

Course discipline/number/title: AMT 1735: Brakes Lab**A. CATALOG DESCRIPTION**

1. **Credits:** 5
2. **Hours/Week:** 10
3. **Prerequisites (Course discipline/number):** None
4. **Other requirements:** None
5. **MnTC Goals (if any):** NA

B. COURSE DESCRIPTION This course covers the service, diagnosis, and repair methods of general automotive maintenance as well as the service, diagnosis and repair of hydraulic brake systems, ABS brake systems and rotor and drum machining/measuring.**C. DATE LAST REVISED (Month, year):** February, 2023**D. OUTLINE OF MAJOR CONTENT AREAS:**

1. Automotive inspection and service
2. Automotive maintenance steps
3. Cooling systems
4. Diagnosis of brake problems
5. Repair methods of hydraulic brakes
6. Diagnosis and repair methods of ABS systems
7. Scan tool usage for diagnostic trouble code retrieval, diagnostic test procedures in ABS systems

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

1. Perform maintenance and service steps.
2. Pressure test and repair automotive cooling systems.
3. Service disc and drum hydraulic brakes.
4. Diagnose faults of hydraulic brakes including ABS.
5. Repair and replace parts as needed.
6. Bleed brake systems correctly.
7. Test/Evaluate completed repair work.

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

1. Shop/Lab projects
2. Lab worksheets
3. Individual and team assignments

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