



AUTOMOTIVE Systems

PROGRAM OVERVIEW



Automotive Systems is a 2 year dual credit program. Students receive 3 credits from MCC, ATP 100 Automotive Services upon completion. The course prepares students for success in the workforce and/or post-secondary institutions through the integration of technical and academic skills. It immerses students in environments that replicate (model) workplace settings. Students learn to maintain, diagnose and repair passenger vehicles. They learn to

identify mechanical and electronic/computer issues that affect vehicle performance and safety. Students are able to explain types, proper names and classification of hand tools and what tools is best used for each job. They are also able to Identify and demonstrate skills necessary for employment. All students understand the OSHA safety requirements when performing automobile maintenance. National Automotive Technicians Education Foundation (NATEF) curriculum provides the instructional foundation for the Units of Study.



CAREER OPPORTUNITIES

- **Professional Mechanic**
- **Lube Technician**
- **Tire Technician**
- **Parts Counter Person**
- **Service Writer**
- **Power Sports Technician**
- **Fleet Maintenance Technician**



POST-SECONDARY EDUCATION OPPORTUNITIES

- **Monroe Community College**
- **Alfred State**
- **Morrisville State**
- **Universal Technical Institute**
- **Motorcycle Mechanics Institute**
- **Ohio Technical College**
- **University of Northwestern Ohio**
- **NASCAR Technical Institute**
- **WyoTech**





PROGRAMS OF STUDY

CAREER MAJOR COURSES

Automotive Systems I

11th Grade // 2 CTE Credits

Wheel, Tire & Wheel Bearing Diagnosis and Repair
 Steering and Suspension Repair
 Antilock Braking Systems
 Oil, Lube and Filter
 Disc Brake Systems
 Drum Brake Systems
 Antilock Braking Systems
 Starting and Charging System Diagnostic and Repair
 Shop Orientation and Safety
 Dash Warning Lights and Criver Information

Automotive Systems II

12th Grade // 2 CTE Credits

Electrical and Electronics Diagnostic and Repair
 Suspension and Steering System
 Accessory Installation and Operation
 Engine Diagnostics
 Engine Mechanical Testing
 NYS Inspection
 Circuit Testers and Diagnostic
 Gasoline and Alternate Fuels
 Manual Transmission/Transaxles
 Heating and Air Conditioning Systems
 Scanning and Diagnostic Tools
 Traction Control System

Dual Credit - completion of both classes.

MCC: ATP 100 Automotive Services - 3 credits



EMPLOYABILITY PROFILE:

The Proficient Automotive Technology Student will...

- Demonstrate employability skills that will help them get a job and meet employer's professional expectations.
- Demonstrate academic knowledge and skills that meet postsecondary requirements.
- Consistently demonstrate safe practices and healthy relationships.
- Properly select, use, store, and maintain all tools and equipment.
- Effectively read a variety of materials and communicate in a variety of situations.
- Accurately use measuring tools and systems in context.
- Accurately measure within industry-standard tolerances.
- Demonstrate GRIT. Persevere through challenges and not give up.
- Prepare vehicle for service.
- Diagnose and repair disc brake systems.
- Diagnose and repair drum brake systems.
- Diagnose and repair steering and suspension systems.
- Inspect and adjust manual drive trains.
- Diagnose and repair electrical/electronic components and systems.
- Inspect tires and perform tire service.
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- Evaluate the condition of the battery and determine what action should be taken.
- Diagnose and repair the starting system.
- Diagnose and repair charging systems.
- Inspect and repair lighting and accessory systems.
- Inspect and identify parts of heating and cooling systems.
- Perform NYS Inspection.
- Inspect and replace engine performance parts.
- Inspect and repair hydraulic brake systems.