



The production, processing, marketing, distribution, financing, and development of agricultural commodities and resources including food, fiber, wood products, natural resources, horticulture, and other plant and animal products/resources.



<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Sample Career Specialties / Occupations</p>	<p>Agricultural Communications Specialists Agricultural Salespersons Bacteriologists Biochemists +Biochemists-Nutritionists-Dieticians Bioengineers Business-Educators +Cheese Makers Field Workers Food and Drug Inspectors Food and Fiber Engineers Food Brokers-Food Inspectors Food Meal Supervisors Food Processors +Food Scientists +Meat Cutters-Meat Graders Meat Processors-Toxicologists Meat Science Researchers Microbiologists Produce Buyers <input type="checkbox"/>Quality Control Specialists Storage Supervisors</p>	<p>+Agricultural Educators Agricultural Journalists Aquaculturalists Bioinformatics Specialists Biotechnology Lab Technicians Botanists Commodity Marketing Specialists Crop Farm Managers Custom Hay/Silage Operators +Education & Extension Specialists <input type="checkbox"/>Farmers Forest Geneticists <input type="checkbox"/>Forestry Workers Golf Course Superintendents Grain Operations Superintendents Greenhouse Managers Growers <input type="checkbox"/>Lumber Production Workers +Nursery Workers Plant Breeders and Geneticists Plant Pathologists Ranchers Sales Representatives +Soil & Water Specialists Tree Surgeons</p>	<p>+Agricultural Educators AI Technicians-Aquaculturalists +Animal Caretakers-Poultry Managers Animal Health Salespersons Animal Nutritionists Animal Scientists Dairy Producers Embryo Technologists Embryo Transfer Technicians Equine Managers-Veterinarians Feed Sales Representatives Feed Sales Specialists +Fishermen/Hunters/Trappers Livestock Buyers Livestock Geneticists Livestock Inspectors Livestock Producers Meat Science Researchers Pet Shop Operators +Reproductive Physiologists USDA Inspectors <input type="checkbox"/>Veterinary Assistants-Feedlot Specialists Vivarian Technicians +Wildlife Biologists</p>	<p>Agricultural Applications SoftwareDevelopers/Programmers +Agricultural Engineers Agricultural Extension Engineering Specialists Communication Technicians Computer Service Dairy Technical Support Technicians Database Administrators Electronics Systems Technicians Equipment/Parts Managers +Farm Equipment Mechanics GPS Technicians <input type="checkbox"/>Heavy Equipment Maintenance Technicians Information Lab Specialists Machine Operators Machinists Recycling Technicians Remote Sensing Specialists Waste Water Treatment Plant Operators +Welders</p>	<p>Cartographers +Commercial Fishermen +Ecologists Environmental Interpreters +Fish and Game Officers Fish Hatchery Managers Fisheries Technicians +Fishing Vessel Operators Forest Technicians Geologists <input type="checkbox"/>Log Graders Loggers Mining Engineers Park Managers Pulp and Paper Managers +Range Technicians Soil Geology Technicians Vessel Crew Water Monitoring Technicians Wildlife Managers</p>	<p>+Environmental Compliance Assurance Managers Environmental Sampling and Analysis Scientists/Technicians +Hazardous Materials Handlers Hazardous Materials Technicians/Managers Health and Safety Sanitarians Pollution Prevention and Control Managers Pollution Prevention and Control Technicians Solid Waste Disposers/Recyclers Solid Waste Managers Solid Waste Specialists Solid Waste Technicians Toxicologists <input type="checkbox"/>Waste Water Managers Water Environment Managers Water Quality Managers</p>	<p>Ag Lenders Agricultural Chemical Dealers Agricultural Commodity Brokers Agricultural Economists Agricultural Products Buyers Animal Health Products Distributors Bankers/Loan Officers Chemical Sales Representatives Dairy Herd Supervisors (DHIA) Farm Investment Managers <input type="checkbox"/>Farm Managers Farmers/Ranchers/Feedlot Operators <input type="checkbox"/>Feed and Supply Store Managers Field Representatives for Banks, Insurance Companies or Government Programs Field Service Representatives Livestock Ranchers/Breeders Livestock Sellers Produce Commission Agents Sales Managers +Salespersons</p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Pathways</p>	<p>Food Products and Processing Systems (Food Processing and Preserving, Packaging, Distribution, Government Monitoring and Regulation)</p>	<p>Plant Systems (Agronomic, Horticulture, Forestry, Turf, Viticulture, Soils, etc.)</p>	<p>Animal Systems (Large Animals, Small Animals, Wildlife Animals, and Research Animals)</p>	<p>Power, Structural and Technical Systems (Power, Structures, Controls, Geospatial Technology, Computer Systems, Electronics, Hydraulics, Pneumatics, etc.)</p>	<p>Natural Resources Systems (Habitat Conservation, Forest Products, Parks and Recreation, Mining, Environmental Services, Fisheries, Soil Conservation, etc.)</p>	<p>Environmental Service Systems (Pollution Prevention, Water and Air Quality, Hazardous Materials, Solid Waste Management, Health and Safety Sanitation, etc.)</p>	<p>Agribusiness Systems (Sales, Service, Farm and Ranch Management, Entrepreneurship, Economics, etc.)</p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Cluster K&S</p>	<p>Cluster Knowledge and Skills</p> <ul style="list-style-type: none"> • Academic Foundations • Communications • Employability and Career Development • Ethics and Legal Responsibilities • Information Technology • Leadership and Teamwork • Problem Solving and Critical Thinking • Safety, Health, and Environment • Systems • Technical Skills 				<p>Education Needed for Career</p> <ul style="list-style-type: none"> ❖ High School – completed high school, high school with career and technology training, GED, on-the-job training, or apprenticeship <input type="checkbox"/> Junior College – completed junior/community college, postsecondary technical, or career and technology training + Baccalaureate Degree – completed four-year degree or more 		