Associate of Applied Science in Automotive Technology

The Associate of Applied Science in Automotive Technology provides students with the technical education and training necessary to be successful in today's automotive industry. Students will study the various vehicle systems, including electrical and electronics and computerized engine controls, along with the numerous mechanical components that make up today's complex vehicles. The academic requirements of the program provide students with fundamental skills to enhance their written and oral communication skills. These courses also provide a foundation for continued studies should students decide to further their education or training.

These programs are modeled after a variety of very successful corporate training programs. Each program is four semesters long. The programs incorporate a prearranged, supervised, evaluated practicum in each of the first three semesters, with the possibility of an additional practicum during the last semester. Many students also choose to complete a summer practicum while enrolled in the program. In addition, there is a registered apprenticeship opportunity available for select students.

Students experience training on a wide variety of modern domestic and imported vehicles, light trucks, and vans. Laboratory and shop objectives are met on training vehicles, components and live shop projects. Automotive technology graduates have been placed in dealerships, independent shops, service stations, mass merchandisers, aviation ground support and fleet repair facilities. Employers require a current vehicle operator's license and a good driving record. The student should have physical capabilities required of the trade which typically include standing long hours; lifting heavy objects; contacting hazardous materials; operating machinery; exposure to noise, heat, cold, vapors, and other workplace hazards; manipulating tools; and working with small parts in confined and awkward positions.

Technicians must be able to distinguish colors in minimal light, transcribe numbers up to 17 digits, and work up to 10 hours a day, six days per week. Equal opportunities are available for men and women.

The program is offered with two options: General Automotive and General Motors ASEP. Each option has different admissions requirements based on the policies of the program sponsors.

The Associate of Applied Science (AAS) in Automotive Technology prepares students to be proficient in diagnosing and repairing various vehicle systems, including electrical and electronics, and computerized engine controls, along with the numerous mechanical components that make up today's complex vehicles.

Automotive technology graduates have been placed in dealerships, independent shops, service stations, mass merchandisers, aviation ground support and fleet repair facilities.

The AAS in Automotive Technology is accredited by the Automotive Service Excellence (ASE) Educational Foundation and recognized as a Center of Excellence by the National Coalition of Certification Centers (NC3).

The AAS in Automotive Technology constitutes the first two years of the Bachelor of Science (BS) in Applied Technologies Leadership.

Licensure and/or Certification

The AAS in Automotive Technology prepares students to test for nationally recognized certifications in automotive engines and engine performance, as well as drive trains, suspension & steering, electrical/electronic systems, and heating & air conditioning systems on light-duty vehicle applications.

This AAS also has a General Motors (GM) specific training program. The GM Automotive Service Education Program (GMASEP) provides manufacturer certifications for students.

Students planning to seek a professional license or certificate in a state other than Alaska are required to contact the UAA offering department before enrolling to determine if the program meets the licensing/certification requirements of the state in which they wish to practice.

Admission Requirements

- Complete the Admission Requirements for Associate Degrees. (http://catalog.uaa.alaska.edu/academicpoliciesprocesses/admissions/undergraduate)

Special Considerations

- Most employers require technicians to be drug-free, physically fit, have a current vehicle operator's license and a good driving record.
- Most employers require technicians to have a minimum set of tools. A tool list is available on the Automotive Technology website.
- Admission to GMASEP is only offered during odd-numbered years.

Graduation Requirements

- Complete the General University Requirements for Associate of Applied Science Degrees (http://catalog.uaa.alaska.edu/undergraduateprograms/aasrequirements).
- Complete the General Education Requirements for Associate of Applied Science Degrees (http://catalog.uaa.alaska.edu/undergraduateprograms/aasrequirements/generaleducationrequirements).
- Complete the following major requirements with a minimum grade of C:

Code	Title	Credits
ADT A102	Introduction to Automotive Technology	3
ADT A121	Basic Electrical Systems	3
ADT A122	Engine Theory and Diagnosis	3
ADT A131	Auto Electrical II	3
ADT A140	Automotive Engine Repair	3
ADT A150	Brake Systems	4
ADT A160	Manual Drive Trains and Axles	4

ADT A162	Suspension and Alignment	4
ADT A195	Automotive Practicum I	6
ADT A202	Auto Fuel and Emissions Systems	4
ADT A222	Automotive Engine Performance	3
ADT A225	Mobile Heating, Ventilation and Air Conditioning Systems	3
ADT A227	Auto Electrical III	3
ADT A260	Electronic and Automatic Transmissions [1]	3
or ADT A295	Automotive Practicum II	
Total		49

[1] *Students admitted to the GMASEP option must complete both ADT A260 and ADT A295 as part of their major requirements.*

A minimum of 61 credits is required for the degree.

Program Student Learning Outcomes

At the completion of this Associate of Applied Science degree program, students are able to:

- Demonstrate academic proficiency necessary to pass national examinations within the domain.
- Demonstrate proficiency in performing occupationally related tasks in a professional setting.
- Integrate knowledge from diverse areas to develop effective diagnostic and repair strategies involving complex systems.
- Request, collect, summarize, evaluate, and apply oral and written information gathered from technical (e.g. schematics, technical bulletins, and service information) and nontechnical (e.g. customer oral and written reports) sources regarding symptoms and potential diagnostic and repair strategies for complex systems used in automobiles.
- Apply knowledge gained from previous education and experience to problem solving to aid in diagnosis and repair for the immediate situation.
- Demonstrate effective employability skills, including oral and written communication skills, as required by accreditation standards for the National Automotive Technicians Education Foundation.
- Demonstrate technical knowledge and critical thinking necessary for success in the automotive maintenance and repair industry.