



Automotive Technology: Electrical and HVAC Diagnostic Specialist C.C.

Career Community: Transportation

Curriculum Code: 1794

Effective: Fall 2025 – Summer 2030

Purpose of the Major

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 Electrical and HVAC certificate will give students the training needed to diagnose, repair, and maintain the automobiles of today, as well as the automobiles of tomorrow. Certificate holders may improve their employment opportunities for advancement in this or a related area. Students will study theory and operation, diagnosis, repair, and maintenance of modern automobile electrical and heat/air conditioning systems. Students will be trained with the newest and latest tools and equipment in a realistic hands-on laboratory environment.

Milestone

Completion of AUTM 111 with a 2.0 or higher is a key component for success in completing this program. Knowledge obtained in this course 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 this course.

Additional Information

A student must earn a minimum grade of 2.0 in all courses.

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 throughout this program to take State of Michigan as well as the nationally recognized ASE tests to become a certified automotive technician. To assist students with their career goals, LCC Automotive covers the cost of State and ASE tests for these specialty areas. Most automotive textbooks are provided as part of this Certificate.

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.

Contact Information

For further information, including career options, course substitutions and waivers, etc., 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.

Major 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 161	Auto Heating/Air Conditioning	4 / 6
AUTM 211	Automotive Electrical III	4 / 6

Minimum Total Credit Hours

17 credits / 25 billing hours

Recommended Course Sequence

Semester I
AUTM 102
AUTM 111 – Milestone course
AUTM 113
Semester II
AUTM 161
AUTM 211

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 titles, and make course changes as needed, without prior notice. The College also reserves the right to discontinue programs when warranted.