

# AT 150 - AUTOMATIC TRANSMISSIONS

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## Course Description

This course is designed to familiarize the student with hydraulic theory, internal transmission powerflow, electronic control and torque converter operation. All aspects of transmission operation will be covered as well as removal, overhaul, and installation procedures. Students will remove, dyno-test, and install actual failed units in the lab. Group 2 course.

## Credit Hours

6

## Contact Hours

9

## Lecture Hours

3

## Lab Hours

6

## Required Prerequisites

Instructor signature required

## General Education Outcomes supported by this course

Critical Thinking - Direct

## Course Learning Outcomes

### Knowledge:

- Describe operation and design of current automatic transmissions using current automotive system nomenclature.

### Application:

- Use the results of diagnostic strategies to service/tear down/rebuild automatic transmissions.

### Integration:

- Apply problem solving strategies to resolve issues with automatic transmissions systems.

### Human Dimension:

- Discuss course information with others regarding engine performance.

### Caring - Civic Learning:

- Service a vehicle owned by a customer using recommended shop procedures.

### Learning How to Learn:

- Demonstrate mastery of automatic transmission concepts as tested by the State of Michigan.