

# Dakota County Technical College

## HCEM 2238: Hydraulics II

### A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: 1

Lab Hours/Week: 2

OJT Hours/Week: \*.\*

Prerequisites: None

Corequisites: None

MnTC Goals: None

This course is designed for students with knowledge of hydraulic flow and pressure. Students learn National Standard Institute symbols used in fluid power diagrams. A technical study provides students with operational knowledge of computer-controlled multiple hydraulic systems. Students troubleshoot and diagnose hydraulic system malfunctions. Prerequisites: HCEM1101, HCEM1130, and HCEM2135, or instructor's approval

**B. COURSE EFFECTIVE DATES:** 03/21/1998 - Present

### C. OUTLINE OF MAJOR CONTENT AREAS

### D. LEARNING OUTCOMES (General)

1. demonstrate shop safety
2. test and repair hydraulic cylinder
3. test hydraulic flow rate
4. display clean work habits
5. calculate hydraulic pressure
6. test fundamental hydraulic circuit
7. explain fundamental hydraulic circuit
8. calculate hydraulic force
9. analyze test results
10. identify A.N.S.I. hydraulic symbols
11. test and adjust main relief valve setting

### E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

None

### F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

### G. SPECIAL INFORMATION

None noted