

# Industrial Fluid Power

## Course Information

**Developers:** Automation Engineer Technology State Curriculum Committee

Robert Blume, Hutchinson Community College; Charlie Randazzo, Johnson County Community College; Richard Fort, Johnson County Community College.

**Developed Date:** 01/27/2014

**KBOR Facilitators:** Rita Johnson/ Shirley Antes/ April Henry/ Lisa Beck

**Business & Industry Liaison:** Steve Reed – KASA Companies, Ronald Owings – Spirit Aerosystems and Mike Hart – Spirit Aerosystems

**Credit Hours: 3**

## Description:

This course examines theory, applications and operation of industrial hydraulic and pneumatic systems. The inspection, maintenance and repair of the various components are covered in this course. Interpretation of the various schematic symbols used in hydraulic and pneumatic circuit diagrams will be discussed.

## Competencies

1. Demonstrate the safety procedures when working with hydraulic and pneumatic systems
2. Discuss the concepts associated with hydraulic theory
3. Describe the various types and applications of hydraulic components
4. Interpret a hydraulic circuit drawing
5. Discuss the concepts associated with pneumatic theory
6. Describe the various types and applications of pneumatic components
7. Interpret a pneumatic circuit drawing
8. Demonstrate the process of hydraulic and pneumatic system troubleshooting