

# ATEC 210: AUTOMATIC TRANSMISSION & TRANSAXLES

Fundamentals of automatic transmission operation, including methods of gear change, power flows, and basic hydraulic principles used in automatic transmissions.

## Course Student Learning Outcomes

1. List and define automatic transmission parts and components.
2. List and price parts needed for a complete transmission overhaul.
3. Compute labor charges for a complete transmission overhaul.
4. List and define proper service and overhaul procedures.
5. Demonstrate proper transmission assembly and overhaul procedures.
6. Describe proper operation of transmission modulators, TV linkage, governors, and manual linkage, and how they operate together.
7. Describe clutch, bank, servo, and related operation.
8. List hydraulic principles and fundamentals, including valves, and their operation to control shifting and shift points.
9. List and define torque converter components, torque converter clutches, operation and testing including stall tests.
10. List and define new transmission designs and component development as they become pertinent to the field.
11. List and describe electronic developments pertinent to automatic transmissions.
12. Read with understanding in order to perform competently as an Automotive Technician.
13. Convey ideas in writing in order to perform competently as an Automotive Technician.
14. Communicate effectively to perform competently as an Automotive Technician.
15. Use math to solve problems and communicate to fulfill responsibilities of an Automotive Technician.
16. Understand the expectations of the workplace, the responsibilities of an Automotive Technician and the methods of securing employment within the field.
17. Demonstrate professionalism in workplace appropriate dress and conduct.
18. Demonstrate the ability to work as a productive member of a team.
19. Demonstrate the ability to use technology effectively in the workplace.

Credits: 6

Prerequisites: 2.0 or higher in ATEC 100 and ATEC 201.

Program: **Automotive Technology**