# AUTOMOTIVE TECHNOLOGY: AAS

**Associate in Applied Science | 61 credit hours minimum**

**Area of Interest: Advanced Manufacturing, Industrial Occupations, and Transportation**

Program Website (https://stlcc.edu/programs-academics/pathways/a-m-i-o-t/automotive-technology/)

Academic Advising (https://stlcc.edu/admissions/advising/)

## Program Description:

The AAS degree of Automotive Technology is a comprehensive degree that combines automotive training with general education courses that will prepare students for employment in the automotive service and repair industry. Students are trained in the eight Automotive Service Excellence (ASE) areas of specialization. Instruction for each of the ASE areas is supported through instructor-led presentations, demonstrations, and reinforced with guided hands-on lab activities. Students will also be administered a student-specific ASE test at the end of the program to prepare them for future ASE tests.

Persons interested in this program should be able to work well in a team setting, think critically, and be detailed-oriented. They should also be able to stand for long periods of time and possess a high level of manual dexterity and hand/eye coordination.

**Locations.** This program is offered in its entirety at Forest Park.

**Related Programs.** The Automotive Department offers certificates in the following areas:

> Automotive Service, Certificate of Specialization (http://catalog.stlcc.edu/programs/automotive-technology-certificate-specialization/)
>
> Automotive Technology, Certificate of Proficiency (http://catalog.stlcc.edu/programs/automotive-technology-certificate-proficiency/)
>
> Automotive Vehicle Inspection and Light Maintenance, Certificate of Specialization (http://catalog.stlcc.edu/programs/automotive-vehicle-inspection-light-maintenance-certificate-specialization/)

**Cost of Attendance**. For more information on cost of attendance visit MoSCORES (https://scorecard.mo.gov/Search/).

**Program Career and Salary Information.** Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: https://scorecard.mo.gov/scorecard/ (https://www.google.com/url/?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program "St. Louis Community College" and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

**Interested in this program?** Start the enrollment process by visiting the Apply to STLCC (https://www.stlcc.edu/admissions/apply-to-stlcc/) page.

## At the completion of the program, students are expected to:

1. identify manual driveline components.
2. inspect manual driveline components for wear or damage.
3. service automatic transmission fluid and filter.
4. interpret automatic transmission sensor data.
5. identify HVAC components.
6. explain the flow of refrigeration in an automobile.
7. test vehicle sub-systems and components to determine root cause.
8. diagnose automotive related customer concerns.
9. replace faulty components.
10. perform the duties of a parts manager.
11. perform the duties of a service manager.
12. develop non-technical skills.
13. improve communication in both technical and non-technical applications.

**Missouri Civics Examination.** Students entering college for the very first time in fall 2019 and who intend to complete an associate's degree must successfully complete a civics examination. Information on who is eligible for a waiver can be found on the STLCC website (https://stlcc.edu/programs-academics/missouri-civics-exam.aspx).

## Program of Study

| Code | Title | Credit Hours |
|---|---|---|
| **General Education** | | |
| COM 101 | Oral Communication I (MOTR COMM 100) | 3 |
| ENG 101 | College Composition I (MOTR ENGL 100) | 3 |
| MTH 108 | Elementary Applied Mathematics (or higher) | 3 |
| PSI 101 | Physical Science (MOTR PHYS 110) | 3 |
| XXX xxx | Social & Behavioral Sciences: Civics Requirement (http://catalog.stlcc.edu/general-education/) | 3 |
| **Program Requirements** | | |
| BUS 104 | Introduction to Business Administration | 3 |
| AUT 101 | Automotive Fundamentals and Service Information | 3 |
| AUT 103 | Automotive Vehicle Inspection and Light Maintenance | 3 |
| AUT 105 | Automotive Maintenance and Service | 3 |
| AUT 107 | Automotive Steering and Suspension Service | 3 |
| AUT 110 | Automotive Electrical Principles | 3 |
| AUT 112 | Automotive Brake Systems Service and Diagnosis | 3 |
| AUT 114 | Automotive Engine Repair and Diagnosis | 3 |
| AUT 116 | Automotive Powertrain Controls | 3 |
| AUT 203 | Automotive Manual Drivetrain | 3 |
| AUT 210 | Automotive Transmissions and Transaxles | 3 |
| AUT 212 | Automotive Heating, Ventilation, and Air Conditioning | 3 |
| AUT 200 | Automotive Fieldwork Operations | 5 |
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| **Total Credit Hours** | | **61** |

# Full-Time Academic Plan

**Missouri Civics Examination.** Students entering college for the very first time in fall 2019 and who intend to complete an associate's degree must successfully complete a civics examination. Information on who is eligible for a waiver can be found on the STLCC website (https://stlcc.edu/programs-academics/ missouri-civics-exam.aspx).

**PLEASE NOTE**: If you originally enrolled at STLCC prior to Spring 2024, you may need to view an archived catalog (https://www.stlcc.edu/programs-academics/ course-catalog/) for your correct program requirements. Please speak with an advisor or the program coordinator for more information.

| Code | Title | Hours | Prerequisites | Milestones/Notes |
|---|---|---|---|---|
| **First Year** | | | | |
| **Fall** | | | | |
| AUT 101 | Automotive Fundamentals and Service Information | 3 | Reading Proficiency | |
| AUT 103 | Automotive Vehicle Inspection and Light Maintenance | 3 | Concurrent or prior enrollment in AUT 101 with a minimum grade of "C" and Reading Proficiency | |
| AUT 105 | Automotive Maintenance and Service | 3 | Concurrent or prior enrollment in AUT 101 and AUT 103 with minimum grades of "C", and Reading Proficiency | |
| AUT 107 | Automotive Steering and Suspension Service | 3 | Concurrent or prior enrollment in AUT 101, AUT 103, AUT 105 with minimum grades of "C", and Reading Proficiency | Apply for Automotive Vehicle Inspection and Light Maintenance, Certificate of Specialization. |
| ENG 101 | College Composition I (MOTR ENGL 100) | 3 | Placement score or ENG 030 or ENG 070 with a grade of "C" or better or recommendation of department and Reading Proficiency or concurrent enrollment in RDG 079 | |
| | **Credit Hours** | **15** | | |
| **Spring** | | | | |
| AUT 110 | Automotive Electrical Principles | 3 | Concurrent or prior enrollment in AUT 101 with a minimum grade of "C" and Reading Proficiency | |
| AUT 112 | Automotive Brake Systems Service and Diagnosis | 3 | Concurrent or prior enrollment in AUT 101 with a minimum grade of "C" and Reading Proficiency | |
| AUT 114 | Automotive Engine Repair and Diagnosis | 3 | Concurrent or prior enrollment in AUT 101 with a minimum grade of "C" and Reading Proficiency | |
| AUT 116 | Automotive Powertrain Controls | 3 | Concurrent or prior enrollment in AUT 101 with a minimum grade of "C" and Reading Proficiency | Apply for Automotive Service, Certificate of Specialization. |
| MTH 108 | Elementary Applied Mathematics (or higher) | 3 | Reading Proficiency | |
| | **Credit Hours** | **15** | | |
| **Second Year** | | | | |
| **Fall** | | | | |
| AUT 200 | Automotive Fieldwork Operations | 5 | AUT 107, AUT 110, AUT 112, AUT 114, AUT 116 with minimum grades of "C" and Reading Proficiency | Students must complete this course twice for Certificate of Proficiency and Associate in Applied Science requirements. |
| AUT 203 | Automotive Manual Drivetrain | 3 | AUT 101 with a minimum grade of "C" and Reading Proficiency | |

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|---|---|---|---|---|
| BUS 104 | Introduction to Business Administration | 3 | Reading Proficiency | |
| PSI 101 | Physical Science (MOTR PHYS 110) | 3 | MTH 108 or MTH 140S with a minimum grade of "C", or placement into MTH 140 or higher, and Reading Proficiency | |
| COM 101 | Oral Communication I (MOTR COMM 100) | 3 | Concurrent enrollment in ENG 070 or Reading Proficiency | Apply for Automotive Technology, Certificate of Proficiency and Automotive Technology, Associate in Applied Science. |
| | **Credit Hours** | **17** | | |
| **Spring** | | | | |
| AUT 200 | Automotive Fieldwork Operations | 5 | AUT 107, AUT 110, AUT 112, AUT 114, AUT 116 with minimum grades of "C" and Reading Proficiency | Students must complete this course twice for Certificate of Proficiency and Associate in Applied Science requirements. |
| AUT 210 | Automotive Transmissions and Transaxles | 3 | AUT 101 with a minimum grade of "C" and Reading Proficiency | |
| AUT 212 | Automotive Heating, Ventilation, and Air Conditioning | 3 | AUT 110 with a minimum grade of "C" and Reading Proficiency | |
| XXX xxx | Social & Behavioral Sciences: Civics Requirement (http://catalog.stlcc.edu/general-education/) | 3 | | |
| | **Credit Hours** | **14** | | |
| | **Total Credit Hours** | **61** | | |

*Click on the hyperlinked course number to view additional information about the course.

**Students completing a course that has been assigned a MOTR number may transfer that course to any public institution in Missouri. Those who complete CORE 42 requirements will have that verification on their transcript.

*** It is your responsibility to verify that the courses listed above will transfer to the four-year institution of your choice. Maximize your transfer credits/classes by meeting with an academic advisor.