



## AUTOMOTIVE DRIVELINE FUNDAMENTALS — AUTM 2238

### A. Course Description

- **Credits:** 3.00
- **Lecture Hours/Week:** 1.00
- **Lab Hours/Week:** 2.00
- **OJT Hours/Week:** 0
- **Prerequisites:** None
- **Corequisites:** None
- **MnTC Goals:** None

This course will cover the operation and proper repair procedures of current differentials, manual transmissions, transaxles, and transfer cases used on late model vehicles. It also covers the operation and proper repair procedures for locking hubs in four-wheel drive vehicles. Prerequisites: AUTM 1003 and 1013

### B. Course Effective Dates: 6/1/17 – 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. Diagnose driveline related noises; determine necessary actions
3. Diagnose fluid loss, level, and condition concerns; determine necessary action
4. Diagnose, disassemble, clean, inspect, adjust, and reassemble driveline components
5. Inspect and reinstall driveline components
6. Inspect, test, and replace transmission/transaxle sensors and switches
7. Locate and interpret vehicle and major component identification numbers (VIN), vehicle certification labels, calibration decals)
8. Perform driveline maintenance services
9. Research applicable vehicle and service information, such as drive train system operation, fluid type, vehicle service history, service precautions, and technical service bulletins

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

**F. Learner Outcomes Assessment**

As noted on course syllabus

**G. Special Information**

None noted