JHS CTE

CAREER & TECHNICAL EDUCATION

AUTOMOTIVE

JACKSON POLAR BEARS

JACKSON
HIGH SCHOOL
330-837-3501

AUTOMOTIVE TECHNOLOGY

Automotive Technology

The Automotive Technology program at Jackson High School will prepare students to be high-tech automotive technicians, move into advanced training within the industry, or lead to an associate degree in the automotive technology field. This program is also A.S E. certified in engine repair, suspension and steering, brakes, electrical systems, engine performance, and work experience

The Road Ahead

The U.S. Dept. of Labor forecasts that the automotive industry is expected to add 237,500 new jobs and have a 30 percent growth rate through 2020, making technicians one of the top 20 jobs with relatively high median earnings and the potential for significant job openings over the next decade

For More Information
330-837-3501
Joe Drury, Auto Tech Instructor, ext 1539
Donna Jeffers, Assistant Principal,
Career & Tech Director, ext. 1407

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Curriculum

This is a 2 year program

Junior Year - 3 credits

GROUND TRANSPORTATION MAINTENANCE - Students will apply skills needed to inspect and perform general service on vehicles. They will research applicable service information and technical service bulletins and perform maintenance on vehicles, as well as inspect service engine, drivetrain, suspension, steering, electrical and braking systems. Students will perform ignition maintenance including spark plug/glow plug and ignition wire and coil pack replacement and change fluids, filters and inspect vehicles for leaks and fluid condition.

GROUND TRANSPORTATION ENGINE AND POWERTRAIN - Students will inspect, adjust and repair internal combustion engines and drivetrain. Students will learn precision measurement, inspection, and reconditioning techniques. Students will also identify customer's needs, determine labor rates, and create estimates.

AUTOMOTIVE BRAKING SYSTEMS - Students will perform inspections, troubleshoot malfunctions and service automotive brake systems. Students will identify poor performing hydraulic brake systems and replace malfunctioning components. Additionally, students will disable and enable supplemental restraint systems (SRS) and replace anti-lock brake systems components.

Senior Year - 3 credits

AUTOMOTIVE ENGINE PERFORMANCE - Students will research vehicle service histories using model specific service bulletins. Students will test and diagnose engine performance in fuel, air induction, and exhaust systems using advanced testing procedures. Topics include computerized engine controls including retrieving and recording diagnostic trouble codes using On Board Diagnostics (OBD). Students will diagnose drivability and emissions problems resulting from malfunctions of interrelated systems.

GROUND TRANSPORTATION ELECTRICAL/ELECTRONICS - Students will diagnose and repair vehicle electrical systems, including chassis electrical, charging, starting and lighting systems. Students will learn the fundamentals of direct current (DC) electronics including series, parallel, and series-parallel circuits. Students will use electronic diagnostic tools, read schematics and utilize printed and electronic repair manuals to troubleshoot electrical circuits, test components, and replace defective modules.