

Docket Item:

Community College Approval: Portland Community College, Certificate of Completion in Secure Programming within 11.1003 – Computer and information Systems Security/Auditing/Information Assurance.

Summary:

Portland Community College proposes a new Certificate of Completion in Secure Programming. 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: CC in Secure Programming.



Portland Community College seeks the Oregon Higher Education Coordinating Commission's approval to offer an instructional program leading to a Certificate of Completion in Secure Programming.

Program Summary

Computer Information Systems are the lifeblood of the 21st century. The mainstream languages, tools, technologies and techniques used in training will allow students to pursue careers in either the computer networking or information software fields. On the networking side, computer configuration, network installation, network systems administration, security, forensics and wireless networking are some career choices. On the software side, student career choices include all phases of application development, database programming, software quality assurance, and project management on both desktop and World Wide Web platforms.

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

There are currently 4599 cybersecurity job openings in Oregon and 4223 in the Portland-Vancouver-Hillsboro metro region (cyberseek.org, accessed May 2020). Computer User Support Specialist average \$60,390 annually in the Portland Tri-County area. Employment in this occupation in 2019 was much larger than most occupations in the region. The total number of job openings is projected to be much larger than most occupations in the region through 2029. This occupation is expected to grow at a somewhat faster rate than the regional average growth rate for all occupations through 2029.

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

The program worked with its advisory board to determine the needs of this certificate program. It will continue to meet and consult with those constituencies to monitor and assess the health and viability of the certificate. The advisory board meets on a regular basis.

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

Cybersecurity continues to grow in importance. Projected demand for cybersecurity professionals outstrips projected supply. In addition, there is a growing expectation by employers for everyday IT workers to be skilled in cybersecurity. The Cyberseek Heatmap (cyberseek.org) shows that the supply of cybersecurity workers in the Portland-Vancouver-Hillsboro metro area is "Very Low" compared to the demand. This demand covers not just cybersecurity-only roles, but IT roles that include cybersecurity skills such as network / system administration.

4. *Does the community college program lead to student achievement of academic and technical*

knowledge, skills, and related proficiencies?

This certificate creates an elective pathway leading toward the Cybersecurity AAS degree. Labs are available for students. Curriculum is aligned with job needs in cybersecurity. Curriculum includes coursework in information security foundations, secure coding as well as database foundations.

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

Portland Community College has assessed the needs of this program and has the resources to develop and maintain it.

Assurances

Portland 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 *intrasemental* 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.