AUT 208: AUTOMOTIVE BRAKES

Transcript title

Automotive Brakes

Credits

3

Grading mode

Standard letter grades

Total contact hours

72

Lecture hours

12

Lab hours

60

Prerequisites

AUT 101, AUT 106, AUT 107, AUT 110 and AUT 115.

Recommended preparation

or to be taken with

Course Description

Studies the theory, operation, diagnosis and repair of the modern braking systems of both domestic and import vehicles. Includes an introduction to anti-lock brake systems.

Course learning outcomes

- 1. Describe hydraulic and mechanical principals of disc and drum brake systems.
- 2. Describe the functions of the brake system components, including anti-lock systems.
- 3. Service, diagnose and repair automotive brake systems.
- 4. Communicate technical information verbally and in writing.
- 5. Describe and practice safety procedures while working in an automotive shop environment.

Content outline

- 1. Brake System Components Performance
- 2. Machining Brake Drums and Rotors
- 3. Brake System Principles
- 4. Brake Hydraulic Systems
- 5. Hydraulic Valves and Switches
- 6. Brake Fluid and Lines
- 7. Brake Bleeding Methods and Procedures
- 8. Wheel Bearings and Service
- 9. Drum Brakes
- 10. Drum Brake Diagnosis and Service
- 11. Disc Brakes

- 12. Disc Brake Diagnosis and Service
- 13. Parking Brake Operation Diagnosis and Service
- 14. Power Brake Unit Operation and Service
- 15. ABS Components and Operation

Required materials

Required textbook and special gear, see syllabus for details.