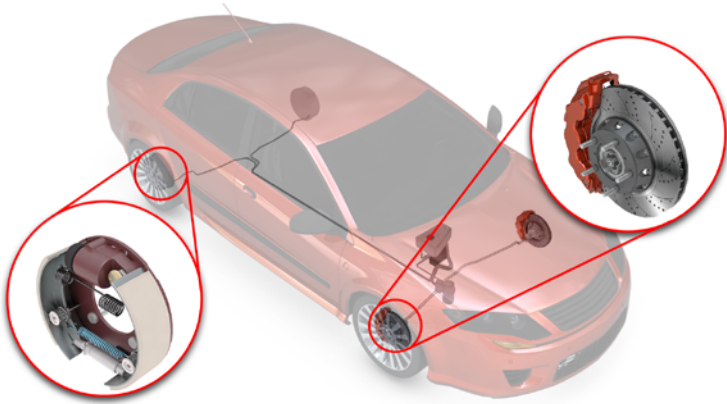


BRAKING SYSTEMS: HYDRAULIC

eLearning courses designed to increase productivity and profits



Learning made Simple, Visual, and Interactive

This course aims to provide learners with an introduction to hydraulic braking systems. The course begins by discussing the basic principles used in hydraulic braking systems as well as the common components of these systems. The learner is then introduced to two types of foundation brakes commonly used with hydraulic braking systems: hydraulic drum brakes and hydraulic disc brakes.

Credit Hours **2**

Learning Objectives

- Define the principles associated with hydraulic braking systems.
- Recognize the common components that comprise the hydraulic braking system.
- Understand how the foundation brakes work with the hydraulic braking system.
- Identify the components of a hydraulic drum brake and explain how it functions.
- Identify the components of a hydraulic disc brake and explain how it functions.

Table of Contents

I. Basic Concepts

- Hydraulic Braking Principles
 - o Friction
 - o Braking Temperature
 - o Vehicle Stopping Distance
 - o Brake Force Distribution
- Common Components
 - o Brake Fluid
 - o Vacuum Booster
 - o Master Cylinder
 - o Brake Lines and Hoses
 - o Service Brake
 - o Parking Brake

II. Hydraulic Drum Brakes

- Brake Drum
- Wheel Cylinder
- Brake Shoe
- Shoe Adjuster
- Brake Shoe
- Hold Down Pins and Springs
- Bleed Screw
- Shoe Return Springs

III. Hydraulic Disc Brakes

- Disc
 - o Solid Discs
 - o Ventilated Discs
 - o Cross-Drilled Discs
 - o Slotted Discs
 - o Slotted and Cross-Drilled Discs
- Caliper
- Brake Pads

