

# **Automotive Technologies A.A.S.**

Career Community: Transportation

Curriculum Code: 1791

Effective: Fall 2022 – Summer 2027

## Description

There is a need for highly skilled automotive technicians because automobiles are more complex than ever, and are being kept for a record-breaking length of time. This Associate Degree will give students the training needed to diagnose, repair, and maintain the automobiles of today, as well as the automobiles of tomorrow. Students explore various aspects of modern automobile theory and operation, diagnosis, repair, and maintenance for all major systems of the vehicle. Students will be trained with the newest and latest tools and equipment in a realistic hands-on laboratory environment.

#### Milestone

In addition to the required General Education courses in Math and English, completion of AUTM 111 and AUTM 131 with a 2.0 or higher is a key component for success in completing this program. Knowledge obtained in these courses is the foundation for learning in other required courses. Students are encouraged to contact their faculty if they need additional assistance with learning the concepts presented in these courses.

#### **Additional Information**

Approximately 70% of the instruction is hands-on laboratory time, and all lab and lectures feature class sizes of less than 16 students to provide generous personal interaction with your instructors. All instructors are ASE certified, and bring their extensive years of experience working within the automotive repair industry to the classroom. All students have the opportunity to take State of Michigan as well as the nationally recognized ASE tests throughout this program to become a certified automotive technician. To assist students with their career goals, LCC Automotive covers the cost of State and ASE tests as well as the cost of most of their automotive textbooks. Select general education courses compliment this degree.

The Automotive Technology Program is a National Automotive Technicians Education Foundation (NATEF) Certified Training Program, evaluated by the National Institute for Automotive Service Excellence (ASE). The Automotive Program is a Snap-On Diagnostics Training Center and a member of the National Alternative Fuels Training Consortium (NAFTC).

Not all courses in this program transfer to all colleges. Students planning to transfer should see an academic advisor before enrolling in any course.

Students completing this curriculum may also be eligible to apply for multiple certificates in Automotive Technologies.

#### **Contact Information**

Contact the Automotive Technology Program, West Campus Building, Room M103, telephone number 517-267-6406, or Student Services West Campus, West Campus Building, Room M106, telephone number 517-267-5452.

## **General Education - Applied Degrees, Recommended Courses**

(For the full list of options, see **General Education**)

- English Composition or Applied English Select one
  ENGL 124, Technical Writing, 3 credits / 3 billing hours
- English Composition (Second Course)/Communications or Applied Communications Select one
   COMM 110, Communication in the Workplace, 3 credits / 3 billing hours
- Humanities and Fine Arts or Social Sciences or Applied Social Sciences Select one MGMT 234, Diversity in the Workplace, 3 credits / 3 billing hours
- Mathematics or Applied Mathematics Select one MATH 115, Technical Math II, 4 credits / 4 billing hours
- Natural Sciences Lab or Applied Science and Technology Lab Select one PHYS 200, Intro to Applied Physics, 4 credits / 5 billing hours

## **Program of Study Required Courses**

Course Code	Course Title	Credit / Billing Hours
AUTM 102	Automotive/Collision Safety	1/1
AUTM 111	Automotive Electrical I	4/6
AUTM 113	Automotive Electrical II	4/6
AUTM 125	Manual Drive Train and Axles	4/6
AUTM 126	Automatic Transmissions	4/6
AUTM 131	Automotive Engine Repair	4/6
AUTM 141	Braking Systems and ABS	4/6
AUTM 151	Suspension and Steering	4/6
AUTM 161	Auto Heating/Air Conditioning	4/6
AUTM 180	Intro to Alternative Fuels	2/2
AUTM 211	Automotive Electrical III	4/6
AUTM 270	Gas Eng Drivability Diagnosis	4/6
AUTM 273	Lt. Diesel Drivability Diag.	4/6
AUTM 275	Ignition/Emission Sys Diag	4/6
AUTM 284	Hybrid Systems & Maintenance	4/6

### **Minimum Total Credit Hours**

72 credits / 99 billing hours

# **Recommended Course Sequence**

Semester I (Fall)	
Gen Ed – English Composition or Applied English	
AUTM 102	
AUTM 111 – Milestone course	
AUTM 141	
AUTM 151	

Semester II (Spring)		
AUTM 113		
AUTM 131 – Milestone course		
AUTM 161		
AUTM 211		

Semester III (Summer)	
Gen Ed – English Composition (Second Course)/Communications or Applied Comm	nunications

Gen Ed – Mathematics or Applied Mathematics

Semester IV (Fall)	
Gen Ed – Humanities and Fine Arts or Social Sciences or Applied Social Sciences	
AUTM 125	
AUTM 126	
AUTM 180	
AUTM 270	

Semester V (Spring)	
Gen Ed – Natural Sciences Lab or Applied Science and Technology Lab	
AUTM 273	
AUTM 275	
AUTM 284	

LCC makes every effort to limit revisions to the pathways during their effective timeframe. However, the College reserves the right to update certificate and degree title changes, and make course changes as needed, without prior notice.