

# MINNESOTA WEST COMMUNITY & TECHNICAL COLLEGE

## COURSE OUTLINE

DEPT. ELEC

COURSE NUMBER: 1210

NUMBER OF CREDITS: 5

Lecture: 2 Lab: 3 OJT 0

### Course Title:

Residential & Farm Wiring

### Catalog Description:

Residential & Farm Wiring introduces blueprint reading for residential wiring. Describe electrical safety and general safety. Discusses National Electrical Code articles on branch circuits, feeders, grounding, services, and overcurrent protection for residential and farm wiring.

### Prerequisites or Necessary Entry Skills/Knowledge:

ELEC 1200

### 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

Wiring methods for residential and farm wiring

Grounding and bonding

### Student Learning Outcomes

Apply National Electrical Codes

Describe branch circuit requirements

Install PVC conduit

Install lighting fixtures

Calculate farm yard services

Calculate box sizes
Describe bonding requirements
Describe grounding requirements
Describe sub panel requirements
Install UF cable

**Is this course part of a transfer pathway: Yes  No**   
**\*If yes, please list the competencies below**

Revised Date: 1/1/2022