

# AUT 256 : AUTOMATIC TRANSMISSIONS THEORY

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## Transcript title

Automatic Transmissions Theory

## Credits

2

## Grading mode

Standard letter grades

## Total contact hours

40

## Lecture hours

10

## Lab hours

30

## Course Description

This course is instructor lead which includes; principles and theory of planetary gear sets, torque converters, and hydraulic controls as applied to automatic transmissions. Includes emphasis on diagnosis, service, and procedures to conform to current service manuals. The student will also be introduced to Constant Velocity Transmissions/Hybrid Electric Vehicles/Electric Vehicle type transmissions.

## Course learning outcomes

1. Describe the theory of planetary gear sets, torque converters, and hydraulic controls as applied to automatic transmissions.
2. Describe the operation of a constant velocity (CVT) type automatic transmission.
3. Perform automatic transmission hydraulic testing on live vehicles.
4. Perform diagnostic testing on computerized transmission controls.
5. Communicate technical information, verbally and in writing.
6. Describe and practice safety procedures while working in an automotive shop environment.

## Content outline

1. Torque Converters and Planetary Gear Sets
2. Hydraulic Circuits and Operations
3. Automatic Transmission Diagnosis
4. CVT Section

## Required materials

Required textbook and special gear, see syllabus for details.