

# COMPLETE

| Collector:     | Web Link 1 (Web Link)               |
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# Page 1: Full-Time Faculty Position Form

## Q1

Please enter the following:

| Department     | Computer Information Systems             |
|----------------|--|
| Position Title | Cyber Security Instructor                |
| Q2             | No, the position has not yet been funded |

If this position has already been funded, do your want to continue with the current request?

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1. Describe why this position is essential to your program and/or service area. How has the lack of this position impacted your program and/or service area? What will be the impact to the program and/or service area if this position is not filled? (Rubric Criterion 1, 3)(300 words or less)

Essential Nature of the Position:

Broad Skill Requirements: Cybersecurity's dynamic nature requires a faculty member adept in diverse, evolving skills to ensure a relevant and comprehensive curriculum.

Industry Relevance: The high-paying, highly skilled cybersecurity industry demands faculty engagement in constant professional development to stay abreast of trends.

Accreditation and Curriculum Standards: The position is vital for maintaining standards expected by accrediting bodies and meeting the academic needs of a robust cybersecurity program.

Impact of the Position's Absence:

Enrollment Decline and Equity Gaps: The loss of four full-time faculty in four years correlates with decreased enrollment and widening equity gaps, impacting program diversity and reach.

Reduced Student Support and Engagement: The lack of a full-time faculty member hinders effective student support and community engagement, crucial for attracting and retaining diverse students.

Limited District IT Collaboration: Without a dedicated faculty, our program struggles to collaborate with district IT, affecting resource sharing and practical training opportunities.

Consequences of Not Filling the Position:

Missed Growth Opportunities: Ignoring the projected 23% employment growth in this field from 2022 to 2032 means missing out on equipping students for emerging professional opportunities.

Further Enrollment Decline and Program Risk: Continuing without this role will likely lead to further enrollment declines and risk the entire program's viability.

Worsening Equity Gaps: The position is key to addressing equity gaps, and providing opportunities to underrepresented students in a lucrative field.

In summary, filling this position is vital for sustaining a relevant, inclusive educational offering in a rapidly evolving field. Its absence risks program viability, fails to meet industry standards, and exacerbates equity issues in our student community.

2. What are the racial and gender demographics of the faculty within your program? What steps will your program take to ensure this position will promote faculty diversity to reflect the students the college serves, for example: (Rubric Criterion 1)- Participating in professional development related to equity and diversity in hiring- Participating in professional development opportunity (EEO)- Completing EEO Representative Training-Employing strategies to recruit diverse applicants(300 words or less)

Gender Imbalance in Department Faculty: The department's current gender balance of 75% male and 25% female, altered by the death and retirement of female instructors, highlights the need for more female representation. This imbalance is not reflective of our community, and the hiring of a cybersecurity instructor offers an opportunity to move towards a more equitable gender representation.

Advantage in Diversity Representation: While our department's gender distribution is slightly better than the industry average (80% male, 20% female), there is still a significant opportunity to improve. By hiring a faculty member who can relate to and represent traditionally marginalized populations, we can encourage more diverse students into IT.

Diversity Training for Department Members: As part of this initiative, department members will participate in equity and diversity training. This training will ensure that the hiring process for the new position is inclusive and focused on finding the best candidate to meet our diverse student needs.

Recruitment from Diverse Sources: We will target various professional groups for recruitment, ensuring a wide and diverse applicant pool. This approach will increase the likelihood of attracting candidates who can contribute to closing the gender gap and enhancing diversity within our department.

3. How will this position improve student learning and achievement, and close equity gaps in access and outcomes in your program? What steps are you taking to close equity gaps in access and outcome, for example: (Rubric Criterion 2)- modify curriculum to reflect the college's diverse student population- close equity gaps- ensuring equitable access to courses that have pre-requisites- removing barriers for students, especially those from historically marginalized groups-adopt/create no cost/low cost textbooks and course materials(300 words or less)

Improvement in Student Learning and Achievement:

Up-to-Date Curriculum: A dedicated instructor ensures the curriculum stays current with industry trends, providing students with the relevant skills needed for success in the cybersecurity field.

Enhanced Practical Experience: The instructor can facilitate practical, real-world learning experiences, bridging the gap between theoretical knowledge and practical application, essential in a rapidly evolving field like cybersecurity.

Personalized Instruction and Mentorship: A full-time faculty member can offer more personalized guidance and mentorship, crucial for student success and achievement.

#### Closing Equity Gaps:

Professional Development: We will intentionally train faculty with material like EMTLI and Hummanizing STEM. Ensuring Equitable Access: We are focused on ensuring equitable access to courses with prerequisites. This includes offering preparatory courses and additional support for students who may not have traditional backgrounds in technology.

Removing Barriers: Recognizing the unique challenges faced by students from historically marginalized groups, we are working to remove barriers to participation. This includes providing additional academic support and mentorship programs tailored to the needs of these students.

No Cost/Low Cost Materials: To alleviate financial burdens, we are adopting and creating no cost or low-cost textbooks and course materials. This makes education more accessible, particularly for students from low-income backgrounds.

4. Has there been or is there evidence to demonstrate that there will be an increase in student demand for your programs and/or services? How are students being adversely impacted without this position? Please discuss supporting data from recent semesters. For example, enrollment trends, waitlist pressures, or wait time for appointments and support services, students served, etc. as they apply to this position. (Rubric Criterion 2)(300 words or less)

#### Evidence of Increased Demand:

Labor Market Projections: The U.S. is expected to face a shortfall of 10 million cybersecurity workers by 2027, reflecting a significant demand in this field. In California, the labor market is especially promising, with an average earning of \$137,846 and a 5% job growth over five years.

Statewide Student Demand: According to data from Palo Alto Networks, there's an increasing demand for cybersecurity education throughout the state. This trend suggests that more students are seeking skills taught in our program.

Enrollment Trends at Cuyamaca College: We have observed that many students prefer Cuyamaca College for its superior facilities and faculty. However, due to limited section availability, some students have had to seek education at other institutions. This indicates a clear demand for our program that we are currently unable to fully meet.

Impact on Students without This Position:

Limited Course Availability: The lack of sufficient faculty has led to fewer course offerings, forcing students to either delay their education or seek alternatives elsewhere.

Diminished Learning Experience: The absence of a specialized instructor limits the depth and relevance of the cybersecurity curriculum, affecting the quality of education and skill acquisition.

Delayed Career Progression: Students are potentially missing out on timely entry into a high-demand, high-paying job market due to the limited scope and depth of the current program.

Center for Strategic and International Studies. "The Cybersecurity Workforce Gap." CSIS, www.csis.org/analysis/cybersecurityworkforce-gap. Accessed 19 Jan. 2024.

Lightcast Press Office. "US Cybersecurity Worker Shortfall Reaches 466,000, CyberSeek™ Data Reveals." Lightcast, 6 June 2023, lightcast.io/resources/blog/cyberseek-06-06-2023. Accessed 19 Jan. 2024.

5. Which program review goal(s) is this request supporting? Please state how the position will help advance the specific goal(s). Please explain how this position would support historically marginalized groups. (Rubric Criterion 3)

Enhancing Curriculum and Instructional Quality: A specialized cybersecurity instructor can develop and update curriculum to include the latest trends and practices in cybersecurity, ensuring students receive an education that is both current and comprehensive. This enhances the program's overall quality, making it more relevant and attractive to potential students.

Increasing Student Success and Achievement: With expertise in cybersecurity, the instructor can provide more in-depth knowledge and hands-on experience, which is crucial for student success in this field. This level of instruction can lead to higher rates of student achievement, including better performance in courses, higher graduation rates, and improved job placement.

Fostering Equity and Inclusion: The cybersecurity instructor can play a vital role in supporting historically marginalized groups. By incorporating diverse perspectives and challenges in cybersecurity into the curriculum, the instructor can create a more inclusive learning environment. This approach can help to attract and retain students from underrepresented backgrounds, thereby closing equity gaps.

Strengthening Community and Industry Partnerships: A dedicated cybersecurity instructor can build stronger connections with industry partners, creating opportunities for student internships, mentorships, and job placements. These partnerships are especially beneficial for historically marginalized students, providing them with valuable networks and career pathways.

Promoting Lifelong Learning and Professional Development: By offering advanced and specialized courses in cybersecurity, the program can attract not only traditional students but also professionals seeking to upgrade their skills. This aligns with the goal of promoting lifelong learning and professional development.

# **Q8**

6. Is this a new position, replacement for a retirement/upcoming retirement or replacement for internal promotion (faculty to administrator), or replacement for other circumstances? Please explain. (Rubric Criterion 3)(100 words or less)

Two retirements in the last three years, a death, illness, and a resignation during the tenure process have left this department completely without full-time faculty.

7. Which strategic priority/priorities is this request supporting? Please state how the position will help advance the specific priority/priorities and the College's mission, vision and values. Note: the more goals addressed the stronger the request (Rubric Criterion 4) Increase equitable access (enrollment) Eliminate equity gaps in course success (passing grade in class) Increase persistence eliminate equity gaps (re-enrolling the subsequent semester or year) Increase completion and eliminate equity gaps (graduating with a degree/certificate, or transferring) Increase hiring and retention of diverse employees to reflect the students and communities we serve (300 words or less)

Increase Equitable Access (Enrollment): By offering a comprehensive cybersecurity program led by a specialized instructor, the college can attract a diverse student body. This initiative directly aligns with the goal of increasing equitable access to education, as cybersecurity is a field with significant career opportunities, appealing to a wide range of students.

Eliminate Equity Gaps in Course Success: A dedicated cybersecurity instructor can implement tailored teaching strategies that address the diverse learning needs of students. This approach can help in achieving higher course success rates and eliminating equity gaps, especially for students from historically marginalized backgrounds who may face unique challenges in higher education.

Increase Persistence and Eliminate Equity Gaps: The presence of a qualified instructor in cybersecurity can enhance student engagement and motivation, encouraging them to re-enroll in subsequent semesters. This persistence is crucial for closing equity gaps in education, as consistent engagement is often a key factor in academic success.

Increase Completion and Eliminate Equity Gaps: A well-structured cybersecurity program, led by a skilled instructor, can significantly improve graduation rates and the successful transfer of students to four-year institutions or into the workforce. This directly supports the strategic priority of increasing completion rates and eliminating equity gaps in education.

Increase Hiring and Retention of Diverse Employees: Hiring a cybersecurity instructor who reflects the diversity of the student body and community serves as a role model, promoting a more inclusive academic environment. This aligns with the strategic priority of increasing the hiring and retention of diverse employees.

# Q10

8. Please confirm that you have discussed this faculty position request with the Division Dean and that you understand that Division Deans will be providing feedback to help inform the prioritization process.Note: The Division Dean will be providing feedback to help inform the prioritization process

# Q11

If you would like to attach data to support your request in light of the rubric criteria, please upload a PDF, Word, or image file using the button below.

# Yes, I have discussed this position request with the Chair of the Department

Respondent skipped this question