

MINNESOTA WEST COMMUNITY & TECHNICAL COLLEGE

COURSE OUTLINE

DEPT. MECH

COURSE NUMBER: 1102

NUMBER OF CREDITS: 2

Lecture: 1 Lab: 1 OJT: 0

Course Title:

Mechanical Power Transmission

Catalog Description:

Mechanical Power Transmission introduces students to fundamental industrial mechanical concepts, principles, and equipment.

Prerequisites or Necessary Entry Skills/Knowledge:

None

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:

Topics to be Covered

Shop safety

Precision Measurement

Print reading

Tools

Lubrication

Bearings

Flexible belt, mechanical and chain drives

Vibration and alignment

Preventive Maintenance

Student Learning Outcomes

Identify and control potential safety hazards and implement safe working practices.

Demonstrate proper use of various tools and measuring devices.

Identify the function and types of lubricants.

Demonstrate selection and installation of common belts drives, bearings, gears, and chain drives.

Calculate speed and torque ratios produced by mechanical drives.

Perform shaft alignments with various measuring devices.

Is this course part of a transfer pathway: Yes No

***If yes, please list the competencies below**

Revised Date: 1/26/2022