

**Docket Item:**

Community College Approval: Mt. Hood Community College, Bachelor of Applied Science in Cybersecurity within 11.1003 – Computer and Information Systems Security/Auditing/Information Assurance.

**Summary:**

Mt. Hood Community College proposes a new Bachelor of Applied Science in Cybersecurity. This submission is Phase Three out of a Three Phase process. Higher Education Coordinating Commission (HECC) staff completed a review of the proposed program. After analysis, HECC staff recommends approval of the degree as proposed.

**Overview of Submission Process:**

Review and approval of the Bachelor of Applied Science (BAS) is a three-step submission process:

- Phase One: Statement of Need (Appendices A and B)
- Phase Two: Notice of Application (Appendices C, D and E)
- Phase Three: Final Program Approval (Submission and Approval in Webforms)

Additional information about the [Applied Baccalaureate Process](#) maybe be found here:

[https://www.oregon.gov/highered/institutions-programs/ccwd/Documents/FULL\\_AB\\_Document\\_FINAL-10-14-20.pdf](https://www.oregon.gov/highered/institutions-programs/ccwd/Documents/FULL_AB_Document_FINAL-10-14-20.pdf)

**Staff Recommendation:**

The HECC recommends the adoption of the following resolution:

RESOLVED, that the Higher Education Coordinating Commission approve the following degree: BAS in Cybersecurity.



**Mt. Hood Community College seeks the Oregon Higher Education Coordinating Commission's approval to offer an instructional program leading to a Bachelor of Applied Science in Cybersecurity.**

**Program Summary**

MHCC's BAS in Cybersecurity aims to take an applied approach to cybersecurity education. The Cybersecurity programs are designated by the National Security Agency (NSA), Cybersecurity and Infrastructure Security Agency (CISA), the Federal Bureau of Investigations (FBI) and other partner agencies as a National Centers of Academic Excellence in Cybersecurity (NCAE-C) program. Students will have the opportunity to learn via hands-on experience, instructor-led laboratory participation, competitions, and cooperative learning with local employers. Upon graduation, students will have the skills and knowledge necessary to be successful and competitive within the current job market. Graduates can find employment through government agencies, public, and private businesses.

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

Mt. Hood Community College appreciates the Higher Education Coordinating Commission for approving both Phase One and Phase Two establishing the need for the Bachelors of Applied Science. MHCC was the first community college in Oregon to offer an AAS in Cybersecurity and Networking and continues to make updates to curriculum and best practices to provide students with the best training for this in-demand field. Between 2020 and 2030, there is a projected job growth rate of 37.8% statewide, and 39.4% in the Portland tri-county area, which reflects a growth of an additional 2% from the previous year; as of January 5, 2022, there are 235 job listings for this occupation. Of these jobs, 90% require a bachelor's degree, and 80% mention industry certifications. MHCC already provides students with the pathway to industry certifications. Based on the recommendation of our Advisory Committee, the next step is to provide a bachelor's degree. In addition, these jobs provide a strong livable wage, with security analyst salary averaging \$107,398 annually.

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

The success of the Cybersecurity program is dependent on its partnership with industry leaders and other constituencies. MHCC partners with vendors to train on their respective technologies, and they in turn provide lessons, labs, and other resources to the college. As of 2021, the official academy partners include: Cisco, Red Hat, CompTIA, AWS, Microsoft, and TestOut. Additionally, the Cybersecurity program has an Advisory Committee that meets twice yearly. These meetings bring valuable industry and partner feedback that help keep our current, and future, programs relevant and flourishing.

MHCC currently partners with local school districts to pique young students' interests in Science, Technology, Engineering, Arts and Math (STEAM) at an earlier age and will expand this outreach initiative with the approval of this program. Presently, there are five public partner school districts, which include eight high schools. MHCC offers dual-credit opportunities, attends career days, supports high-school faculty with professional development, and organizes camps and competitions for high school students for both private and public schools.

We also collaborate heavily with Oregon's public and private universities to avoid programmatic duplication and maximize student access to state and local resources.

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

High school alignment: our faculty actively engage with local high schools to offer meaningful dual-credit opportunities to as many students as possible. We offer strong mentorship with those faculty to ensure course alignment and that outcomes are being met and students are ready to continue on their education with MHCC. High school faculty attend our advisory board meetings and we attend theirs. In addition, all of our faculty attend career fairs, local outreach events, hold competitions, and lead STEAM based camps and activities within our district.

University partnerships: throughout the development of this program, we have worked closely with faculty at other colleges and universities to ensure overarching consistency across the board (in terms of large cybersecurity-based 4-year degree outcomes), but also to ensure as little subject-specific overlap as possible, allowing for long-term program viability. Private universities have provided us with a lot of positive feedback to move forward with the BAS degree.

Industry and workforce: Success of the Cybersecurity program is dependent on its partnership with industry leaders. With their help, MHCC designed curriculum to align with industry needs, including providing students with the necessary certifications, and supports the college with staying current of emerging technologies and best practices. MHCC partners with vendors to train on their respective technologies, and they in turn provide lessons, labs, and other resources to the college. As of 2021, the official academy partners include: Cisco, Red Hat, CompTIA, AWS, Microsoft, and TestOut. In addition, the cybersecurity program has an Advisory Committee that meets twice yearly. The feedback gathered from our Advisory Committee has shaped the program, community connections, and ongoing programmatic work.

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

MHCC's program application has been heavily reviewed by industry leaders, community partners, and other institutions of higher learning. When reviewing industry and partner needs, we feel confident this program addresses the current needs within Oregon's workforce. Our diverse faculty have a tremendous amount of education, industry knowledge, publications, partnerships, and community connections to ensure our students are leaving with the most current and valuable skills necessary to succeed in industry. In addition, MHCC has worked to create a program that is open enrollment, where students are able to join the program at any time, expanding our net of potential students.

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

The MHCC Board of Education has carefully reviewed the attached budget document and feels poised to move forward with this opportunity. We feel confident in building upon our current program and investing where needed to successfully implement and sustain the growing program. MHCC considers this an investment in economic development and future of east Multnomah County. We currently have qualified faculty, have no new equipment cost, and are able to use existing facilities. We anticipate tuition and fees to be comparable, if not lower than, Oregon universities.

HIGHER EDUCATION COORDINATING COMMISSION

June 9, 2022

Docket Item #: 7.2



BAS Proposal – Appendix D  
*Projected Revenue and Expenses*

PROJECTED REVENUE	YEAR 1	YEAR 2	YEAR 3	YEAR 4	Year 5 (full)	NOTES
1. Nonresident Student Tuition	\$					
2. Nonresident Student Fees	\$					
3. Resident Student Tuition	\$	\$	\$	\$ 847,082	\$	Tuition= number of students*number of BAS credits*tuition rate
4. Resident Student Fees	\$ 126,000	\$ 327,787	\$ 561,428	\$ 7,000	1,028,6	
5. Contributions/Grants	\$ 1,875	\$ 3,000	\$ 4,875		25	
6. Other Revenues	\$					
List:						
7. College Budget Allocation	\$					
8. Federal Funds	\$					
9. Other: College Support	\$					
<b>TOTAL PROJECTED REVENUE</b>	<b>\$ 127,875</b>	<b>\$ 330,787</b>	<b>\$ 566,303</b>	<b>\$ 854,082</b>		
<b>PROJECTED EXPENDITURES</b>						
	<b>YEAR 1</b>	<b>YEAR 2</b>	<b>YEAR 3</b>	<b>YEAR 4</b>		<b>NOTES</b>
<b>INSTRUCTIONAL</b>						
1a. Faculty FTE for Full-time	\$ 61,689	\$ 75,401	\$ 112,677	\$ 264,325	\$	- Salary = Step 8 per ILC*number of ILC per year
1b. Faculty FTE for Part-time	\$					ILC's calculated by the alternating year schedule - Year B has a higher count of BAS courses
Faculty Full-time Salaries /Benefits	\$			\$ 161,238		
Faculty Part-time Salaries/Benefits	\$ 37,630	\$ 45,994	\$ 68,733			Benefits = .61 of salary
Faculty Support (Lab or Designated Teaching Assts, etc.)	\$					
List:						
Other instruction-related expenditures	\$			\$ 425,564		
<b>SUB-TOTAL</b>	<b>\$ 99,319</b>	<b>\$ 121,395</b>	<b>\$ 181,410</b>			
<b>OPERATING EXPENSES</b>						
1a. Academic Administration FTE (e.g. program chair, director, etc.)	\$			\$ 28,814		Salary = .2 FTE of Faculty Director at Step 0, .05 of Academic Dean at midrange
1b. Academic Administration Salary/Benefits	\$ 28,211	\$ 28,406	\$ 28,607	\$ 21,909		
1c. Academic Administration -Other expenses	\$					
2. Materials / Supplies -required for teaching	\$					
3. Travel	\$ 21,174	\$ 21,412	\$ 21,657	\$ 11,200		
4. Technology	\$			\$ 4,500		
5. Initial Accreditation review / Initial external reviewers' expense	\$ 1,500	\$ 3,900	\$ 9,300			
6. Student Services Support	\$ 3,000	\$ 4,500	\$ 4,500			
7. Other Professional Services	\$					
8. Communication / Marketing	\$ 2,900					
9. Other program supplies / services (Describe briefly below) \$				\$ 8,000		
	\$ 10,000	\$ 8,000	\$ 8,000			
10. Other program-specific operating expenses-competitions \$	\$ 1,875	\$ 3,000	\$ 4,875	\$ 7,000		
<b>SUB-TOTAL</b>	<b>\$ 68,660</b>	<b>\$ 69,218</b>	<b>\$ 76,939</b>	<b>\$ 81,423</b>		
<b>CAPITAL OUTLAY</b>						
1. Library Resources: Purchase/Subscription/Access fees/ Other	\$ 4,000	\$ 4,000	\$ 8,000	\$ 8,000		
2. Technology equipment or resources	\$		\$ 33,000	\$ 35,000		Upgrade to Lab A in Year 3, and Lab B in Year 4
3. Other equipment required for program instruction	\$					
4. Facilities/ Renovations (specific to new program)	\$					
<b>SUB-TOTAL</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>		
<b>TOTAL PROJECTED EXPENDITURES</b>	<b>\$ 167,979</b>	<b>\$ 190,613</b>	<b>\$ 258,349</b>	<b>\$ 506,987</b>		
19% Indirect rate	\$ 31,916	\$ 36,216	\$ 49,086	\$ 96,327		Indirect rate is for all other college services
Total: Deficit/Surplus	\$ (72,020)	\$ 103,958	\$ 258,868	\$ 250,768		



***Assurances***

Mt. Hood 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.