

# Anoka Technical College

## AUTO 2159: Brake Systems & Service

### A. COURSE DESCRIPTION

Credits: 4

Lecture Hours/Week: 2

Lab Hours/Week: 4

OJT Hours/Week: \*.\*

Prerequisites: None

Corequisites: AUTO 1010 and AUTO 1010

MnTC Goals: None

This course covers the operational theory and repair of automotive brakes and braking systems; principles of hydraulics, disc, drum, and parking brake systems; and Anti-lock Brake Systems (ABS) and Traction Control (TC) basics. Lab experiences will provide an opportunity to service a variety of vehicles and systems. (Prerequisites: None; Co-requisites: AUTO 1000, AUTO 1010, AUTO 1167, and AUTO 2145) (2 credits lecture/2 credits lab)

**B. COURSE EFFECTIVE DATES:** 01/13/2014 - Present

### C. OUTLINE OF MAJOR CONTENT AREAS

1. General break systems
2. Brake hydraulic systems
3. Drum brake systems
4. Disc brake systems
5. Power brake assist systems
6. Related systems (wheel bearings, suspension and drivetrain)
7. Anitlock brakes and traction control systems

### D. LEARNING OUTCOMES (General)

1. Describe General Brake Systems.
2. Diagnose and Repair Brake Hydraulic Systems.
3. Diagnose and Repair Drum Brake Systems.
4. Diagnose and Repair Disc Brake Systems.
5. Diagnose and Service Power Assist Systems.
6. Diagnose and Repair Related Systems.
7. Diagnose Antilock Brakes and Traction Control Systems.

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

None

### F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

### G. SPECIAL INFORMATION

None noted