Faculty is 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. ELWT  COURSE NUMBER: 2130

NUMBER OF CREDITS: 2 Credits (1 Lecture & 1 Lab)

COURSE TITLE: Data Acquisition & Communication

CATALOG DESCRIPTION: Focuses on the practical aspects of designing, installing, testing, and troubleshooting cabling. The course allows students to exercise all combinations of commands from SCADA (Supervisory Control and Data Acquisition).

AUDIENCE: Students who are eager to learn!

FULFILLS MN TRANSFER CURRICULUM AREA(S) *(Leave blank if not applicable)*
Area: by meeting the following competencies:
Area: by meeting the following competencies:
Area: by meeting the following competencies:

PREREQUISITES OR NECESSARY ENTRY SKILLS/KNOWLEDGE:

LENGTH OF COURSE: 1 Semester

THIS COURSE IS USUALLY OFFERED:
Every other year □ fall □ spring X summer □ undetermined □

Four goals are emphasized in course at Minnesota West Community & Technical College:

1) ACADEMIC CONTENT: The academic objectives of this course are:
   a. Introducing students to Data, Voice, and Video Cabling
   b. Manage and train on a wind farm simulator
   c. Manage and train on a wind turbine simulator.

2) THINKING SKILLS: This course will help students improve the effectiveness of their thinking skills through:
   a. 
   b. 
   c. 
   d. 

3) COMMUNICATIONS SKILLS: This course will help students improve their oral and written communication skills through:
   a. 

4) HUMAN DIVERSITY: This course will help students recognize, understand, and appreciate human diversity through:

   a.
   b.


LIST OF EXPECTED COURSE OUTCOMES:

1) Students will be expected to complete discussions, worksheets, quizzes, and tests over the assigned material
2) Students will be expected to turn in all assignments on time
3) Students will be expected to complete all in class work SAFELY
4) Students will simulate a SCADA control system.

LEARNING/TEACHING TECHNIQUES used in the course are:

- Collaborative Learning
- Student Presentations
- Creative Projects
- Lecture
- Demonstrations
- Lab
- Problem Solving
- Interactive Lectures
- Individual Coaching
- Films/Videos/Slides
- Other (describe below)
- Power points

ASSIGNMENTS AND ASSESSMENTS FOR THIS CLASS INCLUDE:

- Reading
- Oral Presentations
- Textbook Problems
- Group Problems
- Other (describe below)
- Tests
- Worksheets
- Papers
- Term Paper
- Individual Projects
- Collaborative Projects
- Portfolio

EXPECTED STUDENT LEARNING OUTCOMES: Students should understand how to terminate low voltage circuits, be able to identify and operate a SCADA system, including adjusting parameters that they may encounter in a real situation.

The information in this course outline is subject to revision

Veteran Services: Minnesota West is dedicated to assisting veterans and eligible family members in achieving their educational goals efficiently. Active duty and reserve/guard military members should advise their instructor of all regularly scheduled military appointments and duties that conflict with scheduled course requirements. Instructors will make every effort to work with the student to identify adjusted timelines. If you are a veteran, please contact the Minnesota West Veterans Service Office.

To receive reasonable accommodations for a documented disability, please contact the campus Student Services Advisor or campus Disability Coordinator as arrangements must be made in advance. In addition, students are encouraged to notify their instructor.