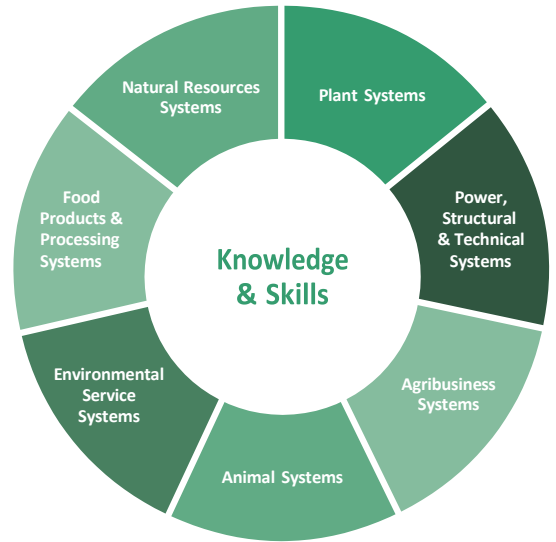


AGRICULTURE, FOOD AND NATURAL RESOURCES

This Program of Study prepares learners for careers in the planning, implementation, production, management, processing and/or marketing of agricultural commodities and services. This includes food, firewood products, natural resources, horticulture, and other plant and animal products. It also includes related professional, technical and educational services.

Pathways:

- Agribusiness Systems
- Animal Systems
- Environmental Service Systems
- Food Products and Processing Systems
- Natural Resources Systems
- Plant Systems
- Power, Structural, and Technical Systems



Suggested Learning Experiences

Middle School Electives				
Courses	Grade 7		Grade 8	
Additional Electives	<ul style="list-style-type: none"> • Band • Choir • Orchestra • Advanced Art 7 • Exploring AgriScience • Exploring French & Spanish • Online Language Exploration 		<ul style="list-style-type: none"> • Advanced Art 8 • Art 8 • Online Language Exploration • Exploring French & Spanish • French I • Spanish I • Band • Choir • Orchestra • Exploring AgriScience & Gateway Innovation & Robotics 	
High School Electives				
Courses	Grade 9	Grade 10	Grade 11	Grade 12
Additional Electives	<ul style="list-style-type: none"> • Prin of Biomed Sciences (PLTW) • World Languages 	<ul style="list-style-type: none"> • Human Body Systems (PLTW) • World Languages 	<ul style="list-style-type: none"> • World Languages • Medical Interventions (PLTW) 	<ul style="list-style-type: none"> • AP Economics • World Languages • Biomedical Innovations (PLTW)
Career & Technical Education	<ul style="list-style-type: none"> • Career Pathways • Construction I • Intro to Metal 	<ul style="list-style-type: none"> • TC Horticulture • Forestry • Dairy Science • Animal Mgmt Small Animal Vet- Science • Wildlife Mgmt • Agribusiness Mgmt • Small Engine and Repair 	<ul style="list-style-type: none"> • TC Accounting I and II • Food Science • TC Business Core 	<ul style="list-style-type: none"> • See Work-Based Learning Options below

High School Electives Cont.

Courses	Grade 9	Grade 10	Grade 11	Grade 12
English	<ul style="list-style-type: none"> • English I • English I Essentials 	<ul style="list-style-type: none"> • English II R/H/Essentials • AP Lang/US History • English II Essentials 	<ul style="list-style-type: none"> • AS Oral and Interpersonal Communication • English III R/H/Essentials 	<ul style="list-style-type: none"> • AS Written Comm • Contemporary Media & Lit • TC English 101/102 • AP English Lit & Comp • English IV Essentials
Math	<ul style="list-style-type: none"> • Essentials I • Algebra I 	<ul style="list-style-type: none"> • Essentials II • Geometry 	<ul style="list-style-type: none"> • Adv. Math Applications • Algebra II 	<ul style="list-style-type: none"> • AS Technical Math • TC Math 105/110 • Pre-Calculus • AP Statistics
Science	<ul style="list-style-type: none"> • Biology • Agriscience • Earth and Space Science 	<ul style="list-style-type: none"> • Chemistry • AP Biology • ES-Animal Science • ES-Biotechnology • ES-Plant & Soil Science 	<ul style="list-style-type: none"> • Physics • AP Environmental Science • Anatomy & Physiology • Dairy Science • Small Animal Vet 	<ul style="list-style-type: none"> • AP Physics
Social Studies	<ul style="list-style-type: none"> • U.S. History and American Government R/Essentials/AP 	<ul style="list-style-type: none"> • American Republic R/Essentials • AP US History • AP Lang/US History 	<ul style="list-style-type: none"> • World Studies R/Essentials • AP European History • AP World History • Crime • Justice and Law 	<ul style="list-style-type: none"> • Crime, Justice, and Law • Psychology R/AP
Other Required	<ul style="list-style-type: none"> • Computer Applications • Healthy Choices • Physical Education 	<ul style="list-style-type: none"> • Healthy Choices • Physical Education • Computer Applications 	<ul style="list-style-type: none"> • Consumer & Personal Finance • Physical Education 	<ul style="list-style-type: none"> • Consumer & Personal Finance • Physical Education
Work-Based Learning Options	Agribusiness Co-op, Youth Apprenticeship			
Other Activities	FBLA, FFA, Pathway Partners, National Honor Society, Youth Service Learning, Science Olympiad			

AGRICULTURE, FOOD AND NATURAL RESOURCES

Career Types by Pathway

High School Diploma/ON-THE-JOB-TRAINING	Certificate/License	Associate's Degree	Bachelor's Degree	Master's/Doctoral Professional Degree
AGRIBUSINESS SYSTEMS				
<ul style="list-style-type: none"> Farm and Ranch Workers 	<ul style="list-style-type: none"> Agriculture Contact Provider 	<ul style="list-style-type: none"> Agribusiness Management Agribusiness Operations Technology Agriculture Agri-Communications Farm and Ranch Business Management 	<ul style="list-style-type: none"> Agricultural Economics Agribusiness Agricultural Education Agricultural Journalism Hospitality Restaurant and Tourism Management Professional Golf Management 	<ul style="list-style-type: none"> Agricultural Economics Agricultural Leadership Education Statistics
ANIMAL SYSTEMS				
<ul style="list-style-type: none"> Animal Caretakers Feed Sales 	<ul style="list-style-type: none"> Ag Dairy Technician Beef Quality Assurance Livestock Production Pork Quality Assurance 	<ul style="list-style-type: none"> Animal Science Equine Industry Management Livestock Industry Management Swine Management Veterinary Technology 	<ul style="list-style-type: none"> Animal Science Biochemistry Grazing Livestock Systems Veterinary Science Veterinary Technologist 	<ul style="list-style-type: none"> Animal Science (Nutrition, Genetics or Physiology Focus) Biochemistry Integrative Biomedical Sciences Veterinary Medicine
ENVIRONMENTAL SERVICE SYSTEMS				
<ul style="list-style-type: none"> Refuse and Recyclable Material Collection 		<ul style="list-style-type: none"> Environmental Science Laboratory Science Technology 	<ul style="list-style-type: none"> Aquatic Ecology Conservation Biology Environmental Soil Science Environmental Studies Habitat Management Insect Science 	<ul style="list-style-type: none"> Entomology Natural Resource Sciences
FOOD PRODUCTS & PROCESSING SYSTEMS				
<ul style="list-style-type: none"> Butchers and Meat Cutters Meat Processing Slaughter and Meat Packer 	<ul style="list-style-type: none"> Ag Dairy Technician Commercial Plant Production Food Handlers Permit Quality Control 	<ul style="list-style-type: none"> Agronomy Diversified Agriculture Dietary Management Food Science and Technology Quality Control 	<ul style="list-style-type: none"> Agronomy Animal Science Food Science and Technology Hospitality, Restaurant and Tourism Management Mechanized Systems Management 	<ul style="list-style-type: none"> Agronomy Animal Science (Meat Science Focus) Food Science and Technology Nutrition
NATURAL RESOURCES SYSTEMS				
		<ul style="list-style-type: none"> Natural Resources Systems Soil and Water Conservation Wildlife Management 	<ul style="list-style-type: none"> Environmental Soil Sciences Environmental Studies Fisheries and Wildlife Grassland Ecology/Management Natural Resources and Environmental Economics Water Science Waste Water Operator 	<ul style="list-style-type: none"> Horticulture and Forestry Natural Resources Sciences
PLANT SYSTEMS				
<ul style="list-style-type: none"> Nursery and Greenhouse Workers Seed Sales Tree Trimmers and Pruners 	<ul style="list-style-type: none"> Commercial Horticulture 	<ul style="list-style-type: none"> Agronomy Commercial Horticulture Crop Production Forestry Landscape/Nursery Sport Turf Technology 	<ul style="list-style-type: none"> Agronomy Biochemistry Diversified Agriculture Studies Grazing Livestock Systems Horticulture Insect Science Plant Protection Sciences 	<ul style="list-style-type: none"> Agriculture Agronomy Biochemistry Entomology Horticulture Horticulture and Forestry
POWER, STRUCTURAL & TECHNICAL SYSTEMS				
<ul style="list-style-type: none"> Electrician Apprenticeship Plumbing Apprenticeship Welding Apprenticeship 	<ul style="list-style-type: none"> Parts Distribution & Management Parts/Sales and Management 	<ul style="list-style-type: none"> Agri-Technology Farm Mechanics Irrigation Technology John Deere Ag Technician Mechanized Agriculture 	<ul style="list-style-type: none"> Agricultural Operations Mechanized Marketing Mechanized Science Mechanized Systems Management Processing Operations 	<ul style="list-style-type: none"> Agricultural and Biological Systems Engineering Mechanized Systems Management