

Docket Item:

Community College Approval: Columbia Gorge Community College, Certificate of Completion in Manufacturing, within 15.0614 - Welding Engineering Technology/Technician.

Summary:

Columbia Gorge College proposes a new Certificate of Completion in Manufacturing. 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: Certificate of Completion in Manufacturing.



Columbia Gorge Community College seeks the Oregon Higher Education Coordinating Commission's approval to offer an instructional program leading to a certificate of completion in Manufacturing.

Program Summary

The Manufacturing Certificate is designed to prepare students for entry-level welding employment in a manufacturing environment. The certificate provides instruction in a wide variety of welding processes including SMAW, GMAW, GTAW (commonly called Stick, Mig and Tig) as well as blueprint reading and manufacturing processes, including quality control. Career opportunities include entry level jobs in cutting parts, blueprint reading and fitting, tacking, production welding, repair welding and fabrication.

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

The Manufacturing Certificate is designed to prepare students for entry-level welding employment in a manufacturing environment. Career opportunities include entry level jobs in cutting parts, blueprint reading and fitting, tacking, production welding, repair welding and fabrication.

Oregon's welders and solderers work in many types of industries but the majority of workers (79%) were concentrated in manufacturing industries in 2014. Three manufacturing sub-sectors - transportation equipment, machinery, and fabricated metals - provided the lion's share of jobs in manufacturing.

In 2014, there were 397,900 welders in the nation and around 5,250 in Oregon. Employment growth through year 2024 is expected to be faster in Oregon than in the nation at 3.6 percent nationally and 13.9 percent statewide. In Oregon, there are expected to be 224 annual openings which include both new and replacement job openings.

As the manufacturing industry in the Columbia Gorge continues to grow (current employment estimates for manufacturing in Wasco County alone reflect 700 jobs per year), the need for specialized training in areas like welding are expected to rise.

Currently, Columbia Gorge Community College (CGCC) offers a stand-alone course in basic welding. The course does not transfer - although students, by submitting their weld samples to the state, can be certified in specific welds. The Manufacturing Certificate was designed to begin to grow a training program that aligns with the emerging and expanding manufacturing industry in the Gorge and can provide students a foundation to build upon. Whether students transfer to another community college with a full welding program or choose to earn their Bachelor's in Welding or Manufacturing Engineering, the courses within the Manufacturing Certificate will transfer to most institutions.

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

CGCC's STEM Advisory Committee, made up of employers from throughout the region from a range of industrial and manufacturing industries, recognizes the need for trained technicians in foundational skills, such as welding. It is a regular topic of our bi-annual meetings.

Attached is a letter from a local employer in support of the Manufacturing Certificate.

Central Oregon Community College partnered with CGCC to help with curriculum development of the Manufacturing Certificate. The certificate is designed to transfer to full welding and/or manufacturing programs at other community colleges throughout the state.

In 2017-18, the Manufacturing Certificate will be offered as dual credit to The Dalles High School students. The high school instructor will utilize CGCC's welding lab to teach the courses. High school students will be bused to CGCC. CGCC advisors will visit the classes once a term to talk with the high school students about their career options and ways to continue their education.

The Manufacturing Certificate was designed without prerequisites, so any student, including

minority, ELL/LEP, or students with disabilities can enter the program.

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

As mentioned above, the Manufacturing Certificate will be offered to The Dalles High School students beginning in 2017-18. As also mentioned, COCC assisted with curriculum development in order to align courses for transferability, not only to COCC's manufacturing and welding programs, but to other community college programs throughout the state.

One priority goal of the 2017-2021 Mid-Columbia Economic Development Strategy Report is Workforce, and one element of Workforce is Basic Skills Training. "Basic skill requirements and the workforce quality for entry level positions needs improvement. With a constantly evolving economy, talent in the region must be able to rapidly adjust to new occupations using transferable skills sets. The region seeks to match the needs of businesses with available skills trainings." CGCC is can help meet this strategic goal by offering the Manufacturing Certificate.

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

All of the courses within the Manufacturing Certificate have clear learning outcomes and all provide problem and project-based learning opportunities. Students are expected to achieve technical and career related skills upon completion of the certificate.

CGCC and the Manufacturing Certificate program affirmatively provides access, accommodations, flexibility, and additional/supplemental services for special populations and protected classes of students, including students with disabilities, ELL/LEP students, and minority students.

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

CGCC's 15-stall welding lab is fully equipped with the necessary equipment to train students in basic welding skills. The Manufacturing Certificate will first be offered as a dual credit program for high school students beginning in 2017-18. The following year, the certificate will be offered to CGCC students.

Assurances

Columbia Gorge 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 *intrasegmental* 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.