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.** ELWT  **COURSE NUMBER:** 2110  
**NUMBER OF CREDITS:** 3  **Lecture:** 2  **Lab:** 1

**Course Title:**  
Turbine Siting and Construction

**Catalog Description:**  
Introduces students to the various aspects of wind turbine in wind farm siting, construction, and commissioning. Students will be engaged in observation and discussions on the use of heavy equipment such as cranes, rigging, tower assembly, and a wind tower production facility being brought on-line.

**FULFILLS MN TRANSFER CURRICULUM AREA(S) (Leave blank if not applicable)**

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:

**Prerequisites or Necessary Entry Skills/Knowledge:**  
None
Topics to be Covered (General)

- Development of a wind farm.
- Siting and rigging for construction of a wind farm.
- Steps to developing a wind farm.
- Construction of a wind farm.
- Documents in different stages of a wind farm completion.
- Different rigging options.
- Siting development of a wind farm.

Student Learning Outcomes

- Understand the development of a wind farm
- Operate the rigging training system.
- Understand the importance of safety at a wind farm.
- Operate a wind farm simulator.
- Operate a wind turbine simulator.
- Investigate the construction of a wind farm.

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

*If yes, please list the competencies below

Revised 8/19