

# AUTOMOTIVE BRAKE SYSTEMS, CERTIFICATE OF ACHIEVEMENT

The Certificate of Achievement in Automotive Brake Systems is designed to prepare students to enter the automotive industry working as a technician in the diagnosis and repair of brake and brake systems. Students in this program are trained to work on drum and disc braking systems, parking brakes and many hydraulic systems. Students learn to inspect, adjust, remove, repair and reinstall brake shoes, disc pads, drums, rotors, wheel and master cylinders, and hydraulic fluid lines. The additional labs and tasks needed to complete the program also allow students to diagnose failing systems and repair them properly using procedures and tools required by employers. Students will be exposed to and able to earn a car brake rotor resurfacing certification through PRO CUT. This is an industry standard on car lathe many dealerships own and operate. The student will also practice the skills and develop the test taking skills to pass the ASE A5 Brake certificate exam. Students will also be ready to take the California State Brake Inspectors licensing exam, one of just a few Automotive State level certifications.

Course ID	Title	Units/ Hours
<b>Required Core Courses:</b>		
AT R110	Introduction to Automotive Technology	6
AT R115	Automotive Electrical Systems	6
AT R150	Automotive Braking Systems	6
<b>Total Units</b>		<b>18</b>
<b>Year 1</b>		
<b>Fall Semester</b>		<b>Units/Hours</b>
AT R110	Introduction to Automotive Technology	6
AT R115	Automotive Electrical Systems	6
<b>Units/Hours</b>		<b>12</b>
<b>Year 2</b>		
<b>Fall Semester</b>		
AT R150	Automotive Braking Systems	6
<b>Units/Hours</b>		<b>6</b>
<b>Total Units/Hours</b>		<b>18</b>

Upon successful completion of this program, students will be able to:

- Examine and evaluate automotive brake systems and components.
- Practice environmental safety in accordance with applicable safety and environmental regulations governing the automotive industry.
- Integrate and analyze online service data, written repair material and technical service bulletins to repair and service a vehicle.
- Demonstrate proficiency in the use of specialized automotive service tools, electronic diagnostic equipment and basic hand tools working on current model vehicles.
- Identify specialized automotive service tools, electronic diagnostic equipment and basic hand tools.
- Interpret automotive electrical wiring diagrams to aid in the diagnosis and repair of automotive electrical problems