COURSE TITLE & NUMBER: Industrial Fluid Power 1: IST 2050
CREDITS: 3 (1 LEC / 2 LAB)
PREREQUISITES: IST 1350 Industrial Technology Math Lab I

CATALOG DESCRIPTION:
Industrial Fluid Power 1 introduces the principles and importance of pressure, flow, speed, and efficiency rating factors in fluid power. Students will learn the basic concepts of hydraulics, the connection and operation of simple practical hydraulic circuits, design and operation of these simple circuits, and the connection and operation of functional hydraulic circuits using accumulators, hydraulic motors, pressure reducing valves, and remotely controlled pressure relief valves.

OUTLINE OF MAJOR CONTENT AREAS:
1. Hydraulic symbols
2. Hydraulic fluid flow principles
3. Hydraulic math
4. Hydraulic circuitry

COURSE GOALS/OBJECTIVES/OUTCOMES:
1. Students will demonstrate appropriate attitudes and behaviors: honesty, responsibility, respect and initiative.
2. Students will identify occupational safety hazards and follow appropriate safety precautions.
3. Students will exhibit safe housekeeping procedures in the lab.
4. Students will work cooperatively and understand the roles of leadership and supervision.
5. Students will use techniques and information learned in class to critically and logically complete projects.
6. Students will demonstrate knowledge of hydraulic/pneumatic symbols.
7. Students will demonstrate knowledge of simple circuits.
8. Students will demonstrate knowledge of cylinder control.
9. Students will demonstrate knowledge of the hydraulic system.

MNTC GOALS AND COMPETENCIES MET:
N/A

HCC COMPETENCIES MET:
Working Productively and Cooperatively

STUDENT ASSESSMENT SHALL TAKE PLACE USING INSTRUMENTS SELECTED/DEVELOPED BY THE COURSE INSTRUCTOR.

Curriculum Committee Approval Committee: March 13, 2018
AASC APPROVAL DATE: March 21, 2018
REVIEW DATE: March 2023