

## Automotive Technology

### Contact Information

Peter Mandt, program coordinator  
peter.mandt@ndscs.edu  
701-671-2442  
Schuett Hall 140

### Delivery Methods

Face-to-Face: Wahpeton

The Automotive Technology curriculum prepares students for employment in the vast and broad automotive technology industry.

Students are provided with experiences emphasizing diagnostic and repair skills with extensive shop time. Students test, diagnose, adjust and repair automotive systems including automatic transmissions, brakes, driveability, electrical and electronics, engine repair, heating and air conditioning, suspension and steering, and manual drivetrain and axles. Students' abilities in communications, human relations and other aspects of general education are also enhanced through coursework.

Graduates gain employment as automotive repair technicians in automotive dealerships, independent automotive shops or automotive service centers. Graduates may choose to specialize in automatic transmissions, brakes, driveability, electrical and electronics, engine repair, heating and air conditioning, suspension and steering, or manual drivetrain and axles. Many graduates have advanced from automotive repair technicians to team leaders, service writers, service managers, owners and automotive vocational teachers.

Students interested in pursuing additional education may return for advanced automotive classes or return for one additional year and earn a second major, Auto and Diesel Master Technician. 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.

Going Green: With growing concern about environmental pollution, the automotive industry has responded by developing alternative drive and fuel systems such as electric, hybrid. Automotive Technicians will have to have knowledge of these systems to be a viable employee in this field.

This program is accredited by the National Automotive Technicians Education Foundation, Inc. (NATEF) at the Automotive Service Excellence (ASE) Master Automobile Service Technology level.

NOTE: This program requires a laptop computer. For further information please contact Peter Mandt at 701-671-2442.

### Admission Requirements\*

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

Required minimum placement scores:

<u>ACT</u>	<u>ACCUPLACER</u>	<u>ACCUPLACER</u>
Reading – 15	Reading Comp – 61	<u>NEXT GENERATION</u>
English – 15	WritePlacer – 3-4	Reading – 240
		Writing – 237

Or transfer equivalencies will apply as appropriate

Applicants not meeting the above requirements are encouraged to visit with the academic counselor at 701-671-2257 or the Automotive Technology program coordinator at 701-671-2442 for strategies to meet the admission requirements.

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

Course Code	Course Title	Credits
<b>Diploma and Associate in Applied Science</b>		
AUTO 103	Power Trains/Brakes	3
AUTO 143	Steering, Suspension, and Wheel Alignment	3
AUTO 165	Automotive Electrical and Electronics	5
AUTO 188	Driveability Procedures I	5
AUTO 206	Chassis Repair/Body Electrical	7
AUTO 216	Engine Repair	7
AUTO 226	Automatic Transmission/Transaxles	7
AUTO 285	Light Duty Diesel	2
AUTO 286	Driveability Procedures	7
MFGT 110	Industrial Shop Practices	2
TECH 109	Air Conditioning	2

### Related/General Education Courses

#### Diploma

FYE 101	Science of Success	1
ENGL 105	Technical Communications	3
MATH 120	Basic Mathematics I	2
MATH 123	Basic Mathematics II	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		
Wellness Elective		1

#### Associate in Applied Science

FYE 101	Science of Success	1
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	
MATH 120	Basic Mathematics I	2
MATH 123	Basic Mathematics II	2
MATH 125	Basic Mathematics III	2
Wellness Electives		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		
AUTO 297	Cooperative Education - 324 hours	2

<b>Total Required Credits for Diploma</b>	<b>63</b>
<b>Total Required Credits for Associate in Applied Science</b>	<b>71</b>

### Specialty Options: (Fifth Semester)

AUTO 209	Advanced Chassis Repair and Body Electrical	4-8
AUTO 219	Advanced Engine Rebuilding	4-8
AUTO 229	Advanced Automatic Transmissions/ Automatic Transaxles	4-8
AUTO 289	Electronics and Computer Systems	4-8

### Award

Upon successful completion of the required courses, students will be awarded a diploma or Associate in Applied Science degree in Automotive Technology.