

# MINNESOTA WEST COMMUNITY & TECHNICAL COLLEGE

## COURSE OUTLINE

DEPT. ELPL

COURSE NUMBER: 1116

NUMBER OF CREDITS: 4

Lecture: 1 Lab: 3 OJT 0

### Course Title:

Electrical Distribution of Powerlines II

### Catalog Description:

Electrical Distribution of Powerlines II covers the application, care, and use of rubber goods, insulated coverup use, and the use of bucket trucks. This course also covers pole top insulator change outs, pole replacements, and conductor transfers all simulating the line being 'Hot'.

### Prerequisites or Necessary Entry Skills/Knowledge:

ELPL1106

### 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

Precautions and safety before digging

Three-phase overhead lines

Conductor ties

Open wire and triplex secondaries

URD

### Student Learning Outcomes

Describe before digging precautions

Build three-phase overhead lines

Install conductor ties

Install open-wire and triplex secondaries

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| Splice 600 volt underground cable                          |
| Demonstrate the use of underground cable preparation tools |
| Install 15 KV URD terminators, elbows, and cable splices   |
| Demonstrate ground procedures for URD cable                |

**Is this course part of a transfer pathway: Yes  No**

Revised Date: October, 2020