

Assessment of Outcomes Achievement

Degree, Certificate, Program

Name of Degree, Certificate or Program: Renewable Energy Technology, certificate.

1. Describe assessment results.

Assessment indicates more than the required percentages 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 necessary. Goals may be modified in the future because the program has shifted core content towards a more general electro-mechanical technician population and offers more focused electives in renewable energy, advanced manufacturing, and unmanned aerial systems (UAS). Student achievement of degree outcomes for the new program will be monitored for the next 5 years, and adjustments will be determined in the next Program Review.

3. Describe your plan for implementation of any changes.

Soliciting STEM committee members for input on redesigned programs. While no changes have been suggested because the RET program has recently changed to the EM-Tech program (F2017), it should be noted that members of the STEM indicated manufacturing in the area is increasing and the need for technicians with core electro-mechanical skills will increase.

Regionally the demand for technicians appears to be split between advanced manufacturing, energy, and UAS. The core electromechanical content will satisfy the advanced manufacturing careers (electronics, mechanics, fluid power, safety, motor control, PLCs) and the school's intention is to offer both a UAS and energy track. The UAS track will most likely involve more technical training in avionics and sensors such as flight, video, and IR imaging. The energy track will most likely involve more focused electives in solar, wind, hydroelectric generation, and transmission. We are discussing whether we can accommodate both tracks in one degree.

Departmental and faculty involvement.

STEM committee

Mary Kramer

Suzanne Burd

Tom Lieurance

Jim Pytel

Chris Spengler

4. Evaluate the assessment strategy.

The program appears to be achieving its desired goals.

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

The program is an open entry program now (2017). This means that the first year classes are mostly open entry and can be taken while students get prerequisite classes out of the way. The mechanics and hydraulics classes are open entry as well as DC circuits. DC circuits pre requisite is now MTH65 with a C or better, they still have to get through MTH111 to finish the degree. Effectiveness is difficult to determine at this point, since the new EM-Tech program has only begun F2017, although, pilot testing of one full cohort (F2016) indicate the perquisite and open entry changes have not adversely affected student success.

6. Additional comments.

None