

# AUT 107 : MECHANICAL SYSTEMS I

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## Transcript title

Mechanical Systems I

## Required materials

Requires textbook, see syllabus for details.

## Credits

3

## Grading mode

Standard letter grades

## Total contact hours

90

## Lab hours

90

## Prerequisites with concurrency

AUT 106.

## Course Description

Provides an understanding of the fundamental principles of automotive shop safety and tool care. Develops mechanical knowledge and skills utilized throughout a career in the automotive field. Includes techniques of routine vehicle maintenance. Includes customer vehicle identification and handling, new vehicle pre-delivery inspection and preparation, safety inspection, lubrication tasks, and light line tasks. A self-paced course.

## Course learning outcomes

1. Describe and apply basic mechanical skills to the tasks of basic vehicle identification, inspection, routine maintenance, handling, and lubrication.
2. Describe work responsibilities associated with careers in the automotive service industry.
3. Demonstrate the ability to use a mechanical vehicle hoist (lift) and floor-level vehicle lifting equipment.
4. Communicate technical information verbally and in writing.
5. Describe and practice safety procedures while working in an automotive shop.

## Content outline

1. Stud Removal / Gasket Making / Hacksaw
2. Vehicle Information Systems
3. Wheel Torque / Brake Inspection
4. Helicoil
5. Micrometers
6. Multimeters
7. Compression Test
8. Maintenance and Safety Inspection
9. Lubrication Systems
10. Tire Rotation / Tire Inspection
11. Soldering
12. Fasteners