



The Agri-Business Science Technology Academy

2024-2025 School Year- Fall Term

The Agri-Business Science Technology Academy is an opportunity for high school juniors and seniors to earn 10 college credits toward the Agri-Business Science Technology associate degree. These credits can be combined with the more than 21 credits offered as transcribed credit in various school districts to vastly shorten their time from school to work and deepen their understanding of Agri-Business Science Technology careers. This year's academy will be held at our Tomah Regional Location. Western will offer the courses in our new 7-Week format. This means students will take two classes each 7-week session. In-person instruction* begins at 8:30 each morning and will go until 11:00. Classes are held Monday through Thursday.

This academy is ideal for motivated and engaged students who are interested in a career in Agri-Business Science. Upon completion of the Academy and graduation from high school, students can enroll at Western or another technical college and finish up their associate degree.

Courses Offered

Tomah Regional Location

Term	Course	Credits
S1	Emerging Agriculture Technologies	3
S1	Career Development in Agriculture	2
S2	Technical Reporting	3
S2	Soil Fertility & Nutrient Management	2
Fall	Total Credits	10

*Virtual/Asynchronous Course

Schedule: First Seven Week Session (Sept 3rd – Oct 18th)

Time	Monday	Tuesday	Wednesday	Thursday	Friday
8:00	Travel Time	Travel Time*	Travel Time	Travel Time	
8:30	Emerging Ag Technologies	Career Dev in Agriculture*	Emerging Ag Technologies	Emerging Ag Technologies	Work Time @ preferred location
9:00					
9:30					
10:00					
10:30					
11:00	Flexible Time	Flexible Time	Flexible Time	Flexible Time	
11:30	Travel Time	Travel Time*	Travel Time	Travel Time	

Schedule: Second Seven Week Session (Oct 28th – Dec 13th)

Time	Monday	Tuesday	Wednesday	Thursday	Friday
8:00	Travel Time	Travel Time	Travel Time	Travel Time	
8:30	Technical Reporting	Soil Fertility & Nutrition Management	Technical Reporting	Soil Fertility & Nutrition Management	Work Time @ preferred location
9:00					
9:30					
10:00					
10:30					
11:00	Flexible Time	Flexible Time	Flexible Time	Flexible Time	
11:30	Travel Time	Travel Time	Travel Time	Travel Time	

***Virtual/Asynchronous Class**

Flexible Time may include office hours to check in with the instructor. Friday work time will be used to complete any hybrid portions of the class and/or homework assignments.

Course Descriptions

Emerging Agriculture Technologies: Students will gain knowledge and experience in the four key areas of accelerating change in agricultural technology: Sensors, Food, Automation and Engineering. Sensors included air & soil sensors, equipment telematics, livestock biometrics, crop sensors, and infrastructural health sensors. Food technology includes genetically designed food and In vitro meat. Automation technology includes variable rate swath control, selective breeding, agricultural robots, precision agriculture. Closed ecological systems, synthetic biology, and vertical farming are included in engineering technology.

Career Development in Agriculture: Student will develop individual leadership and employment qualities, in addition to exploring the agricultural industry and available careers. Subjects to be covered include: personal evaluation, goal setting, career opportunities, career exploration, current issues in agriculture, employment preparation and interviewing skills. Also included are units covering workplace regulations, employment seeking and motivational styles and techniques.

Technical Reporting: Teaches the preparation and presentation of oral and written technical reports. Types of reports may include lab and field reports, proposals, technical letters and memos, technical research reports and case studies.

Soil Fertility and Nutrition Management: Course will cover the fundamental and applied principles and concepts of soil fertility and plant nutrition. Attention will be given to the nutrient requirements of the commonly produced agronomic crops of our area. Course will provide the student with the information necessary to plan and produce agronomic crops based on crop needs and available resources. Students will be able to interpret soil test reports and make recommendation based on given information for related crop plants. In-field activities will be used to effectively reinforce the material presented in class