



AUTOMATION | ELECTRICAL
DATA COMM & SECURITY
INDUSTRIAL & SAFETY
FLUID POWER

AUTOMATION

TUE. JUL. 24 -
THU. JUL. 26
8 AM - 5 PM

SMC JOPLIN
923 W. 4TH ST.
JOPLIN, MO 64801

COURSE NUMBER MMS-125
**HYDRAULICS AND PNEUMATICS
FUNDAMENTALS**

TRAINING EVENT

This three-day course is designed for mechanical technicians and provides information on the concepts associated with hydraulics, hydraulic systems and components, fluid principles, hydraulic system design, and hydraulic schematic symbology.

Upon completion of this course, you should be able to:

- Describe the basic principle of fluid dynamics.
- State the relationship between force, pressure, and area.
- List and describe the major components of a hydraulic system.
- Identify the symbols used to identify hydraulic components in a schematic.
- List and describe the major components of a pneumatic system.
- Identify the symbols used to identify pneumatic components in a schematic.



+ HANDS-ON

Throughout this course, you will have the opportunity to practice the skills you have learned through a variety of hands-on exercises.

COST

\$1,765
Includes lunch
each day

REGISTER

To register, contact Suzan McPherson at smcpherson@smcelectric.com by Monday, June 25.

Prerequisites

To successfully complete this course, the following prerequisites are required:

- Understanding of mechanical theory and mechanical systems

SCHEDULE

Day 1

- Listing the Advantages of Hydraulics and Pneumatics
- Discuss Hydraulic and Pneumatic Components
- Disassembling, Cleaning, Inspecting, and Reassembling a Hydraulic and/or Pneumatic Control Valve
- Operating a Hydraulic and/or Pneumatic Cylinder Using a Given Medium

Day 2

- Operating Multiple Hydraulic Cylinders Using a Hydraulic Medium
- Disassembling, Cleaning, Inspecting, and Reassembling a Hydraulic and/or Pneumatic Control Valve

Day 3

- Operating a Pneumatic Cylinder Using a Pneumatic Medium
- Operating Multiple Pneumatic Cylinders Using a Pneumatic Medium
- Lab
- Review And Exam