## Career Ready Practices

<table>
<thead>
<tr>
<th>Practice</th>
<th>Unit 1 Introduction to Ag Power and Technology</th>
<th>Unit 2 Safety and Measurement</th>
<th>Unit 3 Material Properties</th>
<th>Unit 4 Fabrication</th>
<th>Unit 5 Energy</th>
<th>Unit 6 Machines and Structures</th>
<th>Unit 7 Mechanical Applications</th>
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</thead>
<tbody>
<tr>
<td>1. Act as a responsible and contributing citizen and employee.</td>
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<tr>
<td>2. Apply appropriate academic and technical skills.</td>
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<tr>
<td>3. Attend to personal health and financial well-being.</td>
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<td>4. Communicate clearly, effectively and with reason.</td>
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<tr>
<td>5. Consider the environmental, social and economic impacts of decisions.</td>
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<td>6. Demonstrate creativity and innovation.</td>
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<td>7. Employ valid and reliable research strategies.</td>
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<td>8. Utilize critical thinking to make sense of problems and persevere in solving them.</td>
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<td>9. Model integrity, ethical leadership and effective management.</td>
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<td>10. Plan education and career path aligned to personal goals.</td>
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<tr>
<td>11. Use technology to enhance productivity.</td>
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<td>12. Work productively in teams while using cultural/global competence.</td>
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</tbody>
</table>
### Agriculture, Food, and Natural Resources Career Cluster

   - Unit 1 Introduction to Ag Power and Technology
   - Unit 2 Safety and Measurement
   - Unit 3 Material Properties
   - Unit 4 Fabrication
   - Unit 5 Energy
   - Unit 6 Machines and Structures
   - Unit 7 Mechanical Applications

2. Evaluate the nature and scope of the Agriculture, Food & Natural Resources Career Cluster and the role agriculture, food and natural resources (AFNR) play in society and the economy.
   - X

3. Examine and summarize importance of health, safety, and environmental management systems in AFNR organizations.
   - X
   - X
   - X

4. Demonstrate stewardship of natural resources in AFNR activities.
   - X

5. Describe career opportunities and means to achieve those opportunities in each of the AFNR career pathways.
   - X

6. Analyze the interaction among AFNR systems in the production, processing and management of food, fiber and fuel and the sustainable use of natural resources.
   - X
   - X
   - X

### Power, Structural and Technical (AG-PST)

1. Apply physical science principles and engineering applications related to mechanical equipment, structures, and biological systems to solve problems and improve performance in AFNR power, structural, and technical systems.
   - X
   - X
   - X
   - X
   - X
   - X
   - X

2. Operate and maintain mechanical equipment related to AFNR power, structural, and technical systems.
   - X
   - X
   - X
   - X

3. Service and repair mechanical equipment and power systems used in AFNR power, structural and technical systems.
   - X
   - X
   - X
   - X

4. Plan, build and maintain AFNR structures.
   - X
   - X
   - X

5. Use control, monitoring, geospatial and other technologies in AFNR power, structural and technical systems.
   - X