

MINNESOTA WEST COMMUNITY & TECHNICAL COLLEGE

COURSE OUTLINE

DEPT. DSL

COURSE NUMBER: 1120

NUMBER OF CREDITS: 2

Lecture: 2 Lab: 0 OJT 0

Course Title:

Powertrain Principles

Catalog Description:

Powertrain Principles explains theory of clutch, pressure plate assembly, standard transmissions, differentials, power take-off, brakes, axles, and components that compliment powertrain operations.

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

Powertrain Fundamentals

Powertrain Service

Powertrain Repair

Powertrain Diagnosis

Student Learning Outcomes

Describe a manual transmission

Diagnose powertrain component issues

Explain how clutches operate

Discuss drivetrain operations

List steps for servicing powertrains

Identify powertrain repair procedures

Is this course part of a transfer pathway: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

Revised Date: 8/2021