

AGRICULTURE INDUSTRY AND TECHNOLOGY (AGRONOMY)

Overview

Degrees Offered: AAS

Limited Enrollment: Yes

Program Begins: Fall

Delivery Method: On Campus

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Description

The Agriculture Industry and Technology program prepares students for multiple positions within the agronomy industry. Coursework is concentrated in crop science and agribusiness skills. Technology instruction is infused throughout the curriculum. Students are exposed to various applications of technology related to business management, crop production, and soil science. Precision farming technology instruction includes guidance systems, mobile software, GIS software, variable rate technologies, and remote sensing. Students will graduate with a North Dakota Commercial Pesticide Applicator license and will be prepared to pursue a commercial driver's license and North Dakota certified crop advisor certification. The program requires a cooperative education internship with on-the-job training at an agricultural business. Training consists of a minimum of 400 hours completed during the summer session in the first year of the program.

Preparation

Students interested in agriculture should be resourceful, flexible, creative problem solvers, interested in technology, and enjoy continuous learning. Communication skills and interpersonal skills are an important part of successfully translating sound business, science, and technology-based solutions in the field. The following background is helpful: high school or college courses in agriculture, science and math, and experience working on a farm or for an agriculture-related business. Interested students are encouraged to apply early as openings are limited.

Requirements

Students who complete the curriculum requirements earn an Associate in Applied Science degree.

Career Opportunities

Today's agronomy graduate needs specialized skills to fill the need for qualified workers. Industry has high demand for graduates skilled in agronomy-related disciplines such as crop science, soil science, precision technology, management, and sales. Farms are getting larger and farm managers are turning to service providers to take care of their agronomy needs. Crop consultants, crop scouts, crop protection applicators, fertilizer applicators, and retail/wholesale product sales professionals are the most popular agronomy service positions open in our region.

Specialized training in crop growth and development, seed genetics, pest management, plant nutrition, as well as precision technology, soil and water resource management are necessary to excel as an agronomy professional. This business-savvy industry has many opportunities for candidates skilled at streamlining processes and creating value-added solutions for promoting agricultural goods. Current placement rate of students in this program is 100 percent.

Additional Information

Agriculture Club

Students have the opportunity to join Agriculture Club in they are enrolled in an Agriculture Program.

Scholarships

Students are eligible for a variety of scholarships.

Degree Plans

- Agriculture Industry and Technology (Agronomy) Associate in Applied Science

Program Learning Outcomes

Upon graduation, Agriculture Industry Technology students will be able to:

- Demonstrate knowledge and comprehension of plant and soil science in areas of study including classification, physiology, morphology and culture.
- Apply knowledge and comprehension of plant and soil science to evaluate various production options and formulate best management practices.

- Use and apply geospatial tools including GPS, GIS, remote sensing and other technologies utilized in precision agriculture to gather data, analyze data and create prescription maps.
- Organize, interpret and analyze data using mathematical and statistical principles as well as calculate solutions to production related scenarios. Students will then relate these and other agricultural finance concepts to business management and marketing.
- Demonstrate workplace readiness through an ability to communicate effectively through oral communication, written communication and information literacy.
- Demonstrate critical thinking and problem solving skills as they apply to a variety of agriculture systems.