



## **Automotive Technology: Advanced Electric Drive/Alternative Fuels C.A.**

Curriculum Code: 1792

Effective: Fall 2019 – Summer 2024

### **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 Advanced Electric Drive-Alternative Fuels 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 hybrid/electric vehicles, and alternative fueled vehicles. Students will be trained with the newest and latest tools and equipment in a realistic hands-on laboratory environment.

### **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 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**

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.

### 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	Electrical II	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 280	Electric/Fuel Cell Technology	2 / 2.5
AUTM 282	Gaseous Fuels	3 / 4
AUTM 284	Hybrid Systems & Maintenance	4 / 6
AUTM 286	High Voltage Battery Tech	4 / 6
AUTM 288	High Voltage Management	4 / 7

### Total Credit Hours

36 credits / 52.5 billing hours

### Recommended Course Sequence

Semester I	Semester II
AUTM 102	AUTM 211
AUTM 111	AUTM 270
AUTM 113	AUTM 280
AUTM 180	AUTM 282

Semester III
AUTM 284
AUTM 286
AUTM 288