

Career Clusters

Linking Hall County Students to the World of Tomorrow!



Focusing Education on the Future!

Preparing for Success in Agriculture, Food & Natural Resources





- Prepares learners for careers in the planning, implementation, production, management, processing, and/or marketing of agricultural commodities and services, including food, fiber, wood products, natural resources, horticulture, and other plant and animal products.
- Employment opportunities will continue to increase for those who provide and market an expanding array of food, forest, and veterinary medical consumer products to a growing world population.

Necessary Skills and Traits

- Solid background in math, science, communications, and technical skills
- Knowledgeable in their subject
- Ability to communicate with others



Preparing for Success in Agriculture, Food & Natural Resources

Agribusiness Systems



Career Cluster Area: Agriculture, Food & Natural Resources
Career Pathway: **Agribusiness Systems**

Pathway Major Courses

3 + 1

To complete a pathway, one must take **THREE Pathway Required Concentration Courses and ONE additional Pathway Elective Course.**

■ Pathway Concentration Courses (3)

- Cooperative Agribusiness Sales/Mktg I
- Cooperative Agribusiness Sales/Mktg II
- Entrepreneurship: Building a Business

■ Pathway Elective Courses (1)

- Apprenticeship/Internship
- Co-op/Internship Agribusiness/Mktg.

Other Recommended Courses

Agribusiness Systems

- Biology
- Chemistry
- Economics
- Environmental Science
- Psychology
- Accounting
- Business Data Applications
- Modern Language
- Math Money Management
- Professional Sales/Promotion

Post-Secondary Degrees, Diplomas & Certificates **Agribusiness Systems**

■ Technical Colleges

- Environmental Compliance Tech
- Environmental Horticulture
- Environmental Technology
- Small Business Management

■ Colleges/Universities

- Agribusiness
- Agricultural Communications
- Agricultural Economics
- Agricultural Education
- Agriscience & Environmental Systems
- Agricultural Engineering

Careers in **Agribusiness Systems**

- Farmer/Rancher/Feedlot Operator
- Agricultural Commodity Broker
- Animal Health Products Distributor
- Dairy Herd Supervisor (DHIA)
- Agricultural Products Buyer
- Produce Commission Agent
- Agri-Marketing Specialist
- Field Representative for Bank, Insurance Company or Government Program
- Sales Manager
- Agricultural Economist
- Banker/Loan Officer
- Agricultural Chemical Dealer
- Rancher/Breeder
- Feed and Supply Store Manager
- Ag Lenders
- Livestock Buyer/Seller
- Farm Investment Manager
- Sales Representative
- Chemical Livestock
- Salesperson Farm Manager
- Agricultural Salesperson



Employment Outlook Agribusiness Systems

- Career opportunities will continue to grow in agribusiness, which supports the production of agricultural commodities.
- Jobs in the processing and marketing of agriculture products are available all across our state.

Preparing for Success in Agriculture, Food & Natural Resources

Animal Systems



Career Cluster Area: Agriculture, Food & Natural Resources
Career Pathway: **Animal Systems**

Pathway Major Courses

3 + 1

To complete a pathway, one must take **THREE Pathway Required Concentration Courses and ONE additional Pathway Elective Course.**

■ Pathway Concentration Courses (3)

- Agriscience Principles & Technology I
- Agriscience Principles & Technology II
- Agriscience Principles & Technology III
- Basic Agricultural Science & Technology

■ Pathway Elective Courses (1)

- Apprenticeship/Internship
- Other Pathway Concentration Course

Other Recommended Courses

Animal Systems

- Biology
- Business Essentials
- Chemistry
- Economics
- Environmental Science

Post-Secondary Degrees, Diplomas & Certificates **Animal Systems**

■ Technical Colleges

- Veterinary Assistant
- Veterinary Medicine
- Veterinary Technology

■ Colleges/Universities

- Animal Health
- Animal Science
- Poultry Science
- Veterinary Medicine
- Veterinary Pathology

Careers in **Animal Systems**

- Agricultural Educator
- Livestock Producer
- Aquaculturalist
- AI Technician
- Animal Caretaker
- Equine Manager
- Farm Manager
- Veterinarian
- Veterinary Assistant
- Feedlot Specialist
- Animal Scientist
- Livestock Buyer
- Feed Sales Representative
- Poultry Service Technician
- Embryo Technologist
- Avarian Technician
- Wildlife Biologist
- Livestock Geneticist
- Animal Nutritionist
- Animal Geneticist
- County Extension Agent
- Dairy Producer
- Meat Science Researcher
- Reproductive Physiologist
- Embryo Transfer Technician
- Pet Shop Operator
- USDA Inspector
- Poultry Manager



Employment Outlook **Animal Systems**

- Demand for food and fiber will increase due to the growth in world population and in the demand for U.S. agricultural exports as developing nations improve their economies and personal incomes.
- Aquaculture will continue to provide some new employment opportunities over the next decade.

Career Cluster Area: Agriculture, Food & Natural Resources

Career Pathway: **Plant Systems**

Pathway Major Courses

3 + 1

To complete a pathway, one must take **THREE Pathway Required Concentration Courses and ONE additional Pathway Elective Course.**

■ Pathway Concentration Courses (3)

- Agriscience Principles & Technology I
- Basic Agricultural Science & Technology
- Floral Design & Management
- Floriculture Production & Management
- General Horticulture & Plant Science
- Landscape Design & Management
- Nursery & Landscape

■ Pathway Elective Courses (1)

- Advanced Landscape Design & Management
- Agriscience Principles & Technology II*
- Agriscience Principles & Technology III*
- Apprenticeship/Internship
- Nursery Production & Management
- Turf Production & Management
- Other Pathway Concentration Course

Other Recommended Courses

Plant Systems

- Biology
- Entrepreneurship: Building a Business
- Environmental Science
- Modern Language

Post-Secondary Degrees, Diplomas & Certificates Plant Systems

■ Technical Colleges

- Environmental Horticulture
- Environmental Technology
- Floral Design
- Landscape Design
- Turf & Golf Course Management

■ Colleges/Universities

- Crop & Soil Sciences
- Horticulture
- Landscape Architecture
- Plant Biology
- Plant Science
- Plant Pathology
- Entomology

Careers in Plant Systems

- Bioinformatics Specialist
- Extension Specialist
- Crop Farm Manager
- Plant Pathologist
- Agricultural Journalist
- Landscape Groundskeeper
- Plant Breeder and Geneticist
- Forest Geneticist
- Golf Course Superintendent
- Aquaculturalist
- Custom Hay/Silage Operator
- Landscape Contractor
- Biotechnology Lab Technician
- Soil & Water Specialist
- Agricultural Educator
- Sales Representative
- Greenhouse Manager
- Landscape Designer/Architect
- Grain Operator
- Rancher
- Tree Surgeon
- Botanist
- Grower
- Florist



Employment Outlook

Plant Systems

- Demand for food, fiber and ornamental crops will increase because of the growth in world population and the demand for U.S. agricultural exports.
- Plant scientists are using new avenues of research in biotechnology to develop plants and food crops.
- New advances will continue to provide a demand for careers in plant science.

Career Cluster Area: Agriculture, Food & Natural Resources
Career Pathway: **Power, Structural & Technical Systems**

Pathway Major Courses

3 + 1

To complete a pathway, one must take **THREE Pathway Required Concentration Courses and ONE additional Pathway Elective Course.**

■ Pathway Concentration Courses (3)

- Agricultural Mechanics Technology I
- Agricultural Mechanics Technology II
- Agricultural Mechanics Technology III

■ Pathway Elective Courses (1)

- Apprenticeship/Internship
- Arc Welding Process I
- Introduction to Manuf/Engineering Sciences
- Introduction to Precision Machining

Other Recommended Courses

Power, Structural & Technical Systems

- Chemistry
- Computing in the Modern World
- Electrical Systems
- Environmental Science
- Foundations of Engineering & Technology
- Physics

Post-Secondary Degrees, Diplomas & Certificates Power, Structural & Technical Systems

■ Technical Colleges

- Electrical Controls
- Heavy Equipment Technology
- Industrial Mechanical Technician
- Mechanical Controls
- Welding and Joining Technology

■ Colleges/Universities

- Agriculture
- Agricultural Engineering
- Agricultural Technologies
- Agriscience and Environmental Systems

Careers in Power, Structural & Technical Systems

- Waste Water Treatment Plant Operator
- Agricultural Applications Software Programmer
- Global Positioning System Technician
- Heavy Equipment Maintenance Technician
- Computer Service Technical Support Technician
- Agricultural Applications Software Developer
- Equipment Parts Manager
- Communication Technician
- Database Administrator
- Remote Sensing Specialist
- Information Lab Specialist
- Electronics Systems Technician
- Agricultural Engineer
- Recycling Technician
- Machine Operator
- Welder
- Machinist
- Engineering Specialist



Employment Outlook Power, Structural & Technical Systems

- Employment of individuals in the Power, Structural and Technical Systems pathway is expected to grow at about the same pace as the average for all occupations through 2010.
- Increasing demand for agricultural products, continued efforts for more efficient agricultural production and increasing emphasis on the conserving of resources should result in increased job opportunities in the coming years.

Preparing for Success in Agriculture, Food & Natural Resources

Agribusiness Systems
Animal Systems
Plant Systems
Power, Structural & Technical Systems



Preparing for Success in Agriculture, Food & Natural Resources



HALL CAREER COUNTY CLUSTERS

Focusing Education on the Future!

