

# ATEC 115: AUTOMOTIVE BRAKE SYSTEMS

An ASE/NATEF course designed to familiarize the student with methods, construction, working principals, theory, and aspects used in provide instruction in the principles of automotive brake systems. Included are theory, service and repair of disc and drum brakes, manual and power brakes, and brake system control and indicating devices.

## Course Student Learning Outcomes

1. Identify the various brake components.
2. Describe the theory of brake system operation.
3. Demonstrate the proper service and repair procedures on automotive brake systems.
4. Explain the duties and responsibilities of an automotive technician.
5. Demonstrate and discuss safe working practices.
6. Demonstrate the correct use of the hand tools, power tools, and precision measuring equipment used by the automotive technician.
7. List and identify faults, and factory specifications of assigned engine using the NATEF worksheet.
8. Read with understanding in order to perform competently as an Automotive Technician.
9. Convey ideas in writing in order to perform competently as an Automotive Technician.
10. Communicate effectively to perform competently as an Automotive Technician.
11. Use math to solve problems and communicate to fulfill responsibilities of an Automotive Technician.
12. Understand the expectations of the workplace, the responsibilities of an Automotive Technician and the methods of securing employment within the field.
13. Demonstrate the ability to use technology effectively in the workplace.
14. Demonstrate professionalism in workplace appropriate dress and conduct.
15. Demonstrate the ability to work as a productive member of a team.
16. Participate in weekly online Canvas class curriculum.

Credits: 6

Prerequisites: 2.0 or higher in ATEC 100 or concurrent enrollment.

Program: [Automotive Technology](#)