# Program of Study

**Career Field:** Environmental and Agricultural Systems  
**Career Cluster:** Agriculture, Food, and Natural Resources  
**Career Pathway:** Power, Structural, and Technical Systems  

<table>
<thead>
<tr>
<th>GRADE</th>
<th>ENGLISH</th>
<th>MATH</th>
<th>SCIENCE</th>
<th>SOCIAL STUDIES</th>
<th>GENERAL ELECTIVES</th>
<th>PATHWAY ELECTIVE COURSES</th>
<th>EXTENDED LEARNING SCHOOL/COMMUNITY ACTIVITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>English/Language Arts I</td>
<td>Algebra I</td>
<td>Physical Science</td>
<td>Geography</td>
<td>World Languages &amp; Cultures</td>
<td>Intro to Environmental and Ag Sciences</td>
<td>School Activities: FFA, SkillsUSA</td>
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<td>Physical Education</td>
<td>Power, Structural, &amp; Technical Systems</td>
<td>Community Activities: 4-H, Grow your own garden, Recycle, Tour an agribusiness, Work on a farm during the summer, Join professional organizations in this career cluster, Part-time employment available within this career cluster, Internships available within this career cluster</td>
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<tr>
<td>10</td>
<td>English/Language Arts II</td>
<td>Geometry</td>
<td>Biology</td>
<td>World History</td>
<td>Health Education</td>
<td>Plus two from the following: Adv. Power, Structural, &amp; Tech. Systems</td>
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<tr>
<td>11</td>
<td>English/Language Arts III</td>
<td>Algebra II</td>
<td>Chemistry</td>
<td>American History</td>
<td>Information Technology Applications I</td>
<td>Agricultural Mechanics &amp; Technology</td>
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<tr>
<td>12</td>
<td>English/Language Arts IV</td>
<td>Intro to Statistics</td>
<td>Physics or other science course</td>
<td>American History or Economics</td>
<td>Entrepreneurship</td>
<td>Welding, Advanced Welding Metal Fabrication</td>
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</tbody>
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## Communications
- Public Speaking  
- Written Communications

## Math/Science
- Business Mathematics  
- College Algebra  
- Interpersonal Relations  
- Personal Finance  
- Microsoft Applications  
- Computer Literacy  
- Theory of Engine Operation  
- Theory of Fuel System Operation  
- Mobile Hydraulics  
- Diesel Fuel Injection Systems Lab  
- Advanced Air Conditioning  
- Planting Equipment  

## Social SCI/Humanities
- Interpersonal Relations  
- Descriptive Physics  
- Agriculture  
- Government or Economics  
- Nursery/Landscape Design  
- Animal Science  
- Horticulture  

## Computer Technology
- Basic Electrical  
- Cranking Motors & Ignition Systems  
- Charging Systems  
- Valve Trains  
- Diesel Engine Overhaul & Inspection  
- Diesel & LPG Fuel Systems I  
- Basic Cab Air Conditioning  

## Focus Courses
- Hand & Precision Measuring Tools  
- Oxyacetylene and Arc Welding  
- Diesel & LPG Fuel Systems I  
- Basic Cab Air Conditioning  

## Extended Learning School/Community Activities
- School Activities: FFA, SkillsUSA  
- Community Activities: 4-H, Grow your own garden, Recycle, Tour an agribusiness, Work on a farm during the summer, Join professional organizations in this career cluster, Part-time employment available within this career cluster, Internships available within this career cluster  

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School/Community Activities:
- FFA, SkillsUSA
- 4-H, Grow your own garden, Recycle, Tour an agribusiness, Work on a farm during the summer, Join professional organizations in this career cluster, Part-time employment available within this career cluster, Internships available within this career cluster