



**BERKSHIRE LOCAL  
SCHOOL DISTRICT  
IN PARTNERSHIP  
WITH GREAT  
LAKES CHEESE**



**GREAT LAKES  
CHEESE**

**AGRIBUSINESS &  
PRODUCTION  
SYSTEMS PATHWAY**

**CROSS-SECTOR FOCUS: ADVANCED  
MANUFACTURING & AUTOMATION**

## PROGRAM VISION

The Agribusiness & Production Systems Pathway at Berkshire Local School District prepares students for modern careers at the intersection of agriculture, food production, environmental systems, and advanced manufacturing. The pathway reflects the realities of today's agribusiness industry—where robotics, automation, data systems, environmental monitoring, and industrial production technologies drive efficiency and quality in food manufacturing.

Through close partnership with Great Lakes Cheese, students gain hands-on experience with industrial automation, environmental monitoring, production planning, robotics, and food safety systems while also building foundational agriscience knowledge and business management competencies.

The program develops graduates who are:

- Fluent in **Industry 4.0 technologies** used in food and agricultural production.
- Skilled in **agribusiness and environmental systems management**.
- Prepared to earn multiple **industry-recognized credentials**, including SACA certifications and the Ohio AgriBusiness Association (OABA) credential.
- Equipped with real-world experience through **Supervised Agricultural Experiences (SAEs)** and **industry-driven capstone projects**.
- Connected to leadership and workforce development opportunities through **FFA**.

## PATHWAY STRUCTURE

This is a **four-year, CTE26-approved pathway** that integrates agricultural science, environmental systems, production technology, and advanced manufacturing concepts. Cross-sector manufacturing skills are intentionally embedded throughout the curriculum.

*We ask that students commit to the full 4 year pathway.*

### COURSE SEQUENCE OVERVIEW

#### 9th Grade Course—Agriculture, Food, and Natural Resources

*(Introductory Course to the Field)*

- Foundations of agriculture, food systems, natural resources, and production agriculture.
- Introduces industry practices used in modern agribusiness operations.



#### Industry 4.0 Operations: [SACA Basic Operations](#) & [SACA Advanced Operations Credentials](#)

**Required Elective** [Industry 4.0: SACA Basic and Advanced—Automation Skills for Industry](#)

**Required Elective | 6 IRC Points**

- Safety systems, automation, quality control, maintenance, and industrial processes.
- Formerly the Certified Production Technician (CPT) course.
- Establishes baseline cross-sector advanced manufacturing skills.

#### 10th Grade—Science and Technology of Food

**CTE26 Pathway Course**

- Food processing, sanitation, HACCP systems, and commercial production technology.
- Integrates process-flow models and problem-based scenarios from Great Lakes Cheese.

#### 11th Grade Course—Environmental Science for Agriculture and Natural Resources

**CTE26 Pathway Course**

**Embedded Credential:**

- [SACA Sensor Logic Systems](#) (4 IRC Points)

**Instruction includes:**

- Air, water, and waste systems in agricultural and food production industries
- Automated environmental controls
- Sensor systems, PLC fundamentals, and industrial monitoring

- Sustainability and regulatory compliance in production systems

#### 12th Grade—Business Management for Agriculture and Environmental Systems

**CTE26 Pathway Course**

- Agribusiness economics, production planning, supply chain logistics, workforce management, and operations leadership.
- Meets the required OABA business/marketing course needed for credential eligibility.

#### Capstone: Advanced Manufacturing Production Systems (Great Lakes Cheese)

**Embedded Credentials:**

- [SACA Robot System Operations](#) (4 IRC Points)
- Ohio AgriBusiness Association (OABA) Industry Credential
- FFA Membership & Career Development Opps

**Capstone experiences include:**

- Problem-based learning aligned with real production challenges
- Mentorship from GLC engineers, automation specialists, and production supervisors
- Robotics and industrial systems demonstrations
- Facility tours, shadowing, and authentic production workflow analysis

- Completion of capstone portfolio tied to industry expectations

#### Industry Credentialing: Embedded and Optional Opportunities

##### 1. Smart Automation Certification Alliance (SACA)

Students earn progressive manufacturing credentials across four years, including:

- [SACA Basic Operations](#)
- [SACA Advanced Operations](#)
- [SACA Sensor Logic Systems I](#)
- [SACA Robot System Operations](#)

These credentials prepare students for automation, maintenance, production, and technical roles.

##### 2. Ohio AgriBusiness Association (OABA) Industry Credential

Students may earn the [OABA Agribusiness & Production Systems Certification](#) by completing all 4 courses.

##### C. Supervised Agricultural Experience (SAE)

Students must complete an SAE project that includes:

- **500 documented hours** of entrepreneurial, placement, or research experience
- Alignment to Ohio Agricultural & Environmental Systems Technical Content Standards
- Verification through mentor/employer signatures
- Reflection, task logs, and project documentation



### SAE projects can be connected to:

- Great Lakes Cheese (placement or workforce-oriented SAE)
- On-farm or agricultural employment
- Student-run entrepreneurial projects
- Research-based environmental or production-focused studies
- FFA SAE programs, which naturally support OABA requirements

This embedded experiential component strengthens the senior-year capstone and ensures real-world mastery.

### Student Leadership & Enrichment Opportunities

#### FFA Participation (Co-Curricular or Club-Based)

Students in the pathway will join Future Farmers of America (FFA) as FFA provides:

- Leadership development
- Career Development Events (CDEs)
- Public speaking, agronomy, and food science competitions

- SAE documentation support
- Scholarships, state conventions, and leadership camps

FFA participation directly supports both the OABA credential and career readiness outcomes.

### Cross-Sector Integration: Advanced Manufacturing Thread

Advanced manufacturing is woven throughout the pathway:

- Robotics, sensors, automation, and PLC concepts
- Quality control, industrial safety, and lean manufacturing
- Food processing and production flow systems
- Environmental compliance systems
- Data-driven decision-making in production agriculture

This positions students for careers in **food production, plant automation, industrial maintenance, agribusiness operations, environmental systems, agricultural technology, and supply chain management.**

## WHY CONSIDER A CAREER WITH GREAT LAKES CHEESE?

### Hands-On Career Pathways

#### Learn by doing—starting in high school.

- Real-world experience in food production and agribusiness
- Entry-level roles with clear pathways for growth and advancement
- Hands-on skills used in manufacturing, quality control, logistics, and operations

### Employee Ownership = Long-Term Opportunity

#### More than a job. A future you can build.

- Employee Stock Ownership Plan (ESOP) — employees become owners
- Opportunity to build long-term wealth and retirement security
- 401(k) options with immediate vesting

### Strong Benefits & Career Stability

#### Work in an essential, growing industry.

- Health, dental, and vision insurance
- Paid time off and paid holidays
- Careers tied to food, agriculture, and essential production—industries that don't go away

### A Great Fit for Students

#### Career-focused. Practical. Affordable.

- Paid positions aligned with Agribusiness & Production pathways
- Learn skills employers are actively hiring for
- Start a career without taking on massive college debt

### Local. Essential. Future-Focused.

#### Education that connects directly to real jobs.

- Food and agribusiness careers are always in demand
- Skills transfer across agriculture, manufacturing, engineering, and logistics
- Students connect classroom learning to real employers like Great Lakes Cheese—right here in our region

### Career Earnings Potential

While Great Lakes Cheese does not publish salary ranges, industry data for agribusiness and production careers shows:

- Many production and technician roles can lead to **\$40,000–\$70,000+ annually**
- Skilled, technical, and supervisory roles may exceed **\$80,000–\$100,000+ over time**



### SUMMARY

The Agribusiness & Production Systems Pathway at Berkshire Local Schools blends agricultural science, food production, environmental systems, automation, and advanced manufacturing into a cohesive, industry-aligned four-year program. Students gain access to stackable credentials, FFA leadership, robust experiential learning, and a capstone experience in partnership with Great Lakes Cheese. Through the integration of the OABA credential and SACA certifications, graduates leave high school prepared for immediate employment, technical college programs, apprenticeships, or advanced careers in Ohio's growing agribusiness and manufacturing sectors.

