



**Recommended Program of Study for:**  
Agriculture, Food, & Natural Resources



<b>Career Cluster: Agriculture, Food, &amp; Natural Resources</b>		<b>Pathway Name: General Agriscience</b>		
<b>9th Grade</b>	<b>10th Grade</b>	<b>11th Grade</b>	<b>12th Grade</b>	<b>Postsecondary Schools</b>
English 9	English 10	English 11	English 12	
Algebra I	Geometry	Algebra II with Trig	Pre-Calculus or Calculus	
Physical Science	Biology	Chemistry	Physics or Botany	
World History	United States History I	United States History II	Government/Economics	
Career Preparedness	Health/Elective	Elective	Elective	
Physical Education	Elective	Elective	Elective	
Fundamentals of Agriscience	Intermediate Agriscience	Advanced Agriscience	Applied Agricultural Mechanics	
<b>CTE and /or Foreign Language and /or Arts Education (3 credits)</b>				<b>Career and Technical Student Organizations</b>
<b>Work-based Learning</b>	<b>Secondary</b>	<b>– Articulation –</b>	<b>Postsecondary</b>	
Job Shadowing Internship / Work Experience Career Day / Fair Field Trips / Guest Speakers				
<b>CTE Assessments</b>	<b>Available Industry Certifications</b>		<b>High Wage-High Skill- High Demand Careers</b>	
	<u>Certification</u>	<u>Provider</u>		



**Recommended Program of Study for:  
Agriculture, Food, & Natural Resources**



<b>Career Cluster: Agriculture, Food, &amp; Natural Resources</b>		<b>Pathway Name: Animal Systems</b>			
<b>9th Grade</b>	<b>10th Grade</b>	<b>11th Grade</b>	<b>12th Grade</b>	<b>Postsecondary Schools</b>	
English 9	English 10	English 11	English 12		
Algebra I	Geometry	Algebra II with Trig	Math Elective		
Physical Science	Biology	Chemistry	Physics or Anatomy & Physiology		
World History	United States History I	United States History II	Government/Economics		
Career Preparedness	Health/Elective	Elective *	Elective		
Physical Education	Fine Art/Elective	Elective	Elective		
Agriscience	Animal Science	Animal Biotechnology	Poultry Science		
Equine Science	Introduction to Veterinary Science	Veterinary Science			
<b>Career and Technical Education and /or Foreign Language and /or Arts Education (3 credits )</b>					<b>Career and Technical Student Organizations</b>
<b>Work-based Learning</b>	<b>Secondary</b>	<b>- Articulation -</b>	<b>Postsecondary</b>		
Job Shadowing Internship / Work Experience Career Day / Fair Field Trips / Guest Speakers				<b>FFA</b>	
<b>CTE Assessments</b>	<b>Available Industry Certifications</b>		<b>High Wage-High Skill- High Demand Careers</b>		
	<u><b>Certification</b></u>	<u><b>Provider</b></u>			

\*Some 4 Year Degree programs may require



**Recommended Program of Study for:**  
Agriculture, Food, & Natural Resources



<b>Career Cluster: Agriculture, Food, &amp; Natural Resources</b>		<b>Pathway Name: Plant Systems</b>		
9th Grade	10th Grade	11th Grade	12th Grade	<b>Postsecondary Schools</b>
English 9	English 10	English 11	English 12	
Algebra I	Geometry	Algebra II or equivalent	Math Elective	
Physical Science	Biology	Chemistry	Physics or Botany	
World History	United States History I	United States History II	Government/Economics	
Career Preparedness	Health/Elective	Elective *	Elective *	
Physical Education	Elective	Elective *	Elective *	
Agriscience	Plant Biotechnology	Horticultural Science	Greenhouse Production and Management	
Nursery Production & Management	Sports Turfgrass Production and Management	Landscape Design & Management	Residential Landscape Establishment & Management	
<b>CTE and/or Foreign Language and/or Arts Education (3 credits)</b>				
<b>Work-based Learning</b>	<b>Secondary</b>	<b>– Articulation –</b>	<b>Postsecondary</b>	
Job Shadowing Internship / Work Experience Career Day / Fair Field Trips / Guest Speakers				
<b>CTE Assessments</b>	<b>Available Industry Certifications</b>		<b>High Wage-High Skill- High Demand Careers</b>	
	<b><u>Certification</u></b>	<b><u>Provider</u></b>		



**Recommended Program of Study for:**  
Agriculture, Food, & Natural Resources



<b>Career Cluster: Agriculture, Food, &amp; Natural Resources</b>		<b>Pathway Name: Power, Structure, and Technical Systems</b>		
9th Grade	10th Grade	11th Grade	12th Grade	<b>Postsecondary Schools</b>
English 9	English 10	English 11	English 12	
Algebra I	Geometry	Algebra II with Trig	Math Elective	
Physical Science	Biology	Chemistry	Physics or Physical Science	
World History	United States History I	United States History II	Government/Economics	
Career Preparedness	Health/Elective	Elective	Elective	
Physical Education	Elective	Elective	Elective	
Agriscience	Introduction to Masonry	Construction Framing	Residential Wiring	
Introduction to Drafting Design	Two and Four Stroke Engines	Power Equipment Technology	Residential & Commercial Power Equipment	
Construction Finishing and Interior Systems	Introduction to Metal Fabrication	Construction Site Preparation and Foundations	Introduction to Metal Inert Gas/Flux Cored Arc Welding	
Safety and Health Regulations				
<b>CTE and /or Foreign Language and /or Arts Education (3 credits)</b>				<b>Career and Technical Student Organizations</b>
<b>Work-based Learning</b>	<b>Secondary</b>	<b>– Articulation –</b>	<b>Postsecondary</b>	
Job Shadowing Internship / Work Experience Career Day / Fair Field Trips / Guest Speakers				<b>FFA</b>
<b>CTE Assessments</b>	<b>Available Industry Certifications</b>		<b>High Wage-High Skill- High Demand Careers</b>	
	<u>Certification</u>	<u>Provider</u>		



**Recommended Program of Study for:**  
Agriculture, Food, & Natural Resources



<b>Career Cluster: Agriculture, Food, &amp; Natural Resources</b>		<b>Pathway Name: Environmental and Natural Resources Systems</b>		
<b>9th Grade</b>	<b>10th Grade</b>	<b>11th Grade</b>	<b>12th Grade</b>	<b>Postsecondary Schools</b>
English 9	English 10	English 11	English 12	
Algebra I	Geometry	Algebra II with Trig	Pre-Calculus or Calculus	
Physical Science	Biology	Chemistry	Physics or Botany	
World History	United States History I	United States History II	Government/Economics	
Career Preparedness	Health/Elective	Elective	Elective	
Physical Education	Elective	Elective	Elective	
Agriscience	Environmental Management	Fish & Wildlife Management	Forestry	
Urban Forestry	Arboriculture	Dendrology	Wildland Firefighting & Controlled Fire	
<b>CTE and /or Foreign Language and /or Arts Education (3 credits)</b>				<b>Career and Technical Student Organizations</b>
<b>Work-based Learning</b>	<b>Secondary</b>	<b>- Articulation -</b>	<b>Postsecondary</b>	<b>FFA</b>
Job Shadowing Internship / Work Experience Career Day / Fair Field Trips / Guest Speakers				
<b>CTE Assessments</b>	<b>Available Industry Certifications</b>		<b>High Wage-High Skill- High Demand Careers</b>	
	<u>Certification</u>	<u>Provider</u>		



**Recommended Program of Study for:**  
Agriculture, Food, & Natural Resources



<b>Career Cluster: Agriculture, Food, &amp; Natural Resources</b>		<b>Pathway Name: Agribusiness Systems</b>		
9th Grade	10th Grade	11th Grade	12th Grade	<b>Postsecondary Schools</b>
English 9	English 10	English 11	English 12	
Algebra I	Geometry	Algebra II with Trig	Pre-Calculus or Calculus	
Physical Science	Biology	Chemistry	Physics or Botany	
World History	United States History I	United States History II	Government/Economics	
Career Preparedness	Health/Elective	Elective	Elective	
Physical Education	Elective	Elective	Elective	
Agriscience	Agribusiness Technology	Agribusiness Marketing	Agricultural Communications	
Agribusiness Management				
<b>CTE and /or Foreign Language and /or Arts Education (3 credits)</b>				
<b>Work-based Learning</b>	<b>Secondary</b>	<b>– Articulation –</b>	<b>Postsecondary</b>	
Job Shadowing Internship / Work Experience Career Day / Fair Field Trips / Guest Speakers			<b>FFA</b>	
<b>CTE Assessments</b>	<b>Available Industry Certifications</b>		<b>High Wage-High Skill- High Demand Careers</b>	
	<u>Certification</u>	<u>Provider</u>		



**Recommended Program of Study for:**  
Agriculture, Food, & Natural Resources



<b>Career Cluster: Agriculture, Food, &amp; Natural Resources</b>		<b>Pathway Name: Aquaculture</b>		
9th Grade	10th Grade	11th Grade	12th Grade	<b>Postsecondary Schools</b>
English 9	English 10	English 11	English 12	
Algebra I	Geometry	Algebra II with Trig	Pre-Calculus or Calculus	
Physical Science	Biology	Chemistry	Physics or Botany	
World History	United States History I	United States History II	Government/Economics	
Career Preparedness	Health/Elective	Elective	Elective	
Physical Education	Elective	Elective	Elective	
Agriscience	Aqua Experience	Aquaculture Science	Aquatic Biology	
Introduction to Fisheries Technology	Advanced Fisheries Technology			
<b>CTE and /or Foreign Language and /or Arts Education (3 credits)</b>				
<b>Work-based Learning</b>	<b>Secondary</b>	<b>– Articulation –</b>	<b>Postsecondary</b>	
Job Shadowing Internship / Work Experience Career Day / Fair Field Trips / Guest Speakers				
			<b>FFA</b>	
<b>CTE Assessments</b>	<b>Available Industry Certifications</b>		<b>High Wage-High Skill- High Demand Careers</b>	
	<u>Certification</u>	<u>Provider</u>		