

PRAIRIE STATE COLLEGE

AUTOMOTIVE TECHNOLOGY



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AT PRAIRIE STATE COLLEGE

A career in automotive technology offers students an opportunity to learn high-tech skills using computerized diagnostic tools and engine analyzers to service vehicles. Students can earn a certificate in a specialty, use their training at PSC toward two years of automotive apprenticeship, or transfer to a four-year automotive technology program.

DEGREES AND CERTIFICATES

ASSOCIATE IN APPLIED SCIENCE (A.A.S.)

Automotive Technology

CERTIFICATE OF ACHIEVEMENT

Automotive Alignment Specialist

Automotive Brake Specialist

Automotive Drivability Specialist

Automotive Engines Specialist

Automotive Heating/

Air-Conditioning Specialist

Automotive Parts Specialist

Automotive Services Technology

Automotive Service Management Specialist

Automotive Transmission Specialist

Automotive Technology

A.A.S. Degree

This program provides the balance of theory and practical knowledge necessary for students preparing for careers in the automotive technology industry. Service technicians are trained to maintain and repair cars, vans, small trucks, and other vehicles. Using both hand tools and specialized diagnostic test equipment, they learn to pinpoint problems and make necessary repairs or adjustments. In addition to performing complex and difficult repairs, technicians handle a number of routine maintenance procedures such as oil changes, tire rotation, and battery replacement. Technicians also interact with customers to explain repair procedures and discuss maintenance needs.

I. General Education Core **19-20 credits**

Area A: Communication **6**

ENG 101	Composition I - with a grade of C or better.	3
COMM 101	Principles of Communication	3

Area B: Humanities and Fine Arts **3**

Select one course from Area B

Area C: Mathematics **4**

TECH 109	Technical Mathematics I	4
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Area D: Physical and Life Sciences **3-4**

Select one course from Area D

Area E: Social and Behavioral Science **3**

Select one course from Area E

II. Program Requirements **47 credits**

AUTO 101	Basic Automobile Service and Systems	3
AUTO 102	Automotive Engines	4
AUTO 107	Automotive Electricity/Electronics I	4
AUTO 108	Suspension and Steering Systems	4
AUTO 202	Automotive Brake Systems	4
AUTO 205	Manual Transmissions and Transaxles	4
AUTO 206	Automotive Engine Performance	4
AUTO 207	Automotive Heating/Air-Conditioning	4
AUTO 208	Automotive Transmissions/Transaxles	4
AUTO 210	Automotive Electricity/Electronics II	4
AUTO 211	Automotive Engine Performance II	4
AUTO 215	Advanced Automotive Service and Systems	4

Program Total 66-67 credits

Automotive Alignment Specialist

Certificate

This short-term program trains students to function as front end mechanics. Students learn to align and balance wheels, as well as repair steering mechanisms and suspension systems.

Program Requirements **7**

AUTO 101	Basic Automobile Service and Systems	3
AUTO 108	Steering and Suspension Systems	4

Program Total 7 credits

Automotive Brake Specialist

Certificate

Students in this program are trained to work on drum and disk braking systems, parking brakes, and their hydraulic systems. Students learn to inspect, adjust, remove, repair, and reinstall brake shoes, disk pads, drums, rotors, wheel and master cylinders, and hydraulic fluid lines.

Program Requirements		13
AMATH 100	Basic Mathematics for the Skilled Trades	2
AUTO 101	Basic Automobile Service and Systems	3
AUTO 107	Automotive Electricity/Electronics I	4
AUTO 202	Automotive Brake Systems	4

Program Total **13 credits**

Automotive Drivability Specialist

Certificate

This short-term program trains students to diagnose drivability problems. Students learn the basics of the engine, engine performance, and how the electronics work, as well as the computer system functions of the vehicle. Students are taught to adjust the ignition timing and valves, and adjust or replace spark plugs or other parts to ensure efficient engine performance. Electronic test equipment is used to adjust and locate malfunctions in fuel, ignition, and emissions control systems.

Program Requirements		19
AUTO 101	Basic Automobile Service and Systems	3
AUTO 102	Automotive Engines	4
AUTO 107	Automotive Electricity/Electronics I	4
AUTO 206	Automotive Engine Performance	4
AUTO 211	Automotive Engine Performance II	4

Program Total **19 credits**

Automotive Engines Specialist

Certificate

This short-term program trains the student to function as an engine mechanic. Students learn to overhaul engines, as well as service the electrical needs of the engine.

Program Requirements		13
AMATH 100	Basic Mathematics for the Skilled Trades	2
AUTO 101	Basic Automobile Service and Systems	3
AUTO 102	Automotive Engines	4
AUTO 107	Automotive Electricity/Electronics I	4

Program Total **13 credits**

ABOUT THE CURRICULUM

PSC's Automotive Technology Program offers students the necessary technology and skills to succeed in this exciting industry with an excellent career outlook. Candidates for the Associate in Applied Science degree may specialize in Automotive Service. PSC's program is National Automotive Technicians Education Foundation (NATEF) / Automotive Service Excellence (ASE) certified, meeting nationally accepted standards of excellence and the latest technological advances in areas such as instruction, facilities, and equipment.

ADMISSIONS

PSC offers "open admission" that encourages diversity and admits all high school graduates or the equivalent.

Here's how to start your college career at PSC:

- Provide a high school diploma or GED.
- Take the COMPASS Placement Test or submit a copy of ACT scores.
- Meet with an advisor from Counseling and Advising to select courses. For questions, contact an academic advisor at (708) 709-3506.

Automotive Service Management Specialist

Certificate

Automotive service management specialists are the link between the customers seeking repair or maintenance for their vehicles and the technicians who perform the work. Students are trained to write repair orders, inspect vehicles to determine work that needs to be done, determine costs of the work, and prepare itemized estimates. In addition, students learn basic computer skills and basic business management skills. After gaining experience in entry-level positions, successful students can go on to the management/supervisory levels in auto shops.



Program Requirements

14

AUTO 101	Basic Automobile Service and Systems	3
AUTO 224	Automotive Services Management	2
BUS 103	Business Mathematics	3
BUS 127	Business Communications	3
ITAPP 101	Introduction to Computers	3

Business Elective

3

Select one course from:

BUS 105	Human Relations	3
BUS 107	Bookkeeping and Procedural Accounting	3
BUS 109	Principles of Supervision	3
BUS 170	Small Business Management	3
BUS 241	Principles of Management	3
BUS 242	Human Resources Management	3

Program Total

17 credits

Automotive Transmission Specialist

Certificate

This short-term program trains mechanics to work on gear trains, couplings, hydraulic pumps, and other parts of automotive transmissions. Because these are complex mechanisms and include electronic parts, their repair requires considerable experience and training, including a knowledge of hydraulics.

Program Requirements

15

AUTO 101	Basic Automobile Service and Systems	3
AUTO 102	Automotive Engines	4
AUTO 205	Manual Transmissions and Transaxles	4
AUTO 208	Automatic Transmissions/Transaxles	4

Program Total

15 credits

Automotive Heating/ Air Conditioning Specialist

Certificate

This short-term program prepares technicians to install and repair air-conditioners, as well as service components such as compressors and condensers.

Program Requirements		13
AMATH 100	Basic Mathematics for the Skilled Trades	2
AUTO 101	Basic Automobile Service and Systems	3
AUTO 107	Automotive Electricity/Electronics I	4
AUTO 207	Automotive Heating/Air Conditioning	4

Program Total **13 credits**

Automotive Parts Specialist

Certificate

This short-term program trains the student for positions in parts management. Students learn the parts management system, as well as basic business management techniques and introductory computer skills.

Program Requirements		10
AMATH 100	Basic Mathematics for the Skilled Trades	2
AUTO 101	Basic Automobile Service and Systems	3
AUTO 223	Automotive Parts Management	2
ITAPP 101	Introduction to Computers	3

Business Elective **3**

Select one course from:

BUS 107	Bookkeeping and Procedural Accounting	3
BUS 127	Business Communications	3
BUS 170	Small Business Management	3
BUS 241	Principles of Management	3

Program Total **13 credits**

Automotive Services Technology

Certificate

This program prepares students for employment in automotive servicing and repair, engine testing, automotive field services, and automotive parts and shop management.

Program Requirements		47
AUTO 101	Basic Automobile Service and Systems	3
AUTO 102	Automotive Engines	4
AUTO 107	Automotive Electricity/Electronics I	4
AUTO 108	Suspension and Steering Systems	4
AUTO 202	Automotive Brake Systems	4
AUTO 205	Manual Transmissions and Transaxles	4
AUTO 206	Automotive Engine Performance	4
AUTO 207	Automotive Heating/Air Conditioning	4
AUTO 208	Automatic Transmissions and Transaxles	4
AUTO 210	Automotive Electricity/Electronics II	4
AUTO 211	Automotive Engine Performance II	4
AUTO 215	Advanced Automotive Service and Systems	4

Program Total **47 credits**





CAREER OPPORTUNITIES

According to the U.S. Bureau of Labor Statistics, as well as growth in the industry, many job openings will be created by the need to replace retiring technicians. Job opportunities are expected to be good for those who complete postsecondary automotive training programs and who earn ASE certification. Those employed in the automotive field can expect to earn about \$20 per hour.

Employment opportunities include:

- Service Technician
- Parts Manager
- Parts Counter Staff
- Systems Specialist
- Service Manager
- Service Advisor
- Off-Road Equipment Specialist
- Marine Applications Specialist

Financial Aid Information

PSC's tuition is affordable, and financial aid is available through a variety of sources.

How to Apply

1. Complete the Free Application for Federal Student Aid (FAFSA)

The school code for PSC is 001640. Apply online at fafsa.gov.

2. Notification from Department of Education

If you listed PSC's school code in your FAFSA, the college's Financial Aid Office will receive your report in approximately 14 days.

3. Notification from PSC

Once PSC receives your FAFSA from the Department of Education, a letter is mailed to the student indicating needed documents.

4. Complete the PSC financial aid application.

5. Determination Letter

Once all documents are completed, an award or ineligible letter is issued.

PSC Financial Aid Opportunities:

- PSC Board of Trustees Scholarships cover tuition and fees for two years.
- The PSC Foundation awards more than \$75,000 in scholarships annually.

For more information about how to obtain financial aid, visit prairiestate.edu/finaid, call (708) 709-3735, or email financial-aid@prairiestate.edu.

Gainful Employment Disclosure

The U.S. Department of Education requires colleges with financial aid eligible programs that "prepares students for gainful employment in a recognized occupation" to disclose certain information about these programs. For more information about our graduation rates, the median debt of students who have completed the program, and other important information related to the program, please visit our website at prairiestate.edu/ge. We hope that this information is helpful in making informed choices about your education.

Find out more today by contacting

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 **Prairie State College**

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