

JANUARY 2024-JULY 2024 ELECTRICAL COURSE SCHEDULE GREEN BAY PACKAGING-MORRILTON TRAINING SITE

Course Times are **Tuesdays, 7:00 am to 3:30 pm**

Location: 1001 East Broadway St., Morrilton, AR 72110

Programmable Logic Controllers Level 1

Cost: \$595

Dates: Jan 2 - Jan 30

Bad weather makeup day: Feb 6

An introduction to programing using (PLC) trainers with Allen Bradley (AB) ControlLogix hardware. The central processing unit (CPU) is an L32E. Discrete and analog inputs and outputs allow student operation of their programs. AB's RSLogix 5000 and RSLinx software is utilized. Prepares technicians to take full advantage of vendor training on specific equipment. Covers the basic operating principles of all PLCs, their inputs and outputs, programming, maintenance, and networking.

Electrical Troubleshooting # 730.1

Cost: \$300

Dates: Feb 13 - Mar 12

Bad weather makeup day: March 19

Covers use of schematic diagrams, determining sequence of operation, & use of building diagrams and single-line diagrams. Includes troubleshooting procedures for control circuits and combination starters. Explains troubleshooting practices on DC and AC motors, identifying unmarked leads on three-phase delta and Y-connected motors, and troubleshooting lighting systems.

Programmable Logic Controllers Level 2

Cost: \$595

Dates: Mar 26 - Apr 23

Before taking the PLC Level 2 Course, it is highly recommended that the participant take the Intro PLC Level 1 course as a prerequisite. PLC Level 2 will review instructions, timers, and counters. RS Logix 5000 will be used to cover advanced programming with PID Loop and Bit Shift.

Three Phase Systems # 728.1

Cost: \$300

Dates: May 7 - June 4

Covers principles of three-phase motors, induction motors, synchronous motors, multispeed motors, maintaining three-phase motors, motor starters, three-phase motor controllers, alternators, auxiliary generator systems, power distribution systems.

Programmable Logic Controllers Level 3

Cost: \$595

Dates: Jun 18 - July 16

Before taking the PLC Level 3 Course, it is highly recommended that the participant take the PLC Level 1 and PLC Level 2 as a prerequisite. PLC Level 3 will include PLC communication through ethernet, connecting to, controlling and programming Variable Speed Drives. Also, some Motor Theory will be covered.

Registration Contact:

Ryan Mikles

wmikles@atu.edu

479.508.3348



JANUARY 2024-JULY 2024 ELECTRICAL COURSE SCHEDULE

GREEN BAY PACKAGING-MORRILTON TRAINING SITE

Course Times are **Wednesdays, 7:00 am to 3:30 pm**

Location: 1001 East Broadway St., Morrilton, AR 72110

Basic Electricity & Electronics

721.1

Cost: \$300

Dates: Jan 3 - Jan 31

Bad weather makeup day: Feb 7

Covers basic, nonmathematical approach to understanding principles of electricity. Introduces electron theory, static electricity, electrons in motion, and magnetism. Covers basic methods of measuring current, voltage, and resistance. Explains circuit components-conductors, insulators, resistors, capacitors-and simple Ohm's Law calculations for DC and AC circuits.

Intermediate Electrical

729.1

Cost: \$300

Dates: Feb 14 - Mar 13

Bad weather makeup day: Mar 20

Covers use of schematic diagrams, determining sequence of operation, & use of building diagrams and single-line diagrams. Includes troubleshooting procedures for control circuits and combination starters. Explains troubleshooting practices on DC & AC motors, identifying unmarked leads on three-phase delta and Y-connected motors, and troubleshooting lighting systems.

Reading Technical Diagrams

712

Cost: \$300

Dates: Mar 27 - Apr 24

Reading electrical, fluid power, and air conditioning technical diagrams. Introduction to Technical Diagrams, schematics and symbols. Learning the characteristics of a schematic and how flow is indicated. Schematic troubleshooting.

Electrical Measuring Instruments

724.1

Cost: \$300

Dates: May 8 - June 5

Covers principles of three-phase motors, induction motors, synchronous motors, multispeed motors, maintaining three-phase motors, motor starters, three-phase motor controllers, alternators, auxiliary generator systems, power distribution systems.

Advanced Electrical

723.1

Cost: \$300

Dates: Jun 19 - July 17

Covers differences between DC & AC circuits. Explains AC sine wave, using vectors to solve AC problems, calculating impedance in circuits having inductance, capacitance, and resistance, AC power relationships in single-phase and three-phase circuits, and principles of transformer maintenance *This is an advanced electrical course and the participant must have taken one of the following as a prerequisite: Basic Electricity; Electrical Troubleshooting; or Basic AC Control Equipment /Intermediate Electrical

Registration Contact:

Ryan Mikles

wmikles@atu.edu

479.508.3348



OZARK CAMPUS



GREEN BAY PACKAGING

JANUARY 2024-JULY 2024 MECHANICAL COURSE SCHEDULE

GREEN BAY PACKAGING-MORRILTON TRAINING SITE

Course Times are **Tuesdays, 7:00 am to 3:30 pm**

Location: 1001 East Broadway St., Morrilton, AR 72110

Introduction to Hydraulics

737 Millwright Practices

734.1 & # 733

Cost: \$300

Dates: Jan 2 - Jan 30

Bad weather makeup day: Jan 31

Covers Hydraulic Principles, types of hydraulic fluids and characteristics. Describes components of the hydraulic system and their functions, including filters and strainers, reservoirs and accumulators, pumps, piping, tubing and hoses, control valves, relief valves, and actuating devices. Covers a variety of cylinders and hydraulic motors.

Cost: \$300

Dates: Feb 6 - Mar 5

Bad weather makeup day: Mar 6

Training will focus on rebuilding and setting up equipment. Participants will learn how to set and align gears and sprockets, the fundamentals of bearings and lubrication, and best practices for precision/laser alignment.

Basic Welding

117 & # 713

Cost: \$300

Dates: Mar 19 - Apr 16

This course covers how to lay out motor bases and flanges by using simple trigonometry formulas. Participants will learn how to weld on flat plate, as well as determine machine settings and appropriate rod sizes to use and number codes on welding electrodes.

Machine Shop Practices

815

Cost: \$595

Dates: Apr 23 - May 21

This course will focus on developing lathe and manual milling machine skills. Not to be confused with CNC skills, this course will teach students the basics of layout, sharpening drill bits and cutting tools, and building customized parts.

Intermediate Welding

119

Cost: \$300

Dates: May 28 - July 2

Off Day: June 4th

Participants will learn how weld vertical stick and how to layout pipe joints while building on the skillset learned in the Basic Welding course. Basic Welding is a prerequisite for this course.

Registration Contact:

Ryan Mikles

wmikles@atu.edu

479.508.3348



OZARK CAMPUS



GREEN BAY PACKAGING