

Minnesota North College - Hibbing Campus
Automotive Technician

Academic Year 2023-24
Diploma (64 credits)

FIRST YEAR		Credits	Hours Lec/Lab
FALL SEMESTER 2023 – 16 Credits			
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 SEMESTER 2024 – 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 2024 – 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 SEMESTER 2025 – 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.

Automotive Technician Diploma

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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 www.aseeducationfoundation.org

ARTICULATION AGREEMENTS

- Bemidji State University – Applied Engineering
- Minnesota State University, Moorhead – Operations Management/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

- Trenholm, Wayne E wayne.trenholm@minnesotanorth.edu
- Hyduke, Kevin J kevin.hyduke@minnesotanorth.edu

MISSION

Minnesota North College prepares lifelong learners and engaged citizens through inclusive, transformative experiences reflecting the character and natural environment of the region.



Minnesota North College, a member of Minnesota State, is an affirmative action, equal opportunity employer and educator.
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