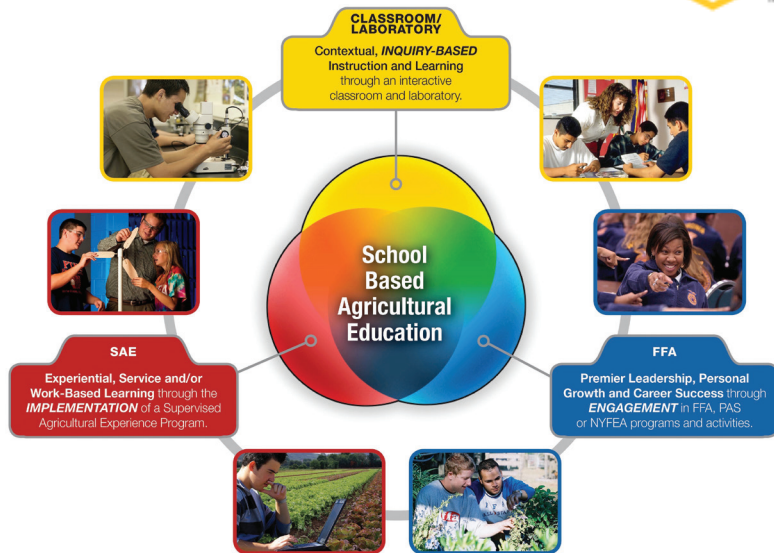


# Student Organizations

Killingly FFA, FFA Alumni, Grange, CT Farm Bureau, Young Farmers Coalition,  
CT State Tractor Puller's Association



# AGRICULTURAL ENGINEERING



**Killingly High School**

Ms. Donna Grant, Career Coordinator  
860-779-6663 • [dgrant@killinglyschoools.org](mailto:dgrant@killinglyschoools.org)

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Updated 1/2020\*

**Killingly High School**

## Career Pathway: Agricultural Engineering

### Career Cluster: Agricultural Education

To complete the **Agricultural Engineering Career Pathway**, students must complete all of the required courses within Section 1, as well as 1 course from Section 2.

To complete this **Advanced Pathway**, students must complete all requirements in Section 1 and earn a total of 3 credits in Section 2.

Section 1- Required Courses	Credits Earned at KHS	College Credits Earned
Agricultural Education I	1	
Agricultural Engineering II	1	
Agricultural Structural Systems	1.5	
Agricultural Power & Technical Systems	1.5	
PGR 1.8 – Job Shadow in Agricultural Mechanics or Engineering	(This requirement will be implemented for all students in the graduating class of 2021 and beyond)	
Section 2- Additional Courses	Credits Earned at KHS	
Projects in Agricultural Mechanics	.5	
Landscape Design	1.5	
Ag Leader	.5 or 1	
Entrepreneurship	.5	
Chemistry CP	1	
Biology CP	1	
Business Management	1	
Principles of Engineering	.5	
Construction Applications	1	
Fundamentals of Construction Technology	.5	
App Creators	.5	
Intro to Data Science	1	
Intro to Programming	1	
AP Computer Science A	1.5	
Intro to Prin. of Manufacturing	.5	
Adv. Prin. of Manufacturing	.5	

**Agricultural Education Agricultural Engineering Teacher:**

Calvin Brodersen, Room 1821  
cbrodersen@killingslyschools.org

## AGRICULTURAL ENGINEERING



**Occupations Related to the Agricultural Engineering Pathway:** Agricultural Equipment Repair Technician, Builder, Carpenter, Diesel Mechanic, Equipment Operator, Equipment Salesperson, Farmer, Landscaper, Electrician, Machinist, Materials Fabricator, Small Engine Repair Technician, Supply Chain Specialist, Surveyor, Truck Driver

Students in the Agricultural Engineering Pathway work with and learn from local farmers and local agri-businesses specialized in engineering trades. Students are introduced to a wide array of trade and mechanical concepts and are given the shop time, supervision and instruction to develop skills in each area. Students in Agricultural Engineering are also encouraged to take courses offered through the Manufacturing and Industrial Design Pathway, further developing skills in design and manufacturing. Students in this pathway are eligible to participate in the Manufacturing Youth Pipeline Initiative, offering opportunities to apply for employment with a wide array of Northeast manufacturing industries upon graduation. Additionally, all students in this career pathway receive a nationally recognized certificate in safe tractor and machine operation.

**Units Covered:** Small Engine Repair, Welding, Electrical, Plumbing, Safe Tractor Operation, Farm/Crop Equipment Operation, Hydraulics, Agricultural Technology, Work Site Safety, and OSHA Regulations

**Professional Organizations This Pathway Opens to You:** Young Farmers and Ranchers, CT Farm Bureau, Young Farmers Coalition, Grange