# Common Career Technical Core Engineering & Applied Mathematics 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 Standards

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 1.1 | Act as a responsible and contributing citizen and employee. |  |
| 1.2 | Apply appropriate academic and technical skills. |  |
| 1.3 | Attend to personal health and financial well-being. |  |
| 1.4 | Communicate clearly, effectively and with reason. |  |
| 1.5 | Consider the environmental,social and economic impacts of decisions. |  |
| 1.6 | Demonstrate creativity and innovation. |  |
| 1.7 | Employ valid and reliable research strategies. |  |
| 1.8 | Utilize critical thinking to make sense of problems and persevere in solving them. |  |
| 1.9 | Model integrity, ethical leadership and effective management. |  |
| 1.10 | Plan education and career path aligned to personal goals. |  |
| 1.11 | Use technology to enhance productivity. |  |
| 1.12 | Work productively in teams while using cultural/global competence. |  |

## Benchmark 2: STEM Cluster Standards

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 2.1 | Apply engineering skills in a project that requires project management, process control and quality assurance. |  |
| 2.2 | Use technology to acquire, manipulate, analyze and report data. |  |
| 2.3 | Describe and follow safety, health and environmentalstandardsrelated to science, technology, engineering and mathematics (STEM) workplaces. |  |
| 2.4 | Understand the nature and scope of the Science, Technology, Engineering & Mathematics Career Cluster and the role of STEM in society and the economy. |  |
| 2.5 | Demonstrate an understanding of the breadth of career opportunities and means to those opportunities in each of the Science, Technology, and Engineering & Mathematics Career Pathways. |  |
| 2.6 | Demonstrate technicalskills needed in a chosen STEM field. |  |

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

Instructor Signature:

For more information, contact:

CTE Pathways Help Desk

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