# Common Career Technical Core Agricultural Technology and Mechanical Systems Pathway

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| --- | --- | --- | --- |
| **Student name:**  |  | **Graduation Date:** |  |

Course Description: To be taught in all courses in the approved pathway.

Directions:The following competencies are required for full approval of this course. Check the appropriate number to indicate the level of competency reached for learner evaluation.

**RATING SCALE:**

4. Exemplary Achievement: Student possesses outstanding knowledge, skills or professional attitude.

3. Proficient Achievement:Student demonstrates good knowledge, skills or professional attitude. Requires limited supervision.

2. Limited Achievement:Student demonstrates fragmented knowledge, skills or professional attitude. Requires close supervision.

1. Inadequate Achievement:Student lacks knowledge, skills or professional attitude.

0. No Instruction/Training:Student has not received instruction or training in this area.

## Benchmark 1: Career REady practices - [Career Ready Practices](https://careertech.org/wp-content/uploads/2024/10/Career-Ready-Practices.pdf)

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 1.1 | Lead as a contributing & professional employee |  |
| 1.2 | Communicate clearly, effectively, & with reason |  |
| 1.3 | Think critically to make sense of problems & persevere in solving them |  |
| 1.4 | Collaborate productively while using cultural & global competencies |  |
| 1.5 | Use digital skills & technologie to enchance productivitiy & make date-informed decisions |  |
| 1.6 | Remain resilient in a changing workplace & world of work |  |
| 1.7 | Manage time & space effectively |  |
| 1.8 | Demonstrate a creative & innovative mindset |  |
| 1.9 | Act as a good steward of organizational & personal finances & resources |  |
| 1.10 | Navigate an education & career path aligned to strengths, work style, interests, & goals |  |
| 1.11 | Consider the environmental & social impacts of decisions |  |
| 1.12 | Apply appropriate academic & technical skills |  |

## Benchmark 2: Agriculture, Food & Natural Resources Career Cluster

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 2.1 | Analyze how issues, trends, technologies and public policies impact systems in the Agriculture, Food & Natural Resources Career Cluster |  |
| 2.2 | 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. |  |
| 2.3 | Examine and summarize importance of health, safety and environmental management systems in AFNR organizations. |  |
| 2.4 | Demonstrate stewardship of natural resources in AFNR activities. |  |
| 2.5 | Describe career opportunities and means to achieve those opportunities in each of the Agriculture, Food & Natural Resources Career Pathways. |  |
| 2.6 | Analyze the interaction among ANFR systems in the production, processing and management of food, fiber and fuel and sustainable use of natural resources. |  |

## Benchmark 3: Power, Structural & Technical Systems

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 3.1 | 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. |  |
| 3.2 | Operate and maintain mechanical equipment related to AFNR power, structural, and technical systems. |  |
| 3.3 | Service and repair mechanical equipment and poser systems used in AFNR power, structural and technical systems. |  |
| 3.4 | Use control, monitoring, geospatial, and other technologies in AFNR power, structural, and technical systems. |  |

I certify that the student has received training in the areas indicated.

Instructor Signature:

For more information, contact:

CTE Pathways Help Desk

(785) 296-4908

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