

Automotive and Diesel Master Technician

Degree Type

Associate in Applied Science

Contact Information

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Delivery Methods

Face-to-Face: Wahpeton

This is a third-year option developed for students who complete Automotive Technology or Diesel Technology and want to continue their education and increase their technical and mechanical skills. The dual major will strengthen the marketability of students for employment in automotive, diesel, and related fields of business and industry. This curriculum is for students who complete Automotive Technology and then go to Diesel Technology. Admission into the Automotive and Diesel Master Technician program is dependent on the availability of open seats in each program area. Please check with the Transportation Department Chair for current information.

The Automotive and Diesel Master Technician program prepares students for employment in the vast and broad automotive and diesel industry. Students are provided with experiences emphasizing diagnostic and repair skills with extensive shop time. Students test, diagnose, adjust, and repair all types of drivetrains, engines, hydraulic systems, steering and suspension systems. Students' abilities in communications, human relations, and other aspects of general education will be enhanced.

This practical education will allow graduates to work in dealerships, independent shops, or national service centers. Graduates work as automotive technicians, truck technicians, tractor technicians, heavy equipment technicians or in many related fields. Many graduates have advanced from technicians to team leaders, service writers, service managers, owners, and vocational teachers.

The Automotive Technology program is master certified by the National Institute for Automotive Service Excellence (ASE). The Diesel Technology program is accredited by the AED Foundation.

NOTE: This program requires an EliteBook Laptop or equivalent. Please refer to the NDSCS website for specifications. For further information, contact Terry Marohl, department chair, at 701-671-2308.

Admission Requirements*

The applicants must be high school graduates or equivalent. Students considered for acceptance must complete all admission requirements. Students who complete Automotive Technology with a Diploma will need to complete additional courses to meet the AAS requirements for Automotive and Diesel Master Technician.

Required minimum placement scores:

ACT

Reading – 15
English – 15

ACCUPLACER NEXT GENERATION

Reading – 240
Writing – 237

Or transfer equivalencies will apply as appropriate

Applicants not meeting the above requirements are encouraged to visit with the Diesel Technology Department at 701-671-2330 or the academic counselor at 701-671-2257 for strategies to meet the admission requirements.

Please Note: Students are placed into English, math and reading courses based on ACT, ACCUPLACER or other nationally recognized tests. Please see www.NDSCS.edu/current-students/student-success/test-center for the NDSCS Course Placement Policy and testing information. Students may be on an extended plan of study pending their course placement.

Students in this emphasis will complete the Automotive curriculum prior to taking Diesel Technology.

**Program Admission Requirements are subject to revision. Please check the department or program website under Program Admission Requirements for current information.*

Award

Upon successful completion of the required courses, students will be awarded an Associate in Applied Science degree in Automotive and Diesel Master Technician.

Required Courses

Course Code	Title	Credits
AUTO 103	Power Trains/Brakes	3
AUTO 143	Steering, Suspension, and Wheel Alignment	3
AUTO 165	Automotive Electrical and Electronics	5
AUTO 168	Hybrid and Electrical Vehicle Systems	1
AUTO 188	Driveability Procedures I	5
AUTO 206	Chassis Repair/Body Electrical	7
AUTO 216	Engine Repair	7
AUTO 226	Automatic Transmissions/Transaxles	7
AUTO 286	Driveability Procedures	7
AUTO 297	Cooperative Education	1
MFGT 110	Industrial Shop Practices	2
TECH 109	Air Conditioning	2

Related/General Education Courses

Course Code	Title	Credits
ENGL 110	College Composition I	3
	English/Communication Elective (choose one)	3
	Wellness Elective(s) (2 credits)	2
MATH 120	Basic Mathematics I	2
MATH 123	Basic Mathematics II	2
MATH 125	Basic Mathematics III	2
	Social and Behavioral Sciences, Humanities, History and/or Computer Electives (4 credits)	4
FYE 101	Science of Success	1

Diesel Technology (Minor) Courses

Course Code	Title	Credits
DTEC 110	Diesel Equipment Maintenance	3
DTEC 125	Intro to Heavy Duty Drive Systems	3
DTEC 135	Medium/Heavy Duty Brake Systems	2
DTEC 164	Introduction to Mobile Hydraulics	4
DTEC 215	Heavy Duty Diesel Engines	7
DTEC 225	Heavy Duty Drive Systems	7
DTEC 255	Heavy Duty Chassis Electrical Systems	7
DTEC 265	Mobile Hydraulic Systems Diagnostics and Repair	7

Throughout the course of the year, students will need to take [DTEC 110](#) or [DTEC 125](#) or [DTEC 135](#), [DTEC 164](#), [DTEC 265](#) **and** two of the following 2nd year courses; [DTEC 215](#), [DTEC 225](#) or [DTEC 255](#).

Total Required Credits	109
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