

Auto Service Technology Diploma - 72 credits

Program Area: Auto Service (Fall 2021)

REMEMBER TO REGISTER EARLY

Program Description

In the Auto Service Technology program, students learn the skills for entry-level positions as automotive maintenance, repair and light duty truck technicians. The program also prepares students for professional certification through Automotive Service Excellence (ASE). Courses of instruction cover parts identification and all systems of the automobile, including basic operation, diagnosis, and repair with the objective of developing the diagnostic and problem-solving skills required of an automotive service technician.

Program Outcomes

At the end of this program, students will be able to demonstrate the skills and knowledge to:

- Meet all ASE G1 industry requirements for MLR.
- Diagnose and repair automotive systems and related components: engine, transmission, drive train, suspension and steering, brakes, electrical, heating and air conditioning, fuel injection, light duty diesel fuel systems, and hybrid electric vehicle systems.
- Access, utilize, and manage electronic service information and shop management systems.
- Perform repairs following environmental and ethical guidelines.
- Exhibit the safety procedures and practices necessary to work efficiently and professionally in the automotive industry.
- Maintain and repair tools and equipment in the automotive shop.
- Perform automotive and light duty. truck vehicle maintenance and repair tasks in accordance with ASE G1 Education Foundation requirements.

Required Courses

Number	Name	Credits	Term
ASTE 1310	Applied Safety and	2	
	Environmental Stewardship		
ASTE 1320**	Information Systems and	3	
	Shop Management		
ASTE 1330*	Automotive Fundamentals	5	
	and Maintenance		
ASTE 1340**	Electrical and Electronics	6	
	Principles		
ASTE 1350*	Electronic Control Units and	2	
	Scan Tools		
ASTE 1510**	Braking Systems	4	
ASTE 1520*	Supplemental Restraint	2	
	Systems		
ASTE 1530**	Steering, Suspension, and	8	
	Alignment		
ASTE 1540*	Climate Control System	4	
	Operation, Diagnosis, and		
	Repair		
ASTE 2310*	Gas and Diesel Engine	5	
	Service and Repair		
ASTE 2320*	Mass Airflow, Speed Density	5	
	and GDI Fuel Systems		
ASTE 2330*	OBD II Operation, Diagnosis,	4	
	and Repair		
ASTE 2630*	Light Duty Diesel Fuel &	4	
	Emission Systems		
ASTE 2520*	Manual Drivetrains,	4	
	Differentials, Transfer Cases,		
	and NVH		
ASTE 2530*	ECU Communication and	6	
	Body Electrical Systems		
ASTE 2540*	Electronic Automatic	5	
	Transmissions		
ASTE 2550*	Hybrid Electric Vehicle	3	
	Operation and Safety		

Total Credits

72

^{*}Requires a prerequisite or a concurrent course

^{**} Meets NC3 Certification requirements



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Pre-program Requirements

Successful entry into this program requires a specific level of skill in the areas of English, reading and mathematics. Program entry will depend, in part, on meeting the prerequisites listed below:

English/Reading:

- Eligible for ENGL 1106 College Composition I, or
- Completion of ENGL/READ 0950/0955 (or equivalent or higher). ENGL/READ 0950/0955 may be taken concurrently with Semester I coursework.

Mathematics:

- Eligible for MATH 0970 Intermediate Algebra, or
- Completion of MATH 0950/0955 (or equivalent or higher). MATH 0950/0955 may be taken concurrently with Semester I coursework.

There are other ways to qualify. Visit Course Placement (Isc.edu/course-placement) to find out more.

For interpretation of test results and selection of appropriate coursework; or general information about the program, admissions, financial aid, and getting started at LSC, contact the <u>professional advising team</u> (advising@lsc.edu) at 218-733-7601

For more information about the Auto Service Technology Diploma including course descriptions, course prerequisites, the program report, and potential career opportunities, see the <u>program website</u> (https://degrees.lsc.edu/)

or

Contact Faculty Advisors:

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MINNESOTA STATE

CIP Code: 47.0604 Minnesota State Program ID: 13-406-2020 LSC Major ID: 5306 Created: 3/1/05 AASC Approval: 12/16/20 Updated: 5/5/21