

Vehicle Maintenance and Repair Technologies (Associate of Applied Science), Automotive Technology Concentration

The purpose of this program is to provide specialized classroom instruction and practical shop experience to prepare individuals to engage in the servicing and maintenance of all types of automobiles at the entry level. The program prepares the individual to select, safely use, and maintain hand and power tools, jacks, and hoisting equipment. Instruction in the diagnosis of malfunctions and the repair of engines; fuel, electrical, cooling, and brake systems; drive train; and suspension systems are included. The competencies in the Automotive Technology program are directly correlated with the knowledge required to prepare an individual for the certification test given by the **National Institute for Automotive Service Excellence (ASE)**. The content is organized into competency-based courses of instruction that specify occupational competencies the individual must successfully complete according to the priorities for tasks established by the **ASE Education Foundation**.

Automotive Technology Admissions Requirements

- Minimum age 18
- Possess a valid driver's license
- Pass a drug and criminal background check
- Math and Writing Proficiency

To receive the Associate of Applied Science degree, the student must:

- Have a cumulative GPA of 2.00 or better in all credit hours that are to be used towards the degree
- Earn a "C" or better in ENGL 1013 and in the GenEd MATH course
- Earn a "C" or better in all MVS and AUTO courses
- Earn an "S" (Satisfactory) in AUTO 1151, 1251, 1351, and 1451

Program Outcomes. Upon successful completion of the program, the graduate will be able to:

1. Demonstrate the skills needed for entry and advanced levels of employment in an automotive technology career.
2. Engage in the servicing and maintenance of all types of automobiles.
3. Demonstrate the appropriate selection, safe use, and maintenance of hand and power tools, jacks, and hoisting equipment.
4. Demonstrate the diagnosis of malfunctions and repair of engines, fuel, electrical, cooling, brake systems, drive train, and suspension systems.
5. Demonstrate knowledge needed to pass the certification exams given by the National Institute for Automotive Service Excellence (ASE).
6. Demonstrate safe and efficient work practices, basic occupational skills, employability skills, and strong work ethics.

Program of Study:

First Semester		Credit Hrs.
MVS 1002	Fundamentals of Safety	2
MVS 1003	Motor Vehicle Service Basics	3
MVS 1604	Electrical Essentials	4
ENGL 1013	English Composition I	3

GenEd MATH	Any General Education course in Mathematics	3
Semester credit hours:		15
Second Semester		
AUTO 1404	Steering and Suspension Systems	4
AUTO 1504	Brake Systems	4
AUTO 1151	Automotive Internship I	1
GenEd Natural Sci	Any department-approved GenEd course in a Natural Science	3
GenEd Humanities	Any department-approved GenEd course in the Humanities*	3
Semester credit hours:		15
Third Semester		
MVSB 1703	Heating and Air Conditioning	3
AUTO 1103	Engine Design	3
AUTO 1251	Automotive Internship II	1
Semester credit hours:		7
Fourth Semester		
GenEd Soc. Sci.	Any General Education course in the Social Sciences	3
AUTO 1204	Automatic Transmission Systems	4
AUTO 1304	Manual Drivetrain & Axles	4
AUTO 1351	Automotive Internship III	1
Semester credit hours:		12
Fifth Semester		
AUTO 1614	Automotive Advanced Electrical	4
AUTO 1803	Engine Performance I	3
AUTO 1813	Engine Performance II	3
AUTO 1451	Automotive Internship IV	1
Semester credit hours:		11
Total program hours:		60

Automotive Technology Credentials

		Credit Hrs.
MVSB 1003	Motor Vehicle Service Basics	3
MVSB 1604	Electrical Essentials	4
AUTO 1404	Suspension and Steering Systems	4
AUTO 1504	Brake Systems	4
AUTO 1151	Automotive Internship I	1
CTS: Suspension, Steering, and Brakes Technician		16
MVSB 1003	Motor Vehicle Service Basics	3
MVSB 1604	Electrical Essentials	4
AUTO 1204	Automatic Transmission Systems	4
AUTO 1304	Manual Drivetrain & Axles	4
AUTO 1351	Automotive Internship II	1
CTS, Drivetrain Technician		16

MVSB 1003	Motor Vehicle Service Basics	3
MVSB 1604	Electrical Essentials	4
AUTO 1614	Automotive Advanced Electrical	4
AUTO 1103	Engine Design	3
AUTO 1803	Engine Performance I	3
AUTO 1251	Automotive Internship II	1
AUTO 1351	Automotive Internship III	1
CTS, Automotive Electrical Systems Technician		19

MVSB 1003	Motor Vehicle Service Basics	3
MVSB 1604	Electrical Essentials	3
AUTO 1103	Engine Design	4
AUTO 1614	Automotive Advanced Electrical	4
AUTO 1803	Engine Performance I	3
AUTO 1813	Engine Performance II	3
AUTO 1151	Automotive Internship I	1
AUTO 1251	Automotive Internship II	1
AUTO 1351	Automotive Internship III	1
AUTO 1451	Automotive Internship IV	1
CTS: Drivability Technician		24

Technical Diploma (TD), Automotive Technician: all MVSB and AUTO courses
 MVSB 1002, MVSB 1003, AUTO 1103, AUTO 1151, AUTO 1204, AUTO 1251, AUTO
 1304, AUTO 1351, AUTO 1404, AUTO 1451, AUTO 1504, MVSB 1604, AUTO 1614,
 MVSB 1703, AUTO 1803, and AUTO 1813 **45**

AAS, Automotive Technology: all MVSB and AUTO courses (45 credit hours) and
 General Education courses (15 credit hours: ENGL 1013, MATH 1113/1213/1103,
 Natural Science elective, Social Science/Behavioral Science elective, department-
 approved Humanities elective*) **60**

* Any approved General Education course in English Literature, History, Humanities, or
 Philosophy

For additional information, contact the Department Chair for Automotive Technology at (225)-216-8338.