

# MINNESOTA WEST COMMUNITY & TECHNICAL COLLEGE

## COURSE OUTLINE

**DEPT. ELUT**

**COURSE NUMBER: 2116**

**NUMBER OF CREDITS: 2**

**Lecture: 1 Lab: 1 OJT 0**

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| <b>Course Title:</b>                |
| Reclosures and Protective Equipment |

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| <b>Catalog Description:</b>  |
| Reclosures and Protective Equipment 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. |

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| <b>Prerequisites or Necessary Entry Skills/Knowledge:</b> |
| 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:

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| <b>Topics to be Covered</b>   |
| Reclosures  |
| Circuit breakers  |
| Protective devices such as fuses, lightning arrests, cut-outs, sectionalizers and the related equipment |
| Troubleshooting in the field  |

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| <b>Student Learning Outcomes</b>  |
| Demonstrate safety precautions, identify protective equipment, and simulate safe work practices |

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| Describe control components                            |
| Describe an oil-level indicator and by-pass operations |
| Operate manual trip device                             |
| Calculate circuit coordination                         |
| Simulate downstream loads                              |

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

Revised Date: October, 2020