

Automotive Technician

Diploma | 64 credits

Campus: Hibbing

| FIRST YEAR FALL SEMESTER | 2024 - 16 Credits | CREDITS | HOURS LEC/LAB |
|-----------------------------|--|---------|------------------|
| ASES 1014 | Engine Diagnosis and Repair | 4 | 1/6 |
| ASES 1020 | General Service Shop | 2 | 0/4 |
| ASES 1022 | Four Wheel/All-Wheel Drive | 1 | 0/2 |
| ASES 1023 | Basic Electricity and Ignition Systems | 4 | 2/4 |
| ASES 1026 | Brakes | 3 | 1/4 |
| WELD 1527 | Welding for Auto and Diesel | 2 | 0/4 |
| SPRING SEMES | TER 2025 - 15 Credits | | |
| ASES 1011 | Steering and Suspension | 4 | 1/6 |
| ASES 1012 | Manual Transmission and Drivelines | 3 | 1/4 |
| ASES 1018 | Automotive Math Applications | 1 | 1/0 |
| ASES 1019 | Starting and Charging Systems | 2 | 1/2 |
| ASES 1025 | Automatic Transmission/Transaxle | 4 | 2/4 |
| GENS 1170 | Introduction to Computer Applications | 1 | 0/2 |

| SECOND YEAR | | | |
|----------------|---|---|-----|
| FALL SEMESTER | 2025 - 18 Credits | | |
| ASES 1016 | Fuel Systems | 2 | 1/2 |
| ASES 2020 | Advanced Ignition Systems | 2 | 1/2 |
| ASES 2024 | Automotive Heat/Air Conditioning | 3 | 1/4 |
| ASES 2026 | Advanced Engine Performance | 4 | 2/4 |
| ASES 2027 | Auto Computers | 4 | 2/4 |
| COMM 1400 | Communication for Career Success | 3 | 3/0 |
| SPRING SEMESTE | ER 2026 - 15 Credits | | |
| ASES 2010 | Brakes – ABS | 2 | 1/2 |
| ASES 2014 | Customer Auto 1 | 3 | 0/6 |
| ASES 2015 | Customer Auto 2 | 3 | 0/6 |
| ASES 2018 | Shop Management/Supervision | 1 | 1/0 |
| ASES 2022 | Transmission and Transfer Case Controls | 2 | 1/2 |
| ASES 2023 | Automotive Electrical Accessories | 4 | 2/4 |

PROGRAM DESCRIPTION

The Automotive Technician program combines classroom study and practical hands-on application, to provide students with the essential skills needed to determine and make the appropriate repairs on today's vehicles.

PROGRAM LEARNING OUTCOMES

Upon completion of the Automotive Technician program, the graduate will be able to demonstrate entry-level competencies in the following areas of professional practice:

- 1. working safely and responsibly within shop standards and environmental guidelines,
- 2. functioning collaboratively as a member of a team to achieve specified and measurable results,
- 3. demonstrating comprehensive knowledge of employer expectations and ethical work practice,
- 4. documenting repairs of vehicles accurately with descriptions of concern, cause, and correction,
- 5. effectively locating and utilizing technical information required for vehicle repairs,
- 6. demonstrating accuracy, proficiency, and quality in task performance,
- 7. diagnosing and repairing all major vehicle systems, and
- 8. demonstrating proper tool and equipment usage.

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2024-25 PROGRAM PLANNER

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ACCREDITATION

Accredited by the National Institute for Automotive Service Excellence – Education Foundation. Students can take the ASE Student Certification tests while enrolled in the Automotive Technician program. Graduating from the Automotive Technician program will satisfy one year of occupational experience when taking professional series of ASE certification tests. More information can be found at the ASE Education Foundation website <u>www.aseeducationfoundation.org</u>

ARTICULATION AGREEMENTS

- Bemidji State University: Applied Engineering
- Minnesota State University, Moorhead: Operations Management, emphasis Technical Management

PROGRAM NOTES

- Students are required to purchase their own basic tool set.
- Differential tuition is assessed for the ASES and WELD courses.

EMPLOYMENT OPPORTUNITIES

The employment prospects for automotive technicians are excellent. Technicians may find employment at new car dealerships, independent repair shops, specialty car care chains as well as federal, state, and county maintenance shops. They may also start their own business.

PROGRAM FACULTY

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