


 A collage of agricultural images including a field, water bottles, logs, a hand holding soil, a cow, wind turbines, and a lab flask. The word "Agriculture" is written in large white letters across the center.

Agriculture

PATHWAY: Plant Systems

Do you like gardening, plants and the science of how things grow?
 Would you like to help feed our growing population by monitoring and improving the quality and safety of our food?

COURSES IN YELLOW are pathway concentrator courses and must be finished with a **C- average or above** to meet Indiana's 3rd requirement to graduate.
COMPLETE ALL COURSES below with a B- or above to graduate with **Academy recognition**.

COURSE NAME	GRADES AVAILABLE	LENGTH	DUAL (COLLEGE) CREDITS POSSIBLE	FULFILLS CORE 40 CREDITS AS...
Introduction to Agriculture, Food & Natural Resources	8, 9, 10	Year		
Plant and Soil Science <i>To take in 9th grade, must have taken Intro to Agriculture Only offered odd graduation years</i>	9, 10, 11, 12	Year	3	Science
ADVANCED LIFE SCIENCE: PLANTS AND SOILS (REQUIRED CONCENTRATOR COURSE)	11, 12	YEAR	3	SCIENCE
AGRIBUSINESS MANAGEMENT (REQUIRED CONCENTRATOR COURSE)	11, 12	YEAR	3	QUANTITATIVE REASONING

Must earn a specified certification or dual credit to graduate with Academy recognition. Apply your senior year.

Check out the list below for more courses related to this pathway - see the Course of Study Guide for details.

- Chemistry I
- CTSO Leadership Development in Action- Agriculture
- Environmental Science/AP Environmental Science
- **Future Farmers of America Club (FFA)**

- Horticulture Science
- Natural Resources
- Supervised Agricultural Experience
- Work-Based Learning Capstone

Possible Careers Requiring 0-4 Years of Additional Training or Education	
<ul style="list-style-type: none"> • Agricultural Journalist • Biotechnology Lab Technician • Commodity Marketing Specialist • Crop Scout • Custom Hay/Silage Operator 	<ul style="list-style-type: none"> • Farmer • Golf Course Manager • Grain Operation Superintendent • Greenhouse Manager • Rancher

Possible Careers Requiring 4+ Years of Additional Training or Education	
<ul style="list-style-type: none"> • Agriculture Educator/Extension Agent • Agronomist • Analytical Chemist • Bioinformatics Specialist • Biosecurity Monitor 	<ul style="list-style-type: none"> • Botanist • Entomologist • Plant Breeder, Geneticist, Pathologist • Soil Scientist • Viticulturist

Local Industry Partners				
Bishop Farms Boggs Farms Clunette Elevator Deatsman Grain Farm	Ferguson Farms Grace College Agricultural Business Dept Greenmark Equipment	Ivy Tech Community College Louis Dryfus Company Metzger & Sons Trucking North Central Co-op	Parker & Sons Equipment Pioneer Hy-Bred Int. Polk Equipment Ransbottom Farms	Silveus Insurance State Farm Insurance Tom Farms

THREE GRADUATION REQUIREMENTS	
THREE REQUIREMENTS	OPTIONS (Pick <u>at least one</u> in EACH box)
<p>1 HIGH SCHOOL DIPLOMA</p> <p>Must complete <u>at least one</u> item Check all that apply</p>	<input type="checkbox"/> Core 40 <input type="checkbox"/> Core 40 with Academic Honors <input type="checkbox"/> Core 40 with Technical Honors
<p>2 EMPLOYABILITY SKILLS</p> <p>Must complete <u>at least one</u> item Check all that apply</p>	<input type="checkbox"/> Project-Based Learning Experience <input type="checkbox"/> Service-Based Learning Experience <input type="checkbox"/> Work-Based Learning Experience
<p>3 POSTSECONDARY-READY COMPETENCIES</p> <p>Must complete <u>at least one</u> item Check all that apply</p>	<input type="checkbox"/> Complete: Concentrator courses and their prerequisite courses (in YELLOW) from a pathway Maintain a C- average minimum in the CONCENTRATOR COURSES for that pathway Chosen pathway: _____ <input type="checkbox"/> Core 40 with Technical Honors diploma <input type="checkbox"/> Core 40 with Academic Honors diploma <input type="checkbox"/> AP/Dual Credit: Must earn a C- <u>average</u> or higher in at least three courses <input type="checkbox"/> ACT with college-ready benchmarks <input type="checkbox"/> SAT with college-ready benchmarks <input type="checkbox"/> ASVAB with minimum AFQT score to qualify for placement into one of the branches of the US military <input type="checkbox"/> State- and Industry-recognized credential or certification <input type="checkbox"/> State-, Federal-, or Industry-recognized apprenticeship

_____ 's Four-Year Plan

GRAD	English	Math	Science	Social Studies	Physical Education/ Health or 3 FACS	Elective Courses	Pathway and Academy Courses	Summer School Credits
		Fill blanks with electives	Fill blanks with electives	Fill blanks with electives	Fill blanks with electives		Fill blanks with electives	
7/8	Any middle school credits							
9	English 9	Algebra I	Biology I	World History Civ. A or B (9-10th grade)	Preparing for College & Careers			Session A before 9 th grade
	(continued)	(continued)	(continued)	World History Civ. A or B (9-10th grade)	PE credit			Session B before 9 th grade
10	English 10	Geometry	Chemistry I, or ICP, or Physics I		PE credit or waiver			Session A before 10 th grade
	(continued)	(continued)	(continued)		Health or 2 other qualifying FACS credits			Session B before 10 th grade
11	English 11	Algebra II	Qualifying Core 40 science of your choice	U.S. History				Session A before 11 th grade
	(continued)	(continued)	(continued)	(continued)				Session B before 11 th grade
12	English 12	Quantitative reasoning or math recommended		Government				Session A before 12 th grade
	(continued)			Economics (fulfills requirement for quantitative reasoning)				Session B before 12 th grade