

# MINNESOTA WEST COMMUNITY & TECHNICAL COLLEGE

## COURSE OUTLINE

DEPT. ELUT

COURSE NUMBER: 1105

NUMBER OF CREDITS: 3

Lecture: 2 Lab: 1 OJT 0

### Course Title:

Blueprint, Schematics and Transit

### Catalog Description:

Blueprint, Schematics and Transit covers the use and interpretation of blueprints, schematic diagrams, and the symbols and abbreviations used in them. This course also covers the fundamentals for set-up, operation and use of a transit mounted on a tripod or other base.

### 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

Blueprint and map readings, electrical drawings and symbol identifications.

Set up and use a transit.

### Student Learning Outcomes

Measure elevations around the school with use of transit, tripod and measuring stick.

Draw the following diagrams: one-line, elementary, highway and wireless.

Prepare staking sheets: both single-phase and three-phase.

Prepare electrical drawings from instructor instructions.

Draw electrical power system substation plans which may include plot plan, bus plan and elevation, grounding layout and details, conduit installations details, electrical equipment layout, electrical floor plan and lighting plan.

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

Revised Date: October, 2020