

Automotive Service Technician AAS DEGREE

Program Overview

Automotive repair requires trained technicians skilled in the use of testing equipment, special tools, and the latest information and specifications to service the many types of automobiles. Technicians diagnose trouble in any one of thousands of automotive components. They work with many new systems each year that require new service techniques and training. Some of these include air conditioning units, emission control devices, alternators, electronic ignition, and electronic fuel injection.

Students are prepared to take the ASE certification tests when they have completed the program. ASE certifies technicians nationwide.

Students should have good mechanical aptitude, be in good physical condition and have the ability to get along with others. Students also need to be able to read and process technical information.

Career Opportunities

Opportunities are expected to be plentiful for automotive technicians with technical training according to the U.S. Department of Labor. The department also states that the growing complexity of automotive technology, such as the use of electronic and emissions control equipment increasingly necessitates that cars be serviced by professionals.

The auto technician may work in a dealership garage, an independent garage, or as a specialist. Opportunities exist for a technician to become a shop service sales person, new car dealership service manager, or shop owner.

Program Outcomes

1. Graduates will be prepared to pass all 8 ASE tests.
2. Graduates will have knowledge and skills in use of testing equipment, special tools, and specifications for servicing automobiles.
3. Graduates will have the knowledge and skills to diagnose problems in automotive systems.
4. Graduates will be prepared for employment as Automotive Service Technicians.
5. Graduates will have proficient communication skills for customer service.
6. Graduates will have business and management skills required of an automotive service technician.

Program Faculty

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Program Requirements

- Check off when completed

Successful completion of each semester in this program is a prerequisite for participation in the following semester.

| Course | Cr |
|---|-----------|
| <input type="checkbox"/> AUTO 1415 Introduction to Automotive Technology | 4 |
| <input type="checkbox"/> AUTO 1430 Brakes | 4 |
| <input type="checkbox"/> AUTO 1441 Alignment & Suspension | 4 |
| <input type="checkbox"/> AUTO 1510 Clutch/Driveline Manual Transmission | 3 |
| <input type="checkbox"/> AUTO 1523 Four Wheel Drive Differential | 3 |
| <input type="checkbox"/> AUTO 1530 Basic Electrical & Battery | 3 |
| <input type="checkbox"/> AUTO 1540 Basic Engine Management | 3 |
| <input type="checkbox"/> AUTO 1550 Heating & Air Conditioning | 4 |
| <input type="checkbox"/> AUTO 2410 Starting & Charging Systems | 3 |
| <input type="checkbox"/> AUTO 2420 Electrical Accessories | 3 |
| <input type="checkbox"/> AUTO 2430 Engine Theory & Repair | 4 |
| <input type="checkbox"/> AUTO 2440 Engine Installation | 2 |
| <input type="checkbox"/> AUTO 2450 Introduction to Auto Computers | 2 |
| <input type="checkbox"/> AUTO 2513 Fuel Systems | 3 |
| <input type="checkbox"/> AUTO 2520 Engine Drivability | 3 |
| <input type="checkbox"/> AUTO 2530 Automatic Transmission Theory | 2 |
| <input type="checkbox"/> AUTO 2542 Automatic Transmission Diagnosis & Repair | 4 |
| <input type="checkbox"/> AUTO 2550 Specialized Lab 1 | 2 |
| Subtotal | 56 |
| General Education/MnTC Requirements | Cr |
| Refer to the Minnesota Transfer Curriculum Course List for each Goal Area | |
| <input type="checkbox"/> Goal 1: Communication | 7 |
| ENGL 1711 Composition 1 – 4 cr | |
| COMM 17XX – 3 cr | |
| <input type="checkbox"/> Goal 3 or Goal 4 | 3 |
| Goal 3: Natural Sciences OR | |
| Goal 4: Mathematical/Logical Reasoning | |
| <input type="checkbox"/> Goal 5: History, Social Science, and Behavioral Sciences | 3 |
| <input type="checkbox"/> Goal 6: Humanities and Fine Arts | 3 |
| General Education Requirements | 16 |
| Total Program Credits | 72 |

Tool Costs

Students will need to supply their own basic tools and tool box. The estimated cost for professional quality tools and tool box is approximately \$2,000–\$3,000. Tool vendors will be on campus during the first week.

Program Start Dates

Fall (AAS General Education credits can be taken any term)

Length of Program

This is a full-time, day and evening program. The program can be completed in four semesters. Students can enroll in the program only in the fall.

See back of this guide for Course Sequence & Transfer Opportunities

Information is subject to change. This Program Requirements Guide is not a contract.

Minimum Program Entry Requirements

Students entering this program must meet the following minimum program entry requirements:

Reading: Score of 240+ or grade of "C" or better in READ 0721 or READ 0724 or EAPP 0860

Writing: Score of 240+ or grade of "C" or better in ENGL 0921 or EAPP 0870

Arithmetic: Score of 237+

Spatial assessment required: Score 10+

Shop/classroom visit recommended; student must have a valid driver's license.

Assessment Results and Prerequisites:

Students admitted into Saint Paul College programs may need to complete additional courses based on assessment results and course prerequisite requirements. Certain MATH, READ, and ENGL courses have additional prerequisites.

Automotive Service Technician AAS DEGREE *(continued)*

Course Sequence

The following sequence is recommended; however, this sequence is not required. Contact Program Faculty with questions.

First Semester

| | |
|---|-----------|
| AUTO 1415 Introduction to Automotive Technology | 4 |
| AUTO 1430 Brakes | 4 |
| AUTO 1510 Clutch/Driveline Manual Transmission | 3 |
| AUTO 1530 Basic Electrical & Battery | 3 |
| ENGL 1711 Composition 1 | 4 |
| Total Semester Credits. | 18 |

Second Semester

| | |
|---|-----------|
| AUTO 1441 Alignment & Suspension | 4 |
| AUTO 1523 Four Wheel Drive Differential | 3 |
| AUTO 1540 Basic Engine Management | 3 |
| AUTO 1550 Heating & Air Conditioning | 4 |
| Goal 1: COMM 17XX | 3 |
| Total Semester Credits. | 17 |

Third Semester

| | |
|--|-----------|
| AUTO 2410 Starting & Charging Systems | 3 |
| AUTO 2420 Electrical Accessories | 3 |
| AUTO 2430 Engine Theory & Repair | 4 |
| AUTO 2440 Engine Installation | 2 |
| AUTO 2450 Introduction to Auto Computers | 2 |
| Goal Area 3 or 4 | 3 |
| Goal Area 5 | 3 |
| Total Semester Credits. | 20 |

Fourth Semester

| | |
|--|-----------|
| AUTO 2513 Fuel Systems | 3 |
| AUTO 2520 Engine Drivability | 3 |
| AUTO 2530 Auto Transmission Theory | 2 |
| AUTO 2542 Auto Tran Diagnosis & Repair | 4 |
| AUTO 2550 Specialized Lab 1 | 2 |
| Goal Area 6 | 3 |
| Total Semester Credits. | 17 |

Any Semester

General Education requirement courses may be taken before, after or concurrently with the Automotive Service Technician courses.

| | |
|---|-----------|
| General Education Requirements | 16 |
|---|-----------|

| | |
|--|-----------|
| Total Program Credits | 72 |
|--|-----------|

Transfer Opportunities

Saint Paul College has a transfer articulation agreement between the following program and post-secondary institutions for the baccalaureate degree programs listed below.

For more information please go to saintpaul.edu/Transfer.

Automotive Service Technician AAS

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|----|------------------------|-------------------------------|
| BA | Individualized Studies | Metropolitan State University |
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