

# 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: \_\_\_\_\_

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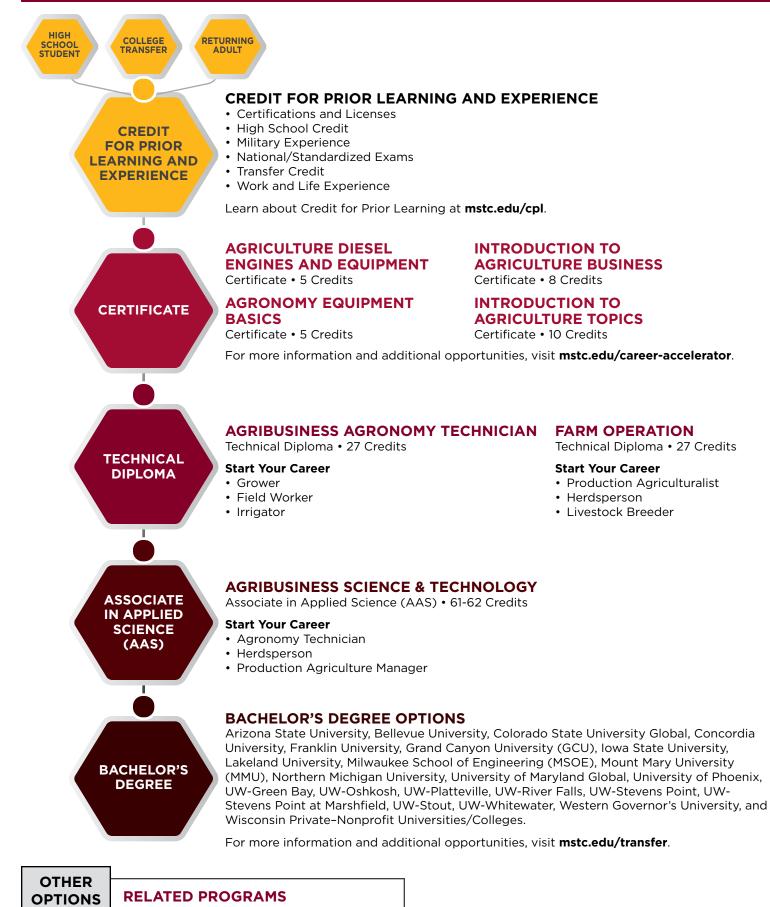
ADAMS CAMPUS 401 North Main Adams, WI 53910 MARSHFIELD CAMPUS 2600 West 5th Street Marshfield, WI 54449



**STEVENS POINT CAMPUS** 1001 Centerpoint Drive Stevens Point, WI 54481 WISCONSIN RAPIDS CAMPUS 500 32nd Street North Wisconsin Rapids, WI 54494

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. 3/2024

## **CAREER PATHWAY • BEGIN AT ANY POINT**



• 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. 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 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 collegelevel 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 CURRICULUM OPTION

<b>Term</b> 10080105 10091102	Intro to Soil Science Intro to Animal Science	<b>6 credits</b> 3 3
<b>Term</b> 10091103 10093102	Animal Nutrition Intro to Precision Agriculture	<b>7 credits</b> 4 3
<b>Term</b> 10090101 10093104	Agriculture Business Management Principles of Crop Management	<b>6 credits</b> 3 3
<b>Term</b> 10003101 10006101 10006102	Agricultural Diesel Engine Systems Agricultural Computations Agribusiness Equipment & Facilities Total	8 credits 3 2 credits 27

#### NOTES:

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**.

## **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.

#### **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.