

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.

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 IN THE PATHWAY

College Credit • Dual Credit
 Military Experience • Work Experience
 Learn about Credit for Prior Learning at mstc.edu/cpl.

HIGH SCHOOL STUDENT

COLLEGE TRANSFER

RETURNING ADULT

OTHER OPTIONS

RELATED PROGRAMS

- Arborist Technician

AGRIBUSINESS
 AGRONOMY
 TECHNICIAN

TECHNICAL
 DIPLOMA
 26 CREDITS

FARM BUSINESS
 & PRODUCTION
 MANAGEMENT

TECHNICAL
 DIPLOMA
 18 CREDITS

FARM
 OPERATION

TECHNICAL
 DIPLOMA
 27 CREDITS

START
 YOUR
 CAREER

START
 YOUR
 CAREER

START
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CAREER OPTIONS

- Grower
- Field Worker
- Irrigator

CAREER OPTIONS

- Agricultural Manager
- Dairy Equipment Service Technician
- Farmer

CAREER OPTIONS

- Agriculture Industry Technician
- Animal Breeder
- Farmer

AGRIBUSINESS
 AND SCIENCE
 TECHNOLOGY

ASSOCIATE IN
 APPLIED SCIENCE
 61-62 CREDITS

EARN A
 BACHELOR'S
 DEGREE

START
 YOUR
 CAREER

CAREER OPTIONS

- Agronomist
- First Line Supervisor, Herdsman
- Farm Manager

BACHELOR'S DEGREE OPTIONS

Bellevue University, Colorado State University Global, Concordia University, Franklin University, Grand Canyon University (GCU), Lakeland University, Milwaukee School of Engineering (MSOE), Mount Mary University (MMU), University of Phoenix, UW-Green Bay, UW-Platteville, UW-River Falls, UW-Stevens Point, UW-Stevens Point at Marshfield, UW-Stout, UW-Whitewater, Western Governor's University, and Wisconsin Private-Nonprofit Universities/Colleges.

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

PROGRAM 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 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 Principles of Crop Management, Agribusiness Equipment & Facilities, Agriculture Business Management, and Intro to Animal Science courses.

Students should be able to operate a calculator and understand basic math skills, such as percentage, addition, subtraction, multiplication, and division.

Farm Operation is a 30-week program and takes a minimum of two years to complete. The program is offered in two 15-week segments with start dates in September, November, January, and February. Each segment is broken into three five-week terms, running from September to May every school year. Classes are scheduled from 10:00 a.m. – 4:00 p.m., allowing time to complete morning and evening farm work at home.

TECHNICAL STANDARDS

A list of specific physical, emotional, and mental tasks needed to function in farm operations is available in the Student Services & Information Center. It is the student's responsibility to notify the Disability Services coordinator in the Student Services & Information Center to receive assistance.

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 must be completed prior to obtaining 12 credits and is a graduation requirement.

ADDITIONAL COURSES AS NEEDED

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

Intro to College Reading

10838104 2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

Intro to College Writing

10831103 3 credits

Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State.

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.


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.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

SAMPLE CURRICULUM OPTION

Term		6 credits
10080105	Intro to Soil Science	3
10091102	Intro to Animal Science	3
Term		7 credits
10091103	Animal Nutrition	4
10093102	Intro to Precision Agriculture	3
Term		6 credits
10090101	Agriculture Business Management	3
10093104	Principles of Crop Management	3
Term		8 credits
10003101	Agricultural Diesel Engine Systems	3
10006101	Agricultural Computations 	3
10006102	Agribusiness Equipment & Facilities	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:

COURSE DESCRIPTIONS

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.

Agricultural Computations ☑

10006101.....3 credits

Deals with the application of quantitative tools to support agribusiness management decisions. These management decisions are executed using spreadsheet and data analysis (e.g., Microsoft Excel) while using elementary mathematical tools in an agricultural economics context. This course is designed to prepare students for upper-level agribusiness courses as well as real-world situations in agriculture.

Agricultural Diesel Engine Systems

10003101.....3 credits

Students learn the different uses of diesel engines in an agricultural setting. This course also provides an introduction to fuel systems, exhaust systems, and electrical systems. Use of technical service resources and precision measuring is stressed.

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.

Animal Nutrition

10091103..... 4 credits

Includes classification and function of nutrients, deficiency symptoms, characterization of feedstuffs, and formulation of diets for domestic animals. They are also able to successfully understand the digestive processes of mono-gastric and ruminant animals.

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, feedstuff's 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 Precision Agriculture

10093102.....3 credits

Explores agricultural applications of GPS, yield monitoring systems, and mapping. Students learn to interpret maps generated by precision agriculture equipment. Learners experience setup, calibration and operation of equipment/software designed to support the production crop industry.

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. A nutrient management plan is created and analyzed.

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.