

AGRIBUSINESS AGRONOMY TECHNICIAN

Technical Diploma Program Code: 31-006-4 Total Credits: 27

Students in Mid-State's Agribusiness Agronomy Technician program gain a deep understanding of the science and technology of using plants as a source of food. They also acquire the specialized skills needed for precision agriculture applications and regulatory requirements. The program will prepare you to use the latest technology to help farmers yield maximum production from the land. You'll also get hands-on experience producing a crop, keeping pests away, making soil more fertile, marketing commodities, and managing a farm.

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

HIGH SCHOOL STUDENT

COLLEGE TRANSFER

RETURNING ADULT

CREDIT FOR PRIOR LEARNING AND EXPERIENCE

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.

CERTIFICATE

AGRICULTURE DIESEL ENGINES AND EQUIPMENT

Certificate • 5 Credits

AGRONOMY EQUIPMENT BASICS

Certificate • 5 Credits

INTRODUCTION TO AGRICULTURE BUSINESS

Certificate • 8 Credits

INTRODUCTION TO AGRICULTURE TOPICS

Certificate • 10 Credits

For more information and additional opportunities, visit mstc.edu/career-accelerator.

TECHNICAL DIPLOMA

AGRIBUSINESS AGRONOMY TECHNICIAN

Technical Diploma • 27 Credits

Start Your Career

- Grower
- Field Worker
- Irrigator

FARM OPERATION

Technical Diploma • 27 Credits

Start Your Career

- Production Agriculturalist
- Herdsman
- Livestock Breeder

ASSOCIATE IN APPLIED SCIENCE (AAS)

AGRIBUSINESS SCIENCE & TECHNOLOGY

Associate in Applied Science (AAS) • 61-62 Credits

Start Your Career

- Agronomy Technician
- Herdsman
- Production Agriculture Manager

BACHELOR'S DEGREE

BACHELOR'S DEGREE OPTIONS

Arizona State University, Bellevue University, Colorado State University Global, Concordia University, Franklin University, Grand Canyon University (GCU), Iowa State University, Lakeland University, Milwaukee School of Engineering (MSOE), Mount Mary University (MMU), Northern Michigan University, University of Maryland Global, University of Phoenix, UW-Green Bay, UW-Oshkosh, 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.

OTHER OPTIONS

RELATED PROGRAMS

- Arborist Technician
- Utility Tree Trimmer

PROGRAM OUTCOMES

Employers will expect you, as an Agribusiness Agronomy Technician graduate, to be able to:

- Develop a crop management plan.
- Apply relevant technologies.
- Investigate opportunities in agribusiness.
- Interact as a professional in agribusiness.
- Apply economic and marketing strategies to agribusiness industry.

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 Principles of Crop Management course.

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		14 credits
10090101	Agriculture Business Management	3
10006102	Agribusiness Equipment and Facilities	2
10006104	Introduction to Agriculture Engineering Technology	3
10093102	Intro to Precision Agriculture	3
10093104	Principles of Crop Management	3

Term		13 credits
10006101	Agricultural Computations	3
1006007	Agriculture Internship	2
10070103	Basic Agriculture Electrical, Mechanical, and Irrigation	3
10080105	Intro to Soil Science	3
10093101	Integrated Pest Management 	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		8 credits
10006102	Agribusiness Equipment and Facilities	2
10006104	Introduction to Agriculture Engineering Technology	3
10093102	Intro to Precision Agriculture	3

Term		6 credits
10006101	Agricultural Computations	3
10080105	Intro to Soil Science	3

Term		6 credits
10090101	Agriculture Business Management	3
10093104	Principles of Crop Management	3

Term		7 credits
1006007	Agriculture Internship	2
10070103	Basic Agriculture Electrical, Mechanical, and Irrigation	3
10093101	Integrated Pest Management 	2

Total credits 27

COURSE DESCRIPTIONS

Agribusiness Equipment and 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.

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 Internship

10060072 credits

This course provides an opportunity for students to apply concepts of agribusiness classroom study with specific off-campus real-life agricultural experiences at local employers. An organized plan of experiences built around agriculture competencies is planned, supervised, and evaluated by the instructor and cooperating business supervisor.

Prerequisites: Admission to the Agribusiness and Science Technology or Agronomy Technician program and completion of at least 12 credits of agriculture course work in the areas of 10006, 10070, 10080, 10090, 10091, or 10093.

Basic Agriculture Electrical, Mechanical, and Irrigation

100701033 credits

Students learn the fundamentals of electrical and irrigation systems related to agricultural equipment and facilities. Electrical topics discussed include safety precautions, Ohm's law, generators, batteries, electric motors, water heaters, overcurrent protection, conductor sizing, and national electrical code requirements. Irrigation topics include an introduction to irrigation systems which includes the study of systems design, pump selection and repair, safety controls, power units, power requirements, power distribution, and basic electrical concepts of irrigation systems.

Integrated Pest Management ☑

10093101.....2 credits

An effective and environmentally sensitive approach to pest management. Learners explore various approaches in integrated pest management (IPM) and gather information on the life cycles of pests and their interactions with the environment. This information in combination with available pest control methods are used to identify the most economical pest management options, with the least possible hazard to people, property, and environment.

Intro to Precision Agriculture

100931023 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.

Introduction to Agricultural Engineering Technology

10006104.....3 credits

Studies engineering concepts and principles as they apply to farm power and machinery, electrical energy and processing, structures and environment, irrigation and drainage, and food engineering. Students are exposed to techniques in design, planning, construction, and performance evaluation.

Principles of Crop Management

100931043 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.