

MINNESOTA WEST COMMUNITY & TECHNICAL COLLEGE

COURSE OUTLINE

DEPT. ELEC

COURSE NUMBER:1225

NUMBER OF CREDITS: 3

Lecture: 1 Lab: 2 OJT 0

Course Title:

Electric Motors

Catalog Description:

Electric Motors describes the difference in alternating current (AC) and direct current (DC) motors, generators, and alternators. Compute motor calculations. Determine the load characteristics and connections of AC and DC motors, generators, and alternators.

Prerequisites or Necessary Entry Skills/Knowledge:

ELCO 1100 or ELCO 1110

FULFILLS MN TRANSFER CURRICULUM AREA(S) (*Leave blank if not applicable*)

- Goal 1: Communication: By meeting the following competencies:
- Goal 2: Critical Thinking: By meeting the following competencies:
- Goal 3: Natural Sciences: By meeting the following competencies:
- Goal 4: Mathematics/Logical Reasoning: By meeting the following competencies:
- Goal 5: History and the Social and Behavioral Sciences: By meeting the following competencies:
- Goal 6: The Humanities and Fine Arts: By meeting the following competencies:
- Goal 7: Human Diversity: By meeting the following competencies:
- Goal 8: Global Perspective: By meeting the following competencies:
- Goal 9: Ethical and Civic Responsibility: By meeting the following competencies:
- Goal 10: People and the Environment: By meeting the following competencies:

Topics to be Covered

AC Motors

DC Motors

Motor Circuits

Student Learning Outcomes

Describe DC motors

Describe AC motors

Identify parts of a motor

Read nameplates on a motor

Perform tests on motor circuits

Hookup motors

Is this course part of a transfer pathway: Yes No

***If yes, please list the competencies below**

Revised Date: 1/1/2022