

**Course discipline/number/title: AMT 2740: Drive Train Theory****A. CATALOG DESCRIPTION**

1. **Credits:** 3
2. **Hours/Week:** 3
3. **Prerequisites (Course discipline/number):** None
4. **Other requirements:** None
5. **MnTC Goals (if any):** NA

**B. COURSE DESCRIPTION:** This course will cover automotive and light truck clutches, manual and automatic transmission/transaxles, differentials, and drivelines. Content includes mechanical, electronic and hydraulic system, driveshaft phasing, alignment, balance gear ratios and diagnosis. All-wheel drive and 4-wheel drive systems.**C. DATE LAST REVISED (Month, year):** February, 2022**D. OUTLINE OF MAJOR CONTENT AREAS:**

1. Automatic Trans/Transaxle
2. Differentials
3. Clutches
4. Electronic Controls
5. Manual Transmissions
6. Scan tool applications
7. Gear Ratios

**E. LEARNING OUTCOMES (GENERAL):** The student will be able to:

1. Inspect, diagnose, and replace transmissions.
2. Identify types of transmissions.
3. Describe types of repairs needed.
4. Describe electronic control methods.

**F. LEARNING OUTCOMES (MNTC):** NA**G. METHODS FOR EVALUATION OF STUDENT LEARNING:** Methods may include but are not limited to:

1. Quizzes
2. Tests
3. Assignments
4. Worksheets

**H. RCTC CORE OUTCOME(S).** This course contributes to meeting the following RCTC Core Outcome(s):  
**Critical Thinking.** Students will think systematically and explore information thoroughly before accepting or formulating a position or conclusion.

**Personal and Professional Accountability.** Students will take responsibility as active learners for achieving their educational and personal goals.

**I. SPECIAL INFORMATION (if any):** None