# **SECTION HEADING**

# **MECH 1131: Pneumatic Lab**

# Description

Pneumatic Lab provides students with skills in plumbing, troubleshooting, and operation of basic pneumatic circuits.

# Credits

1

## **Prerequisite**

None

### Corequisite

Concurrent enrollment with MECH 1120

### **Topics to be Covered**

- 1. Basic pneumatic circuits
- 2. Cylinder sequencing circuits.
- 3. Air/oil circuits.
- 4. Dual supply pneumatic circuit.
- 5. Pneumatic speed control circuits.
- 6. Rodless cylinder circuits.
- 7. System pressure and cylinder speed tests.
- 8. Two-hand safety circuits.
- 9. Vacuum circuits.

## **Learning Outcomes**

- 1. Identify and control potential safety hazards and implement safe working practices.
- 2. Demonstrate the ability to test the basic functions of pneumatic components to determine proper operation.
- 3. Design and connect pneumatic circuits.
- 4. Troubleshoot basic pneumatic systems.

#### **Credit Details**

Lecture: 0

Lab: 1

OJT: 0

MnTC Goal Area(s): None