Automotive Technology

Herndon Career Center | Video Transcript

The Auto Tech program here at Herndon is an overview of just about anything automotive. We try to touch on everything from basic maintenance—checking oil and tire pressures—to how engines and automatic transmissions work, as well as stability control systems, ABS, and traction control.

We even touch a little on electric vehicles and hybrids. Our goal is to give students a solid overview of automotive technology as a whole. We also cover small engine repair, motorcycles, ATVs, and power equipment. Side-by-sides are extremely popular right now, so we talk about that technology, too.

I'll bring vehicles into the middle of the shop and have every student, from start to finish, change a tire and wheel using nothing but the owner's manual and the tools provided with the vehicle. There's nothing worse than being stuck on the side of the road and feeling helpless, and there's no reason for it.

I've had students come in and greet me at the front door on the first day of class and say, "I don't know anything about cars." I tell them, "Perfect. This is going to be fun."

There are a lot of life lessons involved in this program. It isn't just automotive technology. We talk about taking care of a vehicle, even washing it. We'll cover changing a tire on the side of the road, general maintenance, oil changes, air filters, checking a vehicle over, and even washing it. That's another part of vehicle maintenance.

When students leave here, they'll have enough common knowledge to begin a career in the automotive business. I do my best to help them move in that direction through connections at some of the dealerships I've worked with over the years, having been in the car business myself. I want to make sure they're ready to get started and that I can send out a valuable employee or apprentice.

Students who take this class have the opportunity to earn 10 ASE certifications, as well as the Section 609 air conditioning certification and OSHA 10. These credentials get them moving in the right direction and give them a head start over someone who enters the workforce straight out of high school without training. Being able to put your credentials on the table gives you a pretty good bargaining chip as you enter the workforce.

We currently have multiple students participating in internships around the city at different car dealerships. One is at an independent repair facility, and they seem to be doing well. They check in with us once a week to let us know how they're doing and keep us updated. Those check-ins are part of how they earn their grade for the year.

Honestly, this is a wonderful facility. It's much like having a fully operational car dealership inside a high school. We have all the equipment you'd find in a dealership, including tire machines for mounting and balancing tires, wheel balancers, in-ground lifts, four-post lifts, and two-post lifts. We also have a fully operational alignment machine, so we can perform front-end alignments and work with steering and suspension components.

Having a well-maintained vehicle you can rely on is something people often take for granted. Everyone assumes they can walk out to the driveway, hit a button or turn a key, and the car will start, drive, and run as long as they keep putting gas in it. They don't always realize how many wear items are involved.

It's not just tires and brakes. There's a lot involved in maintaining a vehicle, including oil changes and coolant flushes. Brake fluid is something that is constantly overlooked. Changing brakes and tires is part of it, but there's much more to general vehicle maintenance.