

FARM OPERATION

Technical Diploma

Program Code: 31-080-4

Total Credits: 27

The Farm Operation program at Mid-State prepares graduates to confidently run the day-to-day operations on a farm. You'll learn about livestock and their products, livestock diseases and prevention, quality milk and meat production, soils, crop production, and more. This hands-on program features agribusiness professionals who share their knowledge directly through presentations, demonstrations, and tours. Course topics include best practices for farming, such as how to manage farm records, farm computerization, critical facts about financial credit, creating a business plan, and marketing.

To learn more about this program, visit mstc.edu/programs.

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.

NEW STUDENT CHECKLIST

Complete the following steps to prepare for your New Student Advising appointment with your academic advisor:

- Submit a Mid-State application at mstc.edu/apply.
- Send official transcripts to:
Mid-State Technical College
Student Services
500 32nd Street North
Wisconsin Rapids, WI 54494
- Complete the Free Application for Federal Student Aid (FAFSA) at fafsa.gov. Mid-State's Financial Aid team is available to assist with your FAFSA application and to answer your financial aid questions. Contact Financial Aid or schedule an appointment at mstc.edu/financial-aid.
- Set up student MyCampus account at mstc.edu/mycampus-assistance.
- Schedule a New Student Advising appointment at mstc.edu/advising.

mstc.edu • 888-575-6782 • TTY: 711



Adams Campus • Marshfield Campus • Stevens Point Downtown Campus • Wisconsin Rapids Campus • Virtual Campus • AMETA® Center

Mid-State does not discriminate on the basis of race, color, national origin, sex, disability, or age in its program, activity, or employment. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Vice President - Human Resources; 500 32nd Street North, Wisconsin Rapids, WI 54494; 715-422-5325 • AAEO@mstc.edu. 3/2026-AC

CAREER PATHWAY



Career pathways help you build your education step by step. Each stage offers one or more credentials that are recognized by employers and lead to real jobs—and you can keep building toward your career goals as you go.

Begin at any point.

Prior Learning

Credit for Prior Learning

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

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

High School Credit

- High School Dual Credit
- Mid-State Fast Track

Learn about High School Credit at mstc.edu/dc.

Technical Diploma

- Farm Operation (27 Credits)
Start Your Career: Agriculture Industry Technician, Agriculture Sales, Farm Owner, Herdsperson, Livestock Breeder

Bachelor's Degree

For those interested in continuing their education, Mid-State offers transfer guides with various four-year colleges and universities. For more information, visit mstc.edu/transfer.

Other Options

Related Programs: Agribusiness Science & Technology, Arborist Technician, Utility Tree Trimmer

OUTCOMES

Employers will expect you, as a Farm Operation graduate, to be able to:

- Utilize agronomic resources for optimal farm production.
- Evaluate livestock management plans.
- Plan for operation and maintenance of facilities and equipment.
- Create a farm business plan.
- Apply marketing principles to agricultural enterprises.

TECHNICAL SKILLS ATTAINMENT

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure 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. Faculty will let students know when and how the TSA is being assessed in the program.

TECHNICAL STANDARDS

Students enrolled in the Agriculture Program must be able to meet the established technical standards identified below, which reflect those found in the profession.

- Ability to lift, carry or transport supplies, equipment, feeds, animals or other agricultural products, potentially up to or beyond 50 pounds, with occasional, frequent, or constant exertion.
- Ability to detect and respond to emergencies and operational hazards in agricultural environments (machinery, livestock, chemicals, weather, etc.).
- Sufficient endurance, strength, mobility, balance, flexibility and coordination to perform tasks such as tending livestock, operating equipment, working outdoors, and executing emergency or protective procedures.
- Sufficient sensory (auditory, visual, smell, tactile) ability to detect animal cues, environmental changes, product quality, equipment status, and safety-related conditions.

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. Some students are exempt from this requirement. Please see your academic advisor for more information.

ADDITIONAL COURSES AS NEEDED

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

MULTIPLE MEASURES

Students can place into courses using high school GPA and completed classes. Placement can be determined in the following ways:

- **Multiple Measures Writing (MMW)**
High school GPA of 2.6 & successful completion of 2.0 credits of high school writing courses with a "C" or better
- **Multiple Measures Reading (MMR)**
High school GPA of 2.6 & successful completion of 2.0 credits of high school literature courses with a "C" or better
- **Multiple Measures Math 1 (MMM_1)**
High school GPA of 2.6 & successful completion of 1.0 credit of high school math (Algebra 1 or equivalent) with a "C" or better
- **Multiple Measures Math 2 (MMM_2)**
High school GPA of 2.6 & successful completion of 2.0 credits of high school math including Algebra 1 and Algebra 2 with a "C" or better
- **Multiple Measures Science 1 (MMS_1)**
High school GPA of 2.6 & successful completion of 1.0 credit of high school lab science course with a "C" or better
- **Multiple Measures Science 2 (MMS_2)**
High school GPA of 2.6 & successful completion of 1.0 credit of high school chemistry with a "C" or better

Past high school and college transcripts are used in making course placement decisions.

SAMPLE FULL-TIME CURRICULUM OPTION

Farm Operation • 27 Total Credits

Term 16 Credits	Course Number	Course Name	CPL	Credits
	10103106	Microsoft Office-Introduction	Yes	3
	10093104	Principles of Crop Management	No	3
	10091105	Animal Health	No	3
	10080105	Intro to Soil Science	No	3
	10091102	Intro to Animal Science	No	3
	10890102	GPS for Student Success	Yes	1

Term 11 Credits	Course Number	Course Name	CPL	Credits
	10006102	Agribusiness Equipment & Facilities	No	2
	10006107	Agriculture Commodities & Marketing	No	3
	10070104	Basic Agriculture Mechanics and Technology	No	3
	10090101	Agriculture Business Management	No	3

Please Note

- Credit for Prior Learning (CPL) options are available for some courses. You can visit mstc.edu/cpl or contact your academic advisor for details.
- 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.
- Get the latest updates online at mstc.edu.

SAMPLE PART-TIME CURRICULUM OPTION

Farm Operation • 27 Total Credits

Term 10 Credits	Course Number	Course Name	CPL	Credits
	10103106	Microsoft Office-Introduction	Yes	3
	10093104	Principles of Crop Management	No	3
	10091105	Animal Health	No	3
	10890102	GPS for Student Success	Yes	1

Term 11 Credits	Course Number	Course Name	CPL	Credits
	10006102	Agribusiness Equipment & Facilities	No	2
	10006107	Agriculture Commodities & Marketing	No	3
	10070104	Basic Agriculture Mechanics and Technology	No	3
	10090101	Agriculture Business Management	No	3

Term 6 Credits	Course Number	Course Name	CPL	Credits
	10080105	Intro to Soil Science	No	3
	10091102	Intro to Animal Science	No	3

Agribusiness Equipment & Facilities

10006102

2 credits

Examines arrangement and design of efficient farm buildings and equipment as well as construction requirements. Farmstead planning includes mapping of present facilities as well as evaluating usefulness and planning long and short-range goals for farmstead changes to improve economics, safety, efficiency and aesthetics. Environmental factors and animal wellness needs are identified, including space, ventilation, nutrition, and care. Also examines the appropriate use and care of feed, fertilizer, planting and harvesting equipment, and dairy and livestock equipment and facilities. Possible equipment/facility changes are discussed and business expansion is analyzed.

Agriculture Business Management

10090101

3 credits

Examines the farm business as a complex set of enterprises that all need to be managed effectively to be successful and sustainable. Students learn to develop a business plan, set short- and long-term goals, identify and implement alternatives for reaching goals. Includes strategies and tools to monitor success. Students also learn to organize and maintain farm business records as well as how to interpret and analyze the records to make sound farm management decisions.

Agriculture Commodities & Marketing

10006107

3 credits

This course introduces students to agricultural commodity markets with a focus on price analysis, market structures, marketing strategies, and risk management. Topics include supply and demand, government policies, international trade, and the agricultural supply chain. Students will study major field crops, livestock, and milk markets; explore the role of cooperatives in marketing; and learn how futures and options markets function as tools for price discovery and risk management.

Animal Health

100091105

3 credits

This course provides students with the essential knowledge and practical skills required to maintain and promote the health of dairy and livestock animals. Emphasizing preventive care, early disease detection, and effective treatment strategies, students will explore animal physiology, common infectious and non-infectious diseases, vaccination protocols, biosecurity practices, and the responsible use of medications.

Basic Agriculture Mechanics and Technology

10070104

3 credits

Students learn the fundamentals of agricultural mechanics, focusing on the operation, maintenance, and repair of relevant equipment. Topics include diesel and small engine systems, hydraulics, electrical, fuel, and exhaust systems, with emphasis on precision measuring and safe work practices. The course also introduces the troubleshooting of modern technologies such as GPS, automation, and sustainable energy systems used in today's agricultural operations.

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.

Intro to Animal Science

10091102

3 credits

Introduces the basics of livestock management. Examines management of dairy, beef, sheep, and other common livestock with concentration on nutrition, feedstuffs classification, reproduction, genetics, animal behavior, animal health, and sustainable agriculture practices. Includes basic husbandry and care procedures for animals. A livestock management plan will be created and analyzed.

Intro to Soil Science

10080105

3 credits

Designed to provide students with fundamental knowledge of soil and soil composition. Includes study of soil types, formation factors, physical properties, biological properties, and basic soil chemistry. Units covering tillage, conservation, pH, soil management, plant nutrients, and fertilizer sources are also included. Students gain the skills required to interpret soil test reports and soil survey maps and recognize qualities of various soil types. Students perform soil sampling, residue measurements, compaction assessments, and soil loss determinations per crop rotation guidelines.

Microsoft Office-Introduction

10103106

3 credits

Develops introductory skills in the Microsoft Office Suite (Word, Excel, Access, PowerPoint, and Outlook) while reinforcing the students' knowledge of computer concepts, Windows Explorer, and web usage. This course prepares students for the Associate level MOS Certification exams for Word, Excel, PowerPoint, and Outlook. Students should possess basic keyboarding, mouse, and Windows 11 skills. Students may develop these skills in the Academic Learning Center while concurrently enrolled in this course.

Principles of Crop Management

10093104

3 credits

The basic principles and concepts of sound agronomic practices are discussed for corn, soybeans, small grains, and forage crops grown in Wisconsin. All sound agronomy practices are emphasized for each crop area as it relates to cultural and other specific inputs of crop production, environmental factors, and sustainable systems.