



AUTOMOTIVE MAINTENANCE TECHNICIAN

Technical Diploma Program Code: 31-404-3 Total Credits: 27

Mid-State's Automotive Maintenance Technician program prepares students for entry-level automotive repair work with special emphasis on mechanical relationships, basic engine performance, and suspension systems. You'll learn from industry experts to test and maintain basic automotive systems. You'll also apply the techniques you learn in the classroom to an automotive shop laboratory setting, with access to state-of-the-art hand and power tools and complex electrical diagnostic equipment. Graduates will have the confidence to start their careers in automotive repair facilities and retail service centers.

Estimated tuition and fees: mstc.edu/programcosts

ACADEMIC ADVISOR

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit mstc.edu/advising.

CHECKLIST:

This section will be completed when meeting with your academic advisor.

- FAFSA (www.fafsa.gov)
- Financial Aid Form(s)
Form(s): _____
- Follow-Up Appointment:
Where: _____
When: _____
With: _____
- Official Transcripts
Mid-State Technical College
Student Services Assistant
1001 Centerpoint Drive
Stevens Point, WI 54481
- Other: _____



mstc.edu • 888.575.6782 • TTY: 711



ADAMS CAMPUS
401 North Main
Adams, WI 53910

MARSHFIELD CAMPUS
2600 West 5th Street
Marshfield, WI 54449

STEVENS POINT CAMPUS
1001 Centerpoint Drive
Stevens Point, WI 54481

WISCONSIN RAPIDS CAMPUS
500 32nd Street North
Wisconsin Rapids, WI 54494

CAREER PATHWAY • BEGIN AT ANY POINT



CREDIT FOR PRIOR LEARNING AND EXPERIENCE

- Certifications and Licenses
- High School Credit
- Military Experience
- National/Standardized Exams
- Transfer Credit
- Work and Life Experience

Learn about Credit for Prior Learning at mstc.edu/cpl.



AUTOMOTIVE MAINTENANCE TECHNICIAN

Technical Diploma • 27 Credits

Start Your Career

- Automotive Apprentice
- Automotive Parts Sales/Service
- Tire and Lube Technician

AUTOMOTIVE TECHNICIAN

Technical Diploma • 59-60 Credits

Start Your Career

- Automotive and Light Truck Technician
- Automotive Master Mechanic
- Engine Technician



BACHELOR'S DEGREE OPTIONS

For more information and additional opportunities, visit mstc.edu/transfer.

OTHER OPTIONS

RELATED PROGRAMS

- Diesel & Heavy Equipment Technician
- Diesel & Heavy Equipment Technician Assistant

PROGRAM OUTCOMES

Employers will expect you, as an Automotive Maintenance Technician graduate, to be able to:

- Demonstrate professionalism appropriate to the auto service industry.
- Perform maintenance and light repair of automotive steering and suspension systems.
- Perform maintenance and light repair of automotive brake systems.
- Perform maintenance and light repair of automotive electrical and electronic systems.

TECHNICAL SKILLS ATTAINMENT

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students are notified of TSA reporting in the Service Practices and Engine Repair courses.

PROTECTIVE CLOTHING

Students are required to purchase three “Mid-State Automotive Technician Student” uniform shirts. These shirts are available the first week of class for approximately \$30 each. Students are also required to wear safety glasses at all times in the lab. Acquisition of safety glasses is the responsibility of the student.

REQUIRED EQUIPMENT

Students need to purchase a Fluke 177 or Fluke 88V multimeter and test lead set before the start of the second term. These are available for purchase through the campus Bookstore for approximately \$270.

NOTES:

STUDENT HANDBOOK

Visit mstc.edu/studenthandbook to view Mid-State’s student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State’s Student Code of Conduct, and technology.

GRADUATION REQUIREMENT

The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information.

GPS for Student Success

10890102 1 credit

Integrate necessary skills for student success by developing an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes. This course is recommended to be completed prior to obtaining 12 credits and is a graduation requirement unless you receive an exemption from your program advisor.

ADDITIONAL COURSES AS NEEDED

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

College Reading and Writing 1

10831104 3 credits

Provides learners with opportunities to develop and expand reading and writing skills to prepare for college-level academic work. Students will employ critical reading strategies to improve comprehension, analysis, and retention of texts. Students will apply the writing process to produce well-developed, coherent, and unified written work.

Pre-Algebra

10834109 3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

SAMPLE FULL-TIME CURRICULUM OPTION

Term		15 credits
10457119	Fabrication Fundamentals 1	1
31442320	Welding Foundations 1	1
31442321	Welding Foundations 2	1
32404307	Suspension & Steering Systems	5
32404308	Braking Systems-Automotive	5
32404340	Intro to Electricity for the Automotive Industry	1
32404375	Service Practices in Automotive Industry	1
Term		12 credits
32404311	Electrical Systems-Auto	5
32404324	Engine Repair	5
32404330	Applied Fluid Power	2
		Total credits 27

☑ This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/schedule.

NOTES:

SAMPLE PART-TIME CURRICULUM OPTION

Term		7 credits
32404307	Suspension & Steering Systems	5
32404375	Service Practices in Automotive Industry	1
32404340	Intro to Electricity for the Automotive Industry	1
Term		7 credits
32404311	Electrical Systems-Auto	5
32404330	Applied Fluid Power	2
Term		7 credits
31442320	Welding Foundations 1	1
31442321	Welding Foundations 2	1
32404308	Braking Systems-Automotive	5
Term		6 credits
10457119	Fabrication Fundamentals 1	1
32404324	Engine Repair	5
		Total credits 27

COURSE DESCRIPTIONS

Applied Fluid Power ☑

32404330 **2 credits**

Learners employ basic principles and application of pumps, compressors, motors, valves, seals, packing, and conductors to demonstrate the advantage of hydraulic and pneumatic systems as well as the physical properties of liquids and air. The intent is to identify various parts of a circuit and to illustrate standard liquid power components through laboratory experiments.

Braking Systems-Automotive ☑

32404308 **5 credits**

Learners employ fundamentals of vehicle braking systems including drum, disc, hydraulic and air systems to perform on-vehicle repairs. Includes instruction on power and anti-skid systems with emphasis on troubleshooting and component replacement and reconditioning.

Electrical Systems-Auto

32404311 **5 credits**

Learners employ principles of construction, function, and operation of starting motors, charging systems, and controls. Covers basic electronics, including capacitance, inductance, series and parallel circuits, magnetism and Ohm's Law, wiring schematics, soldering techniques, and use of diagnostic equipment. Vehicle control and accessory systems are studied.

Prerequisite: Intro to Electricity for the Automotive Industry 32404340

Engine Repair

32404324 **5 credits**

Learners practice diagnosis, reconditioning and repair of cylinder heads, valve train components, and engine blocks and related components. Provides a general overview of engine types and operating characteristics. Covers engine support systems such as the lubrication systems, cooling system, ignition system, fuel and exhaust systems.

Fabrication Fundamentals 1

10457119 **1 credit**

An introduction to structural shapes and sheet metal fabrication. Presents fabrication techniques, metal selection, and layout, cutting, bending, drilling, threading, and joining using manual equipment and techniques. Information is presented to the student and followed up with lab activities to provide a hands-on experience. Emphasizes developing an understanding of the tools, techniques, safe work habits, and application of sheet metal fabrication skills.

Intro to Electricity for the Automotive Industry ☑

32404340 **1 credit**

Introduces learners to electrical measurement tools and techniques. Includes both hands-on experience and theory on topics including multimeter operation, Ohm's law, wiring diagram interpretation, and circuit testing. Content is focused on tools and procedures commonly used in automotive, and diesel/heavy equipment industries. Learners will have the opportunity to earn NC3 multimeter certification during this course.

Service Practices in Automotive Industry ☑

32404375 **1 credit**

Introduces the learner to common tools, terminology, and service practices in the transportation field. Covers safety, environmental concerns, and basic customer relations. Service shop management practices and the use of automated work order, parts ordering, and time management concepts are included.

Suspension & Steering Systems ☑

32404307 **5 credits**

Analyze construction and working principles of chassis components. Includes frames, suspension systems, steering gears and linkages, wheels and tires, and wheel alignment. Learners practice on-vehicle diagnosis and repair of suspension and steering systems.

Welding Foundations 1

31442320 **1 credit**

An introduction to fundamental welding techniques with an emphasis on safe work habits that covers the processes of FCAW, GMAW, and OXY-Fuel cutting. Classroom instruction paired with lab activities are designed to provide fundamental skills in each of the welding processes covered in the class.

Welding Foundations 2

31442321 **1 credit**

An introduction to fundamental welding techniques with an emphasis on safe work habits that covers the processes of GTAW, SMAW and Plasma cutting. Classroom instruction paired with lab activities are designed to provide fundamental skills in each of the welding processes covered in the class.