

AUTOMOTIVE TECHNOLOGY, ASSOCIATE OF APPLIED SCIENCE



Students are taught to diagnose, correct and repair electrical, fuel, emissions, and mechanical problems found in today's modern automobile through classroom, laboratory, and field experience. Graduates are prepared for entry level positions as technicians in fleet service, manufacturer's dealerships, national oil company and transmission repair facilities, or independent garages. Course work prepares student for the National Institute for Automotive Service Excellence (ASE) automotive technician certifications. The AUTO Program is certified by the ASE Education Foundation in all eight ASE categories.

The General Motors Automotive Service Educational Program (GM ASEP) requires alternating school and General Motors dealership work experience sessions. In addition, GM ASEP students need to complete AUTO-1940 Automotive Field Experience I, AUTO-1950 Automotive Field Experience II, AUTO-1960 Automotive Field Experience III, and AUTO-2505 Automotive Electrical Diagnosis for General Motors ASEP. Please call the Automotive Technology department for more information.

The Ford Automotive Student Service Educational Training (ASSET) program requires alternating school and Ford dealership work experience sessions. In addition, Ford ASSET students need to complete AUTO-1940, AUTO-1950 and AUTO-1960 coursework. Please call the Automotive Technology department for more information.

Program contact: Learn more

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify the Office of the Registrar at RegistrarOffice@tri-c.edu.

Learn more about how certificate credits apply to the related degree.

Program Admission Requirements

- High School Diploma/GED not required, but highly recommended
- Dealership sponsor required for GM ASEP program and FORD ASSET program.
- GM ASEP and FORD ASSET student handbooks contain educational and worksite requirements for continuation in program

Other Information

- ASEP students need to complete five field experience credits:

Code	Title	Credit Hours
AUTO-1940	Automotive Field Experience I	1
AUTO-1950	Automotive Field Experience II	1
AUTO-1960	Automotive Field Experience III	1
AUTO-2940	Automotive Field Experience IV	1
AUTO-2950	Automotive Field Experience V	1

- ASEP students need to complete AUTO-2505 Automotive Electrical Diagnosis for General Motors ASEP
- Enrollment in individual automotive courses for students who are not degree majors is permitted

Program Learning Outcomes

This program is designed to prepare students to demonstrate the following learning outcomes:

1. Read repair orders, write service recommendations, obtain pertinent vehicle information, and document all problems.
2. Work independently, professionally, and as a member of an automotive team.
3. Use basic math and appropriate tools and equipment to perform maintenance and basic repair services according to industry standards in a safe manner.
4. Assist in diagnosis and perform mechanical repairs using appropriate tools and equipment according to industry standards in a safe manner.
5. Diagnose and perform complex mechanical and electrical repairs using appropriate tools and equipment according to industry standards in a safe manner.
6. Apply basic business and management practices (marketing, inventory control, accounting, customer relations, employee relations) to the automotive environment.
7. Identify, interpret and document customer concerns and determine necessary actions. Listen and respectfully communicate with customers, co-workers and managers.

Suggested Semester Sequence

First Semester		Credit Hours
AUTO-1101	Introduction to Automotive Service Procedures ¹	3
AUTO-1400	Automotive Alignment, Steering and Suspension	3
AUTO-1450	Automotive Braking Systems	3
AUTO-1502	Automotive Electrical Fundamentals	3
Select one of the following:		3
COMM-1010	Fundamentals of Speech Communication	
COMM-101H	Honors Speech Communication	
Credit Hours		15
Second Semester		
AUTO-1050	Numerical Applications in Automotive Service	3
AUTO-1300	Automotive Engines	3

Code	Title	Credit Hours
AUTO-1510	Automotive Electrical Systems	3
Select one of the following:		3
ENG-1010	College Composition I	
ENG-101H	Honors College Composition I	
Social and Behavioral Sciences Requirements		3
Credit Hours		15
Third Semester		
AUTO-2310	Manual Transmission and Drivetrain	3
AUTO-2350	Automotive HVAC	2
AUTO-2400	Engine Performance	3
AUTO-2940	Automotive Field Experience IV	1
MATH-1xxx	1000-level MATH course or higher	3
Arts and Humanities/Natural Sciences Requirements		3
Credit Hours		15
Fourth Semester		
AUTO-2300	Automatic Transmissions	3
AUTO-2450	Automotive Electronic Engine Controls	3
AUTO-2701	Automotive Service Operations	3
AUTO-2950	Automotive Field Experience V ¹	1
DEGR-xxxx	General Elective (see Elective list)	3
DEGR-xxxx	General Elective (see Elective list)	3
Credit Hours		16
Total Credit Hours		61

¹ AUTO-1101 is not required for Ford ASSET and GM ASEP students. Students in these programs may apply AUTO-1101 credits toward the general elective requirement.

² ASEP Students must also complete AUTO-1940 Automotive Field Experience I, AUTO-1950 Automotive Field Experience II, AUTO-1960 Automotive Field Experience III, and AUTO-2505 Automotive Electrical Diagnosis for General Motors ASEP.

Ford ASSET Program Additional Required Courses

Code	Title	Credit Hours
AUTO-1940	Automotive Field Experience I	1
AUTO-1950	Automotive Field Experience II	1
AUTO-1960	Automotive Field Experience III	1

GM ASEP Program Additional Required Courses

Code	Title	Credit Hours
AUTO-1940	Automotive Field Experience I	1
AUTO-1950	Automotive Field Experience II	1
AUTO-1960	Automotive Field Experience III	1
AUTO-2505	Automotive Electrical Diagnosis for General Motors ASEP	3

ELECTIVES

Recommend selecting from the below courses to fulfill elective requirement. Elective requirement may be fulfilled by other courses not listed here.