

MINNESOTA WEST COMMUNITY & TECHNICAL COLLEGE

COURSE OUTLINE

DEPT. ELUT

COURSE NUMBER: 2110

NUMBER OF CREDITS: 2

Lecture: 1 Lab: 1 OJT 0

Course Title:

Transformer Banking II

Catalog Description:

Transformer Banking II is a continuation of Transformer Banking I. This course will look into single-phase power banks and auto transformers used in the transmission and distribution of small and large blocks of power.

Prerequisites or Necessary Entry Skills/Knowledge:

ELUT 1110

FULFILLS MN TRANSFER CURRICULUM AREA(S)

- 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

Transformer components

Auto transformers

Ratio tests

Nameplates

Open Circuits

Trouble shooting

Voltage

Current

Construction and application of single phase, v phase, and 3 phase

Student Learning Outcomes

Identify transformer components

Explain function and draw schematic of an autotransformer

Perform ratio test

Locate nameplate and interpret nameplate data

Determine cause of open circuit

Troubleshoot low-voltage complaint

Interpret codes used in abbreviated cooling

Calculate total power

Demonstrate transformer safety procedures

Is this course part of a transfer pathway: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Revised Date: October, 2020