
Basic Hydraulic Circuits
Principles of Hydraulic Pressure and Flow
Hydraulic Speed Control
Pressure Control Circuits

BASIC PNEUMATICS-B834
11 HOURS-4 LAPS
Pneumatic Power Systems
Basic Pneumatic Circuits
Principles of Pneumatic Pressure/Flow
Pneumatic Speed Control Circuits

PLC-B490
70 HOURS-12 LAPS
Intro to Programmable Controllers
Basic PLC Programming
PLC Motor Control
Discrete I/O Interface
Intro to PLC Troubleshooting
PLC System Troubleshooting
Event Sequencing
Application Development
PLC Timer Instructions
PLC Counter Instructions
Program Control Instructions
Math and Data Move Instructions

MOTOR CONTROL-17401
30 HOURS-10 LAPS
Intro to Electrical Motor Control
Manual Motor Control and Overload Protection
Control Transformers
Control Ladder Logic
Control Relays and Motor Starters
Intro to Troubleshooting
System Troubleshooting
Reversing Motor Control
Automatic Input Devices
Basic Time Control: On/Off Delay

MECH II-B503
21 HOURS-7 LAPS
Heavy V-Belt Drives
V-Belt Selection and Maintenance
Synchronous Belt Drives
Lubrication Concepts
Precision Shaft Alignment
Couplings
Heavy Duty Chain Drives

INT HYDRAULICS-B832
15 HOURS-5 LAPS
Hydraulic DCV Applications
Hydraulic Cylinder Applications
Hydraulic Relief Valve Operation
Hydraulic Check Valve Applications
Accumulator Applications

INT PNEUMATICS-B835
9 HOURS-3 LAPS
Pneumatic DCV Applications
Air Logic
Pneumatic Maintenance

PNEUMATIC SYS CONST-B894
3 HOURS-1 LAP
Pneumatic System Construction

ADVANCED PNEUMATICS-B838
9 HOURS-3 LAPS
Moving Loads Pneumatically
Vacuum Systems
Air Compressors

CONTROL WIRING-17451
16 HOURS-2 LAPS
Introduction to Electrical Control Wiring
Electrical Control System Wiring

SENSORS-B830
6 HOURS-2 LAPS
Intro to Electronic Sensors
Operational Theory of Electronic Sensors

ELECTRO-FLUID POWER-B861
24 HOURS-8 LAPS
Intro to Electrical Control Systems
Basic Control Devices
Power devices
Control Relays
Sequencing Control
Timer Control
Pressure Control Applications
Circuit Applications

POWER DIST-17471
19 HOURS-5 LAPS
Introduction to Raceways
Basic Conduit Bending - MET
Advanced Raceways
Conductors, Disconnects & Overload Protector
Conduit Sizing and Wire Pulling Techniques

PIPING-B526
28 HOURS-7 LAPS
Metal Piping Systems
Metal Piping Installation
Plastic Piping Systems
Metal Tubing Systems
Hoses
Two-Way Valves
Check Valves and Sloan Valves

HYDRAULIC TROUBLESHOOTING-B544
35 HOURS-9 LAPS
Intro to Pressure Compensated Pumps
Pressure Compensated Pump Performance
Troubleshooting Pumps
Troubleshooting Hydraulic Actuators
Troubleshooting Hydraulic DCV's
Troubleshooting Flow Control and Check Valves
Troubleshooting Pressure Control Valves
Troubleshooting Unloader and Counterbalance Valves
Troubleshooting Hydraulic Systems