



# Automotive Technology Program of Study

## Proficiencies Needed to be Successful in Automotive Technology:

### Math:

#### Modeling

- Use numerical phenomena or quantities to model a situation.
- Use equations, inequalities and functions to model and interpret situations.

#### Number and Quantity

- Compute fluently with multi-digit numbers and find common factors and multiples.

#### Functions

- Understand ratio concepts and use ratio reasoning to solve problems.
- Analyze proportional relationships and use them to solve real-world and mathematical problems.

#### Geometry

- Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.

### English Language Arts:

#### Reading

- Determine the central ideas of the text and provide an objective summary.
- Determine the meaning of words and phrases as they are used in the text, including figurative, connotative, and technical meanings.

#### Writing

- Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas efficiently as well as to interact and collaborate with others.
- Draw evidence from literary or informational texts to support analysis, reflection, and research.

#### Language

- Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

### Science:

#### Physical Sciences:

- Plan and conduct investigations, make observations and measurements to identify materials based on their (observable) properties.
- Construct an evidence-based account of how an object made of a small set of pieces can be disassembled and made into a new object.
- Analyze and interpret data on the properties of substances before and after the substances interact to determine if a chemical reaction has occurred.

## Education and Career Pathways out of Automotive Technology:

### Post-Secondary Education:

- 18 Month Certificate Program
- 2 year Associates Degree in Automotive Technology

### Certifications:

- Automotive Service Excellence (ASE) Certifications to become a Master Technician
- WorkKeys National Career Readiness Certification (NCRC)

### Apprenticeships or Cooperative Education:

- Students work under a mentor at a dealership or repair facility as part of the HACTC Cooperative Education program.

### Employability:

- Entry Level Auto Technician
- Service Advisor
- Parts Counter
- Car Sales Person