



ADVANCED POWERTRAIN — AUTM 2248

A. Course Description

- **Credits:** 5.00
- **Lecture Hours/Week:** 1.00
- **Lab Hours/Week:** 4.00
- **OJT Hours/Week:** 0
- **Prerequisites:** None
- **Corequisites:** None
- **MnTC Goals:** None

This course includes: advanced automatic transmission and engine diagnostic procedures. Advanced repair of automatic transmissions and engines. Prerequisites: Successful completion of Autm 1003, 1043, 2218, 2228, and 2238 with a minimum overall score of 70% OR concurrent enrollment in course 2960 Skill Development with instructor approval.

B. Course Effective Dates: 8/21/17 – Present

C. Outline of Major Content Areas

As noted on course syllabus

D. Learning Outcomes

1. Complete work order to include customer information vehicle identifying information, customer concern, related service history, cause, and correction
2. Complete work order to include customer information, vehicle identifying information, customer concern, related service history, cause, and correction
3. Diagnose electrical/electronic concerns using principals of electricity (Ohm's law)
4. Diagnose electronic transmission control systems using a scan tool; determine necessary action
5. Diagnose, identify, interpret, test, and repair automatic transmission related concerns; determine necessary action
6. Diagnose, identify, interpret, test, and repair driveline related concerns; determine necessary action
7. Diagnose, identify, interpret, test, and repair engine related concerns; determine necessary action
8. Inspect, repair, adjust, and replace drivetrain system components
9. Locate and interpret vehicle and major component identification numbers (VIN, vehicle

certification labels, and calibration decals)

10. Remove and reinstall engine, automatic transmission, and driveline system components
11. Research applicable vehicle and service information, vehicle service history, service precautions, and technical service bulletins
12. Service engine, automatic transmission, and driveline systems

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

F. Learner Outcomes Assessment

As noted on course syllabus

G. Special Information

None noted