

CTE Outcome Assessment Plan and Results for degrees or certificates 2015-16

**Certificate: Renewable Energy Technology Certificate**

1. Outcome	2. Criteria or Target	3. Measurement Tool (course and assignment)	4. When/how and by who analysis of assessment will be accomplished	5. Program Assessment Results and Recommendations
<b>Individuals who receive a certificate of completion should be able to:</b>				
1. Qualify for employment in the renewable energy field as entry level operators	75% of students pass with a C or better	Spring EET 113 – final performance assessment and labs	Summer RET department	EET 113 – 85% passed with a C or better
2. Assist technicians with repair/servicing/manufacturing of renewable energy systems by applying basic knowledge of electrical, electronics, mechanical, and hydraulics/pneumatics concepts.	75% of students pass with a C or better	Spring EET 113 – final performance assessment and labs	Summer RET department	EET 113 – 85% passed with a C or better
3. Communicate effectively both at the individual level and within team settings.	75% of students pass with a C or better	Spring EET 113 –final performance assessment and labs <u>MEC 120– final performance assessment and labs</u> MEC 122– final performance assessment and labs	Summer RET department	EET 113 – 85% passed with a C or better  MEC 120– 85.714% passed with a C or better  MEC 122– 91.6% passes with a C or better
4. Understand the impact of renewable energy within the context of sustainability and apply sustainability concepts to their practice.	75% of students pass with a C or better	Spring EET 113 –final performance assessment and labs	Summer RET department	EET 113 – 85% passed with a C or better
5. Apply ethical and professional practice within the field of renewable energy.	75% of students pass with a C or better	Spring EET 113 –final performance assessment and labs <u>RT 101– final performance assessment and labs</u>	Summer RET department	EET 113 – 85% passed with a C or better  RT 101– 85% passed with a C or better
6. Achieve success in continuing their education towards completion of a two-year AAS degree should that be their goal.	75% of students pass with a C or better	Spring EET 113 – final performance assessment and labs	Summer RET department	EET 113 – 85% passed with a C or better

Submitted by: Tom Lieurance

Date: 4.4.17

Assessment Completed by: Jim Pytel

Date: 3.20.17

Plans to be submitted to Academic Assessment Coordinator ([kkane@cgcc.edu](mailto:kkane@cgcc.edu)) by Nov 15 of academic year being assessed

Assessment and Analysis to be submitted to Academic Assessment Coordinator ([kkane@cgcc.edu](mailto:kkane@cgcc.edu)) by Nov 15 the following academic year being assessed

## Analysis

1. Describe assessment results.

Assessment indicates more than the required percentage of students are meeting goals.

2. Identify any changes that should, as a result of this assessment, be implemented towards improving students' attainment of degree, certificate, or program outcomes.

Given goals are being achieved no modifications are warranted. Goals may be modified in the future as the program shifts core content towards a more general electro-mechanical technician population and offers more focused electives in renewable energy, advanced manufacturing, and avionics.

3. Describe your plan for implementation of any changes.

Soliciting STEM committee for input on redesigned program.

4. Departmental faculty involvement.

STEM committee

Mary Kramer

Suzanne Burd

Tom Lieurance

Jim Pytel

Chris Spengler

5. Evaluate the assessment strategy.

Program appears to be achieving desired goals.

6. Reflect on any adjustments you made from the last assessment of this degree or certificate and their effectiveness in student achievement of outcomes?

Incorporated online instructional material for Basic Electronics 1, Hydraulics, and Motor Control classes. Resulted in a higher percentage of B or better students in these classes.

7. Additional comments.

None.