

AT 110 - AUTOMOTIVE BRAKE SYSTEMS

Course Description

This course covers theory, components, nomenclature, and service of automotive brake systems. Students will use standard skills to diagnose hydraulic systems, drum and disk brakes, power assist units and systems. The study and repair of modern ABS systems along with the replacement of associated parts such as wheel bearings will also be covered. Group 2 course.

Credit Hours

5.5

Contact Hours

8

Lecture Hours

3

Lab Hours

5

Required Prerequisites

AT 100-may be taken concurrently

General Education Outcomes supported by this course

Critical Thinking - Direct

Course Learning Outcomes

Knowledge:

- Describe modern standard braking systems using current automotive system nomenclature.

Application:

- Service hydraulic braking systems using the results of diagnostic strategies for machining of drums and rotors.

Integration:

- Use problem solving strategies to resolve problems with braking systems to given specifications.

Human Dimension:

- Discuss course concepts relating to brake systems.

Caring - Civic Learning:

- Demonstrate care by using the recommended shop procedures when servicing a vehicle.

Learning How to Learn:

- Demonstrate mastery of safe brake system repair through passing the Automotive Brake Certification State Testing.