

## Automotive and Diesel Master Technician

### ► Contact Information

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### ► Delivery Methods

Face-to-Face: Wahpeton

This is a third-year option developed for students who complete 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 diesel, automotive and related fields of business and industry. This curriculum is for students who complete Diesel Technology and then go to Automotive 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 diesel and automotive 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 also are enhanced through coursework.

Green technology is addressed through changes in emission standards and alternative fuels that will continue to advance changes in this industry.

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 and other related jobs. Many graduates have advanced from technicians to team leaders, service writers, service managers, owners and vocational teachers.

Students interested in pursuing an advanced degree will find the Associate in Applied Science degree in Automotive Technology provides transfer options to four-year colleges and universities in related fields.

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 850 Laptop or equivalent. Please refer to the NDSCS website for specifications. The cost will be approximately \$1065.00 if purchased through NDSCS. For further information, contact Terry Marohl, department chair, at 701-671-2308. **The laptop is required for the Automotive courses during 3<sup>rd</sup> year.**

### Admission Requirements\*

The applicants must be high school graduates or equivalent. Students considered for acceptance must complete all admission requirements. Students who complete Diesel 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:

<u>ACT</u>	<u>ACCUPLACER</u>
Reading – 15	<u>NEXT GENERATION</u>
English – 15	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.

Course Code	Course Title	Credits
DTEC 109	Air Conditioning for Diesel Technology	2
DTEC 110	Diesel Equipment Maintenance	3
DTEC 115	Introduction to Light and Medium Duty Engines	4
DTEC 125	Introduction to Heavy Duty Drive Systems	3
DTEC 135	Medium/Heavy Duty Brake Systems	2
DTEC 155	Electricity for Diesel Technology	4
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
DTEC 297	Cooperative Education for Diesel Technology	2
MFGT 110	Industrial Shop Practices	2

### Related/General Education Courses

ENGL 110	College Composition I	3
English/Communication Elective (choose one)		3
ENGL 105	Technical Communications	
ENGL 120	College Composition II	
ENGL 125	Introduction to Professional Writing	
COMM 110	Fundamentals of Public Speaking	
Wellness Elective(s)		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
Recommended:		
• CIS 101 – Computer Literacy – 2 cr		
• PSYC 100 – Human Relations in Organizations – 2 cr		
FYE 101	Science of Success	1

### Automotive Technology (Minor)

#### Specific Program Courses

AUTO 206	Chassis Repair/Body Electrical	7
AUTO 216	Engine Repair	7
AUTO 226	Automotive Transmission/Transaxles	7
AUTO 286	Driveability Procedures	7

**Total Required Credits 101**

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

Revised May 2022