

Automotive Technology

Degree Type

Associate in Science

Automotive Technology is a two-year associate degree program that is designed to combine automotive technical training and academic course work to provide the student with the skills and knowledge needed for an exciting and rewarding career in the automotive service industry. While enrolled in the program, students will study the theory of operation of the automotive systems including electrical, brakes, steering and suspension, automatic and manual transmissions, heating and cooling, engine performance, and engine repair. Engine Repair is the capstone course for this degree program.

Each course includes an automotive lab that allows the students to apply and build their knowledge and skills by performing work on vehicles with “real life” problems in a “real shop” atmosphere. We accomplish this by completing repairs on customer vehicles in need of repair work covered in each course. This high tech training combined with the academic coursework and “hands-on” experience not only prepares the student to be employed in the automotive field, but also prepares the student to take the ASE (Automotive Service Excellence) technician certification exams.

Graduates of the program will satisfy an industry need for well-educated and technically trained people.

Features of the program include:

- This program is Master Automobile Service Technology (MAST) Accredited by the Automotive Service Excellence Education Foundation
- Highly trained ASE Master Certified Instructors
- Modern facility with state-of-the-art equipment

Job opportunities include: Dealership technician, Independent shop technician, auto part sales person, service writer, powersports technician, tuner and performance shops.

In addition to the general admissions requirements, the Automotive Technology applicants should be aware of the following criteria:

1. A minimum of one year of high school Algebra I is recommended.
2. Basic skills in written English are required.
3. A basic automotive tool kit and roll cabinet are required.
4. Students are expected to possess a good work ethic and a strong desire to learn.
5. A valid driver's license is required to be accepted into the program. It is recommended students be able to drive a manual transmission vehicle.
6. A copy of a clean driving record will be required of all students enrolling into the Honda PACT or Mazda MAST program.

Students should familiarize themselves with the Industry and Transportation Department General Education Policies located in the General Education Policies section of this Catalog.

Technical Standards: Please refer to Technical Standards for details regarding this program.

Upon the completion of the degree in Automotive Technology, graduates will be able to:

1. Evaluate, diagnose, and repair various automotive systems using ASE guidelines.
2. Use technology and basic scientific principles for research and diagnostics.
3. Employ industry relevant written and oral communication skills.
4. Identify ethical repair procedures based on multiple factors.
5. Be able to achieve ASE Master Certification after an additional year in the field.

In addition, the graduate will be able to demonstrate competency in the general education outcomes.

First Year - Fall Semester

Item #	Title	Class Hours	Lab Hours	Credits
AUTO106N	Internal Combustion Engine	2	3	3
AUTO113N	Automotive Electricity & Wiring	2	4	4
AUTO121N	Automotive Service & Maintenance	2	4	4
ENGL101N	College Composition	4	0	4
MATH105N	Technical Mathematics	4	0	4

First Year - Spring Semester

Item #	Title	Class Hours	Lab Hours	Credits
AUTO114N	Automotive Suspension & Steering	2	4	4
AUTO122N	Automotive Brake Systems	2	4	4
AUTO133N	Automotive Intermediate Electrical Systems	2	4	4
	English/Communications Elective			3
	Behavioral Social Science or History/ Political Science			3

Summer Semester

Item #	Title	Class Hours	Lab Hours	Credits
AUTO190N	Automotive Technology Co-Op	0	12	2

Second Year - Fall Semester

Item #	Title	Class Hours	Lab Hours	Credits
AUTO205N	Automotive Advanced Electrical and Electronics	2	4	4
AUTO210N	Automotive Engine Performance I	2	4	4
AUTO226N	Automotive Transmissions and Drivelines	2	6	4
PHYS101N	Physical Science I	3	2	4

Second Year - Spring Semester

Item #	Title	Class Hours	Lab Hours	Credits
AUTO215N	Automotive Engine Performance II	2	4	4
AUTO221N	Automotive Heating & Air Conditioning	2	4	4
AUTO228N	Automotive Engine Repair: A Capstone Course	2	6	4
	Humanities/Fine Arts/Philosophy or Global Awareness			3
Total Credits				69