

# Discover AGRICULTURE

## Industry Overview

Agriscience courses offer exciting opportunities both in and out of the classroom. Students have the opportunity to learn about Ohio's largest industry that involves animals, plants, business, mechanics, food science, natural resources, and so much more!

## Student Organization

Agriscience students also participate in FFA, which is a dynamic student leadership organization. As FFA members, students have the opportunity to travel, compete, and participate in leadership and community service events. The FFA is a vital component of Agriscience Education that helps students develop the soft skills that employers are actively seeking in today's workforce.



## Coursework

- Agriculture, Food, and Natural Resources
- Animal and Plant Science
- Business Management for Agricultural and Environmental Systems
- Mechanical Principles



## Butler Tech Agriculture Course offerings at Ross

### Agriculture, Food, and Natural Resources

This first course in the career field is an introduction to Agricultural and Environmental Systems. Students will be introduced to the scope of the Agricultural and Environmental Systems career field. They will examine principles of food science, natural resource management, animal science & management, plant & horticultural science, power technology and bioscience. Students will examine the FFA organization and Supervised Agricultural Experience programs. Throughout the course, students will develop communication, leadership and business skills essential to the agriculture industry.

### Animal and Plant Science

Students will apply knowledge of animal and plant science to the agriculture industry. They will be introduced to the value of production animals relative to the agricultural marketplace. Students will engage in animal classification and selection, body systems, along with animal welfare and behavior in relation to the production of animals. Students will learn principles of plant anatomy and physiology, and the role of nutrition, deficiencies and growing environment on plant production. Throughout the course, business principles and professional skills will be examined.

### Business Management for Agricultural and Environmental Systems

Students will examine elements of business, identify organizational structures and apply management skills while developing business plans, financial reports and strategic goals for new ventures or existing businesses. Learners will use marketing concepts to evaluate the marketing environment and develop a marketing plan with marketing channels, product approaches, promotion and pricing strategies. Throughout the course, students will apply concepts of ethics and professionalism while implications of business regulations will be identified.

### Mechanical Principles

Students will engage in the mechanical principles utilized in animal and plant production systems. They will learn electrical theory, design, wiring, hydraulic and pneumatic theory, along with metallurgy in relation to hot and cold metals. Students will apply knowledge of sheet metal fabrication applicable to the agricultural industry along with identify, diagnose, and maintain small air-cooled engines. Throughout the course, students will learn critical components of site and personal safety as well as communication and leadership skills.

**"People should take an agriculture class because agriculture effects everyone in the world one way or another. I think it's important that people learn more about it and understand how much effort is put into agriscience for the benefit of the world!"**

*Student, Agriculture*

**Discover Agriculture through Butler Tech and pursue a career that's right for you.**

Butler Tech connects high school students to career technical education in more ways than ever. Complete your traditional academic courses in your school and enhance your educational experience with career-focused labs and on-the-job training. Each moment in a Butler Tech career technical course is a step toward building your future.



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