

Docket Item:

Community College Approval: Clackamas Community College, Associate of Applied Science in Renewable Energy Technology within 15.0303 – Electrical, Electronic, and Communications Engineering Technology/Technician

Summary:

Clackamas Community College proposes a new Associate of Applied Science in Renewable Energy Technology. Higher Education Coordinating Commission (HECC) staff completed a review of the proposed program. After analysis, HECC staff recommends approval of the degree as proposed.

Staff Recommendation:

The HECC recommends the adoption of the following resolution:
RESOLVED, that the Higher Education Coordinating Commission approve the following degree: AAS in Renewable Energy Technology.



Clackamas Community College seeks the Oregon Higher Education Coordinating Commission’s approval to offer an instructional program leading to Associate of Applied Science in Renewable Energy Technology.

Program Summary

The Renewable Energy Technology (RET) program provides technical training for employment in the field of manufacturing, installation and maintenance of renewable energy systems and products. Graduates will be prepared to integrate, install and make repairs related to equipment and controls. This program takes a broad-based approach to training renewable energy technicians, with emphasis on mechanical and electro-mechanical systems, fluid power, instrumentation and controls as well as systems troubleshooting. RET graduates will be prepared to work in the capacity of a technician with specialized skills in energy system measurement, energy efficiency, system design and electronic controls.

For information contact the Industrial Technology Department at 503-594-3318.

1. Describe the need for this program by providing clear evidence.

The demand for renewable energy technicians is expected to grow by 42.9% in the Portland Tri-County area by 2030. This occupation is expected to grow at a much faster rate than the regional average growth rate for all occupations through 2030.

2. Does the community college utilize systemic methods for meaningful and ongoing involvement of the appropriate constituencies?

The need for renewable energy technicians has been vetted with employers through advisory committees, department faculty, and students. The position is in high demand in the Portland Tri-County area as well as statewide.

3. Is the community college program aligned with appropriate education, workforce development, and economic development programs?

This program leads directly to employment upon successful completion. It is aligned with workforce training dollars and other grant funds to support students. Once approved the college will apply for the program to be included on the Workforce Innovation and Opportunity Act, Eligible Training Provider List.

4. ***Does the community college program lead to student achievement of academic and technical knowledge, skills, and related proficiencies?***

Upon successful completion of this program, students should be able to: communicate effectively through technical drawings to determine product and customer specifications in building systems, energy products and thermal components; diagnose and repair electromechanical systems; design, install and troubleshoot electrical and fluid power controls related to energy system integration; analyze potential energy sources and select appropriate technologies; perform a residential energy audit, recommend and implement remediation measures; communicate the pros and cons of renewable energy technologies to diverse user base; determine the financial feasibility of a project through the mathematical analysis of thermal and electrical energy problems.

5. ***Does the community college identify and have the resources to develop, implement, and sustain the program?***

Most of the courses in this program are already developed and are being delivered. The Department is also identifying resources to market the program and has student recruitment/retention resources in place to support access and completion.

Assurances

Clackamas Community College has met or will meet the four institutional assurances required for program application.

1. *Access.* The college and program will affirmatively provide access, accommodations, flexibility, and additional/supplemental services for special populations and protected classes of students.
2. *Continuous Improvement.* The college has assessment, evaluation, feedback, and continuous improvement processes or systems in place. For the proposed program, there will be opportunities for input from and concerning the instructor(s), students, employers, and other partners/stakeholders. Program need and labor market information will be periodically re-evaluated and changes will be requested as needed.
3. *Adverse impact and detrimental duplication.* The college will follow all current laws, rules, and procedures and has made good faith efforts to avoid or resolve adverse *intersegmental* and *intra-segmental* impact and detrimental duplication problems with other relevant programs or institutions.
4. *Program records maintenance and congruence.* The college acknowledges that the records concerning the program title, curriculum, CIP code, credit hours, etc. maintained by the Office are the official records and it is the college's responsibility to keep their records aligned with those of the Office. The college will not make changes to the program without informing and/or receiving approval from the Office.