Course Title:
P & ID and PFD Reading

Catalog Description:
Covers the symbols and diagrams commonly used on Piping and Instrumentation Diagrams (P & ID) and Process Flow Diagrams (PFD). Focus will be on identifying the types of diagrams, identifying instrument symbols and line symbols used on P & ID's, understanding the types of information typically found on a legend, using a P & ID to locate the components of a system, and reading a PFD to trace the flow paths of a system.

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

• Technical diagrams used at a process facility
• Instrument symbols
• Line symbols
• Process Flow Diagram (PFD)

Student Learning Outcomes

1. Identify instrument and major equipment symbols.
2. Describe the process flow of a Dry Mill ethanol plant.
3. Identify and distinguish between various diagrams including PFD and P & ID diagrams.
4. Describe in general terms the type of information found on the various diagrams.
5. Distinguish between process lines and instrument control lines used on a P & ID.
6. Identify control loops on a P & ID and describe their function.

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

Revised Date: August 2020