

# ATEC 110: AUTOMOTIVE STEERING AND SUSPENSION

An ASE/NATEF course designed to familiarize the student with methods, construction, working principals, theory, and aspects used in the reconditioning and servicing the internal combustion engine. Students will learn classroom theory along with hands on experiences utilizing precision measuring tools, torque wrenches, and machining equipment. Theories include levers, pressure/volume, expansion, momentum, inertia, leverage and the operation of cams.

## Course Student Learning Outcomes

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

Credits: 6

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

Program: [Automotive Technology](#)