

# Automotive Technology

## Auto Mechanics



### For Students Who Enjoy

- working with their hands
- using tools
- problem solving and troubleshooting

### Possible Careers

Automotive Technician

Parts sales specialist

Diesel Mechanic



### Student Organization

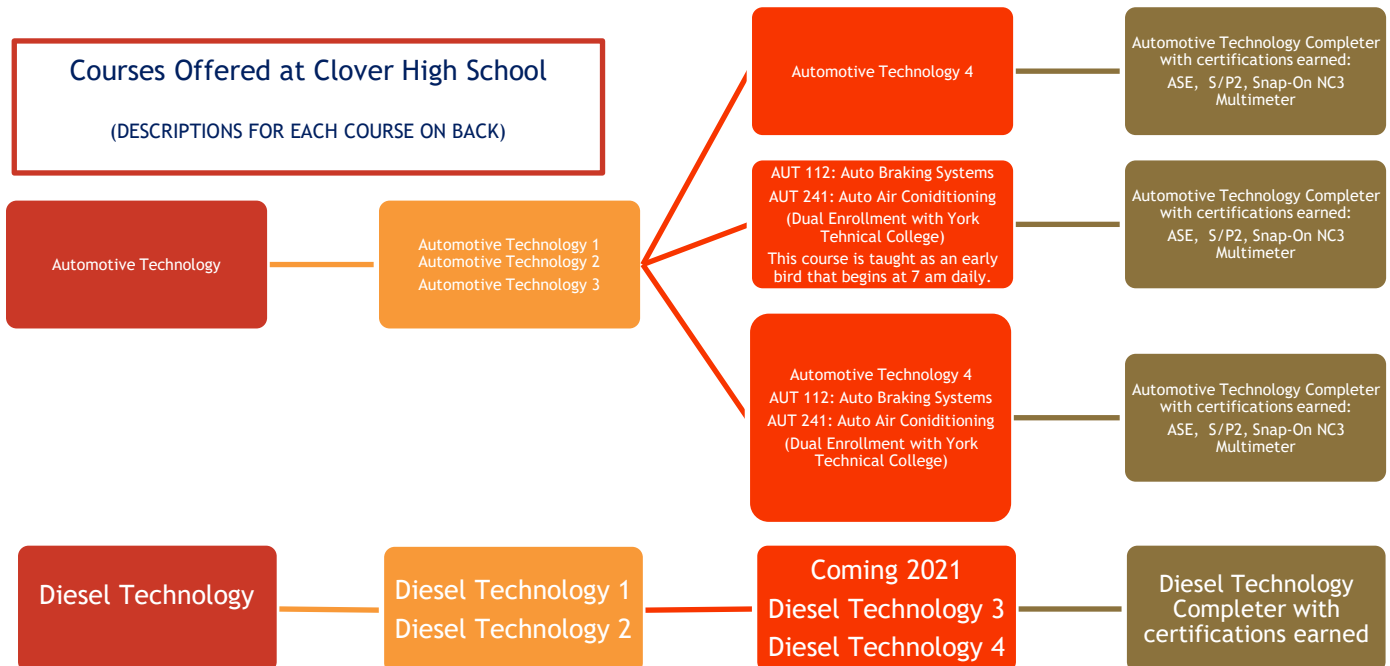
The SkillsUSA-Automotive club meets weekly in the Auto classroom. Activities include preparing for the state contest, that will offer scholarship money toward different institutions. SkillsUSA is a partnership of students, teachers and industry working together to ensure America has a skilled workforce.

### Certifications Earned

Automotive Service Excellence (ASE),  
S/P2: Safety,  
Snap-On NC3 Multimeter

### Courses Offered at Clover High School

(DESCRIPTIONS FOR EACH COURSE ON BACK)



## Course Descriptions

### Automotive Technology 1 - 1 Unit - Grades 9-10

*College Prep Prerequisites: none*

Automotive Technology 1 focuses on shop safety, basic mechanics tools, shop equipment, and brake systems. Brake system theory and brake diagnosis is covered along with repair procedures. Students will study disc and drum brake systems, anti-lock brakes and hydraulics. There will be a limited amount of shop demonstrations and hands-on activities that relate to the material being covered in the classroom. This course is designed for students who are interested in a career in the automotive industry. **All students must have safety glasses, shop clothes, and shoes. [603000CW]**

### Automotive Technology 2 Honors - 1 Unit - Grades 10-12

*Honors Prerequisite: Auto Tech 1*

Auto Tech 2 focuses on steering, suspension, and automatic transmissions. Students will also study tires and wheels, wheel balancing, and wheel alignment. Upon successful completion of this course, they will understand the theory, diagnosis, and repair of automotive steering and suspension systems. Actual repair work will be incorporated into each student's learning experience. Students will perform NATEF tasks within Maintenance and Light Repair (MLR) certification. Content will also include system diagnosis, communication, customer relations, technical writing, computer science, and blueprints & diagrams. Actual repair work is incorporated into each student's learning experience under the close supervision of an ASE-certified instructor. **All students must have safety glasses, shop clothes, and shoes. [603100HW]**

### Automotive Technology 3 Honors - 1 Unit - Grades - 10-12

*Honors Prerequisite: Auto Tech 1*

Auto Tech 3 focuses on drivetrain and HVAC (heat, ventilation, & air conditioning) operation, diagnostics, and service procedures. Students will perform NATEF tasks within the Maintenance and Light Repair (MLR) certification. Content will also include system diagnosis, communication, customer relations, technical writing, computer science, and blueprints & diagrams. Actual repair work is incorporated into each student's learning experience under the close supervision of an ASE-certified instructor. This course also prepares students for Automotive Service Excellence (ASE) certification. Students are advised to have a valid South Carolina driver's license or permit. **All students must have safety glasses, shop clothes, and shoes. [H: 603200HW]**

### Automotive Technology 4 Honors - 1 Unit - Grades - 10-12

*Honors Prerequisite: Auto Tech 1, 2, and 3 plus teacher recommendation.*

Auto Tech 4 focuses on electrical systems, engine performance, and engine repair. Students will study basic engine theory, diagnosis, and service common to automotive internal combustion engines and will learn how to properly use wiring and current flow diagrams in electrical diagnosis and repair. Units will also cover engine rebuilding, measurement and performance testing, entry level driveability concerns on automotive vehicles and modern ignition, fuel and power train computer-controlled systems. Students will have the opportunity to use industry standard testing equipment such as PC based scopes and hand-held scanners. Actual repair work is incorporated into each student's learning experience under the close supervision of an ASE-certified instructor. This course also prepares students for Automotive Service Excellence (ASE) certification. **All students must have safety glasses, shop clothes, and shoes. [H: 603300HW]**

### Auto Braking Systems (AUT 112) & Auto Air Conditioning (AUT 241) - 1 unit - Grades - 12

*Dual Credit Prerequisite: Auto 1, 2, 3 plus teacher recommendation and York Technical College entrance requirements*

***\*may take in addition to Auto 4 or in place of Auto 4 to be a completer***

The AUT 112 course covers hydro-boost power brakes and vacuum power brakes as well as master cylinders and caliper rebuilding. The AUT 241 course covers automotive HVAC systems (heat, ventilation and air conditioning). This course is a study in the principles of refrigeration, operation, and testing procedures to determine the cause of the malfunction, servicing or repairing by approved methods. Emphasis is on special tools, equipment, and safety procedures. Actual repair work is incorporated into each student's learning experience under the close supervision of an ASE-certified instructor. This course also prepares students for Automotive Service Excellence (ASE) certification. **All students must have safety glasses, shop clothes and shoes. [AUT 112: 636200EH, AUT 241: 835200EH] This course is taught as an earlybird, class begins at 7 am each day.**

### **Diesel Technology 1 - 1 Unit - Grades 10-11**

*College Prep Prerequisites: none*

Diesel Technology 1 focuses on shop safety, basic mechanics tools, shop equipment, and engine components and operation as well as brake systems. Brake system theory and brake diagnosis is covered along with repair procedures. Students will study disc and drum brake systems, anti-lock brakes and hydraulics. There will be a limited amount of shop demonstrations and hands-on activities that relate to the material being covered in the classroom. This course is designed for students who are interested in a career in the diesel industry. All course components comply with the Automotive Service Excellence (ASE), and standards set forth by the SC Department of Education. **All students must have safety glasses, shop clothes, and shoes. [631000CW]**

### **Diesel Technology 2 - 1 Unit - Grades 10-12**

*College Prep Prerequisite: Diesel Tech 1*

Diesel Tech 2 focuses on steering, suspension, and automatic transmissions. Students will also study tires and wheels, wheel balancing, and wheel alignment. Upon successful completion of this course, they will understand the theory, diagnosis, and repair of automotive steering and suspension systems. Actual repair work will be incorporated into each student's learning experience. Content will also include system diagnosis, communication, customer relations, technical writing, computer science, and blueprints & diagrams. Actual repair work is incorporated into each student's learning experience under the close supervision of an ASE-certified instructor. Competencies and job tasks comply with ASE and standards set forth by the State Department of Education. **All students must have safety glasses, shop clothes, and shoes. [631100CW]**