

AUTOMOTIVE TECHNICIAN

About the Automotive Technician Program

Learn basic and more advanced automotive maintenance, repair, and diagnostics. Automotive technicians test, diagnose, and service electrical and mechanical systems and components found in today's automotive vehicles, including engines, transmissions/ transaxles, fuel management systems, steering and suspension systems, climate control systems, brake systems, and hybrids. Graduates will be qualified for all eight areas of the ASE Certified Master Technician.

PROGRAM OUTLINE

TERM: 1		
Course #	Course Title	Credits
1044214000	Intro to Welding Techniques Students will explore and perform basic welding techniques.	1.00
3180430200	Applied Technical Mathematics Develops skills in using mathematics principles, essential to the technical service and production workplace, through applied learning contexts. Content includes whole numbers, fractions, percent, graphs, fundamentals of algebra, geometry and trigonometry, and tools and techniques for precision measurement. Prerequisite: Accuplacer Arithmetic score ≥ 61 or TABE Math Composite score ≥ 10 or ACT Mathematics score ≥ 17 .	2.00
3240430100	Automotive Safety Student will demonstrate competence in automotive safety. This is part of the Maintenance and Light Repair ASE G1.	1.00
3240430200	Automotive Service Fundamental Procedures Student will demonstrate basic automotive service procedures. This is part of the Maintenance and Light Repair ASE G1.	1.00
3240430400	Electrical Principles Student will summarize electrical principles. This is part of the Maintenance and Light Repair Certification ASE G1.	1.00
3240430600	Automotive Electrical Wire Repair Student will perform basic electrical testing procedures. This is part of the Maintenance and Light Repair Certification ASE G1.	1.00
3240430800	Steering, Suspension, and Wheel and Tire Student will inspect, diagnose, and repair steering and suspension systems, along with repair wheels and tires. This is part of the Maintenance and Light Repair ASE G1.	2.00
3240431000	Wheel Alignment Student will perform wheel alignment inspection and repair. This is part of the Maintenance and Light Repair ASE G1.	1.00
3240431300	Battery and Lighting Student will diagnose, service, and repair automotive battery and lighting systems. This is part of the Maintenance and Light Repair Certification ASE G1.	1.00
3240431500	Starting and Charging Systems Student will diagnose, service, and repair automotive charging and starting systems. This is part of the Maintenance and Light Repair Certification ASE G1.	1.00

Course #	Course Title	Credits
3240431700	Automotive HVAC Systems Student will perform general A/C diagnosis and repair. This is part of the Maintenance and Light Repair Certification ASE G1.	1.00
TERM: 2		
Course #	Course Title	Credits
1089010400	Professional Skills for Success This course provides the opportunity to develop the knowledge, skills, and understanding of what it takes to become a professional employee. This course will focus on the development the interpersonal skills of emotional intelligence, communication, teamwork, negotiation, conflict resolution, problem solving, and decision making in a professional setting.	1.00
1089010700	Ethics for the Workplace This course offers the opportunity to develop your ability to recognize and make ethical decisions in the workplace. The focus will be on the recognition and development of values. Expansion of ethical values will focus on demonstrating respect through dignity, diversity, and equality while enhancing guiding actions with the principles of confidentiality, honesty, and transparency in business and in conduct towards others.	1.00
3240431900	Engine Repair Mechanical, Lubrication, and Cooling System Student will perform engine mechanical diagnosis procedures and lubrication and cooling systems. This is part of the Maintenance and Light Repair ASE G1.	3.00
3240432100	Disc and Drum Brakes Student will perform general brake system inspection and diagnosis. Diagnose and repair drum and disc brakes along with wheel bearings and parking brakes. This is part of the Maintenance and Light Repair ASE G1.	2.00
3240432500	Engine Performance Maintenance Students will perform general diagnosis and repair procedure of engine performance systems. This is part of the Maintenance and Light Repair Certification ASE G1.	1.00
3240432700	Manual Drivetrain and Axles Maintenance Student will perform fluid service and diagnosis and drive shaft & CV shaft diagnosis & repair. This is part of the Maintenance and Light Repair ASE G1.	1.00
3240433000	Automatic Transmission and Transaxle Fluid Student will perform basic automatic transmission/transaxle diagnosis and fluid service. This is part of the Maintenance and Light Repair ASE G1.	1.00
3240433300	Automatic Transmission and Transaxle Maintenance and Repair Student will perform in-vehicle automatic transmission/transaxle repairs. This is part of the Maintenance and Light Repair ASE G1.	1.00
3240433800	Automotive Service Professional Simulation 1 Students will practice entry-level service technician skills.	1.00
TERM: 3		
Course #	Course Title	Credits
3240434200	Advanced Brakes Student will perform diagnosis and repair of master cylinders, brake lines, brake power assist units, and electronic brake control systems. This is part of the ASE A5 Certification.	1.00

Course #	Course Title	Credits
3240434500	Hybrid Motors and Batteries Student will learn hybrid motor and battery operation and testing.	1.00
3240434700	Hybrid Manufacturer Specific Systems Student will survey manufacturer specific hybrid systems.	1.00
3240435200	Engine Repair Cylinder Head Student will perform service procedures on engine cylinder head. This is part of the ASE A1 Certification.	1.00
3240435400	Engine Repair Engine Block Student will perform service procedures on engine block. This is part of the ASE A1 Certification.	1.00
3240435600	Refrigerant Systems and AC Components Student will perform refrigerant recovery, recycling, and handling procedures. Student will perform A/C system component replacement and diagnosis. This is part of the ASE A7 Certification.	1.00
3240435800	HVAC Controls Student will perform diagnosis of HVAC control systems. This is part of the ASE A7 Certification.	1.00
3240436000	Instrumentation Systems and Comfort and Convenience Accessories Student will perform diagnosis of gauges and warning systems. Student will perform diagnosis of electric motor driven accessories such as power windows and locks. This is part of the ASE A6 Certification.	1.00
3240436200	Anti theft and Security and Entertainment Systems Student will perform diagnosis of anti-theft and security systems. Student will perform diagnosis of entertainment systems. This is part of the ASE A6 Certification.	1.00
3240436400	Safety Systems and Module Reprogramming Student will perform diagnosis of horn and wiper systems. Student will perform module reprogramming procedures. This is part of the ASE A6 Certification.	1.00
3240436600	Automotive Occupational Operations Student will explore automotive occupational operations	1.00
3240436800	Automotive Business Operations Student will explore automotive business operations	1.00
3240437000	Advanced Steering Systems Student will perform diagnosis and repair of power steering and steering linkage. This is part of the ASE A4 Certification.	1.00
3240437200	Advanced Suspension Systems Student will perform diagnosis and repair of suspension components. This is part of the ASE A4 Certification.	1.00
TERM: 4		
Course #	Course Title	Credits
3240437400	Manual Driveline and Four Wheel and All Wheel Drive Student will perform diagnosis and repair of manual transmission/transaxle and Four-wheel and all-wheel drive. This is part of the ASE A3 Certification.	1.00

Course #	Course Title	Credits
3240437600	Axles and Differentials Student will perform diagnose & repair of ring and pinion and differential assembly. This is part of the ASE A3 Certification.	1.00
3240437800	Manual Clutch and Transmission Systems Student will perform diagnosis and repair of the clutch and transmission systems. This is part of the ASE A3 Certification.	1.00
3240438000	Automatic Transmission Transaxle Diagnosis Student will perform advanced automatic transmission/transaxle diagnosis. This is part of the ASE A2 Certification.	1.00
3240438200	Automatic Transmission Transaxle Remove and Reinstall Student will remove and reinstall an automatic transmission/transaxle. This is part of the ASE A2 Certification.	1.00
3240438400	Automatic Transmission Transaxle Rebuild Student will perform transmission/transaxle rebuilding procedures. This is part of the ASE A2 Certification.	1.00
3240438600	Computerized Engine Controls Systems Student will perform diagnosis of computerized engine control system. This is part of the ASE A8 Certification.	1.00
3240438800	Ignition System Student will perform diagnosis and repair of ignition system. This is part of the ASE A8 Certification.	1.00
3240439000	Fuel and Aspiration Systems Student will perform diagnosis and repair of fuel supply and delivery systems. Student will perform diagnosis and repair of air induction systems. This is part of the ASE A8 Certification.	2.00
3240439200	EVAP and PCV Systems Student will perform diagnosis and repair of EVAP and PCV systems. This is part of the ASE A8 Certification.	1.00
3240439400	Post Combustion Emissions Control System Student will perform diagnosis and repair of catalytic converters, AIR, and EGR systems. This is part of the ASE A8 Certification.	1.00
3240439600	Automotive Diesel Operation Student will learn diesel engine and fuel system operation and diagnosis.	1.00
3240439800	Automotive Diesel Emissions Student will learn and diagnose diesel emission systems.	1.00
3240439900	Automotive Service Professional Simulation 2 Students will continue to practice entry service technician skills with refinement on the concern, cause, and correction, including indepth diagnosis.	1.00

Total Credits: 54.00

Talk with an Academic Advisor about the program outline. Together, you will determine if credits you've already earned satisfy any requirements, discuss possible alternative courses, and choose the best classes if you're thinking of transferring.

AT A GLANCE

How You'll Learn



ON-CAMPUS LABS ONLINE CLASSES MULTIPLE START DATES FLEXIBLE PACE

2021 Start Dates

January 6	May 7	September 1
February 1	June 7	October 4
March 1	July 5	November 1

2022 Start Dates

January 5	March 1	June 6
February 7	May 2	July 11

[VIEW FULL ACADEMIC CALENDAR](#)

What is Competency-Based Education?

Competency-Based Education (CBE) is learning at your own pace by mastering competencies through demonstration. Once all competencies for a program have been assessed and mastered, students will earn a certificate, diploma, or degree.

[LEARN MORE ABOUT CBE](#)

Approximate Cost

\$9,045*

Financial Aid Eligible

*Based on 10-level courses—materials, books, and fees may be additional

What You'll Learn

- Demonstrate professionalism appropriate for the auto service industry.
 - Perform diagnosis, service, and repair of automotive internal combustion engines.
 - Perform diagnosis, service, and repair of automotive manual drive train and axles systems.
 - Perform diagnosis, service, and repair of automotive automatic transmission/transaxle systems.
 - Perform diagnosis, service, and repair of automotive steering and suspension steering systems.
 - Perform diagnosis, service, and repair of automotive brake systems.
 - Perform diagnosis, service, and repair of automotive electrical/electronic systems.
 - Perform diagnosis, service, and repair of automotive heating and air conditioning systems.
 - Perform diagnosis, service, and repair of automotive engine performance systems.
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Your Potential Careers

- Automotive Service Technician
- Technical Specialist
- Shop Foreman
- Service Manager
- Manufacturer's Representative
- Automotive Parts Specialist
- Automotive Service Advisor

Median Annual Salary

\$36,374	\$37,927	\$39,214
Local	State	National

EMSI 2020.1

Get Started

Your application can be submitted online, it takes just a few minutes to complete.

[APPLY NOW](#)