# Research & Development for Energy - Comprehensive Course No. 41260 Credit: 1.0

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

Pathways and CIP Codes:Energy (17.2071)

Course Description: An **application level** course which allows for more in-depth student research projects and/or workplace/internship experience related to the field of Energy.

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: Research element

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 1.1 | Work with peers and instructor to determine an energy-related topic, project, or problem for research or design. |  |
| 1.2 | Identify the stakeholders who will be impacted by a project, and consider multiple points of view in the research/design process. |  |
| 1.3 | Access and utilize industry resources in the completion of the project. |  |
| 1.4 | Research new technologies that could affect the topic/project, and/or help solve the problem. |  |
| 1.5 | Demonstrate ability to manage and set project goals and timelines. |  |
| 1.6 | Demonstrate abilities in design/planning, visual communication & problem solving in the energy industry. |  |
| 1.7 | Demonstrate an awareness of current energy industry standards. |  |
| 1.8 | Use appropriate grammar and word usage in the creation and implementation of a formal graphic presentation using current standards and technology. |  |

## Benchmark 2: Workplace behavior

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 2.1 | Employ effective communication skills and professionalism when working with peers / clients. |  |
| 2.2 | Employ customer service principles when working with consumers. |  |
| 2.3 | Evaluate and follow-up on customer service provided. |  |

## Benchmark 3: Workplace safety

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 3.1 | Employ safety skills and equipment usage in appropriate ways. |  |
| 3.2 | Be aware of MSDS (Material Safety Data Sheets) and other safety resources and employ those resources as required for the workplace. |  |
| 3.3 | Describe how workplace injuries impact both the employee and the employer |  |

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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