Automotive Technology

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

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, 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:

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<thead>
<tr>
<th>ACT</th>
<th>ACCUPLACER</th>
<th>NEXT GENERATION</th>
</tr>
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<tbody>
<tr>
<td>Reading – 15</td>
<td>Reading Comp – 61</td>
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<tr>
<td>English – 15</td>
<td>WritePlacer – 3-4</td>
<td>Reading – 240</td>
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<tr>
<td></td>
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<td>Writing – 237</td>
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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.

NORTH DAKOTA STATE COLLEGE OF SCIENCE NDSCS.EDU

Course Code | Course 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 Electric Vehicle Systems              | 1       |
AUTO 188     | Driveability Procedures I                        | 5       |
AUTO 206     | Chassis Repair/Body Electrical                   | 7       |
AUTO 216     | Engine Repair                                    | 7       |
AUTO 226     | Automatic Transmission/Transaxes                 | 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
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)
ENGL 105    | Technical Communications                         | 3       |
ENGL 120    | College Composition II                          | 2       |
ENGL 125    | Introduction to Professional Writing            | 1       |
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
Recommended:
• CIS 101 – Computer Literacy – 2 cr
• PSYC 100 – Human Relations in Organizations – 2 cr
AUTO 297    | Cooperative Education - 324 hours               | 2       |

Total Required Credits for Diploma 64
Total Required Credits for Associate in Applied Science 72

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 Transaxes | 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.

Revised: May 2021