

CAREER PROGRAM OF STUDY



Career Cluster: **AGRICULTURE, FOOD & NATURAL RESOURCES**

Pathway: Food Products & Processing Systems; Plant Systems; Animal Systems; Power, Structural & Technical Systems; Natural Resources Systems; Environmental Service Systems; Agribusiness Systems

Student Name: _____

Career Clusters identify pathways from high schools to two- and four-year technical colleges, universities, apprenticeship programs and the workplace so that learners can recognize the relationship between what they learn in school and what they can do in the future.

Knowledge and Skills Needed to Succeed in this Career Cluster: Academic Foundations, Safety, Health & Environmental, Leadership & Teamwork, Ethics & Legal Responsibilities, Employability & Career Development, and Technical Skills

		9 th Grade	10 th Grade	11 th Grade	12 th Grade
English	English	<i>Core Courses</i>			
		English I English Prep 2 English Prep I	English II Basic Skills English English Prep 2 English Prep I	Adv. Comp. & Early Amer. Lit. American Literature Basic Skills English English Prep 2	AP English World Literature Adv. Comp. & Early Amer. Lit. Technical Writing Everyday English
<i>Schedule a Sophomore Individual Planning Conference with your Counselor</i>					
Social Studies	Social Studies	U.S. History	World History	Modern American History (req.) Psychology Sociology Comparative Politics Modern Global Issues	AP American History Pop Culture Microeconomics Macroeconomics
		<i>Schedule College Visits & College Entrance Exams for Junior Year</i>			
Math	Math	Algebra I Extended Algebra Geometry	Geometry Extended Geometry Algebra II	Probability & Stats Adv. Geometry Pre-Calculus FST	AP Calculus Discrete Math ACT Math Prep
		<i>Schedule Senior Interview with your Counselor before October 1</i>			
Science	Science	Integrated Science Biology Plant Science	Biology Chemistry Animal Science	Physics AP Chemistry Animal Health & Nutrition	AP Physics AP Biology Food Science

CAREER ENHANCEMENT	Elective Courses Within This Cluster Include:			School Activities
	Ag Survey Plant Science Food Science Wildlife Management Environmental Conservation Animal Science Animal Health & Nutrition	Landscape Management Ag Business Personal Finance Computer Programming I Materials & Processes Accounting I Family, Food & Society	Gourmet Foods Food Service Drafting & CAD Architectural Planning Advanced Technology Design Electronics Power & Energy	FFA FBLA Skills USA-VICA Band Choir

Student Signature: _____ Date: _____

Parent/Guardian Signature: _____ Date: _____

Counselor Signature: _____ Date: _____



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AGRICULTURE, FOOD & NATURAL RESOURCES

Career Majors				
POST SECONDARY PROGRAMS	Wisconsin Technical College System – 2 year www.witechcolleges.com		Wisconsin College/University System – 4 year www.uwhelp.wisconsin.edu Wisconsin Independent Colleges Universities www.wisconsinmentor.org	
	Agribusiness/Science Tech Agricultural Equipment Tech Arboriculture-Urban Forestry Biotechnology Laboratory Tech Dairy Herd Management Environmental/Pollution Control Farm Business Production	Farm Operation Golf Course Management Health Physic Technician Horticulture Laboratory Animal Tech Landscape Horticulture Natural Resources Tech Veterinary Technician Water Quality Tech	Agricultural and Applied Economics Agricultural Business / Mgmt Agricultural Journalism Agricultural Studies Agronomy Animal Science Biological Aspects of Conservation Conservation Conservation and Environmental Science Dairy Science Environmental Policy and Planning Environmental Sciences Farm Management	Fisheries and Water Resources Food Science/Systems/Technology Forestry Horticulture Land Use Planning Ornamental Horticulture Paper Science Plant Pathology Poultry Science Reclamation, Environment and Conservation Resource Management Soil and Waste Resources Soil/Crop Science Wildlife Ecology/Management
<i>Learn more about career programs at www.careervoyages.com</i>				



AGRICULTURE, FOOD & NATURAL RESOURCES

Specialty Careers / Occupations		
<p style="text-align: center;">Food Products & Processing Systems</p> <p style="text-align: center;"><i>(Food Processing & Preserving, Packaging, Distribution, Government Monitoring & Regulation)</i></p> <p>Agricultural Sales Agricultural Communications Bioengineers Biochemists Business-Educators Cheese Makers Dieticians Food Brokers-Food Inspectors Food & Fiber Engineers Food & Drug Inspectors Food Meal Supervisors Food Processors Field Production Worker Food Scientists Meat Processors-Toxicologists Meat Cutters-Meat Graders Meat Science Researchers Microbiologists Nutritionists Produce Buyers Quality Control Specialists Storage Supervisors</p>	<p style="text-align: center;">Plant Systems</p> <p style="text-align: center;"><i>(Agronomic, Horticulture, Forestry, Turf, Viticulture, Soils, etc.)</i></p> <p>Agricultural Educators Agricultural Journalists Aquaculturalists Biotechnology Lab Technician Bioinformatics Specialists Botanists Crop Farm Managers Commodity Marketing Specialists Custom Hay/Silage Operators Education & Extension Specialists Farmers Forest Geneticists Greenhouse Managers Grain Operations Superintendents Growers Golf Course Superintendents Plant Breeders and Geneticists Plant Pathologists Ranchers Soil & Water Specialists Sales Representatives Tree Surgeons</p>	<p style="text-align: center;">Animal Systems</p> <p style="text-align: center;"><i>(Large animals, small animals, wildlife animals, and research animals)</i></p> <p>AI Technicians Agricultural Educators Animal Caretakers Animal Health Salespersons Animal Nutritionists Animal Scientists Aquaculturalists Dairy Producers Embryo Technologists Embryo Transfer Technicians Equine Managers Feedlot Specialists Feed Sales Representatives Feed Sales Specialists Livestock Buyers Livestock Geneticists Livestock Inspectors Livestock Producers Meat Science Researcher Pet Shop Operators Poultry Managers Reproductive Physiologists Veterinarians Veterinary Assistants- Vivarian Technicians Wildlife Biologists USDA Inspectors</p>

SAMPLE CAREER OCCUPATIONS



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AGRICULTURE, FOOD & NATURAL RESOURCES

Specialty Careers / Occupations

Power, Structural & Technical Systems

(Power, Structures, Controls, Geospatial Technology, Computer Systems, Electronics, Hydraulics, Pneumatics)

Agricultural Engineers
 Agricultural Extension Engineering Specialists
 Agricultural Applications Software Developers/Programmers
 Communication Technicians
 Computer Service Technical Support Technicians
 Database Administrators
 Electronics Systems Technicians
 Equipment/Parts Managers
 GPS Technicians
 Heavy Equipment Maintenance Technicians
 Information Lab Specialists
 Machinists
 Machine Operators
 Recycling Technicians
 Remote Sensing Specialists
 Waste Water Treatment Plant Operators
 Welders

Natural Resources Systems

(Habitat Conservation, Forest Products, Parks and Recreation, Mining, Environmental Services, Fisheries, Soil Conservation)

Cartographers
 Commercial Fishermen
 Ecologists Park Managers
 Environmental Interpreters
 Fish and Game Officers Loggers
 Fish Hatchery Manager
 Fishing Vessel Operators
 Forest Technicians
 Geologists
 Hydrologists
 Log Graders
 Mining Engineers Fisheries Technicians
 Pulp and Paper Manager Soil Geology Technician
 Range Technicians
 Vessel Crew
 Water Monitoring Technician
 Wildlife Managers

Environmental Service Systems

(Pollution Prevention, Water & Air Quality, Hazardous Materials, Solid Waste Management, Health & Safety Sanitation)

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 Technician
 Solid Waste Managers
 Solid Waste Specialists
 Toxicologists
 Water Environment Managers
 Water Quality Managers
 Wastewater Managers

Agribusiness Systems

(Sales, Service, Farm and Ranch Management, Entrepreneurship, Economics, etc.)

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

Learn more about specific occupations at: <http://www.bls.gov/oco/>

