AUTOMOTIVE TECHNOLOGY DEGREE (AAS)

Program Description

When you encounter a problem, do you see it as a challenge? Do you want to work with your hands in an industry that's essential to everyday life?

When you study Automotive Technology at SPSCC, you'll receive both formal training and real-world experience diagnosing and repairing automotive problems. Take classes in a modern, industry-standard shop facility that has been certified by the National Institute for Automotive Service Excellence (ASE). We also offer an in-depth curriculum designed to prepare you to reach success in all eight ASE areas.

Career Opportunities

The automotive industry employs more than 17,800 persons in the state of Washington. There is a shortage of qualified journey-level workers. Studies show many employers are reluctant to hire trainees without on-the-job or live shop experience. Job prospects are best in high population centers. Some mechanics specialize in one aspect of repair work while others become technicians or general mechanics. Car dealers, garages, service stations, industrial plants, and public agencies are potential employers.

- Service Technician or Mechanic
- Maintenance & Repair Worker
- Transportation Vehicle, Equipment & Systems Inspector

Program Information

Length of Program

The Automotive Technology Program takes a minimum of two years of full-time studies for the Associate in Applied Science degree. The beginning certificate can be completed in a minimum of three quarters leading to the advanced certificate for an additional three quarters.

Additional Costs

The required set of first-year professional grade tools will typically cost anywhere between $2,000 to $10,000 depending on quality and brand from the vendor. Second-year purchases of professional-grade tools are highly recommended before graduation and can cost between $3,000 and $4,200 depending on quality and brand from the vendor. Books will cost approximately $300 for the two-year course.

Special Program Note

Students with previous automotive background or completion of high school automotive training can receive advanced placement credit for AUTO 100 Introduction to Automotive Technology and enroll directly into AUTO 141 Chassis Systems. Students who have had no previous automotive training must enroll in AUTO 100 Introduction to Automotive Technology or have instructor's permission. Students may enroll in AUTO 100 Introduction to Automotive Technology concurrently.

The program is certified by the Automotive Service Excellence (ASE) Education Foundation. For the technician in the field, single classes may be taken for update upon instructor approval. For information during summer quarter please contact the Counseling/Career Center, (360) 596-5261.

Advanced Placement of Credit

Students with a previous automotive background or completion of high school automotive training can receive advanced placement credit for AUTO 100 and enroll directly into AUTO 141/142/143 depending on the quarter the student is starting. Students with no previous automotive training must enroll in AUTO 100 or have the instructor's permission. Students may enroll in AUTO 100 concurrently.

For the technician in the field, single classes may be taken for update upon instructor approval. For information during summer quarter, please contact the the Advising, Career & Transfer Center at 360-596-5261.

Accreditation

The Automotive Technology Program curriculum is certified by the National Institute for Automotive Service Excellence (ASE). They are also certified through Boeing's Pre-Employment Training (BPET) program where students are eligible to bypass the interview process when applying for certain manufacturing jobs at Boeing.

Outcomes

South Puget Sound Community College believes that all students need to develop a broad range of abilities that will not only make them more effective in their professional pursuits but will enhance their capacity to relate well to others in their daily lives. At the end of this program students will:

- Demonstrate expertise needed to be employed as an entry-level automotive technician including proficiency with brakes, steering, suspension, basic oil changes, vehicle inspections, and shop safety procedures.
- Analyze problems and research potential solutions using computer-based tools including vehicle service manuals, diagrams, and safety bulletins.
- Identify and articulate the locations and functions of vehicle parts and systems and utilize diagnostic tools to accurately determine the cause of failures.
- Produce accurate work order summaries that provide detailed information for co-workers as well as customers.
- Demonstrate safe and appropriate use of automotive tools and equipment including the ability to explain local and federal regulations around safety such as OSHA, L I, and EPA requirements for the automotive industry.
- Use quantitative and computational skills to diagnose and repair vehicles including utilizing precision measurement tools; interpreting information presented in graphs, diagrams, and charts; and applying proper unit conversion methods.
- Monitor and model interpersonal competency skills necessary for a culturally diverse and inclusive workplace with both coworkers and customers by analyzing and adjusting one's own behavior, recognizing and addressing differences in communication and interaction styles, and demonstrating appropriate and effective communication and conflict management strategies.

- Recognize common ethical dilemmas that may arise in the automotive industry and implement practical strategies to address ethical issues, both personal and organizational.

The SPSCC college-wide abilities are embedded into each program:

- Analytical Reasoning
- Effective Communication
- Information Literacy
- Multicultural Awareness
- Social Responsibility

Courses by Quarter

Courses by Quarter

Check with your advisor to determine where you will start. Advisors must approve changes to academic plan.

Pre-College Level

Code	Title	Credits
Trasition Studies Courses		
Select one of the following courses:		1 - 7.5
ABE 062	Applied Math I	
ABE 063	Applied Math II	
ABE 064	Contextualized Math I	
Select one of the following courses:		1 -10
ESOL 061	ESOL Level I (Beginning Literacy)	
ESOL 062	ESOL Level II (Low Beginning)	
ESOL 063	ESOL Level III (High Beginning)	
ESOL 064	ESOL Level IV (Low Intermediate)	
ESOL 065	ESOL Level V (High Intermediate)	
ESOL 066	ESOL Level VI (Advanced)	
ABE 053	ABE Language Arts III (Low Intermediate Language Arts)	
ABE 054	ABE Language Arts IV (High Intermediate Language Arts)	
ABE 055	ABE Language Arts V (Adult Secondary Level Language Arts)	

College Level

This degree is a total of 101 credits.

CCS 101 Pathways to Success is a required course for all students. Skip if already taken in Pre-College.

Advising Notes

*****Required** indicates that students must take one of the specific courses listed. Any substitution would require Advisor and Department approval.

*****Recommended** indicates that Pathway faculty recommend the courses listed, but other courses may fulfill the degree requirement. Students should consult with Advisor about additional course options.

- All 100 level automotive courses must be completed with a "C" or better in order to enroll in 200 level automotive courses.
- After completing AUTO 100, students can begin AUTO in fall, winter, or spring - starting with whichever AUTO 141, 142, or 143 course is offered at the time of entry.
- All AUTO courses are only taught in the evenings.

Pathway Notes

F Course only offered in Fall quarter
W Course only offered in Winter quarter
Sp Course only offered in Spring quarter

Code	Title	Credits
Quarter 1		
CCS 101	Pathways to Success	3
MATH 101	Technical Mathematics I	5
AUTO 100	Introduction to Automotive Technology F/W/Sp	5
Quarter 2		
AUTO 141	Chassis Systems F/W	13
ENGL 090	Integrated Reading and Writing I	5
or ENGL 095	Integrated Reading and Writing II	
Quarter 3		
AUTO 142	Electrical/Electronic Systems W/Sp	13
ENGL 098	Transitional English Composition	5
or ENGL& 101	English Composition I	
Quarter 4		
AUTO 143	Engine Repair F/Sp	13
Select one of the following recommended courses (Human Relations/Diversity Distribution):		5
KINS 150	Intro to Adaptive Physical Activity: Diversity	
PSYC 116	Psychology of Human Relations: Diversity	
CMST& 210	Interpersonal Communication: Diversity	
CMST& 240	Intercultural Communication: Diversity	
HUM 121	Multicultural America: Diversity	
Quarter 5		
AUTO 244	Engine Performance F	13
Quarter 6		
AUTO 241	Manual Drivetrains W	13
Quarter 7		
AUTO 242	Automatic Transmissions Sp	7
AUTO 243	Heating and Air Conditioning Sp	6