

# Dakota County Technical College

## HCEM 1270: CAT Basic Training II

### A. COURSE DESCRIPTION

Credits: 2

Lecture Hours/Week: 2

Lab Hours/Week: \*.\*

OJT Hours/Week: \*.\*

Prerequisites: None

Corequisites: None

MnTC Goals: None

The student will gain an understanding of the Caterpillar engine and product line with basic fundamentals of the diesel engine.

**B. COURSE EFFECTIVE DATES:** 12/08/2010 - Present

### C. OUTLINE OF MAJOR CONTENT AREAS

### D. LEARNING OUTCOMES (General)

1. ACERT engines
2. Calibrations
3. Caterpillar ET
4. Caterpillar electronic controls
5. Common rail fuel systems
6. Correct operation of battery, starting and charging systems
7. Electrical schematics
8. Electrical systems and components
9. Fault codes
10. Hydraulic conductor components
11. Hydraulic fundamentals
12. Hydraulic schematics
13. SIS web
14. Tier 3 engines
15. Win-flash

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

None

### F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

### G. SPECIAL INFORMATION

None noted