

## AUTOMOTIVE SERVICE TECHNOLOGY



Baseball-the national pastime? We think not! This is the era of the automobile and here in the US, we've got 'em all. We've got compact cars and SUVs, sports cars, pickups, minivans and buses. Some are designed to fit a whole soccer team, while others have room for just two. What they all have in common, however, is their eventual need of repair. That's where you come in; the Automotive Service Technology program prepares students for entry-level skills as auto mechanics and includes instruction in basic engine repair, engine performance, basic electronics, brakes, suspension and steering. If a career working on one of America's greatest loves is what you're after, this is the program for you.

### **Core Courses Defined by the Arkansas Career Education:**

**Electrical Systems:** This course prepares individuals to engage in the diagnosis and repair of electrical/electronic systems. Instruction will include units in general electrical system diagnosis; battery diagnosis and service; starting system diagnosis and repair; charging system diagnosis and repair; lighting systems diagnosis and repair; gauges, warning devices, and driver information systems diagnosis and repair; horn and wiper/washer diagnosis and repair; and accessories diagnosis and repair.

**Brakes:** This course prepares individuals to engage in the diagnosis and repair of Brakes. Instruction will include units in Hydraulic System Diagnosis and Repair, Drum Brake Diagnosis and Repair, Disc Brake Diagnosis and Repair, Power Assist Units Diagnosis and Repair, Miscellaneous Diagnosis and Repair, and Anti-Lock Brake Systems.

Elective Courses Defined by the Arkansas Career Education:

**Engine Performance:** This course prepares individuals to engage in the diagnosis and repair of engine performance. Instruction will include units in General Engine Diagnosis, Computerized Engine Controls Diagnosis and Repair, Ignition System Diagnosis and Repair, Fuel, Air Induction, and Exhaust Systems Diagnosis and Repair, Emissions Control Systems Diagnosis and Repair, and Engine Related Service.

**Suspension & Steering:** Students will learn to identify different steering systems and components of each system. They will learn techniques of four-wheel alignment inspection and repair of steering columns (including new and emerging technologies such as fiber optics, pass codes, keys with microchip, airbag assemblies), diagnose and determine needed repairs on conventional and electronic front suspension systems, and reassemble, adjust, and install power/manual steering boxes.

Concurrent college credit earned at SAU Tech:

AT1004 Automotive Brakes

AT1014 Automotive Electrical Systems

AT1024 Automotive Engine Performance

AT1034 Automotive Suspension & Steering

Students can earn the Certificate of Proficiency in Automotive Technology by completing the sequence of concurrent courses. Concurrent college credit earned through the Automotive Technology program is also applied to the Technical Certificate in Automotive Technology and the Associate of Applied Science Degree in Technology at SAU Tech. This program is accredited by the National Automotive Technicians Education Association (NATEF).