

# AT 120 - AUTOMOTIVE ELECTRICAL I

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## Course Description

This course covers basic electricity, circuits, testing equipment, and solid state electronics. Group 2 course.

## Credit Hours

5

## Contact Hours

8

## Lecture Hours

2

## Lab Hours

6

## Required Prerequisites

AT 100-may be taken concurrently

## General Education Outcomes supported by this course

Critical Thinking - Direct

## Course Learning Outcomes

### Knowledge:

- Describe electrical basics using current automotive system nomenclature including electricity, circuits, testing equipment, and solid state electronics.

### Application:

- Use the results of diagnostic strategies to service automotive starting and charging systems.

### Integration:

- Use problem solving strategies to resolve basic automotive charging and starting systems.

### Human Dimension:

- Discuss course concepts relating to brake systems.

### Caring - Civic Learning:

- Demonstrate care by using the recommended shop procedures when servicing a vehicle.

### Learning How to Learn:

- Demonstrate mastery of solid state electronics diagnostic tests and repair through passing the written testing modeling after state testing.