

## Multicraft Technician (online)

<b>INTRODUCTION - \$60, 6 HRS</b>	<b>HOURS</b>
REA5 – Study Skills	2
MPR1 – Maintenance Principles	2
TRB1 – Maintenance Troubleshooting: Process	2
<b>BASIC MATH - \$80, 8 HRS</b>	
MAT1 – Whole Numbers	2
MAT2 – Fractions	2
MAT3 – Decimals	2
MAT4 – Algebra	2
<b>BASIC MECHANICS - \$187, 20 HRS</b>	
TPC 301 – Basic Mechanics	20
<b>PRINT READING- \$80, 8 HRS</b>	
PRT1 – Print Reading: Orthographic Projection	2
PRT2 – Print Reading: Format & Dimension	2
PRT3 – Print Reading: Types & Symbols	2
PRT4 – Thread Specifications	2
<b>READING SCHEMATICS &amp; SYMBOLS - \$187, 20 HRS</b>	
TPC 102 – Reading Schematics and Symbols	20
<b>SAFETY &amp; HEALTH - \$140, 14 HRS</b>	
PPE7 – Personal Protective Equipment: Don't Start Work Without It	2
LOT9 – Lockout / Tagout: Lightening in A Bottle	2
ELE5 – Electrical Safety: Beware the Bite	2
ELE0 – ArcFlash: Live to Tell	2
MAC0 – Machine Guarding: Safeguarding Your Future	2
HAZ2 – HazCom: In Sync with GHS	2
CHE5 – Chemical Handling: Basic Principles	2
<b>INDUSTRIAL SAFETY &amp; HEALTH - \$187, 24 HRS</b>	
TPC 109 – Industrial Safety & Health	24
<b>OSHA 10 HOUR GENERAL INDUSTRY - \$150, 10 HRS</b>	
OSHA 10 HR General Industry	10
<b>LUBRICATION - \$80, 8 HRS</b>	
MLU1 – Machinery Lubrication: Lube Oil Types, Properties, & Handling	2
MLU2 – Machinery Lubrication: Lube Oil Equipment & Procedures	2
MLU3 – Machinery Lubrication: Lube Grease Types, Application, & Equipment	2
INS9 – Operator Inspection: Lubrication System Inspection	2
<b>DRIVE COMPONENTS - \$200, 20 HRS</b>	
MDR1 – Industrial Drives: Belt Drives	2
MDR2 – Industrial Drives: Chain Drives	2
CDP1 – Industrial Drives: Complete Drive Package	2
INS7 – Operator Inspection: Belt Drive, Chain Drive & Gear Box Inspection	2
EDS1 – Industrial Drives: Enclosed Drive System	2
CBR1 – Clutches & Brakes: Types, Principles & Functions	2
CBR2 – Clutches & Brakes Troubleshooting	2
INS8 – Operator Inspection: Clutch & Brake Inspection	2

GGS1 – Industrial Drives: Gears and Gear Systems	2
SJC1 – Industrial Drives: Shaft and Coupling Devices	2
<b>BEARINGS - \$90, 6 HRS</b>	
BRG1 – Industrial Bearings: Application & Technology	2
BRG2 – Bearings: Maintenance & Installation	2
BRG3 – Industrial Bearings: Troubleshooting	2
<b>PIPING SYSTEMS - \$187, 20 HRS</b>	
TPC 306 – Piping Systems	20
<b>VALVES - \$240, 16 HRS</b>	
CVA1 – Control Valves & Actuators: Basics & Functions	2
CVA2 – Control Valves: Types and Designs	2
CVA3 – Control Valves: Fundamentals & Selection	2
CVA4 – Control Valves: Sizing & Installation	2
FVB1 – Shutoff Valve Designs & Applications	2
FVB2 – Selecting Shutoff Valves & Accessories	2
FVB3 – Installing Shutoff Valves	2
FVB4 – Maintaining Shutoff Valves	2
<b>PNEUMATICS - \$180, 18 HRS</b>	
PNM1 – The Power of Compressed Air	2
PNM2 – The Pneumatic Circuit	2
PNM3 – Processing Air	2
PNM4 – Using Compressed Air	2
PNM5 – Pneumatic Control Valves	2
PNM6 – Working Safely w/ Pneumatic Systems	2
PNM7 – Pneumatic System Maintenance	2
PNM8 – System Troubleshooting	2
INS1 – Operator Inspection: Pneumatic System Inspection	2
<b>HYDRAULICS - \$260, 26 HRS</b>	
IDH1 – Ind. Hydraulics: Principles & Application	2
IDH2 – Ind. Hydraulics: Types & Concepts	2
IDH3 – Ind. Hydraulics: Functions & Operating Principles	2
IDH4 – Ind. Hydraulics: Maintenance & Troubleshooting	2
HDL1 – Harnessing Hydraulic Power	2
HDL2 – The Hydraulic Circuit	2
HDL3 – Hydraulic Pumps & Actuators	2
HDL4 – Hydraulic Control Valves	2
HDL5 – Hydraulic Fluid	2
HDL6 – Hydraulic System Safety and Maintenance	2
HDL7 – Hydraulic Systems Troubleshooting	2
HPS1 – Hydraulic Power Systems: Identification & Operation	2
HPS2 – Hydraulic Power Systems Troubleshooting	2
<b>MEASUREMENT / INSTRUMENTATION - \$120, 8 HRS</b>	
PME1 – Process Measurement Temperature 1: Thermometers and Thermocouples	2
PME3 – Process Measurement Pressure 1: Manometers and Gages	2
PME5 – Process Measurement Level 1: Measurement & Gages	2
PME7 – Process Measurement Flow 1: Measurement Overview	2
<b>BASIC ELECTRICITY &amp; ELECTRICAL MEASUREMENTS - \$160, 16 HRS</b>	
ELS1 – Industrial Electricity Basic Principles	2
ACDC1 – AC/DC Theory: Current	2
ACDC2 – AC/DC Theory: Voltage	2
ACDC3 – AC/DC Theory: Resistance	2
ACDC4 – AC/DC Theory: Ohm's Law	2
ACDC5 – AC/DC Theory: Magnetism	2
ACDC6 – AC/DC Theory: Electrical Measurements	2
ACDC10 – AC/DC Measurements	2

<b>ELECTRICAL MEASURING INSTRUMENTS - \$187, 20 HRS</b>	
TPC 204 – Electrical Measuring Instruments	20
<b>DC CIRCUITS / FUNDAMENTALS - \$80, 8 HRS</b>	
ACDC7 – DC Circuits	2
ADC2 – Ohm’s Law & DC Circuits	2
ADC3 – Electronic Components & Magnetism	2
ADC4 – Electronic Schematics & Circuit Analysis	2
<b>AC CIRCUITS / TRANSFORMERS - \$140, 14 HRS</b>	
ELS2 – Industrial Electricity: Alternating Current	2
ELS3 – Industrial Electricity: Conductors	2
ACDC8 – Inductance & Capacitance	2
ACDC11 – Capacitive Circuits	2
ACDC12 – Inductive Circuits	2
ACDC13 – Transformers	2
ACDC14 – Tuned Circuits	2
<b>MOTOR DRIVES - \$140, 14 HRS</b>	
MTD1 – Motor Drive Identification	2
MTD2 – Open and Closed Loop Systems	2
MTD3 – Variable Speed AC Drives	2
MTD4 – Servo & Stepper Motors	2
MTD 5 – AC Motor Operation	2
MTD 6 – AC Drive Selection and Setup	2
INS6 – Operator Inspection: Motor Drive System Inspection	2
<b>AC/DC EQUIPMENT &amp; CONTROLS - \$140, 14 HRS</b>	
ELS6 – Industrial Electricity: Generators & Motors	2
ELS7 – AC Motor Control & Current Measurement	2
DCM1 – DC Motors: Basics & Parts of DC Motors	2
DCM2 – DC Motors: Wiring Diagrams & Troubleshooting	2
DCC1 – DC Motor Controllers: Controller Function & Operation	2
DCC2 – DC Motors Controllers: Maintenance & Troubleshooting	2
INS5 – Operator Inspection: Electrical Equipment Control System Inspection	2
<b>MOTOR CONTROLS - \$180, 18 HRS</b>	
MTR1 – Basic Motor Controls & Relays	2
MTR2 – Overload Protection Devices	2
MTR3 – Motor Controls: Time Delay Relays	2
MTR4 – Motor Controls: Schematics/Symbols	2
MTR5 – Motor Control: Schematics and Wiring Diagrams	2
MTR6 – Motor Controls: Starting Methods for Squirrel Cage Motors	2
MTR7 – Wye-Delta, Synchronous, & Wound Rotor Controls	2
MTR8 – Motor Controls: Installing / Troubleshooting	2
TRB3 – Troubleshooting: Motors and Motor Controls	2
<b>BASIC ELECTRONICS - \$120, 12 HRS</b>	
BEC1 – Basic Electronic Components: Types and Diagrams	2
BEC2 – Basic Electronic Controls and Applications	2
BEC3 – Basic Electronic Operation and Troubleshooting	2
ECI1 – Electronic Circuits: Basic Principles	2
ECI2 – Electronic Circuits: Characteristics and Operation	2
ECI3 – Electronic Circuits: Logic Fundamentals, Types & Application	2
<b>PROGRAMMABLE LOGIC CONTROLLERS (PLCS) - \$160, 16 HRS</b>	
PLC1 – Fundamentals	2
PLC2 – Programming	2
PLC3 – Inputs and Outputs	2
PLC4 – Troubleshooting	2
PLC5 – Communications & Advanced Programming	2
RSX1 – Configuring Hardware and Software	2

RSX2 – Programming and Editing	2
RSX3 – Testing / Troubleshooting Functions	2

**Total Hours: 364 Total Cost: \$3,755 Prices subject to change.**

**Once assigned, courses/modules (even if unused) are non-transferable and non-refundable.**

**For more information or to register, please contact:**

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