Faculty members are required to have the outline submitted to the Academic Affairs Office. The course outline is the form used for approval of new courses by the Academic Affairs and Standards Council.

**DEPT.** ELUT  **COURSE NUMBER:** 2116

**NUMBER OF CREDITS:** 2  **Lecture:** 1  **Lab:** 1  **OJT** 0

<table>
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<tr>
<th>Course Title:</th>
<th>Reclosures and Protective Equipment</th>
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**Catalog Description:**

This course covers reclosure testing, inspection and causes of malfunction. Fuse construction and coordination. Coordination scheme that provides system protection along with lightning arrestors, fault indicators and relays.

**Prerequisites or Necessary Entry Skills/Knowledge:**

None

**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**

- Reclosures
- Circuit breakers
- Protective devices such as fuses, lightning arrests, cut-outs, sectionalizers and the related equipment
- Troubleshooting in the field

**Student Learning Outcomes**

1. Demonstrate safety precautions, identify protective equipment, and simulate safe work practices
2. Describe control components
3. Describe an oil-level indicator and by-pass operations
4. Operate manual trip device
5. Calculate circuit coordination
6. Simulate downstream loads

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

Revised Date: October, 2020