



Agriculture, Food & Natural Resources

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

Sample Career Specialties / Occupations	Agricultural Sales • Agricultural Communications • Specialists • Agricultural-Educators • Food Scientists • Meat Processors-Toxicologists • Biochemists-Nutritionists-Dieticians • Food Brokers-Food Inspectors • Meat Cutters-Meat Graders • Meat Science Researchers • Food Meal Supervisors • Cheese Makers • Microbiologists • Produce Buyers • Bacteriologists • Food & Drug Inspectors • Bioengineers • Biochemists • Food & Fiber Engineers • Food Processors • Storage Supervisors • Fieldman • Quality Control Specialists	Bioinformatics Specialists • Plant Breeders and Geneticists • Biotechnology Lab Technician • Soil & Water Specialist • Crop Farm Managers • Agricultural Educators • Plant Pathologists • Aquaculturalists • Sales Representatives • Botanists • Tree Surgeons • Education & Extension Specialists • Agricultural Journalists • Commodity Marketing Specialists • Grain Operations Superintendents • Custom Hay/Silage Operators • Forest Geneticists • Golf Course Superintendents • Greenhouse Managers • Growers • Farmers • Ranchers	Agricultural Educators • Livestock producers • AI Technicians-Aquaculturalists • Animal Caretakers-Poultry Managers • Equine Managers • Veterinarians • Veterinary Assistants • Feedlot Specialists • Animal Technologists • Embryo Buyers • Feed Sales Representatives • Vivarian Technicians • Wildlife Biologists • Livestock Geneticists • Animal Nutritionists • Dairy Producers • Livestock Inspectors • Feed Sales Specialists • Animal Health Salespersons • Meat Science Researcher • Reproductive Physiologists • Embryo Transfer Technicians • Pet Shop Operators • USDA Inspectors	Machine Operators • Electronics Systems Technicians • Agricultural Engineers • Agricultural Extension Engineering Specialists • Heavy Equipment Maintenance Technicians • Waste Water Treatment Plant Operators • Equipment/Parts Managers • Welders • Machinists • Communication Technicians • Agricultural Applications Software Developers/Programmers • Database Administrators • Computer Support Technicians • Information Lab Specialists • GPS Technicians • Remote Sensing Specialist • Agricultural Educator	Cartographers • Wildlife Managers • Range Technicians • Ecologists • Park Managers • Environmental Interpreters • Fish and Game Officers • Loggers • Forest Technicians • Log Graders • Pulp and Paper Manager • Soil Geology Technician • Mining Engineers • Fisheries Technicians • Water Monitoring Technician • Hydrologists • Fish Hatchery Manager • Commercial Fishermen • Fishing Vessel Operators • Vessel Crew • Agricultural Educator	Pollution Prevention and Control Managers • Pollution Prevention and Control Technicians • Environmental Sampling and Analysis Scientists/Technicians • Health and Safety Sanitarians • Environmental Compliance Assurance Managers • Hazardous Materials • Hazardous Materials Technicians • Managers • Water Environment Managers • Water Quality Managers • Waste Water Managers • Toxicologists • Solid Waste Disposal Recyclers • Solid Waste Technicians • Solid Waste Managers • Solid Waste Specialists • Agricultural Educator	Salesperson • Sales Manager • Banker/Loan Officer • Field Representative for Bank, Insurance Company or Government Program • Farm Investment Manager • Agricultural Commodity Broker • Agricultural Economist • Farmer/Rancher/Feedlot Operator • Farm Manager • Livestock Rancher/Breeder • Dairy Herd Supervisor (DHIA) • Agricultural Products Buyer • Animal Health Products Distributor • Livestock Seller • Feed and Supply Store Manager • Produce Commission Agent • Ag Lenders • Agricultural Chemical Dealer • Field Service Representative • Chemical Sales Representative • Agricultural Educator
Pathways	Food Products and Processing Systems (Food Processing and preserving, Packaging, Distribution, Government monitoring & regulation)	Plant Systems (Agronomic, Horticulture, Forestry, Turf, Viticulture, Soils, etc.)	Animal Systems (Large animals, small animals, wildlife animals, and research animals)	Power, Structural & Technical Systems (Power, Structures, Controls, Geospatial Technology, Computer Systems, Electronics, Hydraulics, Pneumatics, etc.)	Natural Resources Systems (Habitat Conservation, Forest Products, Parks and Recreation, Mining, Environmental Services, Fisheries, Soil Conservation, etc.)	Environmental Service Systems (Pollution Prevention, Water & Air Quality, Hazardous Materials, Solid Waste Management, Health & Safety Sanitation, etc.)	Agribusiness Systems (Sales, Service, Farm and Ranch Management, Entrepreneurship, Economics, etc.)
CCTC /Career Ready Practices	<p>The Common Career Technical Core (CCTC) includes a set of standards for each of the 16 Career Clusters™ and their corresponding Career Pathways that define what students should know and be able to do after completing instruction in a program of study. The CCTC also includes an overarching set of Career Ready Practices that apply to all programs of study. The Career Ready Practices include 12 statements that address the knowledge, skills and dispositions that are important to becoming career ready.</p>						